THE PHILIPPINE
MARITIME INDUSTRY DEVELOPMENT PLAN
2028

THE PHILIPPINE MARITIME INDUSTRY

DEVELOPMENT PLAN 2028

Strong and reliable Philippine Merchant Fleet that addresses the sea transport requirements of the archipelago in support of the national development agenda

“Together, let us synergize all our efforts and harness the potential of this event and of the **MIDP 2028**. This is to provide better opportunities for our fellow Filipinos, to build a **more progressive**, **sustainable**, and **resilient maritime sector**.”

HIS EXCELLENCY PRESIDENT FERDINAND R. MARCOS JR.
during the Philippines Maritime Industry Summit,
28 February 2023

MESSAGE FROM THE
PRESIDENT OF THE REPUBLIC OF THE PHILIPPINES

My warmest greetings to the Maritime Industry Authority on the formulation and publication of your Maritime Industry Development Plan 2028 Book.

Throughout centuries, our seas have served as a gateway to the rest of the world, bringing us to distant horizons while also welcoming new cultures, goods, and opportunities for our people. It is undeniable how much the maritime industry has influenced our personal and collective lives and how much our future will be made even better by continuously building on our capabilities as a maritime nation.

I therefore recognize all your officials and staff for their zealousness in laying out concrete steps - as shown through this plan - towards elevating the maritime sector. As you direct your own path with those that are set by our Eight-Point Socioeconomic Agenda and the Philippine Development Plan, among others, I am certain that our citizens will indeed get to enjoy safer, more secure, and more sustainable sea transport in the years to come.

As you inform your stakeholders about the course through which this industry will pursue its progress, let us remain united in implementing this strategy, achieving our goals, and uplifting the country. Let us also remain resilient as we use this plan in navigating the sometimes unsteady but always bright waters of tomorrow.

May the Almighty bless our efforts so that the Filipino people may reap the benefits of a revitalized maritime industry.

FERDINAND ROMUALDEZ MARCOS JR.

MESSAGE FROM THE
SENATE PRESIDENT

My warmest congratulations to the Maritime Industry Authority on the publication of the Maritime Industry Development Plan 2028 (MIDP 2028), in line with the development plans of the administration. In February 2023, we in the Senate gave our concurrence to the ratification of the Regional Comprehensive Economic Partnership (RCEP) agreement, which will allow us to more actively engage in trade relations with our nine economic partners in the Association of Southeast Asian Neighbors, as well as Japan, Korea, China, Australia, and New Zealand. With the MIDP 2028, we are hopeful that we will be able to steer our foreign trade efforts toward the full realization of the promises of the RCEP agreement—that is, sustainable growth and development, and a new age of economic competitiveness for the country. Apart from RCEP countries, we are also hopeful that the MIDP 2028 will be instrumental in helping us foster stronger economic ties with countries across the globe, through smoother, more efficient, and safer transport systems, aided by proper technological support. Trust that we in the Senate are your steadfast partners in strengthening our maritime industry, protecting our seafarers, and working toward the growth and development of our country and our people.

Maraming salamat po!

JUAN MIGUEL FERNANDEZ ZUBIRI

MESSAGE FROM THE
SPEAKER OF THE HOUSE OF REPRESENTATIVES

Blessed greetings to all officials and employees of the Maritime Industry Authority!

Allow me to be among the first persons to congratulate you all on the launch of the Maritime Industry Development Plan (MIDP) 2028 book. This is indeed a monumental feat for a government agency that oversees an industry that contributes significantly to our economy.

The MIDP 2028 plays a major role in accomplishing the goals laid out by the administration of President Ferdinand "Bongbong" Romualdez Marcos Jr. for the duration of his term. As the maritime industry is an integral part of our country, its progress and development should always be a priority.

To the Maritime Industry Authority, you do our people and this great nation an immense deal of public service. Without you, no effort at economic and societal progress will be successful. And for that, you are an important pillar in nation-building.

May you continue to serve the people with passion by upholding the highest degree of standards in the maritime industry.

Again, congratulations on the launch of the MIDP 2028! Mabuhay po kayong lahat!

FERDINAND MARTIN GOMEZ ROMUALDEZ

MESSAGE FROM THE
TRANSPORTATION SECRETARY

Congratulations to the Maritime Industry Authority (MARINA) for the meticulous efforts that went into updating and finalization of the Maritime Industry Development Plan (MIDP) 2028.

I am confident the MIDP would serve as a roadmap that will catalyze the development of the country's maritime sector. The Philippine maritime industry was adversely affected by the pandemic. The Department of Transportation and MARINA collaborated to overcome various challenges faced by Filipino seafarers and their families during the pandemic.

Today, we explore ways to revive the country's maritime industry and ensure the safe deployment of Filipino seafarers throughout the globe. We want to anticipate and address the evolving needs of Filipino seafarers - their overall well-being through secured jobs and equitable benefits package.

I recognize the vital role of the MIDP - how it will shape the Philippine maritime ecosphere in the world stage. I commend MARINA for their unwavering commitment in pushing for the modernization of our country's maritime sector to be a global maritime hub.

We have accelerated the pace of the industry's rebound by drawing a recovery blueprint for the sector.

I hope our seafarers will continue to proudly represent the country as the bedrock of the maritime sector throughout the world. I challenge MARINA to enhance its support for our Filipino seafarers.

I trust that MARINA's projects and initiatives would lead to better benefits for these mariners.

Mabuhay ang Filipino seafarers!

JAIME JIMENEZ BAUTISTA

MESSAGE FROM THE
CHAIRMAN OF THE HOUSE COMMITTEE ON TRANSPORTATION

That fine line that separates a dream from a vision is called a plan, while the one that separates a vision from reality is called taking action.

It is with great fervor that I congratulate the Maritime Industry Authority (MARINA) for its committed effort to conceptualize the MARITIME INDUSTRY DEVELOPMENT PLAN (MIDP) 2028 BOOK. More than the book, it is the development plan found within its pages that we must now celebrate while taking on the challenges that would ensure the realization of its objectives by the year 2028.

Intrinsically aligned with the 8-Point Priority Agenda of the Marcos Administration, the Philippine Development Plan 2028, and Ambisyon Natin 2040, the MARINA completed the updating of the MIDP 2028 with the Philippine Maritime Industry Summit held in 2023 as its primary catalyst.

As the MIDP serves as the beacon of the Philippine maritime industry, it is integral not only to its direction but more importantly, to its eventual success with the realization of its envisioned objectives. Guided by the experiences and lessons of the last few years, MARINA embarked on a mission to develop a truly competent Philippine Merchant Marine Fleet anchored on better access to an optimized sea transport system for both shippers and passengers, an enhanced capacity of our shipping industry, and the attainment of a top-of-mind preference for the Filipino maritime workforce.

I pray for its success and profess to be both an advocate and a vanguard for its realization. The House of Representatives and the House Committee on Transportation will ardently applaud the victories found in every promise delivered and constructively critique when such victories elude us. The Committee will constantly challenge MARINA with the hope that on the road to 2028, it shepherds in the nation's maritime industry, steadfast amidst a sea of uncertainty, competent despite the challenges of the times, and responsive to the ever-evolving demands of our world.

ATTY. ROMEO MACUSI ACOP, MNSA

MESSAGE FROM THE
TRANSPORTATION UNDERSECRETARY FOR MARITIME

First of all, I would like to express my sincerest gratitude and congratulations to the entirety of the Maritime Industry Authority and to everyone who contributed to the Maritime Industry Development Plan (MIDP) 2028!

The finalization and publication of the updated Ten-Year MIDP 2028 is such an important milestone for our country as this will serve as our roadmap to achieve a nationally-integrated and globally-competitive Philippine maritime industry by 2028.

With a vision in mind of achieving a strong and reliable Philippine Merchant Fleet that addresses the sea transport requirements of the archipelago in support of the national development agenda, the updated MIDP is a holistic approach that encourages synergy among industry key players—both from the private and government sectors. This is a result of years of inter-agency collaborations and workshops, series of consultations, and participatory government-industry fora, spearheaded by the MARINA, to ensure that the MIDP will be resilient and responsive to the changing local and international sea transport requirements. The MIDP 2028 recognizes how crucial it is to align our strategies with the current needs of our industry. Major components of the MIDP were revisited and revamped to ensure that it is aligned with the National Transport Policy, Eight (8) Point Socio-Economic Agenda of the Marcos Administration, Philippine Development Plan 2023-2028, and achievement of the *Matatag, Maginhawa, at Panatag na Buhay* for the Filipino people under the *Ambisyon Natin* 2040. Truly, we consider this as a major move of the Philippine Maritime Industry towards the sustainable economic progress that we envision for the country.

As we all know, a thriving maritime industry translates to a more conducive economic environment and smooth influx of investments and facilitation of trade within the country. We are blessed with a very promising maritime industry, and we have this huge responsibility to sustain it and ensure that we are navigating towards a prosperous direction. The updated MIDP is instrumental to make this happen and to follow the marching order of the President – full speed ahead. May this kind of support inspire us to deliver tangible and sustainable outcomes in line with the updated MIDP.

Again, congratulations MARINA for spearheading this effort. I enjoin everyone to sustain our commitment for this noble initiative for the benefit of our stakeholders and the country.

ELMER FRANCISCO UBALDO SARMIENTO

MESSAGE FROM
FORMER MARINA ADMINISTRATOR
July 2022 - December 2023

Our fellow Filipinos, allow me to present to you the Maritime Industry Development Plan 2028, which we have recalibrated and updated to reflect the vision of President Ferdinand R. Marcos Jr., and the long-term objectives of the MARINA, as aligned with the Sustainable Development Goals of the United Nations and AMBISYON Natin 2040.

The sea lies at the heart of Filipino culture and way of life. We, at the MARINA, believe that it is high time for us to embark on an ambitious upgrade of our maritime industry with the MIDP 2028 by bringing it back to its roots based on Presidential Decree No. 474 enacted almost 50 years ago, and putting it into a post-pandemic perspective by focusing on what really matters — the Philippine merchant fleet and our proud maritime workforce.

It is hoped that the recalibration of the MIDP will take our maritime industry to the next level and equip the next generation to embark on their own journeys towards careers at sea.

ATTY. HERNANI NIEVES FABIA

FERDINAND R. MARCOS JR.
President of the Republic of the Philippines
WELCOME
HIS EXCELLENCY
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FERDINAND R. MARCOS JR.
President of the Republic of the Philippines

Acknowledgment

The Maritime Industry Authority (MARINA) expresses its sincerest appreciation to all industry stakeholders from the public and private sectors for their invaluable contributions and strong support for the completion of this noble undertaking, the **updated Maritime Industry Development Plan (MIDP) 2028**, aligned with the goals and vision of the Ambisyon Natin 2040, Philippine Development Plan 2023-2028, Philippine Transport Policy, the 8-Point Socio-Economic Agenda of the Marcos Jr Administration, and relevant international maritime commitments of the country.

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LIST OF Abbreviations

ADLE	Additional Deduction for Labor Expense
AESUS	Alternative Energy Source Using Sail
AFAB	Authority of the Freeport Area of Bataan
AFP	Armed Forces of the Philippines
AFS	Anti-Fouling System
AFTA	ASEAN Free Trade Area
AIS	Automatic Identification System
ALMA	Association of Licensed Manning Agencies
ALON	Alternative Voyage Routing Software for Local Navigation
ALS	Alternative Learning System
APAC	Asia-Pacific
APEC	Asia-Pacific Economic Cooperation
API	Application Programming Interface
ARPA	Automatic Radar Plotting Aid
ASEAN	Association of Southeast Asian Nations
ASR	Afloat Ship Repair
ATF	Annual Tonnage Fee
ATON	Aids to Navigation
BCDA	Bases Conversion and Development Authority
BFAR	Bureau of Fisheries and Aquatic Resources
BFP	Bureau of Fire Protection
BI	Bureau of Immigration
BIAP	Boating Industries Association of the Philippines
BIMP - EAGA	Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area
BMB	Biodiversity Management Bureau
BIR	Bureau of Internal Revenue
BWM	Ballast Water Management
BOC	Bureau of Customs
BOI	Board of Investments
BPS	Bureau of Philippine Standards
BS MarE	Bachelor of Science in Marine Engineering
BSMT	Bachelor of Science in Maritime Transportation
BS NAMARE	Bachelor of Science in Naval Architecture and Marine Engineering
BSP	Bangko Sentral ng Pilipinas
CAR	Cordillera Administrative Region
CBD	Convention on Biological Diversity
CCC	Climate Change Commission
CDA	Cooperative Development Authority
CDC	Clark Development Corporation
CDO	Cease and Desist Orders
CFZ	Clark Freeport Zone
CH_4	Methane
CHED	Commission on Higher Education
CIT	Corporate Income Tax
CIWT-IS	Coastal and Inland Waterways Transport-Information System
CIWTS	Coastal and Inland Waterways Transport System
CLC	Civil Liability Convention
CME	Compliance Monitoring and Enforcement
CMP	Certificate of Marine Profession
CO_2	Carbon Dioxide

COA	Certificate of Accreditation
COC	Certificate of Competency
COP	Certificate of Proficiency
CP	Core Program
CPA	Cebu Port Authority
CPC	Certificate of Public Convenience
CREATE	Corporate Recovery and Tax Incentives for Enterprises
CRUISE	Connecting Rural Urban Intermodal Systems Efficiency
CSEZ	Clark Special Economic Zone
CSR	Continuous Synopsis Record
CTA	Cape Town Agreement
CTDC	Cruise Tourism Development Council
CY	Calendar Year
DA	Department of Agriculture
DBM	Department of Budget and Management
DBP	Development Bank of the Philippines
D-COC	Domestic-Certificate of Competency
DCS	Data Collection System
DENR	Department of Environment and Natural Resources
DENR-EMB	Department of Environment and Natural Resources - Environmental Management Bureau
DFA	Department of Foreign Affairs
DFA-MOAO	Department of Foreign Affairs - Maritime and Ocean Affairs Office
DICT	Department of Information and Communications Technology
DILG	Department of the Interior and Local Government
DMW	Department of Migrant Workers
DND	Department of National Defense
DO	Department Order
DOE	Department of Energy
DOF	Department of Finance
DOH	Department of Health
DOJ	Department of Justice
DOLE	Department of Labor and Employment
DOST	Department of Science and Technology
DOT	Department of Tourism
DOTr	Department of Transportation
DPWH	Department of Public Works and Highways
DQL	Digital Quality of Life Index
DTI	Department of Trade and Industry
DWT	Deadweight Tonnage
EC	European Commission
ECDIS	Electronic Chart Display and Information System
EIMP	Eco-Industrial Maritime Park
EMSA	European Maritime Safety Agency
EO	Executive Order
EP	Enabling Program
ETEEAP	Expanded Tertiary Education Equivalency and Accreditation Program
ETO	Electro-Technical Officer
E-TRB	Electronic Training Record Book
EU	European Union
EU NAVFOR	European Union Naval Force

FAB	Freeport Area of Bataan
FAL	Convention on Facilitation of International Maritime Traffic
FAO	Food and Agriculture Organization
FFO	Fixed or Floating Objects
FRP	Fiber-Reinforced Plastic
FSS	Fire Safety Systems
FVSC	Fishing Vessel Safety Certificates
FVSRR	Fishing Vessel Safety Rules and Regulations
GATS	General Agreement on Trade in Services
GCQ	General Community Quarantine
GDP	Gross Domestic Product
GFI	Government Financial Institution
GHG	Greenhouse Gases
GIE	Gross Income Earnings
GIS	Geographic Information System
GMDSS	Global Maritime Distress and Safety System
GNP	Gross National Product
GT / GRT	Gross Tonnage
HEI	Higher Education institution
HNS	Hazardous and Noxious Substance
HoR	House of Representatives
IACS	International Association of Classification Societies
IAPH	International Association of Ports and Harbors
IATF	Inter-Agency Task Force
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICCFRAIMC	Inter-agency Coordinating Committee to Facilitate the Ratification and Accession to the Implementation of Maritime Conventions
ICS	International Chamber of Shipping
ICT	Information and Communication Technology
IDSFV	Integrated Database System for Fishing Vessels
IEC	Information, Education and Communication
IGC Code	International Code of the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk
ILO	International Labour Organization
IMB	International Maritime Bureau
IMO	International Maritime Organization
IMSAS	IMO Member State Audit Scheme
IORIS	Indo Pacific Regional Information Sharing
IPP	Investment Priorities Plan
IRR	Implementing Rules and Regulations
ISM	International Safety Management
ISPS	International Ship and Port Facility Security
ITC	Independent Tower Companies
ITH	Income Tax Holiday
IUUF	Illegal, Unreported and Unregulated Fishing
JICA	Japan International Cooperation Agency
KITC	Knowledge and Information Technology Center
LCS	Local Classification Society
LBP	Land Bank of the Philippines
LEP	Ladderized Education Program

LGUs	Local Government Units
LL	Load Lines Convention
LL PROT	PROT Load Lines Protocol
LLDA	Laguna Lake Development Authority
LLO	Legislative Liaison Officer
LSA	Life-Saving Appliance
LTE	Long-Term Evolution
M&E	Monitoring and Evaluation
MAOA	Maritime and Ocean Affairs
MARINA	Maritime Industry Authority
MARPOL	Marine Pollution International Convention for the Prevention of Pollution from Ships
MARPOL PROT	Marine Pollution International Convention for the Prevention of Pollution from Ships Protocol
MARRIS	Maritime Route Rationalization and Information System
MASS	Maritime Autonomous Surface Ships
MBPS	Megabytes per second
MBST	Modified Basic Safety Training
MC	Memorandum Circular
MDFO	Municipal Development Fund Office
MEP	Marine Environment Protection
MEPS	Marine Environment Protection Service
MEPSEAS	Marine Environment Protection of the South-East Asian Seas
MET	Maritime Education and Training
MFVRS	Municipal Fishing Vessel Registration System
MHEI	Maritime Higher Education Institution
MIDP	Maritime Industry Development Plan
MIDKTC	Maritime Innovation, Digitalization, Transformation and Knowledge Center
MIKC	Maritime Innovation and Knowledge Center
MISMO	MARINA Integrated Seafarers Management Online
MLC	Maritime Labour Convention
MMDA	Metro Manila Development Authority
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MRO	MARINA Regional Office
MSMC	Minimum Safe Manning Certificates
MSMEs	Micro, Small and Medium Enterprises
MT	Million Metric Tons
MTI	Maritime Training Institution
MTPCS	MARINA Technical Personnel Certification System
N2O	Nitrous Oxide
NAMARE	Naval Architects and Marine Engineers
NAMRIA	National Mapping and Resource Information Authority
NCCAP	National Climate Change Action Plan
NCR	National Capital Region
NCTDSAP	National Cruise Tourism Development Strategy and Action Plan
NCWC	National Coast Watch Council
NDC	Nationally Determined Contribution
NEDA	National Economic Development Authority
NGD	National Guidance Document
NIA	National Interest Analysis

NLS	Noxious Liquid Substances
NGAs	National Government Agencies
NMP	National Maritime Polytechnic
NLEX	North Luzon Expressway
NMSSC	National Maritime Safety and Security Council
NOLCO	Enhanced Net Operating Loss Carry Over
NSP	National Strategic Plan
NSPC Code	National Ships and Ports Security Code
NSPS	National Ships and Ports Security
NSPSTM	National Safety of Ports, Ships and Terminal Management
NSPSTMI	National Security Program for Sea Transport and Maritime Infrastructure
NRI	Network Readiness Index
NTC	National Telecommunications Commission
O&M	Operation and Maintenance
OAS	Online Application System
OBT	Onboard Training
OCD	Office of Civil Defense
OFWs	Overseas Filipino Workers
OLAS	Online Appointment System
OP	Office of the President
OP-MIDP	Overriding Program-MIDP
OSYA	Out-of-School Youth and Adult
OTC	Office of Transportation Cooperative
OTS	Office for Transportation Security
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PAGCOR	Philippine Amusement and Gaming Corporation
PAMTCI	Philippine Association of Maritime Training Centers, Inc.
PAROLA	Port Capacity Analysis and Route Optimization for Local Maritime Administration
PBBM	President Ferdinand “Bongbong” R. Marcos, Jr.
PBSAP	Philippine Biodiversity Strategy and Action Plan
PCG	Philippine Coast Guard
PCIEERD	Philippine Council for Industry, Energy and Emerging Research and Development
PD	Presidential Decree
PDEA	Philippine Drug Enforcement Agency
PDP	Philippine Development Plan
PEZA	Philippine Export Zone Authority
PFSP	Port Facility Security Plan
PFVSRR	Philippine Fishing Vessel Safety Rules and Regulations
PHILCOMSAT	Philippine Communications Satellite Corporation
PIA	Philippine Information Agency
PICC	Philippine International Convention Center
PISA	Philippine Inter-island Shipping Association
PMMA	Philippine Merchant Marine Academy
PMMRR	Philippine Merchant Marine Rules and Regulations
PN	Philippine Navy
PNHS	Philippine Nautical Highway System
PNP	Philippine National Police
PNP-MG	Philippine National Police - Maritime Group
POEA	Philippine Overseas Employment Administration
PPA	Philippine Ports Authority
PPP	Public-Private Partnerships

PRC	Professional Regulation Commission
PRS	Philippine Registered Ships
PSA	Philippine Statistics Authority
PSC	Port State Control
PSRS	Passenger Service Ratings System
PSSRR	Philippine Ship Safety Rules and Regulations
PTEs	Public Telecommunications Entities
PTTI	Passive Telecommunications Tower Infrastructure
PTV4	People's Television Network
R&D	Research and Development
RA	Republic Act
RbME	Results-based Monitoring and Evaluation
RCMS	Route Capacity Measurement System
RDC	Regional Development Council
RO	Recognized Organization
RORO	Roll-On, Roll-Off
RRTS-PSRS	Roll-On Roll-Off Transportation System Passenger Ships Rating Survey
S&R	Search and Rescue
SBMA	Subic Bay Metropolitan Authority
SBSR	Shipbuilding and Ship Repair
SCOs	Show Cause Orders
SCIT	Special Corporate Income Tax
SDG	Sustainable Development Goals
SEEMP	Ships' Energy Efficiency Management Plan
ShAP	Shipyard Association of the Philippines
SHS	Senior High School
SIB	Seafarers' Identity Booklet
SID	Seafarer's Identity Document
SIPP	Strategic Investment Priority Plan
SLEX	South Luzon Expressway
SMC	Serious Marine Casualty
SMIDTKC	Sustainable Maritime Innovation, Digitalization, Transformation, and Knowledge Center
SMS	Safety Management System
SONAME	Society of Naval Architects and Marine Engineers
SOLAS	Safety of Life at Sea
SRB	Seafarers Record Book
SRS	Shipyards Regulation Service
SOx	Sulfur Oxide
STCW	International Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended
STCWO	Standards of Training, Certification and Watchkeeping Office
STCW-F	International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel
STI	Science, Technology and Innovation
SUA	Suppression of Unlawful Acts Against the Safety of Maritime Navigation
TDA	Tourist Destination Area
TESDA	Technical Education and Skills Development Authority
TIEZA	Tourism Infrastructure and Enterprise Zone Authority
TIHM	Technologically-Improved Hull Material
TRAIN	Tax Reform for Acceleration and Inclusion

TRB	Training Record Book
TSR	Transportation Security Regulation
TTPs	Tactics, Techniques and Procedures
TVL	Technical – Vocational Livelihood
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UP	University of the Philippines
USD	US Dollars
VAT	Value Added Tax
VIMSAS	Voluntary IMO Member State Audit Scheme
VMP	Vessel Modernization Program
VSP	Vessel Security Plan
VTMS	Vessel Traffic Management Systems
WHO	World Health Organization
WHS	Wooden-hulled ships
WIMAPHIL	Women in Maritime Philippines Association
WONA	Whole-of-Nation Approach
WWF	World Wildlife Fund

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Executive

SUMMARY

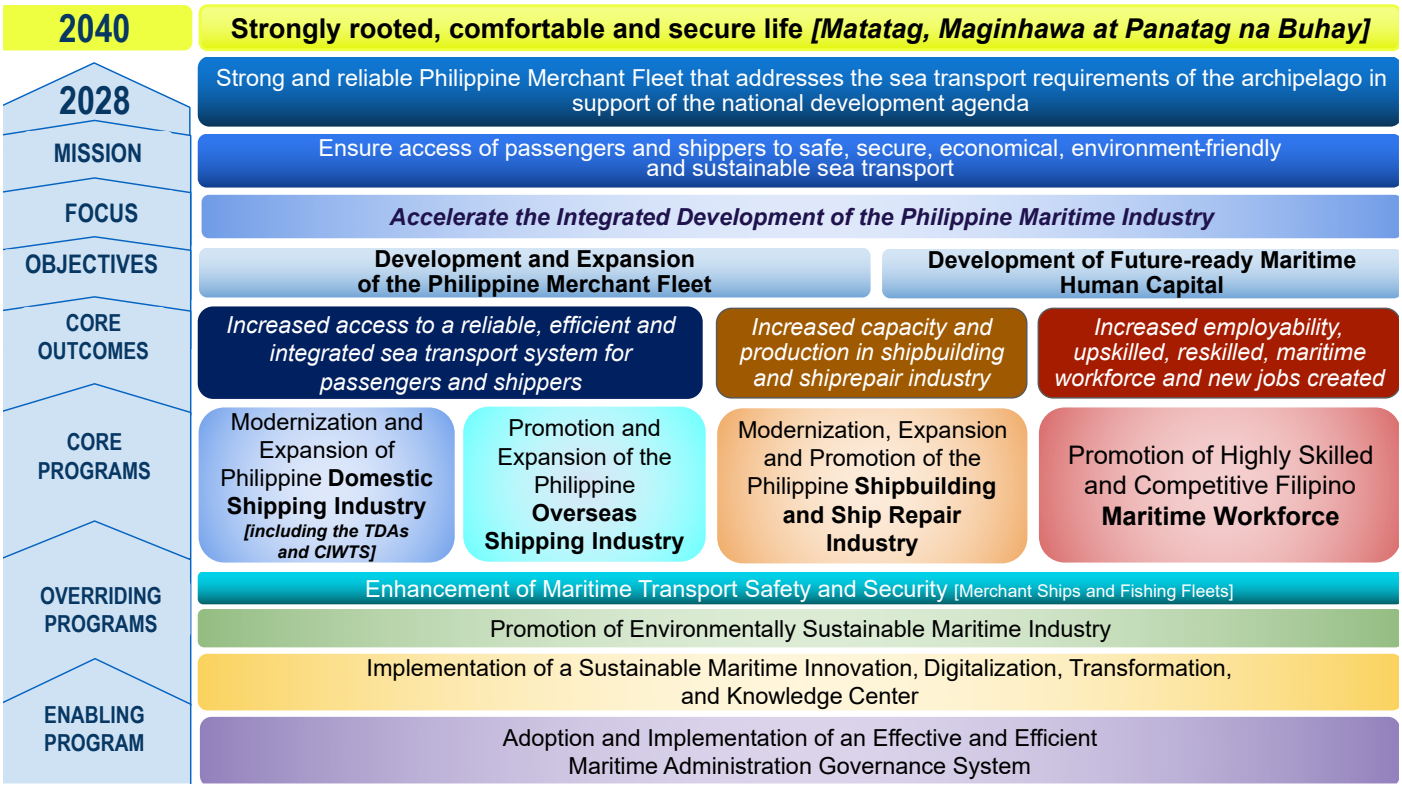
Executive Summary

The Maritime Industry Development Plan (MIDP) is a roadmap to accelerate the integrated development of the Philippine maritime industry. It is consistent with the core principles of the Sustainable Development Goals (SDGs) of the United Nations (UN) and the principle of leaving no one behind, as well as the achievement of the long-term vision for Filipinos to enjoy a "strongly rooted, comfortable and secure life *[Isang Matatag, Maginhawa at Panatag na Buhay]*".

The MIDP envisions a *strong and reliable Philippine merchant fleet that addresses the sea transport requirements of the archipelago in support of the national development agenda.* It is anchored on the vision of the late President Ferdinand Edralin Marcos, Sr., as stated in Presidential Decree (PD) No. 474 issued in 1974. The PD 474 highlighted the desire to develop a Philippine merchant fleet that will serve the needs of moving people and goods between the islands, and at the same time increase the participation of Philippine-flagged ships in the carriage of the country's foreign trade.

The updated MIDP envisions to: (a) increase access to a safe, reliable, efficient, affordable, sustainable, and integrated sea transport system for passengers and shippers; (b) increase capacity and production of shipbuilding and ship repair industry; and (c) increase employability of maritime workforce and create new and quality jobs through reskilling and upskilling of the maritime workforce. The overall framework of the MIDP 2028 is illustrated in the figure below:

UPDATED MIDP 2028 FRAMEWORK



THE UPDATING OF MIDP 2028

The year 2019 marked the initial launching of the MIDP and identified eight (8) programs, as follows: *Program 1: Upgrading of Domestic Shipping in Support of the Nautical Highway Development*; *Program 2: Development of Shipping Services for Maritime Tourism*; *Program 3: Development of Coastal and Inland Waterways Transport System* (CIWTS); *Program 4: Strengthening of Safety Standards of Philippine Registered Fishing Vessels*; *Program 5: Development of a Global Maritime Hub*; *Program 6: Enhancement of Maritime Safety in the Philippines*; *Program 7: Modernization of Maritime Security in the Philippines*; *and Program 8: Establishment of Maritime Innovation and Knowledge Center* (MIKC). In the same year, despite budgetary constraints, the MARINA and some other implementing agencies commenced the implementation of their committed deliverables per program.

In 2020, the threats and imminent damage brought about by the COVID-19 pandemic halted some MIDP projects and activities as the whole of the maritime industry focused more on responding to mitigate the impact of such catastrophe. However, the pandemic was instrumental in **accelerating** some of the projects eyed under Programs 5, 8 and 9, such as the the **digitalization of services** for the processing of seafarers statutory competence certificates; the establishment of the **Philippine Green Lane**; the establishment of **Crew Change Hubs**; and the implementation of **Blended Learning**, among others. Likewise, a new MIDP priority program was proposed which is **Program 9: The Philippines to Advance the Development and Provision of Qualified and Competent Seafarers as well as Human Capital Requirement for the Global Maritime Industry** which will focus on seafarers and maritime professionals to ensure their global competitiveness. *(See Annex B for the list of accomplishments from 2019-2022)*

From 2021-2022, during the various stakeholders' events, some revisions on the title were recommended for Programs 1, 2, 4 and 8, and these are:

Program 1: Development of Domestic Shipping;
Program 2: Development of Shipping Services for Tourist Destination Areas (TDAs);
Program 4: Improvement of the Efficiency of Fishing Operations and Vessel Safety; *and*
Program 8: Development of a Sustainable Maritime Innovation, Digitalization, Transformation and Knowledge Center (MIDKTC).

The stakeholders likewise recommended that Program 5 will focus on the promotion and expansion of overseas shipping and elevate one (1) of its components, the shipbuilding and ship repair into an additional priority program; while Programs 6 and 7 may be merged into one program as both are very interrelated. Moreover, one (1) program was added to focus on marine environment protection and preservation, to wit:

Program 5: Promotion and Expansion of the Philippine Overseas Shipping;
Program 6: Enhancement of Maritime Safety and Maritime Transport Security;
Program 7: Modernization / Expansion of the Shipbuilding and Ship Repair Industry; *and*,
Program 10: Implementation of the Strategy on Marine Environment Protection.

At the start of 2023, the MARINA led the final updating of the MIDP, primarily to ensure that it is consistent with the Philippine Development Plan (PDP) to align with the socio-economic agenda of the PBBM Administration. Programs were categorized, and some were merged, while components were reduced or reclassified.

The 2023 version of the MIDP features four (4) Core Programs, three (3) Overriding Programs, and one (1) Enabling Program. The goals and outcomes of each program are interrelated. The Overriding Programs underpin the goals and outcomes of Core Programs, while the Enabling Program is geared towards facilitating the implementation of both Overriding and Core Programs, as follows;

Core Program No. 1 [MIDP CP 1]
Modernization and Expansion of Philippine Domestic Shipping Industry *[including the Tourist Destination Areas (TDAs) and the Coastal Inland Waterways Transport System (CIWTS)]*

The modernization and development of a strong and dynamic domestic shipping fleet will directly impact the general public through the provision of safe ships in rationalized routes. Not only will this facilitate the efficiency of inter-island bay and river trade, it will stimulate local economies in the areas. It will also contribute to the development of new routes between tourist destinations with the development of new cruise routes and ports. *Refer to Chapter 2.*

Core Program No. 2 [MIDP CP 2]
Promotion and Expansion of the Philippine Overseas Shipping Industry

Recognizing the essential role of sea transport in the carriage of the country's foreign trade, strengthening the Philippine ship registry is geared towards expanding the country's merchant fleet, reducing reliance on foreign-flagged ships. This will also lead to the creation of employment opportunities for Filipino seafarers and shore-based maritime workers in manning ancillary services. *Refer to Chapter 3.*

Core Program No. 3 [MIDP CP 3]
Modernization, Expansion and Promotion of the Philippine Shipbuilding and Ship Repair Industry

The shipbuilding core program aims to address the increasing demand for modern and technologically advanced ships. The Philippines shipbuilding follows the top three (3) ranking shipbuilders of the world, serving as an impetus in raising the competitiveness of the industry. Targeted as a priority outcome is the increase of domestic trading ships built in the Philippines, resulting in foreign exchange savings which would otherwise be paid to foreign shipbuilders. Likewise, attracting foreign shipowners in having their ships constructed in the Philippines will generate foreign exchange, helping the country's balance of payments. *Refer to Chapter 4.*

Core Program No. 4 [MIDP CP 4]
Promotion of Highly Skilled and Competitive Filipino Maritime Workforce

The Program focuses on preparing the maritime human resource to be a more competitive sector of the maritime industry. Through this program, a reservoir of competent maritime human resources will be maintained and available to man merchant ships, and other ancilliary industries. This program facilitates the propagation of the industry's best practices as well as the transfer of maritime knowledge and expertise through the academe and training institution. A competent maritime workforce is pivotal to a strong and reliable Philippine merchant fleet that addresses not only the

sea transport requirements of the archipelago in support of the national development agenda, but also the manpower requirement of the world's merchant fleet. *Refer to Chapter 5.*

OVERRIDING PROGRAMS

Overriding Program No. 1 [MIDP OP 1]
Enhancement of Maritime Transport Safety and Security *[Merchant ships and Fishing fleets]*

This overriding program supports the MIDP's mission of "ensuring access of passengers and shippers to a safe, secure, and economical sea transport". The overall objective of this overriding program is to ensure that all Philippine merchant and fishing fleets are seaworthy through the implementation of a maritime transport safety and security policy framework, upgrading of system and infrastructure, promotion of maritime safety and security culture and strengthened research and development. *Refer to Chapter 6.*

Overriding Program No. 2 [MIDP OP 2]
Promotion of Environmentally Sustainable Maritime Industry

This overriding program of MIDP 2028 on the Promotion of Environmentally Sustainable Maritime Industry supports the MIDP mission of ensuring access to an environment-friendly and sustainable sea transport. The overall objective of this program is to pursue green and blue economy and promote livable and sustainable communities through the implementation of a marine environment protection policy framework, enhancement of systems and infrastructure, implementation of the marine environment protection strategy and promotion of research and development. *Refer to Chapter 7.*

Overriding Program No. 3 [MIDP OP 3]
Implementation of a Sustainable Maritime Innovation, Digitalization, Transformation, and Knowledge Center (SMIDTKC)

Digitalization and automation in maritime transport will optimize existing processes, create new business opportunities and advance the geography of commerce and trade. Digital technologies and solutions increase competitiveness and enhance operational efficiency for the benefit of relevant stakeholders in the maritime industry.

Digitalization of maritime information, documents and services are also envisioned to support the government's thrust to make data-based decisions necessary in the pursuit of the envisioned work and interests of maritime agencies and stakeholders. *Refer to Chapter 8.*

ENABLING PROGRAM

Enabling Program [MIDP EP]
Adoption and Implementation of an Effective and Efficient Maritime Administration Governance System

In view of the demands of the core and overriding programs, the need for a strong maritime administration working on a whole-of-nation (WONA) approach is vital. A strong maritime administration and governance will enable sustainable national response to ever-changing times. It will facilitate the implementation of planned development while also allowing the government to act dynamically to challenges and crises both in the local and international spheres. The program likewise covers all other MIDP implementing agencies which are performing maritime transport related functions. Vital to the success of this program are components identified such as the organizational restructuring, the sustained capacity building program, the enhanced maritime multilaterals and multi-sector linkages, the enhanced systems and good governance and strategic communication and risk management. *Refer to Chapter 9.*

Finally, to help ensure the effective implementation of this industry plan, four (4) chapters are integrated in the updated version of MIDP 2028. These are: **Chapter 10: Action Plan** which contains the consolidated lists of projects and activities per program as well as the legislative agenda items which, through the strong support of the Congress, are targeted to be enacted in the 19th and 20th Congress; **Chapter 11: Results Matrices** which contains the success indicators or measures for each program; **Chapter 12: Monitoring and Evaluation** which provides the mechanism for the assessment of the effectiveness of the implementation of the MIDP and to ensure that the targeted outcomes are realized by the end of the program; and **Chapter 13: Communication Plan** which details strategies by which the MIDP 2028 will be disseminated to all relevant stakeholders of the maritime industry.

Chapter

01

Introduction

Introduction

Shipping has always been the backbone of domestic and international trade for most economies all over the world. Its role in the progress and development of nations cannot be overemphasized. In a very real way, maritime transport has driven, and continues to drive progress in developing countries, and innovation in developed countries. It remains to be the main mode of transportation for goods all over the world. Ninety percent (90%) of the world's goods are moved through seas as it continues to be the most economical mode of transporting high-volume cargo.[1]

Global shipping statistics

The global shipping industry came under intense stress in 2020 due to the COVID-19 pandemic. At a time when countries were forced to close borders, the world came face to face with the possibility of goods becoming scarce and travel virtually at a stand-still as entry restrictions became increasingly stringent. Health scientists, public health providers, and experts grappled with the pandemic and raced against time to provide vaccines as the COVID-19 virus continued to evolve into different variants.

In the years after the initial outbreak of the COVID-19 pandemic, the shipping industry, together with their respective national governments, worked to implement a system by which shipping operations can continue by adopting strict health protocols. While still below pre-pandemic levels, international maritime trade and growth in gross domestic product increased in 2022, driven largely by demand for containerized cargo, shipments of gas, and dry bulk shipping.[2] The demand for containerized cargo was driven in large part by consumers spending through online shopping portals.[3]

While the shipping industry worked to recover from the impact of COVID-19, the threat and outbreak of armed conflict between Russia and Ukraine subsequently prompted a massive change in the flow of goods between continents. The impact of the war was felt beyond the borders of Europe as global inflation rates soared to 8.8% in 2022.[4] The conflict stressed from the war is expected to continue to be felt as the global growth rate is expected to fall from 3.4% in 2022 to 2.9% before rising once again in 2024.[5]

With the resurgence of shipping volumes in 2021 and 2022, the usual accompanying issue of port congestion also reappeared. Continuous efforts to maximize efficiency created changes in trade routes and port calls, which put ports under pressure to adapt by increasing work hours and stacking heights to accommodate the surge in volume.[6] At the same time, war in Ukraine forced buyers to seek alternate sources and routes, which disrupted previously-established routes.[7]

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[1]Organisation for Economic Co-operation and Development (OECD), OECD Competition Assessment Reviews: Logistics Sector in the Philippines., citing Rushton, Croucher and Baker (2017). 2020. https://www.oecd.org/daf/competition/oecd-competition-assessment-reviews-philippines-2020.pdf. Last accessed on 25 April 2023.

[2]United Nations Committee on Trade and Development (UNCTAD), Review of Maritime Transport 2022: Navigating Stormy Waters. xvii. Accessed at https://unctad.org/system/files/official-document/rmt2022_en.pdf. Last accessed 24 April 2023.

[3]UNCTAD, Review of Maritime Transport 2022: Navigating Stormy Waters. Accessed at https://unctad.org/rmt2022. Last accessed 10 May 2023.

[4]International Monetary Fund, World Economic Outlook Update 2023: Inflation Peaking Amid Low Growth. Accessed at https://www.imf.org/en/Publications/WEO/Issues/2023/01/31/world-economic-outlook-update-january-2023#:~:text=Global%20inflation%20is%20expected%20to,since%20the%20 October%202022%20 WEO. Last accessed 24 April 2023.

[5]Ibid.

[6]UNCTAD, Review of Maritime Transport 2022: Navigating Stormy Waters, at 52.

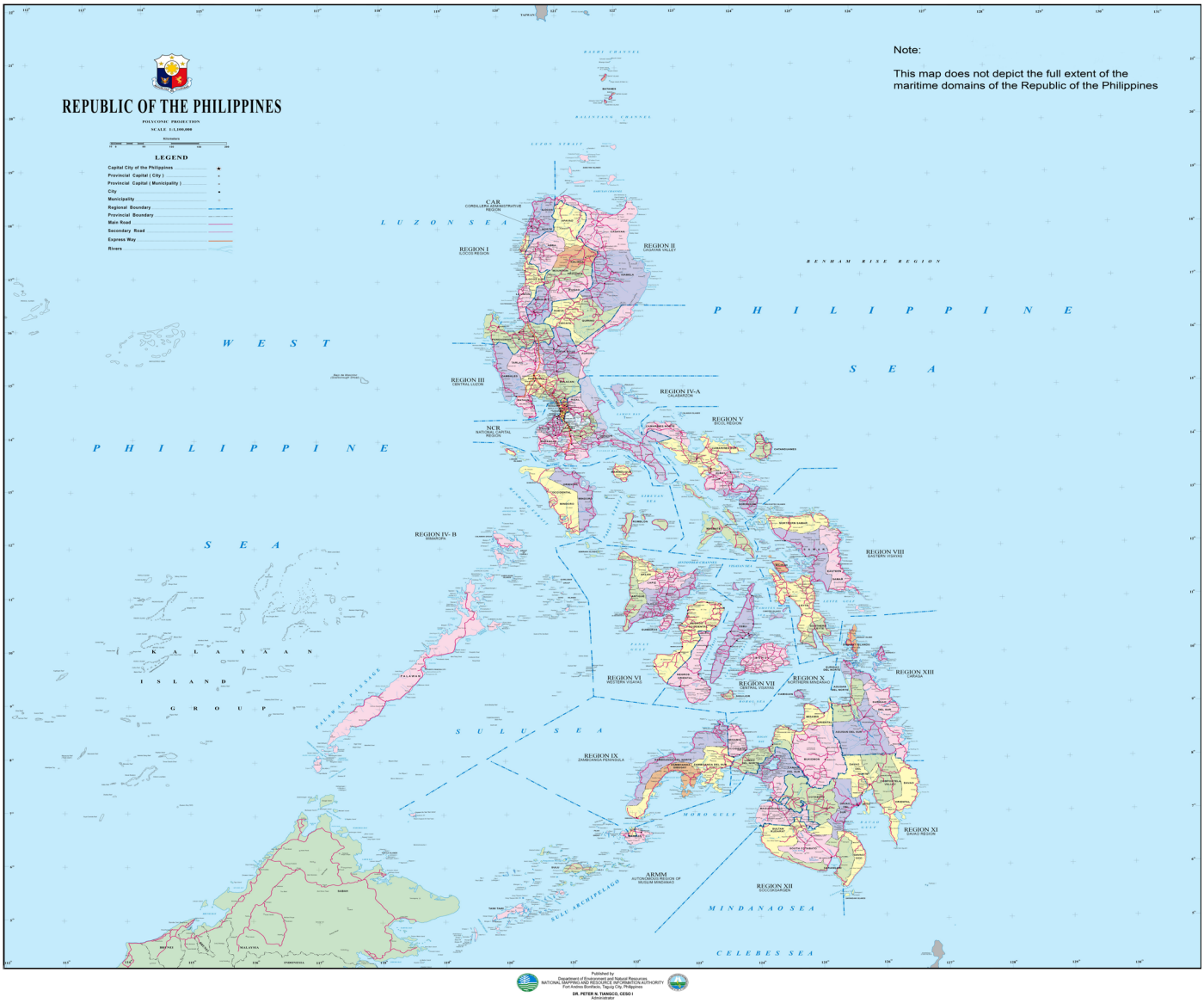
[7]Ibid, at xxiv.

Ageing fleet also emerged as a trend as current events produced volatile prices in fuel and carbon, resulting in much uncertainty in shipowners and investors who are unsure whether to stick to more current, conventional designs or invest in newer ships as innovations continue to be introduced into the market.[8] Like shipping, the business of shipbuilding largely sees orders below pre-pandemic levels.[9]

The Philippines

The Philippines is an archipelago located in South East Asia, bounded in the east by the Pacific Ocean, in the west by the West Philippine Sea, in the north by the Bashi Channel, and in the South by the Sulu and Celebes Seas.[10] The total land area covers approximately 300,000 square kilometers, with three major island groups[11] named Luzon, Visayas and Mindanao populated by 109,035,343 people as of the 2020 official census.[12]

Figure 1.1 Philippine Map



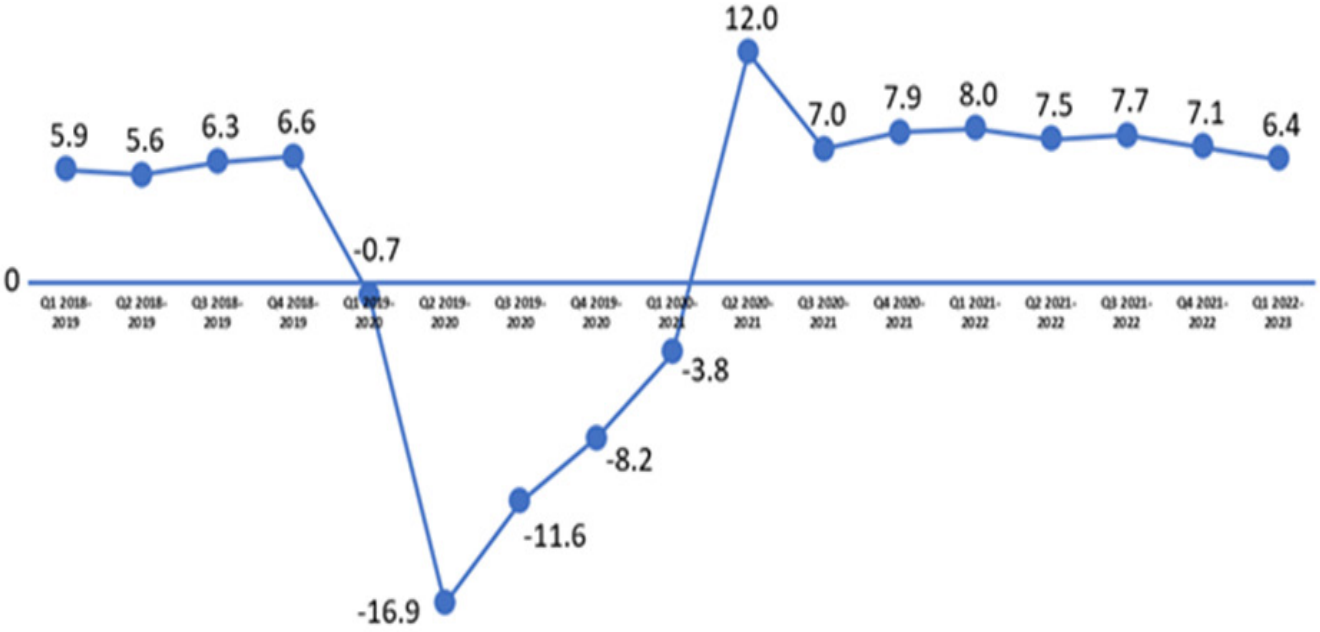
Source: National Mapping and Resource Information Authority

[8]Ibid, at xxiv.
[9]Ibid.
[10]The Permanent Mission of the Republic of the Philippines to the United Nations, The Philippines at a Glance / The Philippines. Accessed at https://www.un.int/philippines/philippines/philippines-glance. Last accessed 24 April 2023.
[11]Ibid.
[12]Philippine Statistics Authority, 2020 Census of Population and Housing Population Counts Declared Official By the President. Accessed at https://psa.gov.ph/content/2020-census-population-and-housing-2020-cph-population-counts-declared-official-president. Accessed on 24 April 2023.

According to the census, the region with the largest population is Region IV-A (CALABARZON) with a total population of 16,195,042, followed by the National Capital Region (NCR) with 13,484,462.[13] Meanwhile, the least populated regions are the Cordillera Administrative Region (CAR) with 1,797,660 people, Region XIII (CARAGA) with 2,804,788 people, and Region IV-B (MIMAROPA) with 3,228,558.[14]

The Philippine Statistics Authority (PSA) lists the growth rate of the Gross Domestic Product (GDP) of the Philippines at 7.6% and its Gross National Product (GNP) at 9.3%.[15] Shipping makes up Php 92.304 million of the Gross Value Added in Transportation and Storage in the national accounts of the Philippines as of the first quarter of 2023.[16] Its growth rate has been 24.5% in 2021-2022, from the previous annual value of -4.4% in 2020-2021.

Figure 1.2
Gross Domestic Product (At Constant 2018 Price)
Year-on-Year Growth Rates (in percent)
Q1 2018-2019 to Q1 2022-2023



Source: Philippine Statistics Authority[17]

Based on the graph above, for March 2023, the inflation rate was reduced by 1% from 8.6%[18] in February to 7.6%. One of the primary drivers of this downward trend is transportation, which includes water transport, where a reduction of 5.3% from 9% was registered in the previous month.[19]

Shipping in the Philippines

Shipping has been, and continues to be, a way of life in the Philippines. The Philippines relies heavily on both the extensive road networks and shipping to make goods between its many islands.

[13]Ibid.
[14]Ibid.
[15]Philippine Statistics Authority, at National Accounts of the Philippines. Accessed at https://psa.gov.ph/statistics/national-accounts/. Last accessed on 24 April 2023.
[16]Ibid.
[17]Ibid.
[18]Philippine Statistics Authority, Summary Inflation Report Consumer Price Index (2018=100): March 2023. Accessed at https://psa.gov.ph/statistics/survey/price/summary-inflation-report-consumer-price-index-2018100-march-2023. Last accessed on 24 April 2023.
[19]Ibid.

Much of Philippine history is tied to maritime trade - from its ancient past as a trading partner of neighboring countries like China and Japan - to its colonial history as shipbuilders for the galleon trade under Spain.

Several places in the Philippines were identified in Chinese texts as part of major trading networks.[20] Various shipwrecks around the Philippines which were dated to precolonial periods contained items coming from as far as Vietnam, Ayutthaya (now Thailand) and India.[21] The number of items recovered from these wrecks speaks volumes on how the Philippines heavily relied on shipping for trade and in obtaining items that were suitable for their use across various social classes.[22]

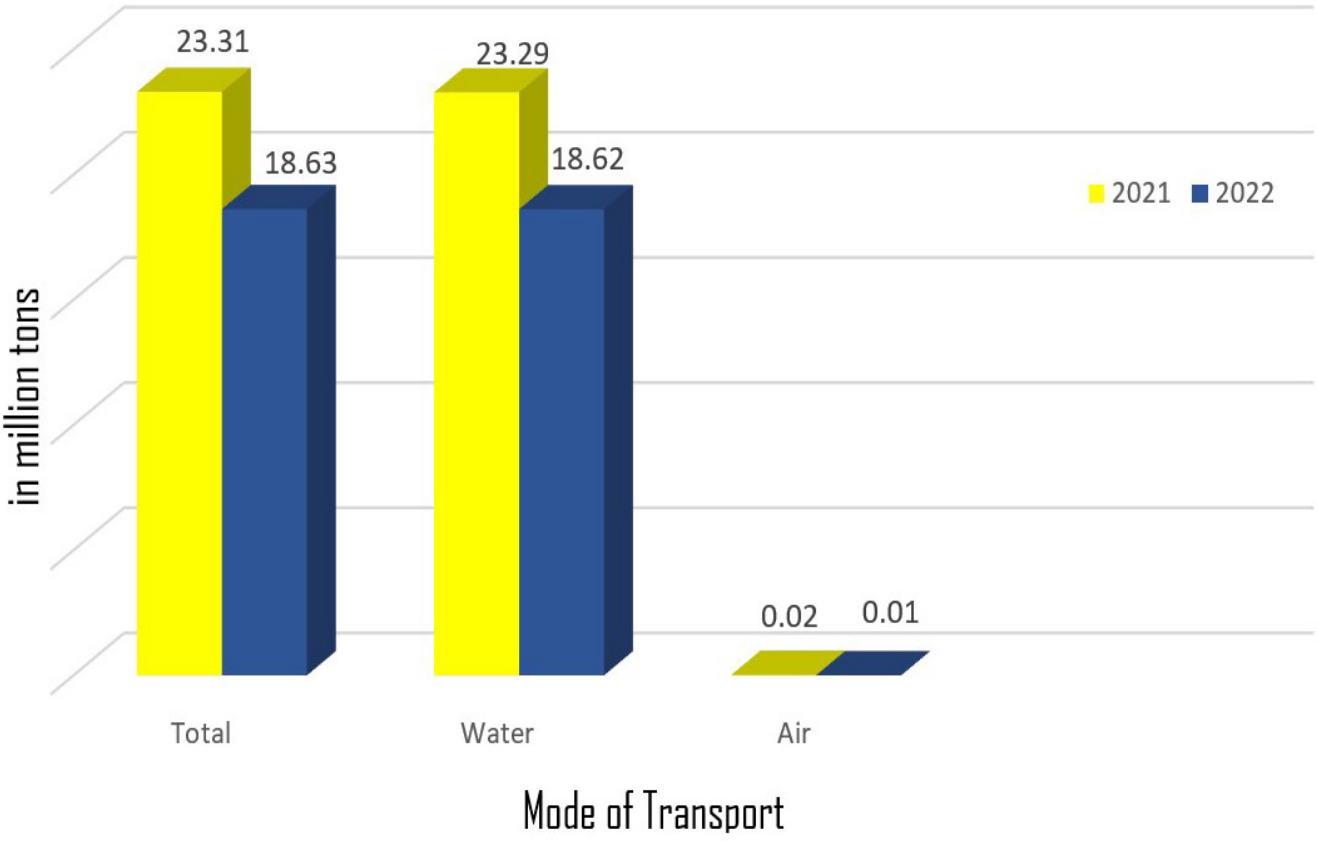
The shipbuilding skills of Filipinos were utilized by the Spaniards in the establishment of Manila-Acapulco galleon trade during Spain's colonial period in the country.[23] The workmanship of Filipinos and the availability of superior local materials made premium-quality ships could even rival the size of ships seen in the harbors of Europe.[24]

At present, the Philippines remains true to its maritime tradition by consistently cultivating a vibrant and competitive shipping industry. As of 2020, the logistics transport services sector is worth approximately USD 11 billion, translating to about 4% of the national Gross Domestic Product (GDP)[25] grabbing the 43rd spot in the World Bank's Logistics Performance Index.[26]

However, as of 2022, the total quantity of domestic trade clocked in at 18.63 million tons - an annual decrease of -20.1% from the previous year of 2021, which was recorded at 23.31 million tons,[27] while 99.94% of the goods were traded through water transport.[28]

[20]Orillaneda, Bobby C. Maritime Trade in the Philippines During the 15th Century CE. Moussons (Online), 27. http://journals.openedition.org./moussons/3529; DOI: https://doi.org/10.4000/moussons.3529. Last accessed on 25 April 2023.
[21]Ibid.
[22]Ibid.
[23]Calairo, Emmanuel F. "Building the Galleons: Some Preliminary Notes on Philippine Shipbuilding During the Spanish Period." Probing Philippine-Spanish Connections in History: Selected Papers. University of San Carlos, Cebu City, 6-8 October 2012 (Manila : National Historical Commission, 2012), 78.
[24]Ibid, 74.
[25]Organisation for Economic Co-operation and Development (OECD), OECD Competition Assessment Reviews: Logistics Sector in the Philippines. 2020. https://www.oecd.org/daf/competition/oecd-competition-assessment-reviews-philippines-2020.pdf. Last accessed on 25 April 2023.
[26]World Bank, International Scorecard Page. lpi.worldbank.org/international/scorecard/radar/C/PHL/2023. Last accessed on 25 April 2023.
[27]Philippine Statistics Authority, Highlights of the 2022 Domestic Trade Statistics in the Philippines: Final Result. Accessed at https://psa.gov.ph/content/2022-highlights-domestic-trade-statistics-philippines-final-results. Last accessed 26 April 2023.
[28]Ibid.

Figure 1.3
Quantity of Domestic Trade by Mode of Transport
Philippines for the period 2021[r] and 2022[r]



r - revised

Source: Philippine Statistics Authority[29]

As of 2021, a total of 3,986 domestic vessels plied Philippine waters (exclusive of motorbancas/ motorboats). Of this number, 742 are passenger vessels; 1,917 are cargo vessels; 242 are tankers; and 1,085 belong to other types of service.

MARINA data also revealed that a total of 2,654 vessels were acquired for entry into domestic shipping for the period of 2017 to 2021. Of these, 907 vessels were locally constructed, 946 were imported newly built, while 801 were imported secondhand.

The average age of passenger vessels was slightly reduced by 11% or from 19 years old in 2019 to 18 years old in 2020-2021. The reduction in average age of passenger vessels can be attributed to the gradual increase in the acquisition of newly constructed vessels.

Despite the numerous setbacks caused by several world events that posed challenges to shipping, Filipino seafarers continue to be much in demand. These seafarers remit a total average of USD 6.5 billion annually in the last three years, with the latest total earnings recorded at USD 6.7 billion (preliminary figure).[30]

[29]Ibid.
[30]Bangko Sentral ng Pilipinas, Overseas Filipino's Cash Remittances By Country, By Source. https://www.bsp.gov.ph/Statistics/External/ofw2.aspx. Last accessed on 11 May 2023.

Maritime Industry Development Plan (MIDP)

The crafting of the MIDP was conceptualized by the late President Ferdinand E. Marcos when he issued Presidential Decree No. 474,[31] or Maritime Industry Decree of 1974. The PD 474 created the Maritime Industry Authority (MARINA)[32] and tasked it with the preparation and updating of a Maritime Industry Development Program, which "*shall contain a rational and integrated development of the maritime industry.*"[33] By law, once approved by the President, all government departments, bureaus and agencies and instrumentalities are enjoined to implement the same within their respective jurisdictions.[34]

In 2018, the MARINA, guided by the inputs of various government agencies performing related functions and maritime industry stakeholders, created the 2018 Ten-Year Maritime Industry Development Plan, published in December 2018.[35] It identified ten (10) priority programs which would be the focus of development:

- **Program 1**: Upgrading of Domestic Shipping in Support of the PhilippineNautical Highway Development
- **Program 2**: Development of Shipping Services for Maritime Tourism
- **Program 3**: Development of Coastal and Inland Waterways Transport System (CIWTS)
- **Program 4**: Strengthening of Safety Standards of Registered Fishing Vessels
- **Program 5**: Development of a Global Maritime Hub
- **Program 6**: Enhancement of Maritime Safety in the Philippines
- **Program 7**: Modernization of Maritime Security in the Philippines
- **Program 8**: Establishment of Maritime Innovation and Knowledge Center (MIKC)
- **Program 9**: Development of Competitive and Highly Skilled Filipino Maritime Professionals[36]
- **Program 10**: Implementation of the Philippine Strategy on Marine Environment Protection[37]

Mindful of the immense impact of the COVID-19 pandemic, which has long-lasting implications and likely changed the way the shipping is conducted for the foreseeable future, the MARINA initiated a recalibration of the MIDP in 2023.

This version of the MIDP, which is expected to be formulated, planned for, and implemented from 2023-2028, reflects not only lessons learned from the pandemic and conflict of recent years, it also contains the Philippines' committed vision toward the advancement of the nation through its maritime endeavors.

[31]PD 474, entitled, "Providing for the Reorganization of Maritime Functions in the Philippines, Creating the Maritime Industry Authority, and for Other Purposes". Enacted 01 June 1974.
[32]Ibid, at Section 4.
[33]Ibid, at Section 5.
[34]Ibid.
[35]Maritime Industry Authority, Formulation of the Ten-Year Maritime Industry Development Plan: Final Masterplan December 2018. Pacific Rim Innovation and Management Exponents, Incorporated. Manila: 2018.
[36]Added in the Maritime Industry Development Plan 2019-2028 (2021 Version). Maritime Industry Authority, Maritime Industry Development Plan 2019-2028 (2021 Version). Accessed at https://marina.gov.ph/wp-content/uploads/2022/06/10-YEAR-MIDP-2021.pdf. Last accessed on 02 May 2023.
[37]Ibid.

Updated MIDP 2028 Framework

Anchored on the long-term vision for national development as formulated by the National Economic Development Authority (NEDA), succinctly stated as "*Matatag, Maginhawa, at Panatag na Buhay*,"[38] the 2023-2028 MIDP is intended to contribute directly to the aim of the National Development Plan 2022-2028 by creating and promoting a healthy, secure, and dynamic shipping business climate that brings development down to the grassroots.

The MIDP 2023-2028, at its core, is a roadmap for the development of a *Strong and Reliable Philippine Merchant Fleet That Addresses the Sea Transport Requirements of the Archipelago in Support of the National Development Agenda*. It is expected that the outcomes of building and developing a strong and reliable Philippine merchant fleet will bring long-lasting progress that will be felt by all, from a marked increase in ease of access to the transport of passengers and goods, to ensuring that maritime workers, from land to sea, are all knowledgeable, skilled, and properly equipped.

The vision of the updated MIDP 2028 is anchored on three main outcomes: (a) increased access to a reliable, efficient, and integrated sea transport system for passengers and shippers; (b) increased capacity and production in shipbuilding and ship repair industry; and (c) increased employability, upskilled, reskilled, maritime workforce, and new jobs created. All identified programs contribute to these outcomes in multiple ways.

Among the changes made by the updated MIDP is the re-clustering and regrouping of the programs identified under the previous iteration of the MIDP, along with the emergence of two new programs identified as crucial in bringing the Philippine maritime industry forward into the post-pandemic decade.

The MIDP programs are now regrouped into Core Programs, Overriding Programs, and an Enabling Program to underscore their respective roles relative to each other. These programs intersect and may have common components depending on their groups and their classification, as one component may be a common component in another. Other components may complement others in a separate program.

The MIDP Core Programs contain the crucial components directly promoting the creation of a favorable business climate leading to a dynamic shipping sector - from domestic shipping, overseas shipping, shipbuilding and ship repair, and maritime workforce sector. On the other hand, the Overriding Programs underpin the goals and outcomes of Core Programs by establishing a strong and stable environment through which the various shipping sectors can flourish, by attaining and sustaining progress. Encompassing both Core and Overriding Programs is the Enabling Program, which is intended to facilitate their implementation primarily by the establishment and institutionalization of strong governance mechanisms.

[38]Known as the Philippine Development Vision, "Ambisyon Natin 2040".

MIDP Core Programs

Four (4) Core Programs were identified in the updated MIDP 2028, namely:

- **Modernization and Expansion of Domestic Shipping Industry, *which includes the Development of Coastal and Inland Waterways Transport System (CIWTS) (previously Program 3) and Tourist Destination Areas (TDAs) (previously Program 2)***

  This program focuses on the development of the domestic shipping sector, with projects designed specifically to identify new avenues for investment, such as identification of underserved routes and services. There are also projects intended for the development of financing schemes to fund new business ventures for those interested in entering the domestic shipping business, as well as proposals for tax incentives to be filed with the Legislature.

  Among the proposed project components include the automation and digitalization of shipping service processes and the development of a domestic shipping portal system. It also has special focus on the development of the cruising industry, as well as the creation of inland waterway transport routes in major cities in the Philippines to help alleviate traffic build up during rush hours. It is intended that these water transport routes and systems will form part of the regular commutes within the major cities.

- **Promotion and Expansion of the Philippine Overseas Shipping Industry**

  This program focuses on the improvement of the attractiveness of the Philippine Overseas Shipping Registry by increasing the competitive advantage of Philippine-registered ships engaged in international trade. To this end, several strategies are proposed, including the enactment of a Ship Registry Law to improve the clarity of applicable rules for entry into the registry and ensuring that all Philippine-flagged ships are compliant with international standards. Incentive programs will also be developed to encourage investments in this sector.

  To increase the attractiveness of the Philippine registry, the program will also target the digitalization and integration of the ship registry systems and processes which will allow ship owners and investors to process their applications online.

  Several studies will also be commissioned by the MARINA as a mean to maintain its position as a responsible IMO Member State by looking into the ratification of maritime conventions. Another study will assess the readiness of the maritime industry and government to the establishment of ancillary maritime services which are expected to grow in the following years. Yet, another study will look into the benefits of allowing operational flexibility of Philippine-registered ships which will allow Philippine-flagged ships to transition from domestic to overseas trading.

- **Modernization, Expansion and Promotion of the Philippine Shipbuilding and Ship Repair Industry**

  The Philippines has one of the top positions in the global shipbuilding and ship repair industry. Nonetheless, the country is keen on expanding its stake in the industry by pushing for the progressive development of the shipbuilding and ship repair sector.

Not only does the MIDP plan on the upgrading the skills of its current work force, it also seeks to revitalize ancillary industries and explore the creation of an industrial ecopark dedicated solely for shipbuilding and ship repair. This is expected to create not only livelihood for more maritime professionals, but also to attract businesses and investments into the country.

Among the components of the program are the passage of the Shipbuilding and Ship Repair Bill, which provides a comprehensive legal framework that will govern the development of the industry, the development and creation of courses and workshops for upskilling and reskilling maritime professionals in the shipbuilding and ship repair industry; and feasibility studies on the establishment of ship recycling facilities. Other projects include feasibility studies on the development of the national steel industry, and investment and financing schemes for this sector.

- **Promotion of Highly Skilled and Competitive Filipino Maritime Workforce**

The demands of shipping will never be met unless there are capable and skilled persons employed in every segment of water transport. To that end, the development of maritime human capital becomes an imperative, and was therefore integrated as the fourth core program of the MIDP. With the identification of this program, the government recognizes not only the vital contribution of the men and women in the maritime industry, but also their potential to make it one of the major drivers for national economic development.

Some of the components of the project are the development of ladderized maritime training and education, as well as professional education and training programs and standards. The government also intends to adopt an advocacy program inviting the youth to consider a career in the maritime industry. The program also includes the integration of a seafarers' information system, which will allow government to process their statutory documents, as well as generate data on their employment.

MIDP Overriding Programs

Overriding Programs enhance the Core Programs by ensuring that safety and security of the fleet is attained, while safeguarding and maintaining the natural environment. Lastly, transferring to, and running the administration of the fleet on secure digital infrastructure will not only increase the efficiency of government service, but will also facilitate ease of doing business which in itself will encourage investment and inspire trust and confidence of the public in water transport.

Overriding Programs encompass all the maritime sectors by ensuring the growth and progress reaped from the development targeted by the Core Programs are stable and secure. These Overriding Programs are:

- **Enhancement of Maritime Transport Safety and Security (*for Merchant Ships and Fishing Fleets*)**

Safety and security have always been of paramount importance since the advent of the shipping business itself. They continue to be the cornerstone of reliable shipping services

today, which is why the Philippines vigilantly maintains its compliance with safety and security requirements of international shipping. In the domestic setting, the government continues to strike a balance between upgrading safety and security requirements and the need to keep economic costs balanced in order to serve public needs.

As to its goal to keep maritime incidents and accidents firmly in the past, several program components and strategies are proposed, including the implementation of a Maritime Transport Safety and Security Policy Framework, which is to codify all relevant issuances and streamline safety and security procedures.

Among these key strategies include Modernization of Communication Systems and Aids to Navigation; Development of a Maritime Safety and Security Portal; Promotion of Safety and Security Culture Awareness; and Digitalization of Compliance Monitoring and Enforcement.

- **Promotion of Environmentally Sustainable Maritime Industry**

The updated MIDP 2028 acknowledges that the progress pushed for in its programs, especially with increased travel and the introduction of new technologies, will eventually negatively impact the environment. If the government does not safeguard against the destruction of nature, the gains of progress will only go toward repairing environmental damage and curing negative impacts on human health. Hence, it is recognized that there is no true progress without a healthy environment that is preserved and can be enjoyed by the coming generations.

Among the components of the strategies identified are the ratification and implementation of environmental conventions on shipping, the creation and operationalization of a Marine Environment Protection and Development Service (MEPDS) in MARINA which will carry out functions under the relevant conventions, and the development of a marine environment protection strategy.

- **Implementation of a Sustainable Maritime Innovation, Digitalization, Transformation, and Knowledge Center (SMIDTKC)**

With the ever-increasing reliance of shipping on the latest technology in a bid to increase efficiency and profitability, it is necessary for the Philippines to digitalize its shipping processes and facilities to usher investment and create investor confidence. This also means the creation of a digital infrastructure that cuts across all industries that support the shipping industry.

One of the main components is MARINA's Blockchain-Enabled Automated Certification System (BEST), which aims to secure and integrate all MARINA applications into a blockchain system through which applicants can submit their documents until a certificate is finally issued. It also enables stakeholders to verify the authenticity of documents through the MARINA's system.

Other key components include the development of an information systems recovery plan which will ensure the continuity of MARINA's business processes in the event of an unexpected occurrence. The program will also include the digitalization of information and educational materials to familiarize the general public with the maritime industry

including the materials aimed at inviting young people to explore a career in maritime; guidelines and announcements concerning voyages; and other promotional materials regarding the latest events celebrating the maritime industry.

MIDP Enabling Program

- **The Adoption and Implementation of an Effective and Efficient Maritime Administration Governance System**

The Enabling Program seeks to strengthen the maritime administration in order to effectively implement all the programs under the MIDP. Its programs address the needs of the government to adapt and upgrade its competencies and internal processes that will ensure capability, accountability, and fairness in the implementation and monitoring of the projects identified as part of the Core and Overriding Programs.

The Enabling Program also aims to strengthen the risk management capabilities of the government, taking into account the lessons learned in light of ongoing challenges posed by the outbreak of conflict in several parts of the world, which continually affect shipping operations and Filipinos deployed in these areas, as well as all the measures adopted out of necessity in the heyday of the COVID-19 pandemic.

It is hoped that with focused and sustained effort of both government and stakeholders on these programs, the landscape of the Philippine shipping industry will be transformed by 2028. These programs are only laying the foundations of future projects that will push further progress not only within the maritime industry, as well as it will continue to solidify its stand as one of the major contributors of economic development in the country.

Chapter

02

Core Program 1

Modernization and Expansion of the Philippine Domestic Shipping Industry

C hapter II

MODERNIZATION AND EXPANSION OF THE PHILIPPINE DOMESTIC SHIPPING INDUSTRY
[Including Tourist Destination Areas (TDAs) and Coastal & Inland Waterways Transport System (CIWTS)]

I. OVERVIEW

The domestic shipping industry plays a vital role in the transportation of passengers and goods all over the country, ensuring the steady flow of trade between islands and driving development even in far-flung areas of the Philippines. With a steady and reliable domestic shipping industry, a favorable local business climate is created as business owners can readily ensure the replenishment of stocks and manage their shops. Improved accessibility also allowed people to pursue their own goals – whether it be education, the practice of their respective professions, or simply to engage in leisure and tourism activities.

Pursuant to Presidential Decree (PD) 474, the MARINA is tasked primarily to modernize and expand the Philippine merchant fleet, provide financial assistance to the industry through public and private financing institutions and instrumentalities and effectively supervise and regulate all domestic marine transport utilities, and other maritime enterprises.

As espoused by Sec. 2 of the RA 9295 otherwise known as the "*Domestic Shipping Development Act of 2004*," the Philippines envisions the establishment of a strong and competitive domestic merchant fleet which shall bridge islands by ensuring safe, reliable, efficient, adequate and economic passenger and cargo services; encourage the dispersal of industry and the economic development of regional communities; ensure the availability of regular, reliable and efficient shipping services; ensure the growth of exports by providing necessary, competitive and economical domestic sea linkage; serve as a naval and military auxiliary in times of war and other national emergencies; and function as an employment support base for our Filipino seafarers.

As such, this core program on modernization and expansion of the Philippine domestic shipping industry including Tourist Destination Areas (TDAs) and Coastal and Inland Waterway Transport System (CIWTS) is adopted to achieve the outcome of increased sustainable, modern, safe and efficient domestic merchant fleet. This core program will continuously support the Philippine Nautical Highway System (PNHS), the Philippine Port Development Roadmap, and the National Cruise Tourism Development Strategy and Action Plan (NCTDSAP) of the Department of Tourism (DOT) in line with the government's thrust to enhance tourism for the Philippines as a ship-friendly and preferred destination for the world's cruise line operators.

II. RATIONALE

The 919-kilometer PNHS established in April 2003 is vital to improving inter-island transport of people and goods and promoting investments and employment in provinces, cities, and municipalities outside the metropolitan and highly urbanized areas. The initiative was complemented by the enactment of RA 9295 in 2004, which among others, promotes the development of domestic shipping as an important element in expanding market linkages and connecting one island to another, stimulating economic activities through increased investments.

This is reflected in the number of accredited domestic companies/enterprises to engage business in the domestic trade. In Table 2.1, a total of 4,068 domestic companies/enterprises have valid accreditation under MARINA Circular No. 2006-03 as of December 2022, of which 671 (16.49%) are corporations; 7 (0.17%) are partnerships; 19 (0.47%) are cooperatives; and 3,371 (82.87%) are single proprietorships, with an aggregate paid-up capitalization of over 38 billion pesos in total.

Table 2.1
Companies/Enterprise with Valid Accreditation[39]
As of December 2022

Type of Issuance	Number of Domestic Shipping Companies/Enterprises	Total Paid-up Capitalization (PhP)
Corporation	671	35,212,502,061.00
Partnership	7	2,884,250.00
Cooperative	19	489,580,900.00
Single Proprietorship	3,371	2,444,066,594.90
Total	**4,068**	**38,149,033,805.90**

Source: Maritime Industry Authority (MARINA) [40]

As to the deployment of ships, there are 19,678 registered vessels for domestic trade (Table 2.2). Fishing vessels top the list, followed by passenger ships, recreational boats and cargo ships with shares equivalent to 37.42%, 22.82%, 19.04% and 12.03%, respectively. Meanwhile, the average GRT of the registered ships engaged in domestic shipping ranges from 38.30 to 1,559 gross tons while the average age is 8 years old (for recreational boats) to 31 years old (for tugs and dredgers).

Table 2.2
Registered Domestic Ships by Average GRT and Average Age per Ship Classification
As of December 2022

Ship Classification	Number	Average GRT	Average Age
Passenger	4,491	75.90	9.39

[39]MARINA Circular No. 03, Series of 2006, Revised Guidelines on the Accreditation of Domestic Shipping Enterprises or Entities. Accessed on 29 May 2023 at https://marina.gov.ph/wp-content/uploads/2018/07/MC-2006-03.pdf.
[40]2022 MARINA Annual Statistical Report. The Maritime Industry Authority. 2022. Accessed on 29 May 2023 at https://marina.gov.ph/wp-content/uploads/2022/06/2022-MARINA-Annual-Statistical-Report-1FINAL.pdf.

Ship Classification	Number	Average GRT	Average Age
Cargo	2,368	694.96	19.38
Tanker	197	1,554.95	22
Tugs and Dredger	794	279.95	31
Special Purpose Ship	16	1,056.32	15
Miscellaneous Ship	702	199.94	10
Recreational	3,746	-	8
Fishing	7,364	38.30	14
Total	**19,678**	**487.54**	**16**

Source: Maritime Industry Authority (MARINA) [41]

In terms of domestic cargo throughput (Table 2.3), over 497 million metric tons (MmT) was reported by the Philippine Ports Authority for the period 2018 to 2022. A slight decrease of (1.43%) or 1.5 MmT from 2018 to 2019 was observed and this further plummeted to 10.34% or 10.74 MmT in 2020, mainly due to the global pandemic. As the country coped with the pandemic, households resorted to online shopping, which purported to the rise of online sellers. This new mode of commerce significantly contributed to the increase in domestic cargo throughput in 2021 by 3.61% or 3,360,315 mT and 1.88% or 1,813,012 mT in 2022.[42] On the other hand, the number of domestic shipping passengers increased by 9% or 6.9 million, from 76.8 million to 83.7 million for the period 2018-2019 and decreased by 60.6 million passengers for the period 2019-2021. The decline in both cargo throughput and passenger traffic from 2019-2020 can be attributed to the outbreak and confirmed local transmission of COVID-19 beginning March 2020.

Table 2.3
Cargo and Passenger Statistics
For the Period: 2018-2022

Year	Domestic CargoThroughput (in metric tons)	Passenger Traffic
2018	105,390,180	76,798,175
2019	103,886,581	83,721,395
2020	93,149,158	24,886,437
2021	96,509,473	23,076,974
2022	98,322,485	59,192,976
Total	**497,257,877**	**267,675,957**

Source: Philippine Ports Authority

As the country's population and economic activities continue to grow, both the number of passengers and volumes of cargo are expected to increase in the coming years as the economy recovers. The continued support to the PNHS under this core program will further contribute to the economic development of the country, especially with its intended expansion to include the South-Western Mindanao connection.

[41]Ibid.
[42]2017-2021 MARINA Statistical Report. The Maritime Industry Authority. 2022. Accessed on 29 May 2023 at https://marina.gov.ph/statistical-report/.https://marina.gov.ph/wp-content/uploads/2022/06/2017-2021-MARINA-Statistical-Report_FINAL_revised.pdf.

Coastal and inland waterways are likewise important to the Philippine economy. Until recently, many of the country's rivers (i.e., Pasig River, Cagayan River, Pampanga River, Agusan River, Mindanao River, etc.) served as the main means of transporting agricultural products from upstream communities to central markets. Local residents also reached their workplaces, schools, and other service centers through these rivers.

In addition, the development of domestic shipping routes and ports will create an environment that would establish the Philippines as a ship-friendly and preferred destination especially for the world's cruise line operators. This is in line with the action plan identified by the NCTDSAP 2023-2028 of the DOT.

NCTDSAP includes the plan to build new and larger ports to accommodate larger cruise liners, as well as additional ports of call/TDAs and cruise lines for longer holiday vacations, transforming the Philippines as a regional cruise center for Asia.

The migration of people from rural to urban areas and the resulting increase in the urban population in major cities caused serious traffic problems in metropolitan roads. One of the solutions being considered is the development of an economical, efficient, safe, and environment-friendly ferry system in coastal and inland waterways to ease traffic congestion. The development of a CIWTS in the future will not only reduce urban traffic and congestion, but will also create new development opportunities, raise property values and promote healthy human activities through walkways and bike lanes along riverbanks.

Thus, the core program on modernization and expansion of the domestic shipping industry was adopted under the MIDP 2028 as one of its four (4) core programs to sustain and enhance its role as a major contributor to the economic development of the country.

III. PROGRAM OBJECTIVE AND IMPACT

Parallel to the long-term objective espoused by MIDP 2028 of developing and expanding the Philippine merchant fleet, this core program on the domestic shipping industry aims to increase modern, safe and efficient domestic merchant ships for the next five (5) years.

The significant impact of this program will be measured by the increase in sustainable, safe, efficient, modernized and upgraded domestic shipping operations; improved sea transport reliability and accessibility; improved and expanded roads, port infrastructure and facilities.

IV. ASSESSMENT

For the last five (5) decades, the domestic shipping industry witnessed various stages of development spearheaded by the MARINA. An assessment of the domestic shipping industry since the launching and implementation of MIDP (2019-2028) offers a sense industry's contribution to the national economy, considering the emergence of new technologies and designs of domestic fleets, the need for new transport systems, and external factors that may influence the modernization and expansion vision of the industry for the next five (5) years, or from 2024 to 2028.

1. Adoption and Implementation of Policies, Rules and Regulations

For the period 2018-2022, a total of nine (9) new and revised domestic shipping circulars, rules and regulations were issued to ensure a shipping environment that will continue to attract investments and contribute to the economic development of the country, to wit:

a. MC DS 2022-01, *Amendment to Memorandum Circular No. 2008-07 on the Revised Rules on the Assessment and Collection of Annual Tonnage Fee* (ATF) implements standardized and effective guidelines among MARINA Regional Offices (MROs) in the assessment and collection of ATF to effectively and efficiently administer, supervise and regulate domestic ships for the promotion and development of the Philippine maritime industry;

b. MC DS 2021-01, *Revised Rules in the Grant of Missionary Routes Status for Roll-On, Roll-Off (RORO) Passenger Ships* provides rules on the grant of Missionary Route Status for RORO Passenger vessels and availment of corresponding incentives granted to the vessels operating in missionary routes in support to the Roll-on Roll Off Transportation System (RRTS) Project under the 10-Year MIDP Program 1 entitled, "Upgrading of Domestic Shipping in Support of the Philippine Nautical Highway Development";

c. MC DS 2021-02, *Rules and Regulations on the Temporary Suspension of Registry of Philippine-Registered Ships* prescribes rationalized guidelines in the temporary suspension of registry of Philippine-registered ships to provide the country's shipping companies commercial opportunities to lease out their ships overseas under the prevailing international chartering of ships;

d. MC DS 2021-03, *Revised Rules and Regulations on the Grant of Pioneer Status under Executive Order No. 909* repealed MC 2015-04 which provides rules and regulations in the grant of "Pioneer Status" and the availment of corresponding incentives for domestic shipowners/operators provides schemes that will encourage the modernization/improvement/upgrading of domestic merchant fleet and the introduction of internationally-classed brand new or newly constructed ships in the domestic shipping industry;

e. MC DS 2020-01, *Implementing Guidelines of the Department Order No. 2020-007 Directing All Domestic Shipping Lines to Provide Cargo Space Allocation for Agricultural and Food Products and Providing for Preferential Cargo Rates* helps the viability of food production and delivery in line with the Government's mandate to provide food security by enjoining all ship owners and operators of passenger cargo and cargo ships to allocate at least 12% of cargo capacity for accomodation of agricultural food products and to extend a discount of no less than 40% of their shipping rates for all agricultural and food products;

f. MC DS 2020-02, *Revised Rules on the Accreditation of Maritime Enterprises* promotes the growth and development of maritime-related activities through the steamlining of requirements and prescription of rationalized schedule of fees and

charges for entities intending to engage in businesses relating to the maritime industry, such as, but not limited to ship management, ship agency and multi-modal transport operation;

g. **MC DS 2019-01,** *Rules on the Registration, Licensing and Operation of Recreational Boats* creates a distinction between recreational boats and large commercial and industrial vessels and provides guidelines for its licensing for commercial tourism purposes to enhance the implementation and monitoring capabilities of MARINA over recreational boats operating in its territorial waters;

h. **MC DS 2019-03,** *Rules on the Mandatory Insurance to Cover Liability for Damage to Fixed or Floating Objects* ensures that all shipowners/operators operating ships in domestic shipping and using Philippine ports will be able to meet financial liabilities arising from damage to fixed or floating objects (FFO) due to allusion or the movement of ships; and

i. **MC DS 2018-05,** *Rules in the Acquisition and/or Operation of Cruise Ships* prescribes guidelines on the acquisition and operation of cruise ships in line with the government's efforts to enhance the Philippines' tourism industry and simultaneously promote safety of ships by ensuring strict compliance with existing safety rules and regulations;

The continued issuance and implementation of MARINA circulars, policies, rules and regulations contributed to the gradual modernization, expansion and upgrading of the domestic shipping industry for the last two (2) decades. Over the years, however, new issuances, amendments, and repeals were made to existing policies, which made it difficult to track which provisions were still applicable and valid.

The codification of all domestic shipping issuances that follows the different stages in the life cycle of a vessel should make it easier for the public to follow the latest valid issuances of MARINA - from vessel acquisition, launching, registration, certification, and operation, right up to decommissioning, ship breaking, and ship recycling.

Notwithstanding regular or sporadic change in leadership in government, the continuing development, formulation, issuance and revision of circulars, policies, rules and regulations affecting the industry should always be undertaken with the desired end state in mind. Such policies should not be treated as quick fix approaches to address or respond to the needs of the industry, thereby losing sustainability and constancy in the course of implementation of these policies. As a matter of course, regulatory impact assessment prior to any policy development should always be part of the policy making process to ensure efficiency and effectiveness in the implementation of all issuances.

2. Establishment of more domestic shipping sea routes/shipping services

As of 2022, a total of 181 RORO routes have so far been established under the PNHS wherein 140 new RORO routes were opened in 2018; 11 new RORO routes in 2019; 6 in 2020; 14 in 2021; and, 10 in 2022. The 919 Kilometer PNHS is composed of three (3) major RORO passenger routes: (a) the Western Nautical Highway linking Manila and Dipolog

connecting to the Central Nautical Highway in Cebu; (b) the Central Nautical Highway that links Pilar, Sorsogon and Balingoan; and, (c) the Eastern Nautical Highway which is a link between Luzon and Mindanao via Leyte and Samar connected to the Central Nautical Highway via Bogo or Cataingan.

Figure 2.1
Philippine Nautical Highway System

From its implementation in 2003, this system reduced travel time by an average of 17 hours to the different key cities, enhancing the accessibility of the prime tourist destinations, and minimizing the handling costs of goods all over the country.

A total of thirty five 35 pioneer routes[43] were likewise approved for the period 2018-2022 in line with the grant of incentives to ships with Pioneer Status availed through the implementation of MARINA MC DS 2021-03, .

Since the adoption of MC DS 2021-01, MARINA likewise posted a total of forty one (41) RORO Missionary Routes for the period 2019-2022, as follows:

[43]Pioneer routes are those served by domestic shipowners/operators granted pioneer status as defined under MC DS 2021 - 03. The following privileges are available to grantees of the pioneer status: with the corresponding incentives/privileges availed of: route protection of six (6) years to IACS-classed brand new or newly constructed ships; 50% discount on all regular fees in all applications, renewal of vessel documents, licenses, certificates and permits, including ATF for a period of six (6) years; and, priority in the issuance of CPC within a period of fifteen (15) days.

Eleven (11) Missionary Routes Opened in 2019:

1. Maya Daanbantayan, Cebu – Calbayog City, Samar and vice versa
2. Lucena City – Aroroy, Masbate and v.v.
3. Lucena City- Masbate- Calbayog City, Samar and v.v.
4. Pio Duran, Albay- Aroroy, Masbate and v.v.
5. Roxas, Oriental Mindoro - Calatrava, Romblon - Romblon, Romblon and v.v.
6. Lucena City - Buyabod, Sta. Cruz, Marinduque and v.v.
7. Aroroy, Masbate - San Pascual, Burias Island, Masbate - San Andres, Quezon and v.v.
8. San Andres, Quezon - San Pascual, Burias Island, Masbate – Pasacao, Camarines Sur and v.v.
9. Tabuelan, Cebu - Ajuy, Iloilo and v.v.
10. Maasin, Southern Leyte- Ubay, Bohol and v.v.
11. Lucena City- Corcuera, Simara (Romblon) Odiongan, Romblon – Caticlan, Malay, Aklan & v.v.

Six (6) Missionary Routes Opened in 2020:

1. Lucena City - Odiongan, Romblon- Caticlan, Malay, Aklan and vice versa
2. Naval, Leyte - Mintac, Cataingan, Masbate and v.v.
3. Cagayan De Oro City- Dumaguete City and v.v.
4. Dimasalang Masbate - San Jacinto, Masbate - Pilar, Sorsogon and v.v.
5. Villaba, Leyte - Cebu City and v.v.
6. Masao, Butuan City - Cebu City and v.v.

Fourteen (14) Missionary Routes Opened in 2021:

1. Batangas Port - Estancia Port, Iloilo - Polambato Port, Bogo, Cebu City and v.v.
2. Lucena City, Quezon - Calapan City, Oriental Mindoro and v.v
3. Pio Duran, Albay to Claveria, Masbate and v.v.
4. San Andres, Quezon to Masbate City, Masbate and v.v.
5. Matnog, Sorsogon - Maya, Daanbantayan, Cebu - Bogo, Cebu and v.v.
6. San Andres, Quezon – Dumaguit, Aklan and v.v.
7. Castilla, Sorsogon - Allen, Northern Samar and v.v.
8. Bulan, Sorsogon - Maya, Daanbantayan Cebu - Bogo, Cebu and v.v.
9. Castilla, Sorsogon - San Isidro, Northern Samar and v.v.
10. Lucena,Quezon - San Isidro,northernSamar v.v.
11. San Juan, Cabalian, Southern Leyte- Lipata Surigao City and v.v.
12. Lucena,Quezon - Dumaguit,Aklan av.v.
13. Castilla, Sorsogon- Maya Daanbantayan,Cebu-Bogo, Cebu.v.v
14. San Andres, Quezon - San Isidro, Northern Samar v.v.

Ten (10) Missionary Routes Opened in 2022:

1. Maantangan, E.B. Magalona Neg. Occ. – Ajuy, Iloilo and vice versa
2. Batangas Port (Batangas City) - Culasi Port (Roxas City, Capiz) - Polambato Port (Bogo, Cebu) and v.v.
3. Talisay City, Cebu – Getafe, Bohol and v.v.
4. Lucena City, Quezon - Romblon, Romblon – Culasi, Roxas City, Capiz and v.v.
5. Mobo, Masbate - San Jacinto, Ticao Island, Masbate - Pilar, Sorsogon and v.v.

6. Port of Balingoan, Misamis Oriental – Port of Balbagon, Camiguin and v.v.
7. Cebu City – Ubay, Bohol and v.v
8. Port of Guinsiliban, Camiguin – Balingoan, Misamis Oriental and v.v.
9. Sogod, Cebu – Palompon, Leyte and v.v.
10. Sogod, Cebu – Isabel, Leyte and v.v.

Being an archipelagic country, expanding market linkages and connecting one island to another is vital to stimulate economic development. Hence, the Philippine Nautical Highway System or the Road Roll-On/Roll-Off Terminal System (RRTS) was developed to meet the expected increase in demand for more economical efficient, safe, and secure domestic shipping services.

Table 2.4
Number of Domestic Shipping Sea Routes
For the Period: 2018-2022

Routes Established / Opened	2018	2019	2020	2021	2022	Total
RORO Routes	140	11	6	14	10	181
Pioneer Routes	19	7	2	6	1	35
Missionary Routes	0	11	6	14	10	31

Source: MARINA

Vessels granted Missionary Route Status enjoy the incentives, such as protection of investment or route protection for a maximum period of five (5) years and 50% discount on all regular fees in all applications, renewal of vessel documents, licenses, certificates and permits, including payment of Annual Tonnage Fees (ATF) for the first year of operation. In spite of these incentives, several routes were voluntarily withdrawn by domestic shipowners/operators following their inability to recover their capital investment.

In recent years, liner operators brought forward complaints regarding the encroachment of tramping operators on their Certificate of Public Convenience (CPC)-authorized schedules. Tramping operators started operating in regular or fixed routes and ports of call contrary to their CPC-prescribed areas of destination/operation.

There are also claims that port authorities removed berthing priority for liner shipping vessels in favor of tramp service carriers. This was allegedly brought about by the policy shift in the issuance of CPC from “per vessel CPC” to “company CPC”, which makes it difficult for MARINA to track the exact liner vessel/s operating in regular routes and schedules and tramping vessels that are sailing along the same routes regularly. While both domestic liner shipping and tramp service operators are required to obtain CPCs, there is a need to study and verify these concerns.

3. Determination of Available Shipping Services

As a result of the deregulation policy of the domestic shipping industry under RA 9295, the MARINA has continuously monitored all domestic shipping operations and exercised regulatory interventions whenever public interest warranted. With the view of effectively pursuing this agency's mandate, the Maritime Route Rationalization and Information System (MARRIS) was conceptualized in 2019. The MARRIS, using the NAVIS.2 software, a completed project for the MARINA and funded by the Department of Science and Technology (DOST), was developed by the University of the Philippines (UP) to estimate the number of vessels required per route through an effective route capacity measurement system (RCMS) for maritime transportation, determine the number of possible trips, passenger capacity, occupancy and perceived profitability of the selected fleet under analysis, and analyze the feasibility of future routes such as missionary routes.

The MARRIS was officially turned over to the MARINA on 17 August 2021, and is expected to be deployed in all MARINA Regional Offices nationwide for implementation in 2024 upon the upgrade of the Agency's digital infrastructure.

Complementing the MARRIS is the Port Capacity Analysis and Route Optimization for Local Maritime Administration (PAROLA), a DOST-PCIEERD project that focuses on port berthing capacity estimation and ship trip scheduling. The resulting output will be utilized by the MARINA and relevant government agencies as an additional analytical tool in addressing the congestion and inefficiency problems in various road-sea networks.

4. Fiscal Incentives and Financial Assistance

To ensure the continued viability of domestic shipping operations, and to encourage investments in the industry, incentives and financial assistance are offered to those interested in entering the domestic shipping business.

Under the Board of Investment (BOI) Investment Priorities Plan (IPP) 2017, the six (6)-year income tax holiday and duty-free importation of brand new International Association of Classification Societies (IACS)-classed ships was extended. MARINA Advisory 2020-84-A, s. 2021, was issued allowing the continued issuance of endorsements to exempt VAT to the BOI.

Recognizing the issue of inadequate financial assistance and incentives to support the modernization of domestic shipping, the MARINA introduced various initiatives to make these available to interested investors. In June 2022, a Memorandum of Agreement (MOA) providing a framework for partnership arrangement between MARINA and Development Bank of the Philippines (DBP) was signed to provide financial assistance, training and consultancy services which will promote, develop, and foster a sustainable and progressive maritime industry.

Dubbed as "CRUISE" (Connecting Rural Urban Intermodal Systems Efficiency), this system

was adopted to: (i) encourage increased investments in transportation and logistics; (ii) promote rural-urban integration and connectivity; and, (iii) accelerate economic growth.

Under the Agreement, the DBP will allocate a Php 50 Billion loan facility towards the modernization of the domestic shipping industry. In addition, it also committed to formulate and design financing programs/products to assist shipyards, shipping companies, cooperatives and/or its members for maritime-related investments in accordance with its existing credit policies and guidelines.

5. Modernization and Upgrading of Domestic Shipping Vessels

Based on Table 2.5 below, there was an increase in the number of domestic operating vessels from 2018 to 2021 by 4,854 (36.80%). However, the succeding year's operating vessels has significantly decreased by 5,720 (31.70%) in comparison to 2021.

Table 2.5
Domestic Operating Vessels by Type of Service
For the period 2018 to 2022

Type of Service	Number of Operating Ships in the Domestic Trade				
	2018	2019	2020	2021	2022
Passenger	8,939	11,092	11,945	12,495	4,491
Cargo	2,850	3,168	3,379	3,623	2,368
Tanker	220	225	230	242	197
Tug & Dredger	552	603	628	682	794
Special Purpose Ship	13	13	14	25	16
Misc. Ship	616	750	789	977	702
Recreational					3,756
Total	**13,190**	**15,851**	**16,985**	**18,044**	**12,324**

Source: Maritime Industry Authority (MARINA) [44]

[44]Statistical Reports - Maritime Industry Authority

Table 2.6 provides information on the GRT of the domestic operating vessels operating from 2018 to 2022.

Table 2.6
Domestic Operating Vessels by Average GRT
For the period 2018 to 2022

Type of Service	Average GRT				
	2018	2019	2020	2021	2022
Passenger	49.25	33.86	34.34	39.57	75.90
Cargo	616.03	585.5	571.20	568	694.96
Tanker	1,297.74	1,272	1,264.5	1,255	1,554.95
Tug & Dredger	162.21	164.53	166.49	181.05	279.95
Special Purpose Ship	174.57	342.6	319.1	196.3	1,056.32
Misc. Ship	112.01	750	86.51	82.49	199.94
Recreational	-	-	-	-	-
Total	**2,411.81**	**3,148.49**	**2,442.14**	**2,322.41**	**3,862.02**

Source:Maritime Industry Authority (MARINA) [45]

Based on Table 2.7, as of 2022, recreational boats registered the youngest average age among all types of ships at 8 years old, followed by passenger ships at 9 years old, and miscellaneous ships at 10 years old.
Table 2.8 shows that there is a total of 3,986 operating domestic vessels in 2021, exclusive

Table 2.7
Domestic Operating Vessels by Average Age
For the period 2018 to 2022

Type of Service	Average Age				
	2018	2019	2020	2021	2022
Passenger	7	6	7	8	9
Cargo	15	16	16	17	19
Tanker	19	20	21	22	22
Tug & Dredger	27	29	30	31	31
Special Purpose Ship	18	14	14	14	15
Misc. Ship	10	10	11	12	10
Recreational					8

Source:2017-2021 MARINA Statistical Report[46] & 2022 MARINA Annual Statistical Report[47]

of motorbancas. Of this number, 742 (18.6%) are passenger vessels; 1,917 (48.1%) are cargo vessels; 242 (6.1%) are tankers; and 1,085 (27.2%) belong to other types of service. It can also be gleaned from Table 2.8 that the total number of domestic vessels decreased from 2018 to 2019 by 108 vessels (3.11%) while there is marked increase from 2019 to 2021 by 623 vessels (18.5%) for all types of service. For the period 2019-2020, the average age of domestic vessels is 22 years old and 23 years old for 2021. For passenger vessels,

[45]Ibid.
[46]Statistical Report - MARITIME INDUSTRY AUTHORITY (marina.gov.ph).
[47]Ibid.

however, the average age decreased 18 years old from 2020-2021, from 19 years old in 2019. The reduction in average age of passenger vessels can be attributed to the gradual increase in the acquisition of newly constructed vessels.

Table 2.8
Number of Domestic Vessels by Type of Service and Average Age
For the period 2018 to 2022

Type of Service	2018		2019		2020		2021	
	Number	Ave Age	Number	Ave Age	Number	Ave Age	Number	Ave Age
Passenger	817	-	618	19	773	18	742	18
Cargo	1,672	-	1,653	22	1,773	22	1,917	23
Tanker	220	-	225	20	230	21	242	22
Others	762	-	867	27	910	27	1,085	26
Total	3,471		3,363		3,686		3,986	
Average Age	-		**22**		**22**		**23**	

Source: Maritime Industry Authority (MARINA)[48]
This report excludes data on motorbancas and motorboats

From Table 2.9 below, a total of 2,742 vessels were acquired for domestic use for the period 2017 to 2021, of which 907 (33.08%) vessels were locally constructed, 946 (34.5%) vessels were imported newly built, and 801 (29.2%) were imported second hand. The

Table 2.9
Number of Vessels Acquired through Local Construction and Importation for Domestic Use and Export, 2017 to 2021

Mode of Vessel Acquisition	2017	2018	2019	2020	2021	Total
Locally constructed for domestic use	71	85	70	324	357	907
Locally constructed for export	8	15	19	20	26	88
Imported newly built for domestic use	228	85	103	174	356	946
Imported second hand for domestic use	165	303	126	87	120	801
Total	**472**	**488**	**318**	**605**	**859**	**2,742**

Source: MARINA

[48]Ibid.

biggest number of locally constructed vessels for domestic use was recorded in 2021 with 357 vessels, while the lowest was in 2019 at 70 vessels.

A significant decrease in the number of imported newly built ships for domestic use can be seen in the above table from 228 vessels in 2017 to 85 in the year 2018. However, after this decline, importation increased gradually before finally shooting up to 356 in 2021.

On the number of imported second hand vessels, it was noted that the biggest number was registered in 2018 at 303 vessels, with relative fluctuations for the period 2019 to 2021 (126, 87, 120 vessels for those years, respectively). This can be attributed to the rules on the importation of passenger vessels under MARINA MC 2017-04 wherein passenger vessels for importation should be more than 500 GT and less than 20 years old.

RA 11659, otherwise known as the "Public Service Act, as Amended", is set to provide significant impact in terms of increased investments and competition in the country's maritime industry. With this law, the domestic shipping industry was opened to 100% foreign ownership, which was previously restricted to 40% foreign equity ownership under the Philippine Constitution and RA 9295. The Implementing Rules and Regulations of RA 11659 was published on 20 March 2023 and took effect on 04 April 2023.

6. Upgrading the Quality of Passenger Shipping Service

MARINA MC No. 125, issued on 26 August 1997, adopted the Passenger Service Ratings System (PSRS) as a basic tool used by MARINA in monitoring, assessing and rating the standard of service offered to passengers by liner and ferry ships. It identifies how the services of various passenger shipping operators compare to each other and the relative quality of services they are providing. PSRS is also a practical and ideal mechanism to foster effective and efficient implementation of the program of deregulation as set forth in Executive Order Nos. 185 and 213 and their IRRs.

The basic service elements identified under the PSRS are: (i) Passenger Accommodation (seating/sleeping areas, toilet and bath, dining areas, deck/open areas, etc.); (ii) Service Adequacy (frequency, capacity, adherence to schedule, service speed); (iii) Boarding System (control, baggage assistance, waiting area, etc.); (iv) Baggage Stowage and Security (pre-boarding security and weight control, stowage area location and capacity, baggage security agreement, baggage damage/loss record and claims response); (v) Reservation System (convenience and booking, ticketing system, reservation record); and (vi) Management and Staff (land-based staff attitude and efficiency, vessel crew attitude and efficiency, management service standard attitude).

Results of the CY 2019 RRTS-PSRS surveys conducted by MARINA revealed that all passenger vessels subjected to the PSRS surveys satisfactorily met the minimum accommodation requirement as provided in MC 65/65-A, and were found to have provided better quality shipping service in terms of service adequacy, boarding system, baggage stowage and security, ticketing system and ship's crew and staff performance. The conduct of PSRS surveys utilize the following Service Rating Classifications, as provided under MC 125.

However, upon attaining a rating of "standard" or "above average" service, there is nothing that requires the operator to upgrade its services. Therefore, an update of the existing passenger service rating systems is necessary in order to update the standards of ships being offered to their passengers.

Table 2.10
Service Rating Classification and Grade Point Ranges

Service Rating Classification	Grade Point Ranges
Superior Service These services achieve higher than "targeted" standards, partly through higher capital outlay per passenger space, but also through good service design and excellent staff training and discipline.	91-100
Above Average Service These services are significantly better than standard services in most or all aspects, and might be considered as having "target" standards. In that standards are about as high as they might be without significantly increasing capital cost.	71-90
Standard Service These services meet the minimum accommodation requirement and most other elements are satisfactory	50-70
Probationary Service These are services which do not meet PSRS minimum standards.	49 or below

7. Replacement of Aging, Obsolescent and Uneconomical Domestic Merchant Fleet

Section 23 of the Revised IRR of RA 9295 on the retirement of old vessels requires classification of existing unclassed ships which attained the following maximum age:

Table 2.11
Maximum Age of Ships

Type of Ship	Maximum Age
Steel-Hulled	30 years
Wooden-Hulled	20 years
Motorbancas	5 years

If found to be non-compliant, unclassed ships of that have reached their maximum age shall be automatically delisted from the Philippine registry. Operators whose ships have reached the maximum allowable age shall have the option to have their ships classed, replaced with classed ships, or retired without any replacement.

Presently there is no information as to the number of retired/delisted vessels which have reached the maximum age vis-à-vis the total number of unclassed and overaged vessels. Domestic shipowners opted to have their unclassed and overaged vessels classed instead of being delisted from Philippine Registry. Thus, it is plausible that there is still a number of aging, obsolescent, and uneconomical domestic merchant fleet operating in the country.

[49]MARINA Memorandum Circular No. 2016-02, Revised rules on the Phase out of Wooden-Hulled Ships Carrying Passengers in Domestic Shipping. Accessed on 29 May 2023 at https://marina.gov.ph/wp-content/uploads/2018/06/MC-2016- 02.pdf.

MARINA MC No. 2016-02 or the "Revised Rules on the Phase-out of Wooden-Hulled Ships (WHS) carrying passengers in Domestic Shipping" was issued with the intent of modernizing passenger service particularly in routes which are served by wooden-hulled ships.[49] Under the MC, WHS will be replaced by steel-hulled ships or ships with aluminum, fiberglass or any other technologically-improved hull material (TIHM).

Since the implementation of the WHS phase-out program in 2016, a total of 735 ships were phased out, including 149 in 2018; 146 in 2019, 296 in 2020, 144 in 2021 and 31 in 2022. MARINA has yet to implement the phase-out of the remaining 544 WHS as of 2022.

Only 5% of the 420 registered passenger boats in Eastern Visayas use technologically-advanced hull materials as part of the modernization of the domestic shipping industry. MARINA Regional Office VIII (Eastern Visayas) reported that only 23 passenger boats in the region are made of modern materials and 397 are made of wood. It was noted that local passenger boat operators find it very difficult to replace wooden boats, which freezes the phase-out program in the transition phase despite the targeted phase-out period of five (5) years. Accordingly, the modernization program is a welcome development but more time is needed to acquire modernized vessels due to lack of capital. Each modernized 30-seater boat is worth approximately Php 2.5 Million, which is way above the Php 500,000 to Php 600,000 investment required to build a wooden-hulled boat.

8. Port and Road Rehabilitation and Improvement

Based on information from PPA, 34 ports/terminals were improved and rehabilitated in 2019, while 27 and 7 ports/terminals were improved in 2020 and 2021, respectively. Despite these figures, the Philippine Development Plan 2023-2028 revealed that while progress has been made in maritime transportation, issues on infrastructure quality remain, as most of the ports in the country are operated inefficiently due to inadequate equipment and ancillary facilities leading to increased logistics cost (NEDA, 2022). NEDA also mentioned the problem of roads leading to ports which are often congested and therefore deteriorate faster due to heavy truck loads.

The MARINA will coordinate with PPA/ CPA/ LGUs for the MARRIS Project, Phase 2, which is intended to provide data and analysis as to which ports may be further developed/ improved. MARINA will also explore other projects and partnerships aimed at improving road-port connectivity.

9. Development of Coastal and Inland Waterways Transport System (CIWTS)

While the Philippines has some established CIWTS, its use and development have been severely lacking. Of these transport systems, few have formal and well-established waterway transport as most are mainly rudimentary, outdated, and are composed of an inefficient mix of vessels and terminals.

The Cavite Ferry System which was initiated by the private sector started deploying modern ferry vessels in Sangley Point, Cavite to the Philippine International Convention Center (PICC) Forum, Pasay Area. Continuing discussion with various government and private agencies on the possible expansion of the ferry operations in Pasig River and Laguna Lake are being undertaken.

Direct funding for the development of the CIWTS in the country is not available as a central program has not been established. Different programs and initiatives by different public sector agencies, such as MARINA, DPWH, DENR, DOTr, MMDA, PPA, have some direct effect leading to the development of CIWTS, such as river and coastal dredging programs of DENR and DPWH in Manila Bay and Laguna de Bay, and planned ferry operations by the MMDA and the Laguna Lake Development Authority (LLDA). These fragmented efforts need to be connected and harmonized to benefit the overall development of the CIWTS.

To this end, a comprehensive study should be conducted on the viability of proposed CIWTS to entice investors and the public to utilize the system. Opportunities for ferry cargo operations in rivers, lakes and coastal areas all over the country must also be explored to serve far flung islands.

10. Development of Shipping Services for Tourist Destination Areas (TDAs)

The Cruise Tourism Development Council (CTDC), headed by Tourism Infrastructure and Enterprise Zone Authority (TIEZA), prepared a feasibility study on the Development of a Cruise Port and Passenger Terminal in Manila Bay area. Salomague Cruise Tender Port was developed, and the proposed Cruise Port in Manila Bay (Bloomberry Cruise Terminals, Inc.) will serve Manila as a cruise hub, catering to more cruise ships. Likewise facilitated is the initial funding of Php 500 M for the Puerto Princesa Cruise Port. The DOT, on its part, identified eighteen (18) cruise destinations out of the forty nine (49) TDAs, which will be the focus of the MIDP Program.

The DOT-Office of Product and Market Development (OPMD) Cruise Team likewise embarked on a Study on the Domestic Cruise Tourism and other Nautical Products. Another milestone of this MIDP Program was the forging of a Memorandum of Agreement (MOA) between MARINA and Philippine Council for Industry, Energy and Emerging Research and Development (PCIEERD) for the conduct of: (a) Study on the Development of Solar Assisted Electric Boat for a safe, efficient, and sustainable solar-assisted plug-in electric boat that could be utilized for island tourism and passenger transport; and, (b) Study on the Development of Hybrid Trimaran, a prototype vessel with multiple engines and alternative renewable energy system using wave ocean energy.

The latest list of TDAs by grouping and cluster destination sourced from the DOT as provided under Table 2.12, as follows:

Table 2.12
Tourist Destination Areas (TDAs)

Grouping	Cluster Destinations	Tourism Development Areas
Northern Philippines	NP- 1: Batanes	NP1-A: Batanes
	NP- 2: Ilocos Region	NP2-A: Ilocos Norte, Ilocos Sur, Abra
		NP2-B: La Union, Pangasinan
	NP- 3: Cagayan	NP3-A: Cagayan, Isabela
		NP3-B: Quirino, Nueva Vizcaya

Grouping	Cluster Destinations	Tourism Development Areas
Northern Philippines	NP- 4: CAR	NP4-A: Apayao, Kalinga
		NP4-B: Benguet, Ifugao, Mountain Province
	NP- 5: Central Luzon	NP5-A: Zambales, Bataan
		NP5-B: Clark, Subic, Tarlac, Pampanga
		NP5-C: Bulacan, Nueva Ecija, Aurora
	NP- 6: Metro Manila and environs	NP6-A: Metro Manila, e.g., Quezon City, Makati City, Manila City
		NP6-B: Rizal
		NP6-C: Cavite
	NP-7: Laguna, Batangas and Quezon	NP7-A: Laguna, Batangas
		NP7-B: Quezon
Central Philippines	CP - 1: Bicol	CP1-A: Camarines Norte, Camarines Sur, Catanduanes
		CP1-B: Albay, Masbate, Sorsogon, Burias Island, Ticao Port
	CP - 2: MIMARO	CP2-A: Marinduque
		CP2-B: Romblon
		CP2-C: Oriental Mindoro, Occidental Mindoro
	CP - 3: Palawan	CP3-A: Calamianes, Group of Islands
		CP3-B: North Main Land
		CP3-C: South Main Land (Puerto Princesa)
	CP - 4: Western Visayas	CP4-A: Iloilo, Guimaras
		CP4-B: Antique, Aklan, Capiz
	CP - 5: Central Visayas and Negros Island	CP5-A: Cebu
		CP5-B: Negros Oriental, Negros Occidental, Siquijor
		CP5- C: Bohol
	CP - 6: Eastern Visayas	CP6-A: Leyte, Southern Leyte, Biliran
		CP6- B: Samar, Northern Samar, Eastern Samar
Southern Philippines	SP - 1: Surigao and Dinagat Islands	SP1-A: Dinagat Islands (MRO 13), Siargao Island (MRO 13)
		SP1-B: Surigao Del Norte (MRO 13), Surigao Del Sur (MRO 13)
	SP - 2: Agusan River Basin	SP2-A: Agusan Del Norte (MRO13)
	SP - 3: Cagayan De Oro Coast and Hinterland	SP3-A: Camiguin (MRO10)
		SP3-B: Cagayan de Oro City, Misamis Oriental (MRO 10)
		SP3-C: Misamis Occidental, Iligan City, Lanao del Norte
		SP3-D: Bukidnon

Grouping	Cluster Destinations	Tourism Development Areas
	SP - 4: Zamboanga Peninsula	SP4-A: Zamboanga Del Norte
		SP4-B: Zamboanga Del Sur
		SP4-C: Zamboanga Sibugay, Zamboanga City, Isabela City
	SP - 5: Davao Gulf and Coast	SP5-A: Davao Del Norte, Davao City, Samal Island
		SP5-B: Davao Del Sur, Davao Occidental
		SP5-C: Compostela Valley, Davao Oriental
	SP - 6: Cotabato & Sarangani	SP6-A: Cotabato
		SP6-B: South Cotabato
		SP6-C: Sultan Kudarat (MRO 12)
		SP6-D: Sarangani
	SP - 7: ARMM	SP7-A: Basilan, Tawi-Tawi, Sulu
		SP7-B: Lanao Del Sur, Maguindanao

V. CHALLENGES

1. Policy Development and Implementation. Formulation of new policies that will contribute to the modernization, expansion and upgrading of the domestic shipping industry, such as expansion of authority to operate in international waters;

2. Full implementation of RA 11659 or the Public Service Act, as amended, allowing 100% foreign ownership in the domestic shipping industry. The introduction of amendments to RA 11659 has both been hailed and derided by different players in the industry. Primarily, the goal was to allow the entry of foreign players, with their new capital, to improve the capacity as well as introduce new vessels and services to domestic shipping;

3. Unattractive financing packages. Attractiveness of current financing packages are affected where high interest rates prevail and banks usually require that the collateral is the ship itself. The high barrier for entry in the industry is made more difficult due to the lack of available capital, as the current mode of ship acquisition is through heavy industrial loans with high rates. Finance companies also require leveraging newly built ships as loan collateral. Other modes of capital raising, either through stock market offering or issuance of bonds, are out of reach to smaller players;

4. Excessive taxation. Imposition of six percent (6%) excise tax on fuel under the RA 10963, otherwise known as the Tax Reform for Acceleration and Inclusion Law in addition to 12 percent (12%) Value Added Tax (VAT). The imposition of 6 percent excise tax and 12 percent VAT on industrial bunker fuel used by domestic ships is excessive and is a major cost which ultimately cuts into the margin of operators and results in higher passenger and cargo fares;

5. Lack of incentives for second-hand vessel. There is no provision for incentives such as income tax holiday for imported and second-hand ships that are 5 years old and below.

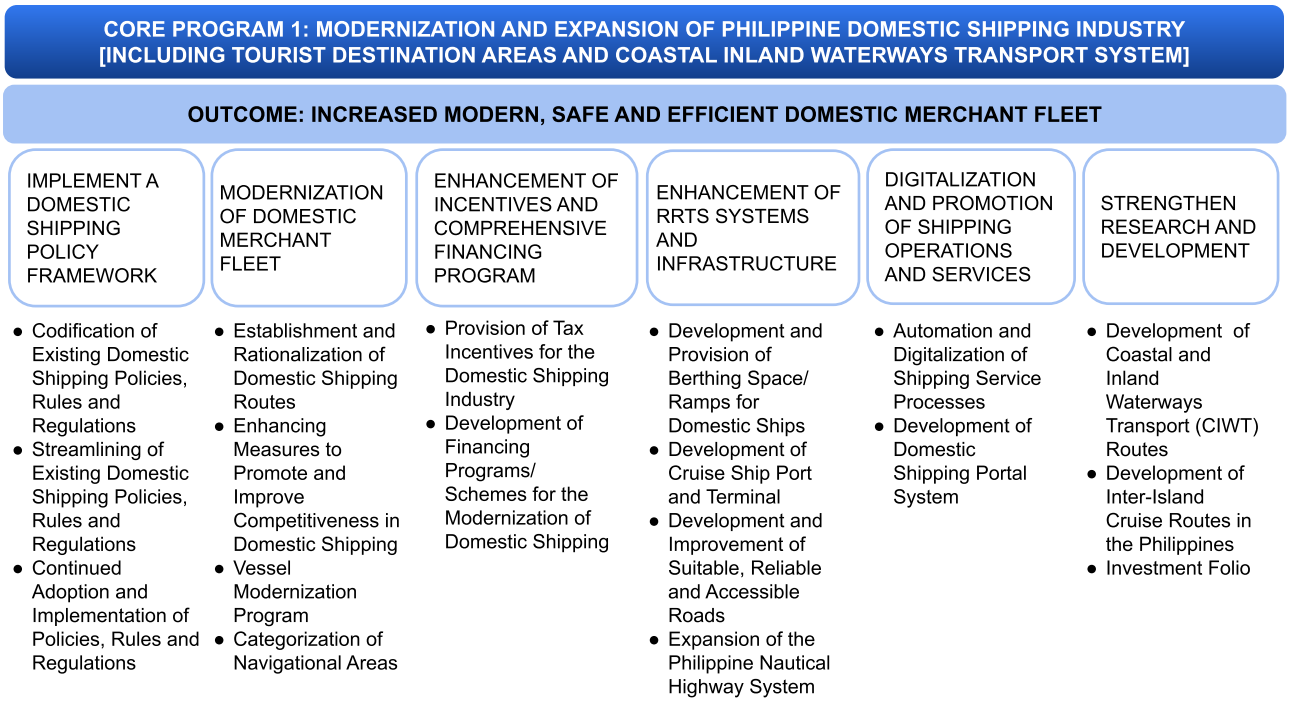
6. Lack of quality infrastructures. The infrastructure to support ship operators, in the forms of ports, port roads, and other connecting facilities are not adequate resulting in congestion, delays and additional costs. Further, differing local policies by LGUs on access to port connectivity infrastructure hamper the timely passage of passenger and goods;

7. Absence of effective data collection and management (availability from all domestic shipping industry transactions processed and approved). Data collection and processing, as integral parts of shipping management, are inconsistent and are not a standard practice with ship operators and authorities. While formal and organized ports are able to provide data and analysis, smaller port operators such as private ports and municipal ports do not keep proper data or formal records. Further, informal operators and small shipping companies operate with little to no data gathering and tracking; and,

8. Lack of effective compliance, monitoring, and enforcement of issued circulars, policies, rules and regulations and regular conduct of assessment of effectiveness. The proper implementation of policies, through compliance, monitoring and enforcement, is not achieved by authorities, making policy direction and adjustment difficult. There is no systemized recording of compliance, as well data tracking to ensuring policy effectiveness and cohesion.

VI. PROGRAM FRAMEWORK, STRATEGIES, COMPONENTS AND PROJECTS

Figure 2.2
Core Program 1 Framework



The core program on modernization and expansion of the domestic shipping industry will be implemented through the following program strategies, components and projects that will address and resolve the current issues and challenges of the industry and subsequently achieve the vision of further modernizing and expanding the industry by 2028:

1. Implement a domestic shipping policy framework

a. Codification of Existing Domestic Shipping Policies, Rules and Regulations refers to the systematic compilation of all existing domestic shipping policies, circulars, rules and regulations and all amendments. These policies should be incorporated into a single new code to make it easier for all interested persons to refer to the latest rules which are relevant to their needs.

PROJECT:

1. Codification of the Domestic Shipping Policies, Rules and Regulations

b. Streamlining of Existing Domestic Shipping Policies, Rules and Regulations refers to the process of identifying and eliminating repetitive and unnecessary steps, activities, and requirements for applications in existing domestic shipping policies, rules and regulations to make them more efficient, effective and responsive.

PROJECT:

1. Streamlining of Existing Domestic Shipping Policies, Rules and Regulations to Promote Competition and Ease of Doing Business

c. Continued Adoption and Implementation of Policies, Rules and Regulations refers to the development and implementation of domestic shipping circulars that ensure a shipping environment that will continue to attract investments and contribute to the economic development of the country.

2. Modernization of domestic merchant fleet

a. Establishment and Rationalization of Domestic Shipping Route refers to the process of connecting islands and regions by ensuring safe, reliable, efficient, adequate and economical passenger and cargo services through the identification and development of domestic shipping routes that will expand market linkages and stimulate economic development.

Corollary to the above, and pursuant to the provisions of law that shipping services should always be available to the riding public and the shippers, the delineation between liner and tramp service operations must also be maintained at all times, as appropriately provided in their respective CPCs.

PROJECTS:

1. Feasibility Study Establishing and Rationalizing the Passenger and Cargo Traffic in the Country using MARRIS and PAROLA
2. Study on the Economic Impact of Existing Tramp Service Operations in the Philippines on Liner Shipping Routes

b. Enhancing Measures to Promote and Improve Competitiveness in Domestic Shipping

RA 11659, otherwise known as the "Public Service Act, As Amended" and its IRR which took effect on 04 April 2023, are expected to facilitate the influx of investors into new and existing routes. Under this law, the MARINA is obliged to implement its provisions allowing 100% foreign ownership in the operation of shipping vessels in domestic shipping routes.

PROJECT:

1. Study on the Effectiveness of the Implementation of RA 11659 and its IRR (to include possible reclassification of the domestic shipping industry from "public service" to "public utility")

c. Vessel Modernization Program (VMP) is considered an offshoot of the MARINA's mandatory vessel retirement program per Sec.23 of RA 9295 where unclassed vessels that attain the maximum vessel age stipulated in the program and fail to meet the classification standards of a government-recognized classification society shall be retired or delisted from the Philippine Registry. This strategic component also finds legal basis in Sec. 2 of PD 474 which mandates MARINA to pursue and implement further replacement of obsolete and uneconomic vessels in support of the core program's vision.

PROJECT:

1. Development and Implementation of the Domestic Fleet Modernization Program

d. Categorization of Navigational Areas is a sequel to previous efforts of MARINA to categorize navigational waters in the country as embodied in MARINA MC No. 2015-03. In the said MC, geographical features, weather and hydrographic conditions were used as parameters in the categorization process to arrive at three (3) types of navigational waters, namely: open sea, coastal waters and protected waters. Revalidation and updating of the previously categorized navigational areas in the country will be undertaken.

PROJECT:

1. Development and Implementation of the Alternative Voyage Routing Software for Local Navigation or "ALON" Project

3. Enhancement of incentives and comprehensive financing program

a. Provision of Tax Incentives for the Domestic Shipping Industry is an effort to ensure the continued viability of the domestic shipping operations through provision of enhanced incentives that will further encourage investments in the domestic shipping industry It is also intended to assist the industry stakeholders in availing of tax incentives contrary to the provisions of the TRAIN Law (on the imposition of 12% VAT and excise tax on fuel) which have impacted on the transport of cargoes within the country.

PROJECT:

1. Study on the Impact of Fuel Cost (present Excise Tax in addition to 12% VAT) to shipowners.

b. Development of Financing Programs/Schemes for the Modernization of Domestic Shipping. The acquisition of ships requires million-dollar capital investment, so a strong and aggressive partnership with existing government financial institutions (GFIs) such as the DBP and the LBP will be forged to further assist the domestic shipping industry for more attractive financing programs/schemes that will lower interest rates and promote acceptable payment schedules.

PROJECT:

1. Development of Financing Programs/Schemes between MARINA and GFIs for the Modernization of Domestic Shipping

4. Enhancement of RRTS systems and infrastructure

a. Development and Provision of Berthing Space/Ramps for Domestic Ships is a commitment of the PPA and other port authorities to improve RORO connectivity in the domestic and regional routes. Notwithstanding that 80 percent of the ports under its jurisdiction are already equipped with RORO ramps, the PPA shall continue to construct RORO ramps and increase the number of RORO capable ports in the country based on the PPA Roadmap (2017-2022).

PROJECT:

1. Port Project Development/Enhancement/Improvement in Congested Routes

b. Development of Cruise Ship Port and Terminal. Relevant Port Authorities are highly encouraged to support cruise tourism through the development of cruise ship ports and terminals ito serve as gateways to the many tourism destinations in the country. These ports shall be called hub ports which may cater to both interisland and international shipping.

PROJECT:

1. Surveys on the Availability of Infrastructure (e.g., ports and terminals) to Support Cruise Ship Calls

c. Development and Improvement of Suitable, Reliable and Accessible Roads refers to the identification of roads to be developed and improved in coordination with DPWH and municipal governments (LGUs) to improve road-port connectivity and accessibility.

PROJECT:

1. Road Development/Expansion/Improvement Project in Port Congested Areas

d. Expansion of the Philippine Nautical Highway System (also known as Road RORO Terminal System) refers to the augmentation of the existing scope of the PNHS to include more routes. This will lead to increased accessibility by the public to new areas which were not connected to the PNHS before.

PROJECT:

1. Expansion of the Philippine Nautical Highway System covering the South-Western Mindanao RORO Connection

5. Digitalization and promotion of shipping operations and services

a. ***Automation and Digitalization of Domestic Shipping Service Processes*** aims to automate and digitalize the different domestic shipping service applications to be cryptographically secure, fully online, and shared across a public or private network. It is part of **MARINA-BEST (Blockchain Enabled Automated Certification System)**.

PROJECT:

1. Automation and Digitalization of Domestic Shipping Service Processes (MARINA-BEST)

b. ***Development of Domestic Shipping Portal System*** refers to a centralized system using web-based platform/connection that will facilitate data access and interchange between and among MARINA Offices and other government agencies. The information gathered will be used for data management, status updates, monitoring, reporting, and policy formulation and review. This portal is a data management system that is envisioned to expedite transactions in all maritime agencies involved in the domestic shipping industry.

PROJECT:

1. Development of a Domestic Shipping Portal System

6. Strengthen research and development

a. ***Development of Coastal and Inland Waterways Transport (CIWT) Routes*** refers to the creation of integrated water transport systems in metropolitan and highly urbanized areas with coastal/inland waters which can serve as an alternative highways. With the recalibration of the former program in the first quarter of 2022, the focus was shifted from Pasig River Ferry Program to other CIWTS areas which identified Laguna Lake as a pilot area. The establishment of which will be replicated in other areas in the country.

PROJECT:

1. Development of Identified CIWT Routes

b. ***Development of Interisland Cruise Routes in the Philippines*** This project aims to promote the country as a regional cruise center in Asia, serving as a homeport for international cruise ships, and targets the increase in the number of port calls and passengers in 2023 and beyond. This component also aims to develop and upgrade the design and operational safety standards for cruise ships, promote local construction of cruise ships, and develop cruise routes in order to provide more efficient and safe cruise ship services.

c. ***Profiling of Cruise Routes*** originally covers all Philippine-registered cruise ships operating in existing and potential ports of call/destinations in the country, as specified in NCTDSAP (2016-2022). These include the "Turquoise Triangle" (Manila, Boracay and Caticlan in Aklan, and Puerto Princesa in Palawan), where the existing ports are accessible due to geography and inter-port distances. The cruise destinations in the Turquoise Triangle are grouped in the three apexes, namely: (i) Manila and Subic Bay; (ii) Boracay, Iloilo, and Romblon; and (iii) Puerto Princesa, El Nido, and Coron. The other potential Philippine cruise destinations to be covered by the program are Aparri, Batanes, Currimao/ Salomague in Ilocos Norte, Cebu in Cebu Province, Tagbilaran City in Bohol, Cagayan de Oro in Misamis Oriental, and Davao City.

PROJECTS:

1. Development of Interisland Cruising in the Philippines
2. Enhanced Information and Promotional Campaign in TDAs - this project be included under Research and Development (R&D) in the "Development of Inter-Island Cruise Routes in the Philippines"
3. Identification of Cruise Routes in the Identified TDAs – this project is included under the "Development of Inter-Island Cruise Routes in the Philippines"

d. ***Investment Portfolio*** refers to the creation and development of a document which contains information on possible areas for investments in the domestic shipping industry. Information will include the codified rules and regulations of the MARINA with respect to the life cycle of a vessel (from vessel construction/acquisition to decommissioning), existing shipping sea routes (RORO routes, pioneering routes, missionary routes, and number of operators and vessels per route, documentary requirements, processing time, among others.

PROJECT:

1. Development and Promotion of the Domestic Shipping Investment Folio

VII. LEGISLATIVE AGENDA

Table 2.13 presents the priority legislative agenda that will complement and support the strategies to further accelerate the development of the domestic shipping industry.

Table 2.13
Legislative Agenda for Core Program 1

Legislative Agenda	Rationale / Key Features	Responsible Agencies
Amendment to Republic Act 9295 also known as "Domestic Shipping Development Act of 2004"	• Extension of Investment Incentives under Chapter II, Section 4 of RA 9295 • Inclusion of Missionary Routes and Pioneer Status	DOTr, MARINA, DOF, DBP, BOI, BIR, BOC, NAMRIA

Legislative Agenda	Rationale / Key Features	Responsible Agencies
Merging of PPA and MARINA through a creation of Maritime and Port Administration similar to Singapore	• To simplify planning of port and domestic shipping operation	MARINA, PPA and Other Port Authorities, DPWH and Stakeholders
Amendment of TRAIN Law to exempt excise tax on fuel used by domestic shipping companies in operating their vessel	• 12% VAT + excise tax causes domino effect on prices of goods and services • 50% of their operating cost consumed	DOTr, MARINA, DOF, DBP, BOI, BIR, BOC

VIII. RESULTS MATRIX

Table 2.14 presents the indicators and targets to achieve results for the accelerated development of the domestic shipping industry.

Table 2.14
Results Matrix for Core Program 1

#	Indicators	Baseline		TARGETS							Means of Verification	Responsible Agency/ies
		Year	Value	'23	'24	'25	'26	'27	'28	EOP		
1	% increase in the number of new domestic shipping sea routes established/ opened	2021	47	12 %	12 %	12 %	12 %	12 %	-	60% or 75 routes	MARINA Report	MARINA
2	% increase in the number of modern ships deployed	2021	210	5 %	5 %	5 %	5 %	5 %	-	25% or 263 ships	MARINA Report	MARINA
3	% increase in the number of ports and roads established/ rehabilitated/ improved	2021	27	TBD	TBD	TBD	TBD	TBD			Annual Reports of PPA / DPWH / LGU	PPA/ CPA LGUs
4	Very satisfactory ratings of passenger sustained	2021	-	VS	VS	VS	VS	VS			PSRS survey	
5	% increase in the number of passengers	2022	59 Million	2 %	2 %	2 %	2 %	2 %	-	10 %	PPA Reports	
6	% increase in the number of cargoes	2022	98 Mmt	2 %	2 %	2 %	2 %	2 %	-	10 %	PPA Reports	

#	Indicators	Baseline		TARGETS							Means of Verification	Responsible Agency/ies
		Year	Value	'23	'24	'25	'26	'27	'28	EOP		
7	Number of interisland cruise routes established/ opened	2023	-	-	-	-	2	2	-	4	MARINA Report	
8	Number of identified CIWTS	2021	-	-	-	2	2	2	-	6	MARINA Report	

Chapter

03

Core Program 2

Promotion and Expansion of the
Philippine Overseas Shipping Industry

Chapter III

PROMOTION AND EXPANSION OF THE PHILIPPINE OVERSEAS SHIPPING INDUSTRY

I. OVERVIEW

In recent years, the contribution of the country's merchant fleet to international shipping has diminished due to the significant decline in the number of ships registered under the Philippine flag. Despite its weakening merchant fleet, the country aspires to become one of the world's leading ship registries that actively participates in the movement of goods and carriage of passengers catering to global trade. It is for this reason the Philippines remains steadfast in fulfilling its commitment as a member of the international maritime community actively contributing to the formulation and implementation of the global maritime regulatory framework for international shipping.

With its strategic geographical location and huge human resources, the country possesses the potential attributes of running a ship registry such as legal framework, regulatory authority, international recognition, and seafarer certification.

The Philippines' archipelagic structure opens a wide range of opportunities offered by the increased attention to promoting the blue economy in the country. Maritime transport, either in domestic or international trade, is an important component of the blue economy and serves as foundation to sustainable development. The development of the blue economy for an archipelago like the Philippines is aligned to the works in achieving the targets set under the United Nations Sustainable Development Goals (UN-SDGs). The 17 SDGs sum up its objective of transforming the world so that no one will be left behind; this UN goal is analogous to the Philippine national aspiration of social inclusivity.

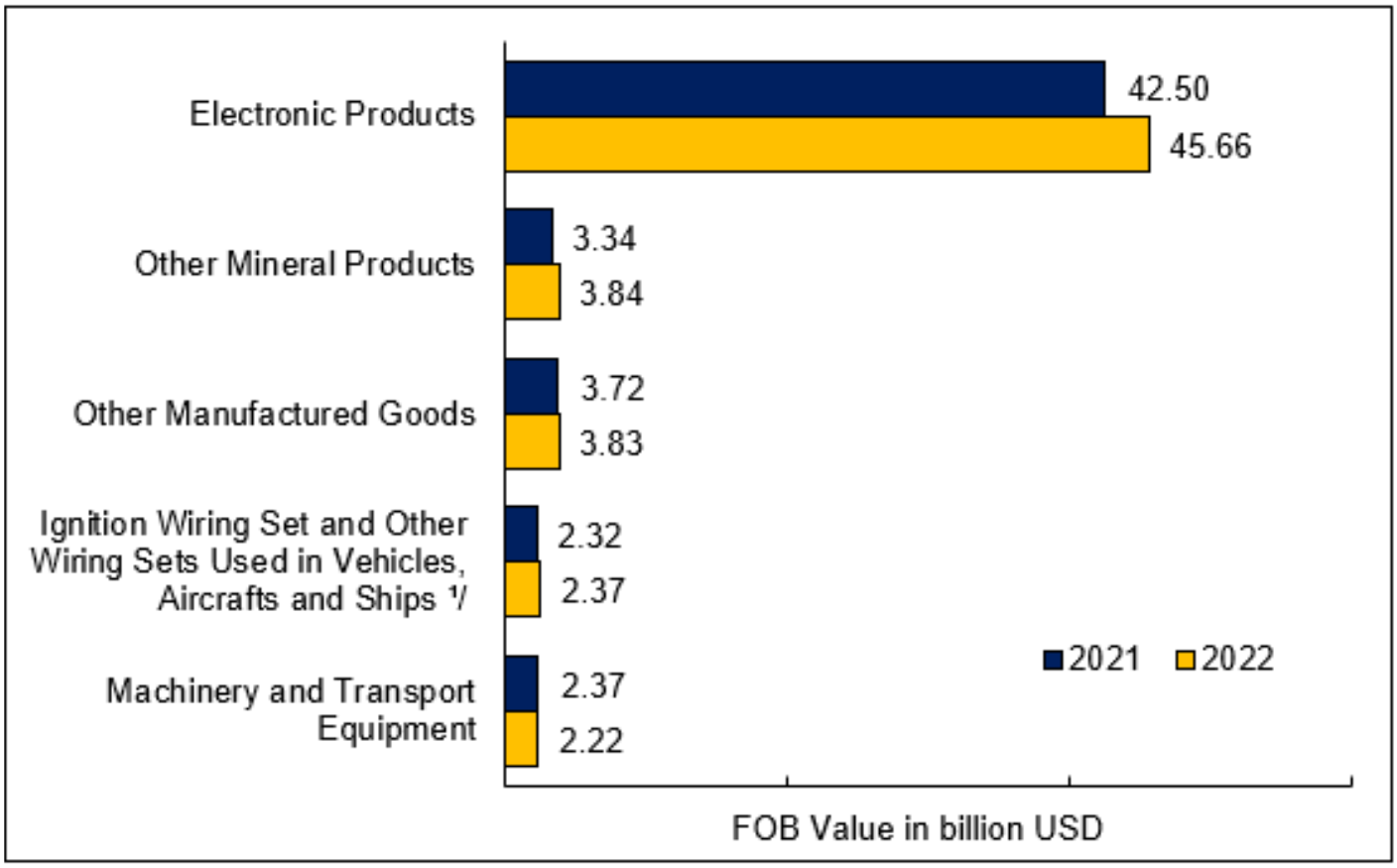
Revitalizing the Philippine ship registry is an important step in achieving the benefits derived from the blue economy as it attracts investments in shipping operations and ancillary enterprises which in turn creates jobs as well as generate revenue for the government.

Philippine Foreign Trade

As important in moving domestic trade, sea transport provides the primary means of transporting Philippine exports and imports. The Philippines recorded a 7.6% growth rate on gross domestic product, and a growth of 5.6% in exports and 17.3% in imports in terms of trade in goods as of 2022.

Figure 3.1 shows the Philippines' top 5 exports by commodity group for 2021 and 2022. The country's top export is electronic products[50] with an export value of USD 45.66 billion. This is followed by other mineral products (USD 3.84 billion); other manufactured goods (USD 3.83 billion); ignition wiring set (USD 2.37 billion; and machinery and transport equipment (USD 2.22 billion). Other exports are refined copper, chemicals, coconut oil, metal components and electronic equipment and parts.

Figure 3.1
Top Five (5) Commodity Groups in Terms of Value of Exports
For the period 2021-2022



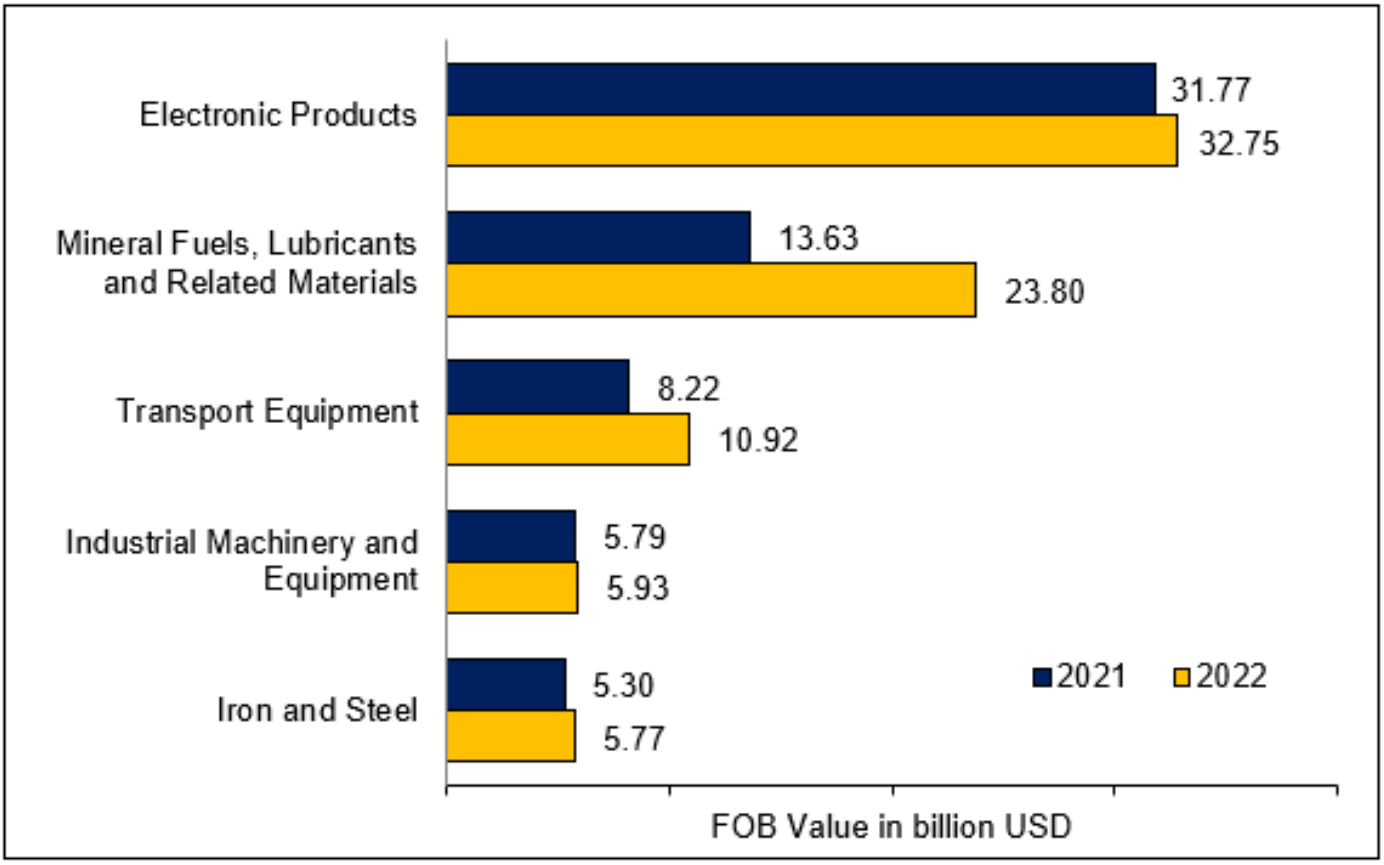
Source: Philippine Statistics Authority[51]

Further, the country's top 5 imports by commodity groups for 2021 and 2022 as shown in Figure 3.2 are also electronic products with the import value of USD 32.75 billion; mineral fuels, lubricants and related materials at USD 23.80 billion; transport equipment at USD 10.92 billion; industrial machinery and equipment at USD 5.93 billion; and iron and steel at USD 5.77 billion.

Other imports are food and live animals, miscellaneous manufactured articles, telecommunication equipment and electrical machinery, iron and steel and metalliferous ores and metal scraps.

[50]Including components/devices (semiconductors), electronic data processing, office equipment, consumer electronics, telecommunication, communication/radar, control and instrumentation and automotive electronics.
[51]Highlights of the 2022 Annual International Merchandise Trade Statistics of the Philippines. 2023, April 1. Accessed at https://psa.gov.ph/content/highlights-2022-annual-international-merchandise-trade-statistics-philippines.

Figure 3.2
Top Five (5) Commodity Groups in Terms of Value of Imports
For the period 2021-2022



Source: Philippine Statistics Authority[52]

Profile of Philippine Merchant Fleet in International Waters

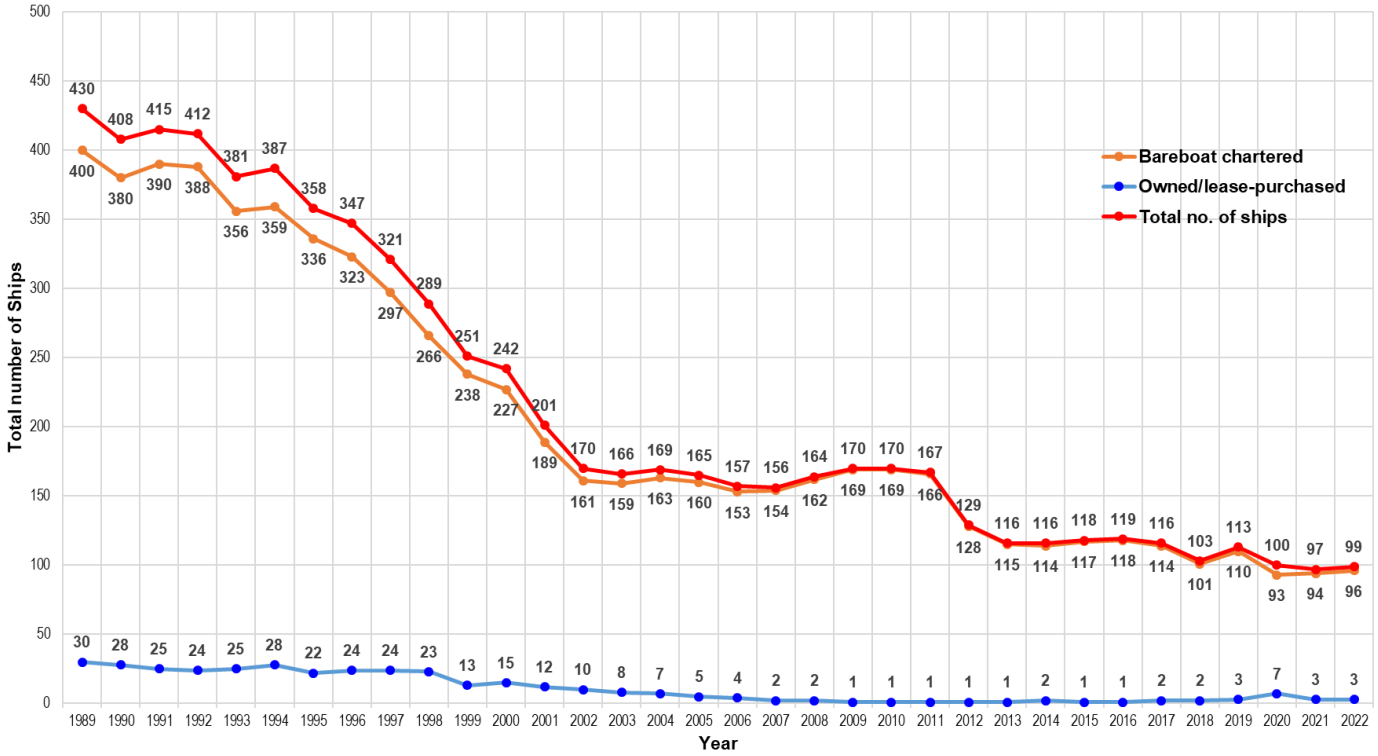
Unlike in the inter-island trade, the carriage of the country's foreign trade counts on the services of foreign-flagged ships. The Philippines ranks as the 34th maritime country among the leading flags of registration by deadweight tonnage (UNCTAD Review of Maritime Transport,2022). The Philippines used to have a higher total deadweight tonnage count which was gradually reduced at the turn of the 21st century.

In 2022, the Philippine overseas merchant fleet consisted of 99 registered ships, 96 of which are under a bareboat charter arrangement. Ten year earlier or in 2012, the fleet consisted of 128 bareboat chartered ships for which a total of Php 62,405,793.20 (USD 1,284,901.58) was collected representing the 4.5 percent withholding tax. Consequent to the decline in the number of Philippine-flagged ships ten years later, the tax collected in 2022 drastically dropped to Php 29,014,217.49 (USD 531,439.79).

The decline of the country's overseas merchant fleet started in the late 1980's with the deletion from the Philippine ship registry of both Filipino beneficially-owned and bareboat chartered ships. Over a period of ten years from 1989 to 1999, the fleet tapered off to just 251 ships from a high of 430. In terms of deadweight tonnage (DWT) there was a decrease from 14,187,872 DWT in 1989 to 7,758,907 DWT in 1999. From 2004 to 2011, the number of Philippine-registered ships under the bareboat charter arrangement and those owned and operated by Philippine companies continued to decline (see Figure 3.3).

[52]Ibid.

Figure 3.3
Philippine-registered Ships Engaged in Overseas Trade
For the period 1989-2022



Source: Maritime Industry Authority

The decline of the country's merchant fleet can be attributed to the increasing competition posed by other flag States which offer attractive incentives. Philippine ship registration policies and regulations on the other hand, constrained by legislative proscriptions and bureaucratic processes, among others, failed to measure up with the competition.

Unyielding to the constraints which hinder the country from optimizing the benefits that go with operating a national merchant fleet, the government is bent on pursuing policy, legislative and institutional reforms aimed at scaling up to the level offered by top-notch ship registries. These reforms will lead to the establishment of a strong and attractive Philippine ship registry, which by 2028 translates into more ships being registered under the Philippine flag.

II. RATIONALE AND PROGRAM OBJECTIVES

Shipping is the backbone of global trade, thus, it is recognized as one of the vital infrastructures of a country's economy. This becomes even more important for an archipelagic country like the Philippines. The Philippines' access to the international market relies heavily on sea transport services; this is true for both export and import products. The absence of Philippine-flagged ships serving the foreign trade requirements of the country has long been noted, as most of the ships registered in the Philippines undertake third country operations, i.e., Philippine registered ships seldom call on Philippine ports.

Cognizant of the important role shipping plays in driving the world economy, the Philippines is determined in maintaining an active role, convinced of its potential capability to offer globally competitive sea transport services. This program aims for the Philippine ship registry to develop a merchant fleet that caters to the needs of its domestic and foreign trade. Consequently, encouraging foreign investment in the maritime industry needs to be vigorously pursued by promoting an attractive ship registry.

Being one of the largest suppliers of seafarers as well as professional and skilled maritime manpower who can take onshore-based jobs, will help boost the Philippines' attractiveness to investments in the maritime industry. Support services for shipping-related activities, such as shipbuilding and ship repair and port facilities, ship management and superintendency, maritime training and education facilities (not limited to seafaring) and other related ancillary services are conveniently and readily available.

The challenge lies with upgrading basic services and facilities, such as communications, banking, and road and air transport, which are crucial to maritime operations. These could be addressed in the medium term by creating and implementing plans and programs in these sectors, which can support the goals of the MIDP.

An attractive Philippine ship registry is expected to create employment opportunities, encourage investment in shipping, generate government revenue, yield foreign exchange revenue and savings, and stimulate local entrepreneurship, among others. All of these will contribute to the country's economic and social upliftment and will elevate the political stature of the Philippines in the international maritime community.

On the other hand, the Philippines must at all times take cognizance of its responsibilities and obligations attached to being a flag State, a commitment which the country expressly accepted upon becoming a member of the international maritime community. Further, the country is also expected to ensure that its flagged-ships are at all times compliant with international standards and requirements.

III. ASSESSMENT AND CHALLENGES

The expansion and development of the country's merchant fleet for international voyage is hitched to the marketability of the Philippine ship registry. Therefore, understanding what motivates foreign shipowners to re-flag their ships is one important step when establishing a competitive ship registry.

Efforts to promote the country's ship registry in the past forty (40) years have not been successful primarily due to the limitation imposed by restrictive legislative and administrative policies and regulations. The inability of the country to adapt to the fast-paced development in shipping and maritime technologies and innovation further worsen the difficulties of promoting the Philippine ship registry.

A close scrutiny of the reasons for the declining number of foreign-owned ships registered under the Philippine ship registry are identified. These are the areas of concerns for which reforms need to be introduced in order to make the Philippine ship registry attractive:

1. **Tax regime**. In addition to the registration fees paid by shipowners, the Philippines levies taxes on income generated by shipping enterprises operating under its flag. The Philippine shipping enterprises also pay a 4.5% withholding tax on the gross charter hire of bareboat chartered ships. In stark contrast, the top-ranking ship registries of the world do not levy taxes on ships flying their flag. Instead, an annual tonnage fee is collected on top of the fees charged upon registration in lieu of all taxes.

   Considering the amount of taxes collected from the modest number of Philippine-

flagged ships, revisiting the concept of replacing taxation with tonnage fees could be considered. The increase with the number of ships under the Philippine flag could more than offset the loss of tax revenues. Moreover, an increase in the number of Philippine ships will result in the establishment of ancillary services from which taxes could be generated.

2. **Maritime policies and legislation**. Maritime policies and legislation are not clearly stipulated, which resulted in frequent changes introduced according to the interpretation of government implementers and regulators. At times, such changes contradict subsisting policies which create confusion among stakeholders. The propensity to make frequent changes in maritime policies discourages shipowners whose business ventures are conditioned on constancy and predictability.

   Policies are formulated through legislation (Congress) with the bureaucracy (Executive) as implementers and regulators. Maritime laws were in many instances enacted primarily to address pressing matters and may therefore have the effect of passing over existing legislation. Absence of any effort to bring together all relevant and existing legislation when drafting a maritime bill may result in contradictory provisions thus, reducing the effectiveness of the measures or policies being proposed.

   A number of maritime legislations that are crucial to a shipowner's business are not adequately covered by existing Philippine laws. These include the Ship Mortgage Act under Presidential Decree (PD) No. 1521, which needs updating in order to align its provisions with international standards and practices. This outdated law creates apprehension among lending and financial institutions that provide loans for the acquisition of ships. Inadequate guarantees to ensure repayment of loans and uncertainty of protection for ships under temporary registration with the Philippine flag undermines the confidence of lenders.

   There are several legislation dealing with ship registration under the Philippine flag but lack clarity in terms of the roles, obligations, and requirements for both the implementing agencies and shipowners. Republic Act No. 1937 or the Tariff Law of the Republic of the Philippines which took effect in 1957, provides for the duty of the Commissioner of Customs to register ships owned in the Philippines. Subsequent amendments to said law allowed the temporary registration of foreign-owned ships for use in the domestic trade under PD 760[53] and for international voyages under PD 866[54]. Furthermore, the conditions of registration of ships under the Philippine flag are covered by various administrative issuances that allow updating of regulations pertaining to the technical aspects of ship operations in conformance to internationally adopted standards and requirements. On the other hand, there is a need to provide constancy in the regulations through a Republic Act on matters pertaining to corporate and investment matters.

   Shipping operations in international waters are governed by a regulatory framework formulated by international maritime agencies, primarily by the IMO and the United

[53]Presidential Decree No. 760, Allowing the Temporary Registration of Foreign-Owned Vessels Under Time Charter or Lease to Philippine Nationals for Use in The Philippine Coastwise Trade Subject to Certain Conditions. July 1975. Official Gazette. Accessed on 08 June 2023 at https://www.officialgazette.gov.ph/1975/07/31/presidential-decree-no-760-s-1975/.
[54]Presidential Decree No. 866, Amending Presidential Decree No. 760 by Reducing the Term of the Lease or Charter Period to Not Less Than One Year, Deleting the Word "Time" in the Title and Body of the Decree, and allowing Overseas Use in Certain Cases. January 1976. Official Gazette. Accessed on 08 June 2023 at https://www.officialgazette.gov.ph/1976/01/02/presidential-decree-no-866-s-1976/.

Nations. As a flag State, the Philippines is expected to adhere to the standards and requirements of international conventions and instruments. Upon ratification or accession, the Philippines is obligated to transpose the convention into national law for its full and effective implementation.

The enactment of the law amending the Public Service Act[55] allows foreign nationals/ corporations to invest and engage in domestic shipping operations. This means that the privilege of operating ships in domestic routes are extended to foreign nationals who may, at the same time, be operating ships in international waters. Such policy opens wider opportunities to them as they can maintain their shipping operations overseas and therefore, offer continuous sea transport services. A policy that grants the same operational flexibility to Filipino shipowners engaged in domestic shipping needs to be formulated to allow them to enjoy the same privilege granted to Philippine nationals.

3. **Financing programs for ship acquisition and high cost of doing business**. Ship owning is a capital-intensive industry, however generating capital is not easy. There is stiff competition for funds placement and allocation and the high rates of interest on borrowed capital which gives rise to alternative ship acquisition schemes such as bareboat chartering. In addition, regardless of the manner of ship acquisition, there is the ever-increasing cost of operations.

   The invitation for shipowners to register ships under the Philippine flag is not limited to foreign nationals. Filipino shipowners engaged in inter-island shipping operations may also be enticed to go into overseas voyages. However, the lack of financing programs to support the acquisition of ships that can compete globally remains a big challenge.

   The renewed provision of financing programs for investments in shipping is seen as a way to stimulate interest in ship-owning and operations.

4. **Ease of doing business**. The process of registering ships in the Philippines is complicated and complex. There are numerous documentary requirements that are not explained and therefore considered by shipowners as pointless and superfluous. Likewise, there are various government agencies involved in ship registration wherein shipowners find unreasonably bureaucratic and confusing. The layers of transactions among the various agencies result in additional cost and time for the shipowner. One of the reasons for shipowners' preference with the other ship registries is that they deal only with one agency, i.e. the flag State administration.

   The shift of the industry towards digital operation will pave the way to the use of online platforms which will then significantly simplify the ship registration processes and eliminate the loads of paperwork. Also, digitalization will mean less physical intervention therefore, eliminate avenues for corruption and red tape.

5. **Adapting to global trends and advances in technology**. The dynamism of international shipping is most evident in the global trend which is shaped by advances in technology, materials and fuels. Green technology, autonomous ships, electric ships and blockchain

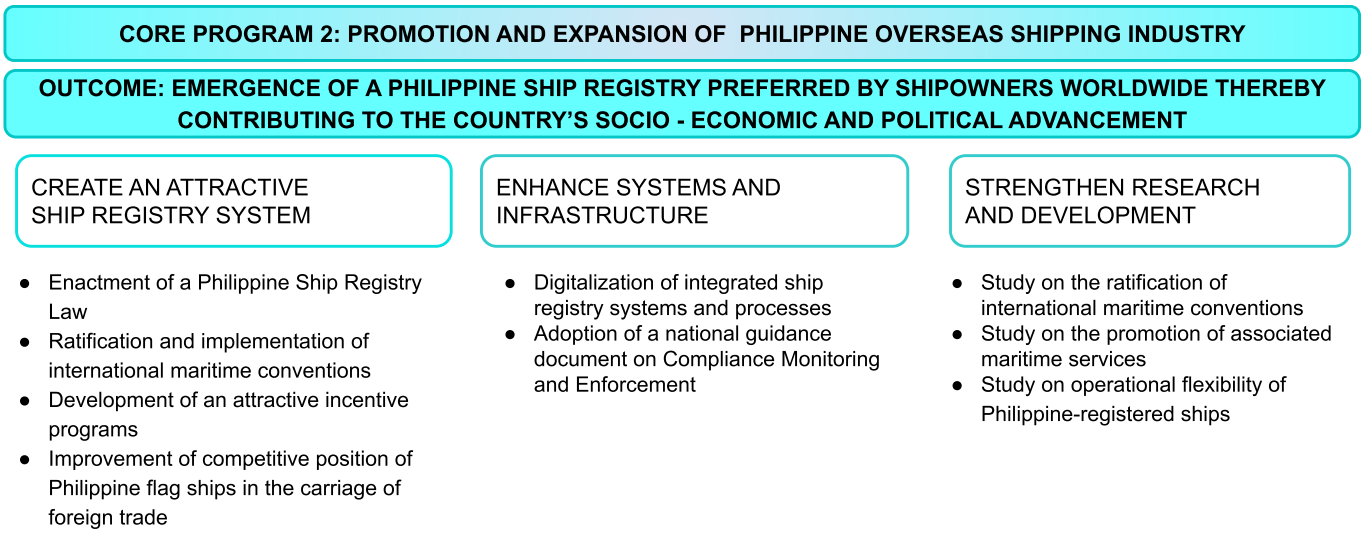
[55]Republic Act No. 11659, An Act Amending Commonwealth Act No. 146, otherwise known as the Public Service Act. March 2022. Official Gazette. Accessed on 13 July 2023 at https://www.officialgazette.gov.ph/downloads/2022/03mar/20220321-RA-11659.pdf.

technology are dominating the discussions on the future of shipping. The demand for sea transport that is both economic and sustainable is transforming shipping operations, thus Philippine-flagged ships must be able to cope with these evolving changes.

IV. PROGRAM FRAMEWORK, STRATEGIES, COMPONENTS AND PROJECTS

Towards attaining the ultimate goal of expanding the Philippine merchant fleet engaged in international voyage, several areas must be addressed by the government with the active support of private sector and other stakeholders.

Figure 3.4
Core Program 2 Framework



The MIDP Core Program on the Promotion and Expansion of the Philippine Overseas Shipping Industry framework (Figure 3.4) sets down the strategies and components to initiate, facilitate and undertake the needed reforms towards delivering a successful program outcome. The framework reflects the strategies to be initiated and the expected trajectory leading to the realization of the MIDP overall vision in 2028.

Program Strategies

The following strategies are identified for the purpose:

1. **Create an attractive ship registry system**. The vision of expanding the national merchant fleet depends on the ability of the ship registry to attract and encourage shipowners to invest in shipping operations. Generally, shipowners whose ships are in international trading opt to flag their ships in countries, which offer the best opportunities for their business ventures. In many instances, beneficial owners of ships are nationals of developed maritime nations whom are constrained to re-flag their ships in another country due to stringent requirements such as those on taxation and nationality requirements for seafarers.

   The emergence of alternative ship registries addresses the demand for more economical shipping operations. The desire to achieve a competitive edge prompted alternative ship registries to offer favorable incentives and improved services in order to attract shipowners.

For the Philippines to attract foreign shipowners to re-flag in the country, it is imperative to focus on approximating the best practices of the world's leading ship registries. Hence, a review of the efficacy of existing legislation and administrative processes of the country's ship registry must be pursued. Hence, the Bill on the "Philippine Ship Registry System Act" could be the key that will spur the expansion of the country's merchant fleet.

a. Enactment of a Philippine Ship Registry Law

Ship registration in the Philippines is governed by legislation and policies dating several decades back. The conditions for registration of ships were first provided under Republic Act No. 1937[56]. This was followed by PD 474[57] issued by then President Ferdinand E. Marcos, as well as Executive Order No. 125-A[58] issued by then President Corazon C. Aquino, which mentioned ship registration, both citing the Maritime Industry Authority (MARINA) as the responsible agency for issuing the Certificate of Philippine Registry.

The conditions on the temporary registration of foreign-owned ships under the Philippine flag is treated more specifically under PD 760[59] subject to the condition that such ships are to be used only in coastwise trade. The PD 866[60] expanded the coverage of PD 760 to allow foreign-owned ships to be registered temporarily in the Philippines upon permission granted by MARINA. Thereafter, the Philippine Merchant Marine Rules and Regulations (PMMRR) promulgated by MARINA defines the conditions upon which the entry under the ship registry is to be permitted. Several MARINA Memorandum Circulars (MC) related to registration of ships under the Philippine flag were later issued.

Notwithstanding these issuances, the Philippine ship registry lacks the coherence and clarity shipowners look for when registering their ships. A comprehensive Philippine Ship Registration Law will provide requirements and conditions that will govern the entry of ships in the country's ship registry.

Further, the House Bill No. 4336[61] was re-filed in the 19th Congress. The Bill aims to establish the Philippines as a leading maritime nation and a respected flag State by ensuring that all Philippine-flagged ships engaged in international voyages meet internationally-adopted standards for ship operations. The Bill will also promote the modernization and expansion of the Philippine merchant fleet through the formulation of clear and coherent policies, adoption of systematic and sustainable incentive programs, and the revision of the hierarchy of claims and liens under the ship mortgage law. More importantly, the Bill proposes to align the tax structure for shipping operations approximating the practices of leading flag States.

[56]Republic Act No. 1937, An Act to Revise and Codify the Tariff and Customs Laws of the Philippines. June 1957. Official Gazette. Accessed on 08 June 2023 at https://www.officialgazette.gov.ph/1957/06/22/republic-act-no-1937/#:~:text=Prohibited%20Importations.,except%20when%20authorized%20by%20law.

[57]Presidential Decree No. 474, Providing for the Reorganization of Maritime Functions in the Philippines, Creating the Maritime Industry Authority, and for Other Purposes. June 1974. Official Gazette. Accessed on 08 June 2023 at https://www.officialgazette.gov.ph/1974/06/01/presidential-decree-no-474-s-1974/.

[58]Executive Order No. 125-A, Amending Executive Order No. 125, Entitled "Reorganizing the Ministry of Transportation and Communications, Defining its Powers and Functions, and For Other Purposes. April 1987. Official Gazette. Accessed on 08 June 2023 at https://www.officialgazette.gov.ph/1987/04/13/executive-order-no-125-a-s-1987/.

[59]Presidential Decree No. 760, Allowing the Temporary Registration of Foreign-Owned Vessels Under Time Charter or Lease to Philippine Nationals for Use in The Philippine Coastwise Trade Subject to Certain Conditions. July 1975. Official Gazette. Accessed on 08 June 2023 at https://www.officialgazette.gov.ph/1975/07/31/presidential-decree-no-760-s-1975/.

[60]Presidential Decree No. 866, Amending Presidential Decree No. 760 by Reducing the Term of the Lease or Charter Period to Not Less Than One Year, Deleting the Word "Time" in the Title and Body of the Decree, and allowing Overseas Use in Certain Cases. January 1976. Official Gazette. Accessed on 08 June 2023 at https://www.officialgazette.gov.ph/1976/01/02/presidential-decree-no-866-s-1976/.

[61]House Bill No. 4336, An Act Establishing the Scope and Procedure for Philippine Ship Registry, Recognition and Enforcement of Maritime Claims, and Limitations of Liability, as well as Providing Essential Incentives, which Collectively Will Promote a Comprehensive and Orderly Philippine Ship Registry System for the Regulation of Vessels Carrying the Flag State. November 2022. Accessed at 08 June 2023 at https://hrep-website.s3.ap-southeast-1.amazonaws.com/legisdocs/basic_19/HB04336.pdf.

b. Ratification and implementation of international maritime conventions

The regulatory framework in international shipping is provided by the international conventions formulated and adopted by the IMO and other international organizations. This regulatory framework is implemented by State Parties according to the requirements of flag States to enforce these through Port State Control activities. Therefore, it is in the interest of a shipowner that the flag State, under whose jurisdiction adheres to the requirements of the relevant conventions to avert any control initiatives over his ship.

There are certain benefits that accrue to Parties to the conventions, and for the Philippines, there is that value added that makes the country's ship registry attractive. It is from this perspective that the country is determined to ratify/accede to a number of IMO conventions to be facilitated through the mechanisms identified under Executive Order (EO) No. 159[62] issued in December 2021 on adopting an integrated approach in the ratification and accession to IMO instruments.

The EO 159 institutionalized the establishment of the Inter-agency Coordinating Committee to Facilitate the Ratification and Accession to the Implementation of Maritime Conventions (ICCFRAIMC), which is responsible for undertaking the necessary steps in considering new international maritime conventions for possible ratification or accession through the conduct of a national interest analysis, and study measures needed to satisfy convention requirements.

The Philippines has ratified 28 IMO Instruments as of April 2023:

Table 3.1
IMO Conventions Ratified/Acceded by the Philippines

Convention/Protocol/Agreement	Date of Signature or Deposit of Instrument
1. Convention on the International Maritime Organization, 1948 (IMO Convention 1948)	Joined as Member State in 1964
2. 1991 Amendments to the IMO Convention	*
3. 1993 Amendments to the IMO Convention	*
4. International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS 1974)	15 December 1981
5. Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS PROT 1978)	24 April 2018
6. Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS PROT 1988)	6 June 2018
7. Convention on the International Regulations for Preventing Collisions at Sea, 1972, as amended (COLREG 1972)	10 June 2013

[62]Executive Order No. 159, Adopting an Integrated Approach in the Ratification and Accession to International Maritime Organization Conventions and Instruments, and Reconstituting the Inter-Agency Coordinating Committee for the Purpose. January 2022. Official Gazette. Accessed on 08 June 2023 at https://www.officialgazette.gov.ph/2021/12/28/executive-order-no-159-s-2021/.

Convention/Protocol/Agreement	Date of Signature or Deposit of Instrument
8. International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78) Annex I: Regulations for the Prevention of Pollution by Oil Annex II: Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk	15 June 2001
9. Annex III: Regulations for the Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form	15 June 2001
10. Annex IV: Regulations for the Prevention of Pollution by Sewage from Ships	15 June 2001
11. Annex V: Regulations for the Prevention of Pollution by Garbage from Ships	15 June 2001
12. Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL PROT 1997 (Annex VI))	24 April 2018
13. International Convention on Load Lines, 1966, as amended (LL 1966)	4 March 1969 *PH as Signatory - Subject to ratification or acceptance: 1 July 1966
14. Protocol of 1988 relating to the International Convention on Load Lines, 1966 (LL PROT 1988)	24 April 2018
15. International Convention on Tonnage Measurement of Ships, 1969, as amended (TONNAGE 1969)	6 September 1978 *PH as Signatory – Subject to acceptance
16. Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC PROT 1992)	7 July 1997
17. Special Trade Passenger Ships Agreement, 1971 (STP 1971)	2 July 1973
18. Protocol of 1992 to amend the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971, as amended (FUND PROT 1992)	7 July 1997
19. Convention on the International Maritime Satellite Organization, 1976 (IMSO C 1976)	30 March 1981
20. Operating Agreement on the International Mobile Satellite Organization, as amended (INMARSAT OA)	*PH as Signatory – Philippine Communications Satellite Corporation (PHILCOMSAT)
21. International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW 1978)	22 February 1984
22. Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation, 1988 (SUA 1988)	6 January 2004 *PH as Signatory – Subject to ratification by the Congress of the Philippines
23. Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf (SUA PROT 1988)	6 January 2004 *PH as Signatory – Subject to ratification by the Congress of the Philippines

Convention/Protocol/Agreement	Date of Signature or Deposit of Instrument
24. International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990 (OPRC 1990)	6 January 2004 *PH as Signatory – Subject to ratification
25. International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001 (AFS 2001)	6 June 2018
26. International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (BWM 2004)	6 June 2018
27. Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972, as amended (LC 1972)	10 August 1973
28. 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (LC PROT 1996)	9 May 2012

However, only three (3) of these have been transposed into national legislation:

Table 3.2
IMO Instruments Transposed into National Legislations

Convention/Protocol/Agreement	Date of Signature or Deposit of Instrument
1. International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978	Republic Act No. 10635[63]
2. International Convention on Civil Liability for Oil Pollution Damage (CLC)	Republic Act No. 9483[64]
3. International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FUND)	

To address this concern, a Bill entitled, "An Act Providing for the Full and Effective Implementation and Enforcement of International Maritime Instruments of which the Philippines is a State Party" was filed in the 19th Congress in July 2022. The Bill provides the platform by which technical requirements and standards as embodied in maritime conventions and treaties signed and ratified by the Philippines can be promptly translated into national rules and regulations, a course of action expected of a Party to international maritime agreements.

The Philippine maritime administration has undergone the IMO Member States Audit Scheme (IMSAS), a tool adopted by the IMO to determine its Member States' effective compliance with the mandatory IMO Conventions and Instruments to which the

[63]Republic Act No. 10635, An Act Establishing the Maritime Industry Authority (MARINA) as the Single Maritime Administration and Enforcement of International Convention on Standards of Training, Certification and Watchkeeping (STCW) for Seafarers, as amended, and international agreements and covenants related thereto. March 2014. Official Gazette. Accessed on 08 June 2023 at https://www.officialgazette.gov.ph/2014/03/13/republic-act-no-10635/.
[64]Republic Act No. 9483, An Act Providing for the Implementation of the Provisions of the 1992 International Convention on Civil Liability for Oil Pollution Damage and the 1992 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, Providing Penalties for Violations thereof, and for other purposes. June 2007. Official Gazette. Accessed on 08 June 2023 at https://www.officialgazette.gov.ph/2007/06/02/republic-act-no-9483/.

countries are a State Party to. Through the audit, IMO expects to promote consistency and effectiveness of the implementation of IMO Instruments and to assist the Member States to improve their capability in fulfilling their obligations as Contracting Parties to these instruments thereby promoting maritime safety, security, and prevention of pollution from ships. Pursuant to EO 84, the Inter-agency Council on the IMSAS was created to ensure that its member agencies shall implement and comply with all the polices, laws and issuance pertaining to the implementation of the IMO instruments in an integrated manner.

To further strengthen the Philippine ship registry, the country has listed several IMO Conventions and Instruments for evaluation and consideration for ratification/ accession. Amongst those that are being considered priority are as follows:

Table 3.3
Identified Priority IMO Conventions to be Ratified/Acceded

Priority IMO Conventions	Rationale/Key Features	Responsible Agency/ies
1. Convention on Facilitation of International Maritime Traffic (FAL Convention)	• Its main objectives are to prevent unnecessary delays in maritime traffic, to aid cooperation between Governments, and to secure the highest practicable degree of uniformity in formalities and other procedures. In particular, the Convention reduces the number of declarations which can be required by public authorities. • As the global maritime world is now heading for digitization, ratifying the FAL Convention will definitely help the maritime industry to be at par with other maritime nations.	PPA & other port authorities
2. International Convention on Civil Liability for Bunker Oil Pollution Damage (Bunker Convention)	• Adopted in 2001 and entered into force in 2008. • Adopted to ensure that adequate, prompt, and effective compensation is available to persons who suffer damage caused by spills of oil, when carried as fuel in ships' bunkers. • Applies to damage caused on the territory, including the territorial sea, and in exclusive economic zones of States Parties. • Provides a free-standing instrument covering only pollution damage.	MARINA PCG
3. Hazardous and Noxious Substance Convention (HNS Convention)	• Aims to ensure prompt and effective compensation to those who have suffered from damage to person and/or property. • Includes the cost of clean-up and economic losses resulting from the maritime transport of hazardous and noxious substances	MARINA PCG

c. Development of an attractive incentive program

With the aim of making the Philippines as a flag of choice, there is a need to develop more responsive and attractive incentive programs. Tax incentives or the shift from tax to ship tonnage fees could be considered. Likewise, ship financing and leasing facilities which offer competitive rates can promote the attractiveness of the Philippine ship registry.

d. Improvement of competitive position of Philippine flag ships in the carriage of country's foreign trade

In order to realize this component under the strategy of creating an attractive Philippine ship registry, there should be persistent efforts to strengthen programs and activities related to the following areas:

i. Active participation in international and regional cooperation initiatives on trade opportunities such as Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA), Association of Southeast Asian Nations (ASEAN), General Agreement on Trade in Services (GATS), ASEAN Free Trade Area (AFTA), Asia-Pacific Economic Cooperation (APEC), and other international organizations and committees. Cooperation agreements were concluded such as the MOU among the BIMP-EAGA Member States on Establishing and Promoting Efficient and Integrated Sea Linkages and the 2018 ASEAN MOU on the Improvement of Safety Standards and Inspection for Non-Convention Ships. In order for the country to reap the benefits from these regional arrangements, it is important that policy direction aimed at improving the competitiveness of Philippine-flagged ships be introduced.

ii. International operations of domestic ships. The flag administration grants special permits for the temporary utilization of domestic ships in overseas shipping. Transforming this short-term opportunity offered to domestic shipowners to participate in the carriage of Philippine exports and imports into a long-term grant of authority, instead of a special permit, will translate into an expanded Philippine merchant fleet operating in international waters.

   The grant of special permits to domestic ships to temporarily ply international waters gives domestic ships the opportunity to operate beyond the country's waters. However, the transitory character of providing shipping services in international waters through special permits renders strategic planning for an expanded area of operations quite challenging, thus, not many Philippine domestic ships venture into international trading.

   The policy on "operational flexibility" which proposes to allow the grant of long-term authority to Philippine-flagged ships engaged in domestic shipping to assume domestic/international status and may need to be closely studied in light of the amendments to the Public Service Act, which extends to foreign nationals the privilege of investing in sea transport services within the country.

2. **Enhance systems and infrastructure**. A crucial infrastructure to shipping operations pertains to access to information and databases in real time. As transactions and contracts for shipping services take place 24/7, shipowners are always on the lookout for cargoes and business opportunities, and decision-making depends on their ability to know where his ships are and the status of their operations. Therefore, shipowners not only look for easy and seamless registration processes, but more importantly, on how they are able to transact business, which in most cases is attached to the quality of the flag under which their ships operate.

   Ship registries and their respective flag States assume the responsibility of ensuring that ships under its flag are seaworthy and up to internationally-adopted standards. Tracking the ships' compliance with international maritime regulations could be a tedious task especially for one that has no digitized database nor digitalized processes. It is therefore imperative for the Philippine ship registry to launch a digitalization project to achieve the target of an expanded merchant fleet.

   *a. **Digitalization of the integrated ship registry systems and processes.***

      To create access and significantly increase the ease of doing business, digitalization of an integrated ship registry systems and processes will be crucial. Improving the rate at which ship owners can process their applications and data will help create a favorable business climate thus encouraging investments. This endeavor will be in coordination with relevant government agencies.

   *b. **Adoption of a National Guidance Document on Compliance, Monitoring and Enforcement***

      Review and update of a National Guidance Document (NGD) which will serve as the guidebook in the implementation of maritime rules and regulations, consistent with international standards and requirements facilitating the exercise of regulatory functions of the flag State. Having the NGD is expected to boost the respect and confidence of the stakeholders and the international shipping community. This is most important in a ship registry.

3. **Strengthen research and development.** Shipping is a dynamic undertaking for shipowners, government, stakeholders and society in general. At all levels of decision-making, information and evidence are crucial in formulating sound policies and plans. Research and development must be conducted not only to address the immediate and future concerns of the Core Program in order to bring to date the management of the Philippine ship registry but also to sustain its relevance to the demands of the shipowners and the requirements of the international maritime community.

   *a. **Digitalization of the integrated ship registry systems and processes.***

      By becoming a Party to international maritime conventions, the Philippines undertakes to abide by the regulatory framework governing flag, coastal, and port States. On the other hand, international conventions accord benefits to member States which include, among others, official recognition of ship's certificates issued pursuant to the convention and the right to exercise port State control over foreign-flagged ships calling on its coastal waters.

Being a signatory to the various international maritime conventions and treaties, the Philippines enjoys the support and assistance extended by these international organizations, notably the IMO, International Labour Organization (ILO), and other regional arrangements. To the extent that technical cooperation assistance is offered under these international and regional arrangements. In addition the Philippines has become a continuing beneficiary of the capacity-building programs and related technical assistance activities to futher strengthen the understanding and effective implementation of the conventions.

Related to this component of strengthening research and development, the review of the Bill entitled "An Act Providing for the Full and Effective Implementation and Enforcement of International Maritime Instruments of which the Philippines is a State Party" could be included as part of the "study on the ratification of international maritime conventions".

b. Study on the Promotion of Associated Maritime Services

Shipping is characterized by continuing transformation brought about by advances in science and technology which in turn shape society's preferences that businesses must adapt. The changes create new needs, which lead to the establishment of facilities and mechanisms to respond to the demands of the shipping industry. This further leads to adjustments in government policy and regulatory frameworks.

The Philippines noted the emergence of ancillary maritime services such as ship management. MARINA's records show thirty-six (36) accredited companies. Ship management is an essential aspect of the shipping industry and deals with a plethora of processes relating to fleet management such as crewing, chartering, vetting, and logistics. Such services could be pursued as one-off business ventures very much like manning or chandling services which have been in existence in the country for many years or could be merged under a ship management enterprise.

Affirmation of the desire to establish the country as a maritime hub through the provision of a menu of services to shipping is to be achieved through a study on how to promote and encourage investments in these ancillary maritime services. The study is expected to provide the basis and guidance on how to expand and strengthen ancillary maritime services

c. Study on Operational Flexibility of Philippine-registered Ships

The research takes cognizance of the impact to Filipino shipowners as a result of the amendment to the Public Service Act, which relaxes the foreign equity requirements for investors in domestic shipping operations. The benefits granted to foreign investors by the law demands that parallel incentives be extended to local shipowners for them to be able to match the competition offered by foreign interests.

Shipping companies, which are documented as engaged in inter-island shipping, are restricted from operating overseas without a "special permit" and only for a limited period. The proposed plan to allow "operational flexibility" for ships engaged in domestic trading to extend their operations overseas supports the country's commitment towards economic integration, trade facilitation and seamless movement of people and goods.

Expanding the operations of Philippine-flagged ships overseas is expected to generate additional employment consequent to the increase in the number of ships needed to carry the country's foreign trade. The wider participation of Philippine shipping enterprises as a result of the operational flexibility granted to them leads to generation and savings of foreign exchange revenues which otherwise will be paid to foreign-flagged carriers carrying the country's exports and imports.

V. LEGISLATIVE AGENDA

Table 3.4 presents the priority legislative agenda that will complement and support the strategies to further accelerate the development of the overseas shipping industry.

Table 3.4
Legislative Agenda for the Core Program 2

Legislative Agenda	Rationale/Key Features	Responsible Agency/ies
An Act Establishing the Scope and Procedure for Philippine Ship Registry, Recognition and Enforcement of Maritime Claims, and Limitations of Liability, as well as Providing Essential Incentives, which Collectively Will Promote a Comprehensive and Orderly Philippine Ship Registry System for the Regulation of Vessels Carrying the Flag State (Philippine Ship Registry System Act)	• To establish the Philippines as a leading maritime nation and respected flag State; • To ensure that Filipino-owned-and- manned maritime fleets or vessels are strengthened and assisted to meet the minimum global standards for reliability, safety, competitiveness, and effectiveness; • To provide protection to merchant marine fleets, and help expand Philippine international trade; • To encourage Philippine vessel acquisition, development, modernization, and expansion through systemized and sustainable Programs; • To provide policies that will attract more ship owners to register under Philippine flag, thus ensuring the country's economic growth; • To align the tax structure for its domestic and overseas shipping fleet to make it competitive; and, • To provide a mechanism for the early adoption and implementation of international maritime regulations and conventions.	**Proponent office:** MARINA **With support from:** • Office of the President (OP) • Senate of the Philippines • House of Representatives • Department of Transportation (DOTr) • Philippine Coast Guard (PCG) • Philippine Port Authority (PPA) and other port authorities • Department of Finance (DOF)/Bureau of Internal Revenue (BIR) • Department of Trade and Industry (DTI)/ Board of Investments (BOI) • Relevant Private stakeholders
An Act Providing for the Full and Effective Implementation and Enforcement of International Maritime Instruments of which the Philippines is a State Party (Maritime Safety, Security and Prevention of Ship-sourced Pollution Act)	• To provide for the full and effective implementation and enforcement of international maritime instruments that cover safety of life at sea, prevention of pollution from ships, load lines, tonnage measurements of ships, and regulations for preventing collisions at sea; • To serve as a platform for the adoption of regulations implementing the technical annexes, provisions, and requirements of these international maritime instruments; and • To serve as a mechanism for the full and effective implementation of Port State Control (PSC) guidelines as provided by regional agreements or Memoranda of Understanding.	**Proponent office:** MARINA **With support from:** • OP • Senate • HoR • DOTr • PPA and other port authorities • PCG • National Telecommunications Commission (NTC)

VI. RESULTS MATRIX

Table 3.5 presents the indicators and targets to achieve results for the accelerated development of the Philippine overseas shipping industry.

Table 3.5
Results Matrix for the Core Program 2

#	Indicators	Baseline		TARGETS							Means of Verification	Responsible Agency/ies
		Year	Value	'23	'24	'25	'26	'27	'28	EOP		
1	% increase in gross tonnage of Ph-registered overseas ships	2021	2.2M gT[65]	-	2%	2%	4%	6%	6%	20%	MARINA Report	MARINA
2	Increase in number of Ph-registered overseas ships	2021	97[66]	-	2	2	4	4	8	20	MARINA Report	MARINA
3	% increase of seafarers employed on Ph-registered overseas ships	2021	1,940[67]	-	2%	2%	4%	4%	8%	20%	DMW Report	DMW
4	% increase in collection of withholding tax for bareboat Chartered Ships	2021	29.5M	-	2%	2%	4%	4%	8%	20%	BIR Report	BIR

[65]MARINA Data of registered ships for 2021.
[66]Ibid.
[67]Based on the average of 20 actual crew deployed by the shipping companies, employment covers safety operation of the ship and other services required on-board, e.g. messman and cook.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Chapter

04

Core Program 3

Modernization, Expansion and
Promotion of the Philippine Shipbuilding
and Ship Repair Industry

Chapter IV

MODERNIZATION, EXPANSION AND PROMOTION OF THE PHILIPPINE SHIPBUILDING AND SHIP REPAIR (SBSR) INDUSTRY

I. OVERVIEW

The Philippines is advantageously located alongside the commercial shipping channels used for international trade, which can propel the nation towards transforming the Philippines into a significant maritime power, especially when combined with the country's potential in maritime labor, maritime services, and shipbuilding and ship repair. The technological and financial requirements of the local shipbuilding and ship repair (SBSR) sector should be developed to draw additional investments.

Shipbuilding in the Philippines continually grows and is already listed as the 4th largest shipbuilding country in the world in terms of deliveries of newbuilds by major vessel type and country of construction in 2021[68], contributing a total of 643,000 Gross Tons of newbuild ships. Moreover, with the increasing volume of trade and demand for ships, the Philippines has to maintain a strong and well-developed shipbuilding and ship repair industry.

A major contributor to the excellence in shipbuilding is the tactical position of the country in terms of commercial trade routes and its overwhelming coastline and seabed characteristics which can accommodate large vessels. As of 2021, there are 116 registered shipyards, 26 of which are categorized as medium to large scale scattered along the country's 3 main islands of Luzon, Visayas and Mindanao.

The role of the SBSR sector is to provide the shipping sector with opportunities to acquire locally-built ships, repair and drydock ships at a relatively lower cost, while maintaining a quality comparable to foreign-built and repaired ships. It also supports the expansion of Philippine merchant fleet including fishing, recreational and mobile offshore crafts in line with the declared policy of adopting and promoting blue economy, particularly the sustainable use of resources in the maritime industry. This serves as a way to increase job employment and improve the livelihood of shipyard employees that contribute to the growth of the Philippine economy.

The modernization, expansion and promotion of the Philippine shipbuilding and ship repair industry is in line with the national development agenda of the government, which is to ensure a level playing field by strengthening market competition and reducing barriers to entry and limits to entrepreneurship.

II. RATIONALE

This core program of the MIDP 2028 aims to modernize and expand the Philippine shipyards' capability and capacity to not only meet the demands of the local and international sea transport market, but also create more jobs and increase investments to the country.

[68]Review of Maritime Transport 2022 by United Nations Conference of Trade and Development.

In line with this objective, four (4) interlinked program strategies that address the critical components of the SBSR industry were identified, particularly: a) upgrading and enhancement of capability and capacity of shipyards; b) promotion of research and development; c) establishment of an eco-industrial maritime park; and d) development of financing programs supporting inter-island transport of people and goods, promoting investments and employment. To enable the transformation and effective implementation of these program strategies, an overarching program focusing on legislative reforms toward comprehensive development of the SBSR industry is vital.

With the implementation of this program, the following impacts are expected to be realized:

1. Strengthened policy and regulatory frameworks, including incentives and financing mechanisms that support modernization, expansion and promotion of the shipbuilding and ship repair industry;
2. Shipbuilding and ship repair infrastructure improved, modernized and expanded;
3. Shipyard workforce upskilled and reskilled to cope with the challenges of modern and green technology in shipbuilding and ship repair;
4. Investments in the shipbuilding and ship repair industry increased;
5. Technical cooperation on the development of the iron and steel industry and other ancillary industry to support the SBSR industry promoted;
6. Establishment of the Eco-Industrial Maritime Park initiated;
7. Green Shipyard program initiated; and
8. Conduct of research and development on new technologies and solutions in shipbuilding and ship repair, including but not limited to:

    a. Ship Recycling in the Philippines;
    b. Development and Implementation of a Modernize Transport System Technology;
    c. Development of the iron and steel industry and other ancillary industries to support the SBSR industry; and
    d. Development of fit-for-purpose modern and low carbon/green ships for domestic voyage.

The modernization of the shipbuilding and ship repair industry covers the safety, efficiency, environmental-friendly and advanced ship technology of ships.

III. ASSESSMENT

Aside from targeting the development of domestic shipping, Republic Act No. 9295 (Domestic Shipping Development Act of 2004) also mandates "*the development of a viable shipbuilding and ship repair industry*." The law recognizes that one of the keys to the expansion and modernization of the Philippine domestic merchant marine fleet is a vibrant and capable shipbuilding and ship repair industry.

According to Section 20 of RA 9295, the MARINA must "evaluate and determine the progressive capacity of MARINA-registered shipyards to build and construct new vessels for domestic trade." After a yearly evaluation of their progressive capacity, MARINA may determine incentives or other government support that may improve capacity or capability of the shipyards.

In this regard, the 2021 Shipbuilding and Ship Repair Capability and Capacity Assessment Report provided the status of existing SBSR entities nationwide, including problems in shipbuilding in terms of acquiring resources as well as challenges in actual production. The report also identified measures that would accelerate the development of MARINA-registered and licensed shipyards in building and repairing ships, and improving the current state of the shipyard facilities.

Below are the highlights of the 2021 SBSR Capability and Capacity Assessment Report:

1. SBSR Industry Profile

Table 4.1 shows that there are 116 shipyards registered by MARINA as of 2021, 7% or 8 of which are classified as Class A; 15% or 18 are classified as Class B; and 78% or 90 are classified as Class C. These are registered and licensed under MC No. 2018-02 and MC No. SR-2019-01. The latter memorandum was issued in 2019 as a set of additional guidelines for the registration and licensing of shipyards.

Table 4.1
Number of MARINA-Registered & Licensed Shipyards As of 2021

SBSR Category	Classification	Number	Capacity
Shipbuilder & Ship Repairer (SBSR) under MC No. 2018-02 and MC No. SR-2019-01.	Class A	8	Capable of building and repairing big ships with a length of 130 meters and above
	Class B	18	Capable of building and repairing ships with a maximum length of 129 meters
	Class C	90	Capable of building and repairing ships with a maximum length of 80 meters
Total Number of Shipyards Nationwide		**116**	

Source: Maritime Industry Authority (MARINA) [69]

MARINA has 45 SBSR entities in Metro Manila which is the largest number of shipyards registered and licensed among all regions. The MARINA also recorded in Metro Manila the greatest number of Class A and Class B shipyards with 3 and 8 SBSR entities respectively.

2. Shipyard Facilities

Back in the year 2020, the Shipyards Regulation Service (SRS) of the MARINA did not record any significant changes in shipyard facility profile in the Philippines. In line with this, the number of shipyard facilities remains at 186. Around 66% of the said facilities need rehabilitation while most of the larger assets such as syncrolifts, graving docks, and floating docks are owned by Class A and Class B shipyards. It is very crucial to determine the current state of the main yard facilities relative to the capability and capacity of the entire SBSR industry nationwide.

As of 2021, out of the 186 shipyard facilities, there are 112 slipways, 52 building yards, 14 floating docks, 5 graving docks and 3 syncrolifts in the country, which recorded a total of 1,337,864 Deadweight Tonnage (DWT) capacity. The following are the most common facilities found in Philippine shipyards:

[69] 2017-2021 MARINA Statistical Report. The Maritime Industry Authority. 2022. Accessed on 29 May 2023 at https://marina.gov.ph/statistical-report/.https://marina.gov.ph/wp-content/uploads/2022/06/2017-2021-MARINA- Statistical-Report_FINAL_revised.pdf

- **Slipways** are the most used yard facility for shipbuilding, ship repair and dry-docking. The average capacity of slipways in the country is about 5,551 DWT. Based on the 2020 Philippine SBSR Situation Report, majority of these slipways need to undergo rehabilitation.

- **Building Yard** is usually an area of land where a ship can be docked, commonly by using blocks. According to the 2019 SBSR Capability and Capacity Assessment, there are 52 building yards with a cumulative size of 137,610 m^2.

- **Floating Dock** is the third main yard facility with the greatest number of units in the country. There are 14 floating docks with an average capacity of 5,154 DWT. The mechanism of floating docks requires flotation through the use of a ramp to stabilize the ship or, in some cases, the use of other flotation devices to drydock or launch a vessel. This is considered as a method to haul or dock ships. Generally, a floating dock is cheaper to maintain compared to a graving dock. Most of the floating docks in the Philippines are imported.

- **Graving Dock** is a narrow basin within a shipyard where the vessel is docked while the facility is drained of water before ship repair or any other ship service can commence. Once the service is finished, the facility is then filled with water until the ship is afloat and ready to be launched. With an average capacity of 168,000 DWT, there are 5 graving docks being used in the Philippine SBSR industry. Most of the graving docks in the country are owned by Class A shipyards.

- **Syncrolift or Liftdock** is one of the main yard facilities of Class A shipyards. Syncrolift and liftdock is a system where a vessel is maneuvered by submerged cradles and is hoisted from the water by a set of synchronized hoists or winches.

Shown in Table 4.2 below is the Top 10 Shipyards in the Philippines with the greatest number of DWT capacity in 2021. It also shows the classification and percentage share of each shipyard in the Philippine SBSR industry.

Table 4.2
Top 10 Shipyard Facilities per Capacity in Deadweight as of 2021

Name Of Shipyard	Deadweight (Dwt) Capacity	Class	% Share
1. Keppel Subic Shipyard Inc.	550,000	A	41.11%
2. Tsuneishi Heavy Industries (Cebu) Inc.	200,000	A	14.95%
3. Keppel Philippines Marine Inc.	46,000	A	3.44%
4. Josefa Slipways Inc. (NCR, I and II)	30,000	B	2.24%
5. Herma Shipyard Inc.	24,000	A	1.79%
6. GenSan Shipyard & Marine Works	22,000	B	1.64%
7. Seafront Shipyard and Port Terminal Services Corp.	20,500	B	1.53%
8. Colorado Shipyard Corp.	15,000	B	1.12%
9. Frabelle Shipyard Corp.	8,809	B	0.66%
10. F.F. Cruz and Company Inc.	6,000	A	0.45%

Source: Maritime Industry Authority (MARINA) [70]

[70]Ibid.

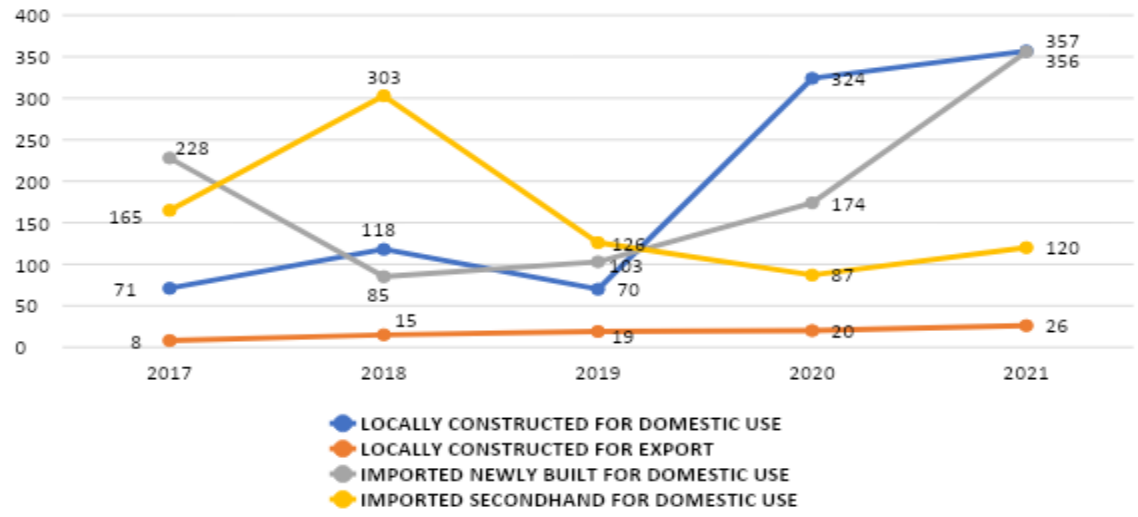
Five out of the eight Class A shipyards belong to the Top 10 Shipyards in the Philippines in terms of Deadweight Capacity such as Keppel Subic Shipyard Inc., Tsuneishi Heavy Industries (Cebu) Inc., Keppel Philippines Marine Inc. in Batangas, Herma Shipyard Inc. and the F.F. Cruz and Company Inc. The rest of shipyards in the Top 10 list are classified as Class B. Further, the said Top 10 Shipyards covers 68.93% of the total 1,337,864 DWT capacity in the country.

3. Shipbuilding and Ship Repair Operations

The government leads the country towards a more progressive maritime industry particularly in the shipbuilding and ship repair sector. The modernization, expansion and promotion of the SBSR industry is expected to contribute more production in shipbuilding that would meet the increasing demand of the local and global markets.

The total number of ships acquired for domestic use and for export through local construction and importation from 2017 to 2021 is shown in Figure 4.1. Based on the 2021 SBSR Capability and Capacity Assessment Report, the greatest number of locally constructed ships for five years was in the year 2021 with a total of 383 ships. Of this, 357 were built for domestic utilization while 26 were for exportation.

Figure 4.1
Total Number of Ships Acquired for Domestic Use and for Export through Local Construction and Importation
From 2017 to 2021



Source: Maritime Industry Authority (MARINA) [71]

From 2017 to 2021, the number of locally constructed ships for export increased yearly. There are 8 locally constructed ships for export in 2017, and this figure more than tripled its value in 2021. Regarding the number of the locally constructed ships for domestic use, the greatest number of units produced in 5 years was recorded in the year 2021 with 357 ships.

Meanwhile, there was a significant decrease in the number of newly-built imported ships for domestic use in the year 2018. From 228 ships in 2017, this decreased to 85 in 2018. However, these ships continued to increase from 103 in the year 2019 to 356 in 2021. This may be attributed to the effective implementation of MARINA Circular DS-2019-01 on "Rules on the Registration, Licensing, and Operation of Recreational Boats."

[71]Ibid.

Further, back in the year 2018, the number of imported secondhand ships for domestic use reached its peak at 303 vessels, and decreased to 126 ships in 2019. The significant decrease in the number of imported secondhand ships for domestic use may be attributed to the rules on the importation of vessels under MARINA MC 2017-04, which requires that passenger ships to be imported should be more than 500 GT and younger than 20 years of age. In 2021, out of the 356 imported ships for domestic use, 349 ships or 98% are miscellaneous ships which are mostly recreational boats. These recreational boats have a huge percentage of the total size of imported ships in 2021 which is 90 GT with an average size of less than 1 GT.

Table 4.3
Total Number of Locally Constructed Ships for Domestic Use and for Export For the Period: 2020 and 2021

Year	Domestic Use		For Export		Total	
2020	324	48,754 GT	20	714,340 GT	344	763,094 GT
2021	357	15,177 GT	26	1,800,000 GT	383	1,815,177 GT

Source: Maritime Industry Authority (MARINA) [72]

Despite the nationwide lockdown implemented in 2020 due to COVID-19, as shown in Table 4.3, a total of 344 ships were constructed locally that year, including 324 ships for domestic use and 20 ships for export. It also appears that local shipyards took advantage of the gradual lifting of COVID-19 protocols in 2021, resulting in a higher number of locally constructed ships with a total of 383, including 357 for domestic and 26 for export.

In addition, Table 4.3 also shows the size comparison between locally constructed ships for domestic use and for export in 2020 and 2021. Based on the data, locally constructed ships in 2021 reached 1,815,177 GT in size, higher than the 763,084 GT recorded in 2020.

The number of locally constructed ships for domestic use in 2021 is higher compared to 2020. However, the total size of the locally constructed ships for domestic use in 2021 is smaller at 15,177 GT compared to 48,754 GT in 2020. For export, the size of the locally constructed ships in 2021 was tallied at 1.8 million GT, higher than the 714,340 GT in 2020.

The 2021 SBSR Capability and Capacity Assessment Report shows that among the repair activities conducted by the shipyards are replating, rudder works, propulsion works, overhauling among others. Ship repair remains as one of the core activities of shipyards in the Philippine maritime industry.

In this regard, ships engaged in domestic shipping and in fishing are being dry-docked in local shipyards and inspected by concerned government authorities such as MARINA to assure its safety.

4. SBSR Workforce

As expected, there is a big decrease in the number of employees in the shipbuilding and shiprepair industry in 2020 and 2021 amid the COVID pandemic. Based on the

[72]Ibid.

data gathered by MARINA, there are 8,801 workers employed by the shipyards in 2021, which is equivalent to 34.7% decrease compared to the manpower in 2019.

Based on the SBSR 2019 Capability and Capacity Assessment Report, there were 13,479 personnel in the SBSR industry. Shown in Table 4.4 is the number of SBSR employed personnel by region in 2021.

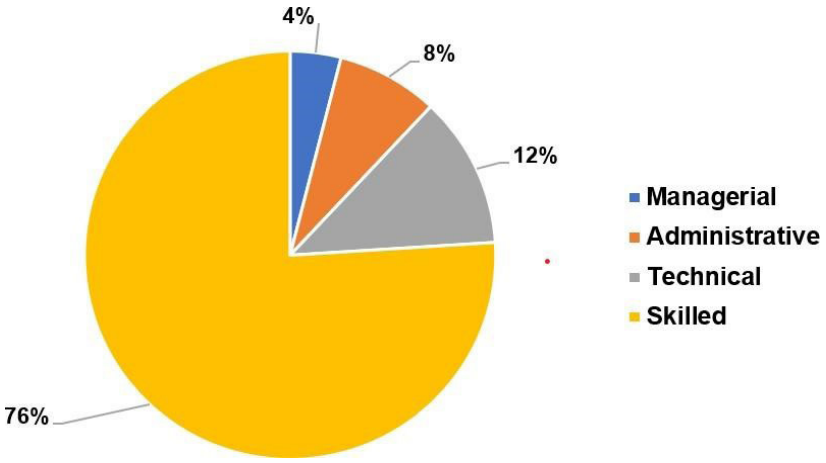
Table 4.4
Number of SBSR Employed Personnel by Region In 2021

Office	Managerial	Administrative	Technical		Skilled		Total
			Permanent	Contractual	Permanent	Contractual	
NCR	158	314	318	56	1,941	305	3,092
MRO 1 & 2	2	20	2	3	10	20	57
MRO IV	26	113	143	27	419	247	975
MRO V	2	2	6	10	3	0	23
MRO VI	17	38	62	10	128	142	397
MRO VII	44	60	151	38	427	370	1,090
MRO VIII	2	5	6	0	0	19	32
MRO IX	12	21	29	5	269	0	336
MRO X	5	4	13	0	9	32	63
MRO XI	3	4	2	2	13	24	48
MRO XII	70	133	108	43	1,998	200	2,552
MRO XIII	4	5	14	2	107	4	136
TOTAL	**345**	**719**	**854**	**196**	**5,324**	**1,363**	**8,801**

Source: Maritime Industry Authority (MARINA) [73]

Moreover, Figure 4.2 below shows the percentage distribution of occupational categories in the shipbuilding and ship repair industry as of 2021.

Figure 4.2
Percentage Distribution of SBSR Personnel by Occupational Category As of 2021



Source: Maritime Industry Authority (MARINA) [74]

[73]Ibid.
[74]Ibid.

Majority of the workforce in SBSR in the nation is made up of skilled workers. As of 2021, the SBSR sector employed 6,687 people which include welders, solderers, and similar skilled employees, making up 76% of the total workforce. The other occupational categories include managerial, administrative and technical.

At the outbreak of COVID-19 pandemic in 2020, shipyards had only 10%-20% of their staff reporting for work, mostly for station-keeping and with few to no technical personnel on site. Shipbuilding and ship repairs in progress stopped. However, for foreign-owned shipyards, staff reporting to work is 70-80%. Personnel that perform crucial works, who are mostly LGU dependents, cannot travel to the yard so final checkout or owner's crew cannot take over ships, this is very dire for new construction. All major work stopped since supplier technicians who oversee the work cannot be present due to travel restrictions.

MARINA issued Advisory No. 2020-33 in May 2020 to set the official rules on the resumption of operations of SBSR entities (including SBK and ASR) under the General Community Quarantine (GCQ) and Inter-Agency Task Force (IATF) Alert Level No. 1.

Aside from the severe impact of the pandemic, the significant decrease in the SBSR workforce from 2019 to 2021 may be attributed to the closure of one of the major shipyards in the country in 2019. In spite of these challenges, there are other foreign players who are eyeing to invest in the Philippine shipbuilding and ship repair sector particularly in the Subic Bay Area and other potential locations.

On the other hand, shipyards inserted efforts and initiatives to promote gender equality in their companies. Based on the result of the survey for the 2021 SBSR Capability and Capacity Assessment Report, among the initiatives are conducting gender awareness seminars for employees and other related activities.

5. 2021 SBSR Capability and Capacity

Despite the COVID-19 protocols, there was a continuous increase in the number of locally constructed ships both for domestic use and for export from 2019 to 2021. It was also concluded that even though there were a greater number of locally constructed ships for domestic use in 2021, the pandemic year of 2020 recorded the greater total size in GT of locally constructed ships for domestic use.

Table 4.5
Ships Built According to Ship Type

Ship Type	Locally-Built Ships For Domestic Use				Imported Ships			
	Ave. Size (GT)		Max. Size (GT)		Ave. Size (GT)		Max. Size (GT)	
	2020	2021	2020	2021	2020	2021	2020	2021
Passenger	317	101	317	854	527	9933	2017	27285
Cargo	626	164	650	1077	1118	2306	9957	10050
Tanker	0	893	0	1114	0	0	0	0
Tugs	97	81	250	248	187	231	488	1197
Fishing	15	15	130	122	121	421	176	995

Source: Maritime Industry Authority (MARINA) [75]

[75]Ibid.

Table 4.5 reveals that in terms of the average size in GT for the locally constructed ships for domestic use, the passenger ships constructed in 2020 have an average of 317 GT while the cargo ships have an average of 626 GT, which are higher compared to the average size of passenger ships and cargo ships in the year 2021 with 101 GT and 164 GT respectively. The maximum size of passenger ships built in 2020 is 317 GT, which is lower compared to 854 GT in 2021. Meanwhile, the maximum size for cargo ships in 2021 came from the "KAMI GST," which is 1,077 GT in size and it was built by the Golden Dragon Fast Craft Builders Inc. The "KAMI GST" has a greater size compared to the maximum size of cargo ships in 2020 which was recorded at 650 GT.

In addition, the average size of fishing vessels was recorded at 15 GT in the year 2020 and 2021. It is important to note that the number of fishing vessels depends on the demand in the local market at that time. Over the years, shipyards proved that they can construct industrial fishing vessels that are safer and can carry more catch. In this regard, the number for bigger and safer fishing vessels is expected to flourish depending on the situation in the market in accordance with the Philippine Fishing Vessels Safety Rules & Regulations (PFVSRR).

Based on the 2021 SBSR Capability and Capacity Assessment Report, shipyards in 2021 are capable of building tankers with a maximum size of 1,114 GT and with an average size of the locally constructed ships for domestic use at 893 GT. No new tankers built locally in 2020 were recorded.

Over the years, assessment reports in the shipbuilding and ship repair industry includes the data on maximum size of locally-built ships for domestic use in relation to determining up to what size of ship the Philippine–registered shipyards can cater or construct.

Meanwhile, here are the other findings and observations in the said Assessment Report:

a. Most of the shipyards turned their focus to ship repair instead of shipbuilding due to COVID-19 restrictions;

b. Around 98% of the imported newly built ships for domestic use in 2021 are categorized with miscellaneous as its type of service which covers recreational boats with a maximum size of 83 GT. It was noted that there are no imported tankers acquired for the year 2020 and 2021, on the other hand, all of the tankers acquired in 2021 were built by the local shipyards;

c. Just like in 2019 & 2020, export remains a strength of Philippine shipbuilding in 2021; and

d. The severe impact of COVID-19 and the closure of one of the major shipyards in the country in 2019 may be attributed to the decrease in SBSR workforce in 2021.

6. Incentives

Pursuant to Memorandum Order No. 61, the 2022 Strategic Investment Priority Plan (SIPP) includes the qualified activities for investment incentives under RA No. 11534 otherwise known as Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act. Incentives in the SIPP take the form of income tax holidays, enhanced deductions and a preferential 5 percent corporate income tax rate.

CREATE Act is responsive to the needs of businesses negatively affected by the COVID-19 pandemic and is enacted to improve the ability of the Philippines to attract highly desirable investments that will serve the public interest.

The following are the key features of CREATE Act:

- Reduction of Corporate Income Tax (CIT) effective 01 July 2020 from 30% to 25% for foreign corporations and non-resident foreign corporations;
- President's flexibility in granting incentives for highly desirable projects with minimum investment capital of P50 billion or at least 10,000 job generation (maximum of 8 Income Tax Holiday (ITH) years and 40 years of Special Corporate Income Tax (SCIT);
- Removal of export and national bias;
- Incentives Package:
  - » ITH;
  - » 5% Special CIT rate based on GIE for 10 years, in lieu of all national and local taxes;
  - » Enhanced deductions for domestic market enterprises:
    - Depreciation Allowance of Assets - additional 10% for buildings; and additional 20% for machineries and equipment; and
    - Additional Deduction on Labor Expense, R&D Expense, Training Expense, Domestic Input Expense, Power Expense, and Reinvestment Allowance to Manufacturing Industry; Enhanced Net Operating Loss Carry Over (NOLCO)
  - » Duty exemption on importation of CE, raw materials, spare parts or accessories; or
  - » VAT exemption on importation and 0% VAT on local purchases
- Additional Incentives;
- CIT rate of 20% for domestic corporations with Net Taxable Income not exceeding Php 5M and with total assets (excluding land) not exceeding Php 100M;
- Registered enterprises that fully relocate outside of NCR will be entitled to an additional 3 years of ITH; and
- Registered enterprises that locate in areas recovering from disasters or conflict will be entitled to an additional 2 years of ITH

IV. CHALLENGES

The following are the challenges that SBSR sector is facing:

1. **Outmoded/Inefficient Facilities**. In general, advanced or updated facilities, equipment, tools and machinery belong to the Class A shipyards or shipyards with foreign partners. Around 66% of the total main yard facilities nationwide need

rehabilitation and/or upgrading;

2. **Emigration of highly trained technical and skilled workers/lack of skilled workers**. The shipbuilding and ship repair industry has no exception to the emigration of highly trained technical and skilled workers just like in other industries in the country. This is in line with the workers seeking for better career opportunities that include higher salary, which would eventually help them in the development or improvement of their way of living. Also, additional skills training is needed for workers in Class C shipyards;

3. **Scarcity of machineries, equipment and materials used in shipbuilding and ship repair in the local market**. One of the factors that pose a challenge is the scarcity of basic machineries, equipment and spare parts used for shipbuilding and ship repair, including marine grade steel;

4. **Non-attractiveness of locally built ships**. In 2021, the MARINA recorded a total of 356 imported newly built ships for domestic use. Although, it was found out that 98 percent or 349 out of the 356 ships are categorized as miscellaneous, which covers recreational boats;

5. **Environmental hazards attributed to shipbuilding and ship repair**. Protecting the environment is a challenge for the shipbuilding and ship repair industry. GHG gas emissions, use of anti-fouling paints in ships, and discharge of solid and oily wastes are some of the environmental issues attributed to the industry. Thus, MARINA launched new measures to promote an environmentally sustainable local shipbuilding and ship repair industry; and

6. **Lack of contingency plans**. The COVID-19 related protocols led to the temporary closure of businesses in the shipbuilding and ship repair sector. It affected its operation that led to losses in the financial performance of different companies. Hence, this highlights the need for a contingency plan relating to SBSR operations during national crises or emergencies.

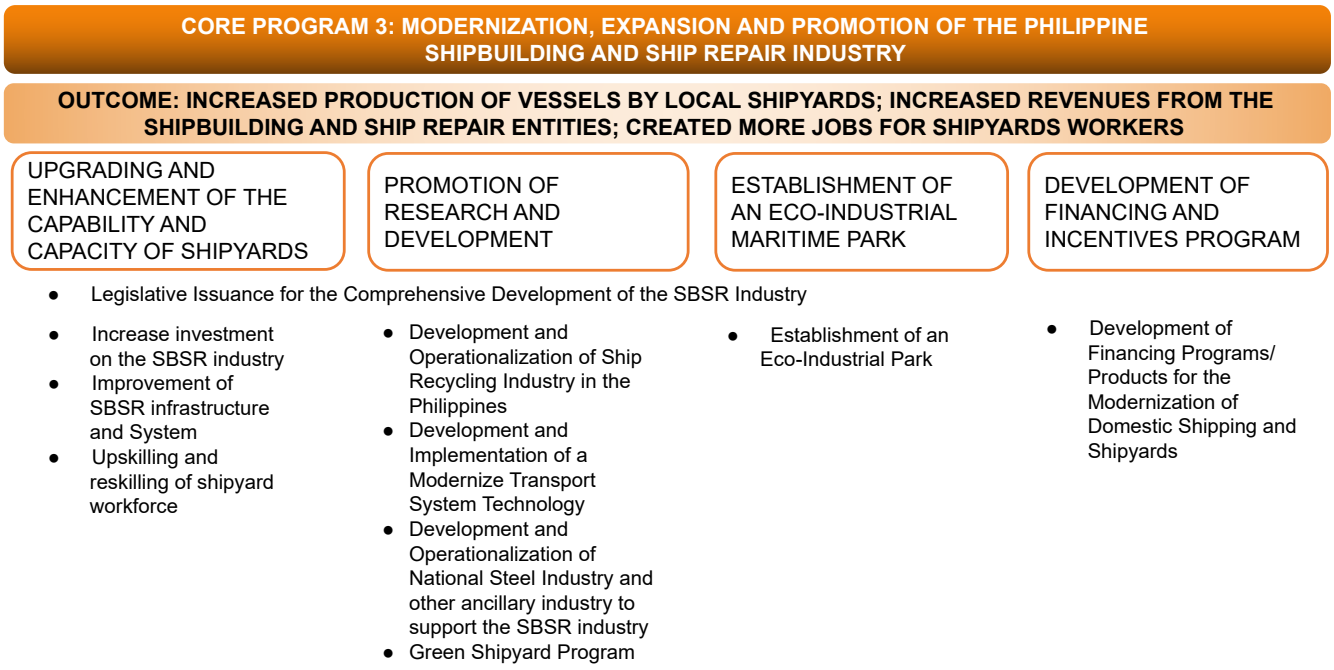
In conclusion, the 2021 SBSR Capability and Capacity Assessment Report shows that local shipyards have the capability and capacity to construct ships for domestic use up to 1000 GT on the average which serves as proof that the local shipyards in the Philippine SBSR Sector are improving and gearing up its competence towards the path to being ready to compete in the global market soon.

V. PROGRAM FRAMEWORK, STRATEGIES, COMPONENTS, PROJECTS

This core program of MIDP 2028 supports the expansion and modernization of the Philippine domestic merchant marine fleet as well as its strict adherence to safety regulations, which will guarantee the seaworthiness of all sea-going structures. The overall objective of the program is to modernize and expand the capability and capacity of the Philippine Shipyards to meet the demands of the local and international sea transport market.

Figure 4.3 below illustrates the program framework consisting of the program objectives, outcome, strategies and components of this core program of MIDP 2028.

Figure 4.3
Core Program 3 Framework



This Core Program on Modernization, Expansion and Promotion of the Philippine Shipbuilding and Ship Repair Industry consists of the following strategies and components which will increase the contribution of the maritime sector to the country's Gross Domestic Product (GDP):

1. Upgrading and Enhancement of the capability and capacity of Shipyards

The Philippines became the world's 4th-largest shipbuilding nation due to strategic location, favorable investment climate, and readily available skilled labor force. There is tremendous potential for the nation to export large, commercial ships to other countries as well as meet domestic demand for (smaller) boats. The construction and upkeep of boats are handled by the shipbuilding and ship repair (SBSR) sector. Shipbuilding includes the entire process of building, outfitting, and launching a maritime vessel.

The ship repair sector, on the other hand, focuses on existing ships and offers services like restoration, upgrading, conversion, and reconditioning. The country will benefit immensely from improving this sector in terms of investment, and it will also help to provide jobs for highly qualified Filipinos. By boosting SBSR services in the Philippines through the creation and promotion of incentives, joint ventures, and investments, local shipyards can have their competency and capacity upgraded and increased.

For local shipyards to fulfill the rising demand for the shipbuilding and ship repair sector, it is also crucial to facilitate the upskilling and reskilling of shipyard labor while simultaneously strengthening the SBSR infrastructure and system.

a. Legislative Issuance for the Comprehensive Development of the SBSR Industry

PROJECT:

1. Passage of Shipbuilding and Ship Repair Bill

b. Increase investment on the SBSR industry

PROJECTS:

1. Business Continuity Plan Template
2. Development of attractive Financing program / products for the SBSR industry

c. Improvement of SBSR infrastructure and System

PROJECTS:

1. Passage of Shipbuilding and Ship Repair Bill
2. Feasibility Study on the viability of localization of ship building materials

d. Upskilling and reskilling of shipyard workforce

PROJECT:

1. Skills-mapping projects

2. Promotion of Research and Development

Research and Development (R&D) is a very important strategy to determine the areas for improvement and matters to be prioritized to achieve the main objective of this Program. In the SBSR sector, R&D has a valuable contribution in enhancing the performance of shipbuilding and ship repair as well as in the development and operationalization of ship recycling.

The program will explore the potential of promoting ship recycling in the Philippines by thoroughly evaluating the provisions of the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (The Hong Kong Convention), adopted on 11-15 May 2009, which aims to ensure that ships, when being recycled after reaching the end of their operational lives, do not pose any risks to human health, safety and environment. It intends to address the issues around ship recycling, including the fact that ships sold for scrapping may contain environmentally hazardous substances such as but not limited to asbestos, heavy metals, hydrocarbons and ozone-depleting substances.

Further, the development and implementation of a Modernized Transport System Technology would play a vital role in making this Program strategy effective. This will be conducted in collaboration with the Ship Research Institute of Japan.

The scarcity of basic machineries and materials, including marine grade steel used for shipbuilding and ship repair is identified as one of the challenges of the sector. Hence, technical cooperation will be promoted in the development and operationalization of the National Steel Industry and other ancillary industries to support the SBSR sector.

A Green Shipyard Concept will be initiated as industry's contribution towards reducing the impact of shipyard operations to the environment specifically on the use of anti- fouling paints, biofouling management, among others. Decarbonization must be addressed in all phases of shipbuilding, including the design of low GHG emissions.

a. Development and Operationalization of Ship recycling industry in the Philippines

PROJECTS:

1. Feasibility Study on the Establishment of Ship Recycling Facilities in the Philippines;
2. Business Continuity Plan Template.

b. Development and Implementation of a Modernize Transport System Technology

PROJECTS:

1. Business Continuity Plan Template;
2. Research projects for modernization transport system technology such as:
   - » Hybrid Trimaran Fast Craft Passenger-Cargo using Multi Engine and Alternative Energy Sourced from Ocean Waves;
   - » Severe-weather Amphibious Navigator;
   - » Hull Design Standards for Philippine Seawater Typology; and
   - » Design and Development of MASS prototype

c. Development and Operationalization of National Steel Industry and other ancillary to support the SBSR industry

PROJECT:

1. Business Continuity Plan Template.

d. Green Shipyard Program

PROJECT:

1. Development and Promotion of Green Shipyard.

3. Establishment of an Eco-Industrial Maritime Park

This project aims to transform the Philippines as a "go-to-location" for international shipbuilding and ship repair. The establishment of an eco-industrial maritime park (EIMP) will not only support the modernization of shipbuilding and ship repair facilities in the country, but also the reintegration of Filipino seafarers to work as marine surveyors, technical superintendents, and managers of ancillary industries.

The concept of EIMP is to provide a dedicated a location where SBSR companies will enjoy various incentives similar to those enjoyed by "PEZA locators". With the legislative reforms for the comprehensive development of the SBSR industry, the EIMP can be achieved by: a) conducting a Feasibility Study and detailed engineering design of an Eco-Industrial Maritime Park; b) developing and operating of the Eco-Industrial Maritime Park; and c) marketing of the Eco-Industrial Maritime Park for

locators such as shipyards, ancillary industries, technical, legal, and logistics services, both for the domestic and global markets.

In addition, the collaboration between concerned government agencies including MARINA and local government units (LGUs) is important to entice more investors to develop a maritime hub where shipyards will be modernized and co-exist with the new developments in the area, relative to the creation of more local jobs.

a. Establishment of an Eco-Industrial Park

PROJECTS:

1. Establishment of Maritime Eco-Industrial Parks
2. Feasibility study on the following:

    - Technology Efficiency
    - Development of Maritime Hub
    - Value and Cost Chain

4. Development of Financing and Incentives Program

The development of comprehensive programs and products, including financing packages and incentives, is important to the modernization of local shipyards. The partnership between government agencies and financial institutions would be beneficial to the development and implementation of different projects under the SBSR sector.

In June 2022, the MARINA and Development Bank of the Philippines (DBP) formalized their partnership by signing a Memorandum of Agreement (MOA). As mentioned in Core Program 1, the purpose of the MOA is to establish a framework for partnership arrangement between the two parties to provide financial assistance, training and consultancy services, that will promote, develop and foster sustainable and progressive maritime industry. This agreement intends to cover investments in the SBSR sector.

Also, pursuant to Memorandum Order No. 61, the 2022 Strategic Investment Priority Plan (SIPP) includes the qualified activities for investment incentives under the CREATE Act. Incentives in the SIPP take the form of income tax holidays, enhanced deductions and a preferential 5% corporate income tax rate.

a. Development of financing programs/ products for the Modernization of Domestic Shipping and Shipyards

PROJECTS:

1. Passage of Shipbuilding and Ship Repair Bill
2. Development of attractive Financing program/products for the SBSR industry
3. The following are the projects under this Core Program with its respective lead and contributing agencies:

TITLE OF PROJECT/S	DESCRIPTION	LEAD/ RESPONSIBLE AGENCIES	CONTRIBUTING AGENCY/IES
1. Passage of Shipbuilding and Ship Repair Bill		Congress (Senate and HoR), MARINA	OP, PCG, PPA, DOTr, DOST-PCIEERD, DENR, PN, CPA, DTI, BOI, DOF, DBM, DBP, BIR, BMB, CCC, DOLE, PSA, LGUs
3. Feasibility Study on the following: • technology efficiency • Development of maritime hub • Value and cost chain	Business plan / strategy plan	MARINA	DTI – BOI , NEDA, DOF
4. Skills mapping projects	Increase the number of SBSR pool of workers for sub-contractors/ trades	MARINA	TESDA
5. Feasibility Study on the viability of localization of ship building materials	To increase localization of shipbuilding materials / value adding activities	MARINA	DTI – BOI, NEDA
6. Environmental Compliance Project	Increase localization of shipbuilding	MARINA	DENR, LGUs
7. Business Continuity Plan Template	Development of Business Continuity Plan	MARINA	NEDA, DTI-BOI
8. Feasibility Study on the establishment of Ship Recycling facilities in the Philippines		Shipyard Companies	MARINA
9. Research projects for modernization Transport System Technology such as: » Hybrid Trimaran Fast Craft Passenger-Cargo using Multi Engine and Alternative energy sourced from ocean waves; » Severe Weather Amphibious navigator; » Hull design standards for Philippine sea typology; and » Design and development of MASS prototype		DOST DOST DOST DOST	MARINA, LGUs, UP MARINA, UP MARINA, UP MARINA, UP
10. Feasibility Study on the establishment of Ship Recycling facilities in the Philippines		DOST	DENR, environment organizations

TITLE OF PROJECT/S	DESCRIPTION	LEAD/ RESPONSIBLE AGENCIES	CONTRIBUTING AGENCY/IES
11. Development of attractive Financing program / products for the SBSR Industry		DBP, LBP and other financial institutions	MARINA

VI. LEGISLATIVE AGENDA

Table 4.6 presents the priority legislative agenda that will complement and support the strategies to further accelerate the development of ship building and ship repair industry.

Table 4.6
Legislative Agenda for Core Program 3

Legislative Agenda	Rationale / Key Features	Responsible Agency/ies
Legislative Issuance for the Comprehensive Development of the SBSR Industry	The Shipbuilding and Ship Repair Bill recognizes the role of the SBSR industry as one of the vital components of the maritime sector. It also highlights the key role of the SBSR industry relative to the economic growth of the country. The enactment of the Bill would pave the way for the country's global competitiveness on SBSR industry. This will also promote additional investments to the SBSR sector as well as grant more incentives such as but not limited to the Exemption from Value-Added Tax, Income Tax Holiday, Additional Deduction for Labor Expense and Tax Credit on Domestic Capital Equipment among others. Being its overarching goal, it is very important to pass this bill to holistically promote the Philippine shipbuilding and ship repair industry. The enactment of this law will foster healthy and competitive investment and operation environment which will provide necessary assistance and incentives for the continued growth of the Philippine Ship Repair and Shipbuilding Industry; encourage the improvement and upgrading of the existing Philippine shipping and naval fleet; enhance the Filipino shipyard worker's skills to meet the international standards; and encourage the development of a viable shipbuilding and ship repair industry to attract private capital investment in the shipbuilding and ship repair sector. This industry would support the expansion and modernization of the Philippine shipping and naval fleet and its strict adherence to safety standards ensuring the seaworthiness of all sea-borne structures.	MARINA, Congress (Senate & HOR), OP, PCG, PPA, DOTr, DOST- PCIEERD, DENR, PN, CPA, DTI, BOI, DOF, DBM, DBP, BIR, BMB, CCC, DOLE, PSA, LGUs
Ratification of Hong Kong Convention	The ratification and implementation of the Convention will serve as an essential step towards the country having its National Maritime Transport Policy and Strategy in order to foster safety and marine environment protection, in conjunction with the international regulatory regime. The formulation of the implementation plan for the ratification of the Convention will serve as a guide for the effective execution of plans and strategies, which are confined within the drafted National Interest Analysis.	MARINA, Congress (Senate & HOR), OP, PCG, PPA, DOTr, DOST- PCIEERD, DENR, PN, CPA, DTI, BOI, DOF, DBM, DBP, BIR, BMB, CCC, DOLE, PSA, LGU

Legislative Agenda	Rationale / Key Features	Responsible Agency/ies
Draft Bill on Hong Kong Convention	Being a responsible member of the international community, the Philippines is expected to meet its obligations in supporting global initiatives, specifically with respect to the United Nations Convention on the Law of the Sea, 1982 (UNCLOS) which provides for nations, to adopt generally accepted international rules and standards when implementing laws and regulations governing safe and environmentally sound recycling of ships.	MARINA, Congress (Senate & HOR), OP, PCG, PPA, DOTr, DOST- PCIEERD, DENR, PN, CPA, DTI, BOI, DOF, DBM, DBP, BIR, BMB, CCC, DOLE, PSA, LGUs

VII. RESULTS MATRIX

Table 4.7 presents the indicators and targets to achieve results for the accelerated development of ship building and ship repair industry.

Table 4.7
Results Matrix for Core Program 3

#	Indicators	BASELINE		TARGETS							Means of Verification	Responsible of Verification
		YEAR	VALUE	'23	'24	'25	'26	'27	'28	EOP		
1	% increase in the number of modern and green ships built by local shipyards	2022	TBD	-	2 %	2 %	2 %	2%	2 %	10 %	MARINA Report	MARINA/ PCIEERD Shipping Companies; Shipyards
2	% increase in the number ships retrofitted	2022	TBD	-	2 %	2 %	2 %	2 %	2 %	10%	MARINA Report	MARINA Shipping Companies; Shipyards
3	Upgraded or expanded facilities of local shipyards	2022	TBD	-	2 %	2 %	2 %	2 %	2 %	10%	MARINA Report	MARINA DTI, BOI Shipyards/ GFIs
4	% increase in the revenue from the SBSR entities	2022	TBD	-	2 %	2 %	2 %	2 %	2 %	10%	MARINA Report	MARINA BIR/ DOF/ PSA Shipyards/
5	Increase in the number of shipyard workforce	2022	TBD	-	2 %	2 %	2 %	2 %	2 %	10%	DOLE Report	MARINA Shipyards DOLE, PSA

MARINA COMPLETES 10-YR MARITIME ROADMAP FORMULATION PROCESS

Chapter

05

Core Program 4

Promotion of Highly Skilled and
Competitive Filipino Maritime Workforce

Chapter V

PROMOTION OF HIGHLY SKILLED AND COMPETITIVE FILIPINO MARITIME WORKFORCE

I. OVERVIEW

Sea transport plays a crucial role in inter-island connectivity, especially for remote coastal communities in bringing agricultural produce to the market centers, affording access to education and health facilities and providing the benefits of enjoying recreational resorts and amenities. Where there are no roads or if land transport becomes inaccessible, local residents turn to sea transport. The geographical configuration of the Philippines with its numerous islands putting in place an extensive sea transport network is indispensable.

Consequent to the necessity of connecting islands through sea transport is the need to develop a reservoir of human resources who can fill the requirements of operating ships and all the associated activities and services related thereto. Based on figures released by the Philippine Statistics Authority (PSA) as of May 1, 2020, the Philippine population which stands at around 109 Million suggests that there is a sufficient number of people who could join the maritime labor force. PSA further reports that the labor force participation rate in the country in February 2023 was registered at 66.6% or 51.27 million individuals out of the 77 million Filipinos are aged 15 and over.

Human capital is undoubtedly the most important asset of a country as it is through people who work that the economy depends. Endowed with a vast maritime domain, it is for the country's population that the Program on the Promotion of Highly Skilled and Competitive Filipino Maritime Workforce focuses to invite and prepare them for a maritime career/ employment. Harnessing potential maritime workforce is an indispensable step to meeting the demands for a competent workforce not only of the Philippine archipelago but also the international maritime community. Sea transport and the associated activities pertaining to ship design, construction and repairs, ship operations and maintenance, shipping enterprise management and maritime administration, among others, offer an array of gainful employment.

This Core Program will serve as one of the pillars by which the targeted vision of a "strong and reliable Philippine merchant fleet that addresses the sea transport requirements of the archipelago" will be achieved by 2028. Stakeholders confirmed the need to develop and expand local maritime expertise to address the growing requirements of the industry not only in the domestic front, but more so in the international stage. Technological advances and the introduction of digitalization and innovation in maritime activities call for building up a pool of maritime workforce from seafaring to naval architecture and shipyard and port workers and logistics, from fishermen to maritime administration (at both levels of policy-making and technical implementation), who have acquired the requisite expertise in the various areas.

Further, gender mainstreaming in the maritime workforce ensures that women are involved and well-represented in all aspects of the maritime industry, have equal opportunities as men, and have fair or equal treatment in the workplace. This move could help address the

global shortage of seafaring workforce, improve the diversity and representation of the maritime industry, and become more inclusive. Gender mainstreaming may be achieved by raising awareness of the prevailing disparity of opportunities provided to women and men, eradicating the stereotypes about the role that women play in the maritime industry, providing access to education, training and development, promoting gender-sensitive policies and practices, creating a supportive workplace culture, and supporting women groups and organizations.

II. RATIONALE

The Program on the Promotion of Highly Skilled and Competitive Filipino Maritime Workforce aims to raise awareness of the many possibilities which the industry opens to Filipinos seeking employment in the country. This Program is an affirmation that maritime industries such as the country's domestic and international shipping and the shipbuilding and ship repair and related industries are in need of human resources who are fit and qualified to undertake maritime work. It also focuses on leveraging the natural affinity of the Filipino towards the sea through an aggressive information dissemination campaign on available maritime jobs and at the same time strike their interest for a maritime career.

Cognizant of the underlying objective of the various maritime industries in creating jobs, the Program seeks to provide the policies and strategies to prepare those who opt to pursue a maritime career. Moreover, capitalizing on the opportunities that the blue economy offers means broader possibilities for maritime-related activities and livelihood which would give rise to the government's determination to further the work on the development of the Filipino's maritime aptitude.

In developing the country's human capital to get them ready for a career or employment in the maritime industry, it is crucial to adopt a holistic approach from preparation, promotion up to placement and deployment.

Preparation entails instituting a maritime awareness programme. Getting the public to appreciate the archipelagic character of the Philippines could be a good start and may mean going as far back into the education of young people such as those in the basic education level to nurture the curiosity and desire to explore more of the seas. The connection of the Filipinos to the sea is shaped by the archipelagic configuration of the Philippines and therefore serves to back up the advocacy to go maritime.

Education and training are essential for preparing Filipinos to join the maritime workforce. However, the country's maritime education and training have been primarily dedicated to merchant marine programs due to the high demand for Filipino seafarers overseas. A total of 1,215,063 students enrolled for maritime degree programs from 2007 to 2017 while the number of graduates for the same period is 174,081 or 14.33%. These programs also draw the most number of enrollees as BS Maritime Transportation (BSMT) took in 128,420 students and BS Marine Engineering (BSMarE) at 96,103 students during the school year 2015–2016. However, the maritime degree program draws much enrollees. Table 5.1 shows that it only ranks 8th of the 21 discipline groups with the most number of graduates for AY 2016-2017.

On the other hand, the naval architecture and marine engineering program under the

Table 5.1
Higher Education Enrollees by Discipline Group
For the Academic Period 2007 – 2017

Discipline Group	2006-07	2007-08	2008-09	2009-10	2010-2011	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Agricultural, Forestry, Fisheries, Vet Med.	59,634	58,248	59,208	59,745	63,471	68.098	81,740	96,164	125,526	143,182	127,287
Architectural and Town Planning	18,650	18,780	17,994	20,491	23,116	26,356	31,352	34,698	39,532	45,583	40,238
Business Administration and Related	568,049	621,726	647.292	723,997	796,302	845,031	915,191	970,558	990,676	1,066,639	921,324
Education and Teacher Training	333,602	335,468	322,703	352,343	404,261	450,225	536,854	624,254	725,183	791,284	740,713
Engineering and Technology	306,664	305,848	315,453	339,045	354,321	367,620	406,831	424,143	463,221	517,010	448,550
Fine and Applied Arts	14,041	15,316	16,362	16,327	18,149	19,260	21,778	23,710	26,755	28,055	16,324
General	12,385	13,979	10,830	12,365	12,832	10,232	10,586	11,132	8,813	8,425	7,614
Home Economics	5,342	4,672	4,852	5,095	5,331	5,681	6,655	6,939	7,310	7,575	5,960
Humanities	27,925	28,311	28,560	28,219	30,470	31,775	35,605	40,575	43,623	48,482	40,753
Information Technology	247,337	279,826	302,057	346,427	377,438	393,913	404,813	425,416	433,712	460,862	398,765
Law and Jurisprudence	18,539	21,075	21,067	21,099	23,087	22,479	24,092	21,349	20,387	21,691	23,239
Maritime	**69,536**	**74,853**	**68,115**	**88,567**	**111,469**	**125,905**	**152,657**	**156,794**	**161,229**	**156,087**	**119,387**
Mass Communication and Documentation	26,808	27,670	27,363	28,818	33,284	35,068	35,520	38,605	41,078	44,786	36,527
Mathematics	13,382	11,688	12,115	12,310	12,792	13,595	13,992	16,195	17,544	18,247	14,109
Medical and Allied	602,474	560,296	520,026	440,160	365,715	284,598	243,285	228,484	224,897	228,537	203,561
Natural Science	24,757	24,389	23,580	24,242	25,758	27,442	30,394	38,219	41,454	45,069	34,923
Other Disciplines	132,158	119,573	117,839	131,033	151,935	161,514	193,490	214,277	221,007	240,462	212,709
Religion and Theology	7,444	7,334	7,266	6,805	7,300	8,682	9,593	11,093	12,710	10,233	8,351
Service Trades	19,011	23,518	29,546	36,390	46,960	50,850	57,734	67,723	77,701	85,871	73,905
Social and Behavioral Science	70,392	75,445	71,746	76,677	83,537	92,403	101,617	112,048	126,123	135,921	114,834
Trade, Craft and Industrial	4,579	4,920	3,824	4,213	3,667	3,491	3,486	1,020	3,245	840	411
Grand Total	**2,582,709**	**2,632,798**	**2,627,798**	**2,774,368**	**2,951,195**	**3,044,218**	**3,317,265**	**3,563,396**	**3,811,726**	**4,104,841**	**3,589,484**

Source: Commission on Higher Education (CHED)[76]

Engineering and Technology discipline group caters to the needs of the shipbuilding and ship repair industry. However, this program is not as attractive as that of the merchant marine program. As of 2022, there are five (5) Higher Education Institutions (HEIs) offering the Bachelor's Degree in Naval Architecture and Marine Engineering (BS NAMARE). In October 2022, only 48 out of the 116 examinees passed the NAMARE Licensure Exams conducted by the Professional Regulations Commission (PRC).

[76]Ibid.

Table 5.2
Naval Architect and Marine Engineer (NAMARE) Board Exams Result
For the period 2017-2019 and 2021- 2022[77]

Year	Number of Examinees	Number of Passers	% of Passers
2017[78]	117	51	44%
2018[79]	129	52	40%
2019[80]	156	89	57%
2021[81]	66	33	50%
2022[82]	116	48	41%
TOTAL	**584**	**273**	**47%**

Source: Professional Regulations Commission (PRC)

Table 5.2 shows that 273 passed the NAMARE licensure examinations for the period 2017-2019 and 2021-2022 with an average passing rate of 46%.

The Philippines is missing out the economic and technical opportunities with very few institution offering BS NAMARE-this is when the government needs to pay special attention to promote these professionals. In fact, the Society of Naval Architects and Marine Engineers (SONAME) recorded a total membership of only 1,037 as of 2021.

Meanwhile, electrical engineers may also assume the position onboard as electro-technical officers subject to satisfying the required knowledge and understanding the proficiencies of an Electro-Technical Officer (ETO) as prescribed by the STCW Convention prior to their deployment onboard.

Notwithstanding the predisposition of the Filipinos to go into seafaring, the government intends on relentlessly carrying out a program aimed at generating interest for other equally rewarding maritime careers. This is founded on the realization that as an archipelago, the Philippines will continually depend on its maritime workforce. Consequent to such realization is the government's determination to achieve the national objective of creating employment opportunities at home. The program on the **Promotion of Highly Skilled and Competitive Filipino Maritime Workforce** undertakes to contribute to the government commitment by enhancing the maritime and archipelagic awareness of the population and at the same time provide support to prospective maritime workforce.

On top of creating employment opportunities for the population is the prospect of improving the quality of life of every Filipino as their capacity to earn income is put into reality. Social inclusion is expected to be achieved as the country's human capital gets to participate in economic endeavors provided by the maritime industry. Promotion and placement proceed from the confidence that a competitive workforce who are qualified and up to standards are suitably ready to assume their maritime tasks.

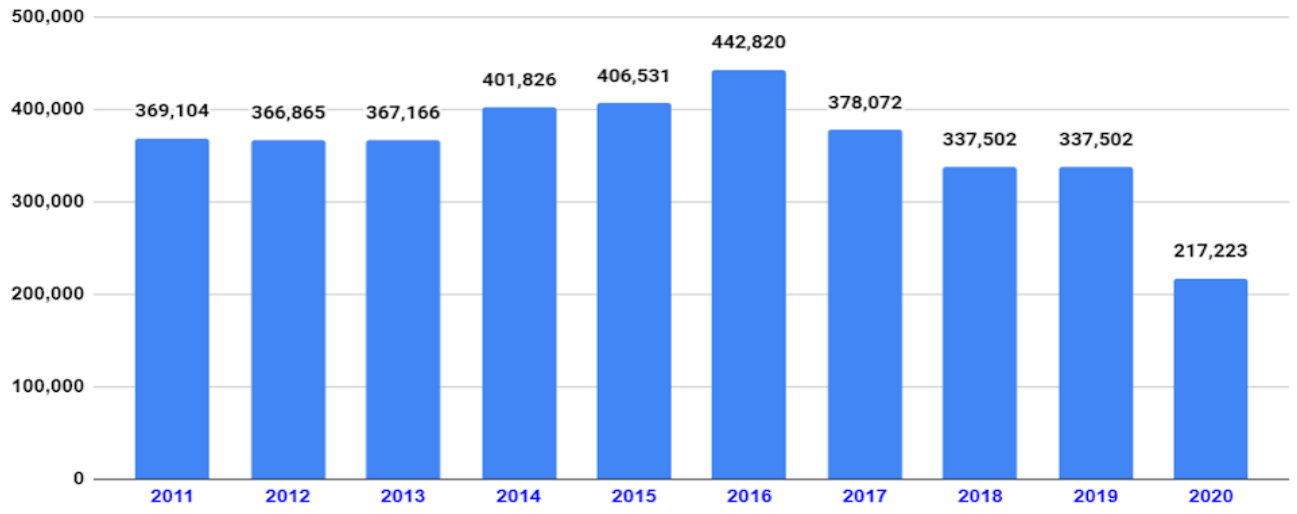
PHILIPPINE MARITIME WORKFORCE

[77]No board exams were conducted in 2020 due to the pandemic.
[78]October 2017 Naval Architect and Marine Engineer Licensure Examination results released in three (3) working days, October 2017. Professional Regulation Commission. Accessed on 09 June 2023 at https://www.prc.gov.ph/article/october-2017-naval-architect-and-marine-engineer-licensure-examination-results-released.
[79]October 2018 Naval Architect and Marine Engineer Licensure Examination results released in two (2) working days, October 2018. Professional Regulation Commission. Accessed on 09 June 2023 at https://www.prc.gov.ph/article/october-2018-naval-architect-and-marine-engineer-licensure-examination-results-released-two.
[80]October 2019 Naval Architect Licensure Examination results released in two (2) working days, October 2019. Professional Regulation Commission. Accessed on 09 June 2023 at https://www.prc.gov.ph/article/october-2019-naval-architect-licensure-examination-results-released-two-2-working-days/4170.
[81]June 2021 Naval Architect Licensure Examination Results Released in Three (3) Working Days, June 2021. Professional Regulation Commission. Accessed on 09 June 2023 at https://www.prc.gov.ph/article/june-2021-naval-architect-licensure-examination-results-released-three-3-working-days/5068.
[82]October 2022 Naval Architect Licensure Examination Results Released in Two (2) Working Days, October 2022. Professional Regulation Commission. Accessed on 09 June 2023 at https://www.prc.gov.ph/article/october-2022-naval-architect-licensure-examination-results-released-two-2-working-days/5856.

The archipelagic character of the country requires it to develop and modernize the Philippine merchant fleet to move people and goods in the domestic routes. For international voyages, developing a national fleet is motivated by the assurance of a reliable sea transport that will carry the country's foreign trade. One critical factor for a merchant fleet is for the ships to be seaworthy which calls for the engagement of competent and qualified maritime workforce. **These competencies should be applied from the ship's construction, through its deployment / operation until its retirement or decommissioning**. To name some job titles, they are called shipbuilders and ship repairers (afloat or inland), ship surveyors, ship safety inspectors and auditors, seafarers, ship chandlers, ships / ports managers, maritime transport safety and security regulators and enforcers, maritime training and education specialists, and the list goes on. It is therefore to the interest of the country to develop a pool of highly skilled and competitive workforce primarily for its maritime industry.

It is indisputable that Filipino seafarers are the most prominent among the country's maritime workforce as the Philippines remains one of the major suppliers of maritime labor in the world. **It is estimated that there is one Filipino seafarer for every four to five crew members on board a vessel at any time**. A total of 3.6 million deployment for sea-based overseas Filipino workers was recorded for the period 2011 to 2020 as shown in Figure 5.1.

Figure 5.1
Deployed Overseas Filipino Workers
For Period 2011 to 2020



Source: Department of Migrant Workers – POEA[83]

In the past decades, Filipino seafarers contributed a cumulative total of USD 65 billion in the form of remittances as shown in Table 5.3, per record of the *Bangko Sentral ng Pilipinas* (BSP). In 2022 alone, it was reported to amount to $6.7 billion which is slightly higher compared to 2020 and 2021 remittances at the height of COVID-19 pandemic.

Through earnings, a seafarer is able to improve his/her dependents' access to education, housing, and healthcare, among others, thus opening the prospects for a better quality of life. With their disposable income, seafarers and their households gain the capacity to purchase goods and services. Consequent to the increase in consumption is the demand for improvement in the public utility services and infrastructures funding production of which is added to the country's gross domestic product (GDP).

[83]OFW Statistics accessed on May 30, 2023 https://www.dmw.gov.ph/archives/ofwstat/compendium/deployment%202006-2018S1.pdf.

Table 5.3
Overseas Filipinos' Cash Remittances By Source
For Period 2012 – 2022
In Thousand U.S. Dollars

YEAR	TOTAL	LAND-BASED	SEA-BASED	% Contribution of seabased
2012	21,391,333	16,555,991	4,835,342	22.60%
2013	22,984,035	17,768,656	5,215,378	22.69%
2014	24,628,058	19,124,879	5,503,179	22.35%
2015	25,606,830	19,814,372	5,792,459	22.62%
2016	26,899,840	21,327,692	5,572,148	22.62%
2017	28,059,789	22,188,962	5,870,827	20.92%
2018	28,943,112	22,803,600	6,139,512	21.21%
2019	30,133,300	23,594,054	6,539,246	21.70%
2020	29,903,256	23,549,734	6,353,522	21.25%
2021	31,417,614	24,872,612	6,545,002	20.83%
2022	32,539,430	25,823,550	6,715,880	20.64%
TOTAL	**302,506,597**	**237,424,102**	**65,082,495**	**21.77% AVE**

Source: Bangko Sentral ng Pilipinas (BSP)[84]

On a bigger scale, seafarers who are dubbed as "essential workers" are responsible for moving trade globally. According to the International Chamber of Shipping (ICS) Workforce Report 2021, there are 1.89 million seafarers serving the world merchant fleet operating over 75,000 vessels.[85] Of this number, 857,540 are officers while 1,035,180 are ratings. The Philippines, Russian Federation, Indonesia, China and India are the largest suppliers of ratings and officers working on merchant ships. As the global economy is set for a rebound, so will the demand for seafarers increase especially for officers which is projected to be more than 890,000 by 2026. The fast economic recovery of the world is possible because seafarers continue to man ships.

Translated into the local dimension, seafarers who work onboard ships engaged in domestic trade are responsible for keeping the Philippine islands connected. The contribution of these seafarers is vital because they enable access to the more economical mode of transport available between islands. Seafarers who serve in domestic ships are highly acknowledged as they continue to ferry passengers, mostly students and workers, local tourists, shippers and the general public who consider sea transport as the most economical mode for inter-island trips. They likewise move cargoes across the various islands of the archipelago.

Over and above the preference for a seafaring career, the maritime industry offers other employment opportunities which are as rewarding as a job at sea. These occupations are as much needed by shore-based maritime enterprises such as shipyards, port terminals and facilities and other related undertakings. Job placement for skilled workers and professionals at these maritime enterprises will contribute to the efforts to lower unemployment and help achieve the poverty alleviation targets of the government.

III. PROGRAM OBJECTIVE AND IMPACT

To support the long-term objective as espoused by MIDP 2028 on the **development of future-ready maritime human capital**, this core program on the **maritime workforce** aims

[84]Statistics – External Accounts https://www.bsp.gov.ph/SitePages/Statistics/External.aspx?TabId=8
[85]Joint Manning Group Inc, 2022 Accomplishment Report (citing the BIMCO and ICS Workforce Report 2021), (Manila: Joint Manning Group Inc., 2022).

to increase the reservoir of qualified and competent maritime human resource.

The significant impact of this program will be measured by the increase of maritime workforce that will redound to **higher dollar remittances of Filipino seafarers**[86] and all other shore-based ancillary maritime services.

IV. ASSESSMENT

Initial review of the various maritime professions and jobs showed partiality towards promoting seafaring as a maritime career as it is where Filipinos have proven caliber in the global market. Nonetheless, the preference towards the development of Filipino seafarers must not draw away from cultivating other equally important skills and vocations which are necessary for the country's maritime sector. Besides, the expertise of shore-based maritime workers would be equally needed.

The Program's goal can be summed up simply as a bid for the maritime industry to spur the interest in its other ancillary and related services. In all the various kinds of maritime profession and occupation, it is important for the government to step up career planning support including that of introducing professionalism and developing skills in all levels.

1. Seafarers

Currently, the main initiatives on the development of maritime workforce center on stepping up the qualification and competitiveness of Filipino seafarers. As Filipino seafarers' competence came to be recognized by the international shipping community, seafaring became an attractive maritime career for the country's young people, the one compelling reason for the Philippines to uphold the integrity of the education, training and certification of Filipino seafarers. Needless to say, it is of utmost importance for the country to harness the socio-economic gains derived from the continuous deployment of Filipino seafarers.

Maintaining the position of the country as the primary source of shipboard manpower requires relentless efforts to ensure that national provisions on maritime education, training, certification and assessment are consistent with international conventions and standards. This means adopting a long-term strategic direction with the primary goal of enhancing maritime education and training for seafarers which, as a minimum, must be aligned to the requirements of the International Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW Convention), as amended.

Republic Act No. 10635 establishing the MARINA as the "Single Maritime Administration Responsible for the Implementation of the STCW Convention" provides the policy direction through which Filipino seafarers are to be educated, trained and certified. However, the implementation of the STCW Convention is not without difficulties being so, there is continued attention given to the requirements of the Convention in order to remove uncertainties in the qualification and competence of Filipino seafarers.

In addition to the issues surrounding the country's implementation of the STCW Convention is the continuing competition posed by other maritime labor-supplying

[86]Seafarers covers all individuals performing any jobs on-board ocean-going ships

countries; thus, the persistent and meticulous efforts of keeping the Filipino seafarers' qualification and competence is of paramount importance.

2. Seafarers engaged in non-navigation work

An even higher number of employment opportunities are available for onboard passenger ships and cruise ships. There is also an indication that Filipino seafarers engaged on these ships outnumber those involved in navigation. These non-navigational seafarers include those working as maîtres d'hôtel, waiters, chefs and cooks, and those in the entertainment and similar services and their contribution matters as much as any of the other land-based overseas Filipino workers.

In terms of qualification, this category of seafarers need not to pass the rigorous qualification requirements of the STCW Convention except those that pertain to basic safety and security training. Further, there are scores of education and training programs offered by higher education institutions and technical-vocational training facilities such as those of the Technical Education and Skills Development Authority (TESDA) which help produce a pool of workers who may eventually be hired for shipboard employment. Validating the inclination of young people who are bent on getting employment onboard ships not related to technical navigation could provide a different perspective from the general concept of seafaring.

In addition to existing private sector initiatives, the government should undertake programs to promote employability and prepare those who wish to work on passenger and cruise ships.

3. Naval architects and shipyard workers

The Philippines aspires to join the world's topnotch shipbuilding nations. This means mobilizing naval architects, marine engineers, shipyard workers and experts who will provide the required manpower complement to build, repair or refurbish ships. In 2021, there were 116 registered shipyards in the country; 26 of which were considered in the medium to large scale categories.

Contrary to the general perception that Filipino naval architects make up the larger number of those in the upper level of technical positions in the shipyards, there is actually a dearth of these professionals in the shipbuilding and repair facilities. Only a few of the naval architects practice their profession in the shipyards since there are those who are engaged in ship survey/inspection or technical management activities including government administration.

Filipino diaspora could also be one of the reasons for the decreasing number of naval architects in the country. Overseas employment remains an attractive opportunity to Filipinos notwithstanding the presence of foreign-capitalized shipyards in the Philippines. The shortage of instructors for the naval architecture educational program is another cause for the depleting production of indigenous experts in the local shipyards. The paucity of naval architects in the shipyards, though taken up by others who belong to the corps of engineering and science professionals, needs to be addressed in order to meet the demand of the shipbuilding industry.

In 2019, shipyard workers (in shipbuilding and ship repair facilities) numbered 13,479 workers drastically decreased to 8,801 by 2021 due to the COVID-19 pandemic. Of the SBSR workforce in 2021, a total number of 6,687 individuals or 76% were skilled workers such as welders, solderers and similar skilled employees. The remaining 24% make up the managerial, administrative and technical personnel. The closure of Hanjin Heavy Industries and Construction Philippines in 2019 resulted in the cited decrease of shipyard manpower.

4. Fishers

The Philippines ranks among the top fish producing countries in the world. In 2018, it ranked 8th with its total production of 4.35 million metric tons (MT) of fish, crustaceans, mollusks, and aquatic plants (including seaweed). This production constituted 2.06% of the total world production of 211.87 million MT (FAO, 2020). In terms of aquaculture production, the country ranked 11th in the world with 826.01 thousand MT or 1.01% share of the total global aquaculture production of 82.10 million MT. The total value of the country's aquaculture production including fish, crustaceans, and mollusks is USD 1.89 billion (FAO, 2020). The Philippines is also the world's 4th largest producer of aquatic plants (including seaweed) having a total of 1.48 million MT or 4.56% of the total world production of 32.39 million MT (FAO, 2020).

There are 811 operators and 5,557 commercial fishing vessels as of 2020. Forty-seven percent of these commercial fishing vessels are categorized as small-scale, 45.89% are medium scale and 6.73% are into large-scale operations. Half of these vessels are from Mindanao, wherein Region XII recorded 1,783 registered commercial fishing vessels (Philippine Fisheries Profile 2020).

The fishing sub sector employed over 1.6 million[87] workers in 2015, up by about 7% from the 1.5 million reported in 2010.[88] For many of them, fishing is not only a source of employment, but also a livelihood to meet their daily family subsistence. Most municipal fishers operate small-scale in coastal and inland waters.

Given the distinct character of fishing vessel construction and operations, it is essential that this workforce undergo necessary training and skills development demanded by the fishing trade. Not only are fishermen required to be competent in manning fishing vessels to support the overall efficiency of fishing operations but also for them to ascertain crew safety and security.

At present, there is no standardized education and training specific for them yet. Rather, MARINA has been utilizing the Modified Basic Safety Training (MBST) for seafarers manning 35GT and below. This is one of the requirements for the issuance of Seafarers' Identity Booklet (SIB) and Certificate of Marine Profession (CMP) license ID and Certificate for Boat Captains or Motormen. It becomes imperative that a review of this practice be undertaken.

Notwithstanding that the majority of the fishers are onboard fishing vessels on small-scale operations and therefore do not possess the basic educational qualifications,

[87]Of this figure, 85% worked in municipal fisheries, 1% in commercial fisheries, and 14% in aquaculture. Source: FAO. 2014. Fishery and Aquaculture Country Profiles: Philippines. Country Profile Fact Sheets, 2014. http://www.fao.org/ fishery/.
[88]FAO. 2014. Fishery and Aquaculture Country Profiles: Philippines. Country Profile Fact Sheets, 2014. http://www.fao.org/ fishery/.

the government is duty-bound to ensure Filipino fishers are protected by providing them with the basic skills and aptitude to face the rigors of working at sea.

For large commercial fishing vessels whose operations are in the high seas, there is a need to establish the country's competency standards for those who work onboard such fishing vessels. The Philippines has not ratified the International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (STCW-F). Nonetheless, it is best for the country to move towards compliance with the said Convention. An initial effort to ratify and implement the Convention calls for the full support of the fishing industry stakeholders onboard.

5. Port Workers

Port workers in the Philippines are categorized according to their type of contract of employment or engagement. Port workers include permanent workers engaged under an employment contract for an indefinite or a definite term that is fully governed by general labor laws while permanent workers registered as port workers are under specific port labor arrangements. Many ports in the country rely on registered pool workers who are hired on a daily basis (or for a shift or a half shift) and who are entitled to unemployment benefit while they are not working. There are also ports that use various categories of more or less irregularly employed supplementary workers (occasional or auxiliary workers, including, in some ports, seasonal workers and/or temporary agency or interim workers).

Training and experience impact labor performance. A customized training plan can provide port workers with a future career path based on experience and proven competence. Many ports use occupational categories of port workers combined with clear rules regarding the flow from one category to the other higher category. The regulation of the influx of new dockers is also relevant in this context. Key issues in this respect relate to the "screening" of potential candidates, training facilities, the modalities for trial periods, and the characteristics of labor evaluation systems.

Technological advances in cargo handling facilities have led to labor productivity increases and quality improvements; it also brought new requirements in terms of the skills and qualifications of the workforce. Technological innovations and developments in cargo handling increase labor productivity expressed in tons handled per docker per time. Many ports have set up dedicated training centers for port workers. These training centers offer voluntary or obligatory professional training courses for newly registered dockers and special schooling for port workers willing to move to another job category.

6. Harbor Pilotage

Harbor pilotage is the service of guiding ships in and out of ports and other waterways by licensed harbor pilots. Its importance in the maritime trade has long been underscored as early as 1968 when the IMO recommended governments to organize pilotage services in areas where such services would contribute to the safety of navigation[89]. Later on, IMO Resolution A.960 was adopted on 5 December 2003 providing Recommendations on Training and Certification and on Operational Procedures for Maritime Pilots other than Deep-Sea Pilots.

[89]IMO Resolution A.159, 1968

In recognition of the critical role of the efficient delivery of pilotage services in the promotion of safety of navigation and the protection of the coastal marine environment including its surrounding marine resources, MARINA issued MC 2016-06[90] which aims to achieve the following:

- Prescribe and implement a system and procedure for the efficient conduct and administration of Harbor Pilot Licensure Examinations and issuance of appropriate harbor pilot licenses;

- Maintain a reservoir of trained, qualified and competent harbor pilots; Promote professionalism in the delivery of pilotage services in relevant ports of the country; and,

- Implement, as far as practicable, rules and regulations including recommendations as adopted by relevant international multilateral bodies, organs or organizations on the matter of training and certification of harbor pilots.

7. Maritime educators, instructors, supervisors and assessors

In accordance with Regulation I/6[91] of the STCW Convention, 1978, as amended, the Maritime Administration ensures that those responsible for the training and assessment of competence of seafarers, as required by the Convention are appropriately qualified in accordance with the provisions of Section A-I/6 of the STCW Code for the type and level of training or assessment involved.

General qualification standards for instructors, training course assessors, and competency assessors are established for new applicants. Individuals who are issued a Certificate of Accreditation (COA) undergo reaccreditation every five (5) years with a Continuing Development Training for Maritime Instructors and Assessors at least once during the validity of the COA provided by the institution they are employed with. Other requirements are also given to continually ensure that maritime educators, instructors, supervisors and assessors are competent in honing Filipino seafarers.

8. Maritime Offshore Workers

Despite the lack of hard data at present, the country has been supplying maritime offshore workers which are engaged in activities and operations that take place at sea, such as oil exploration, production and transmission of electricity, gas and other resources. For a macroperspective, this industry is affected by several issues such as: **1. environmental regulations** wherein the maritime industry is facing pressure to reduce its greenhouse gas emissions and comply with new environmental standards in the next decade[92]; **2. economic crisis** as the maritime industry is vulnerable to fluctuations in global trade, demand and supply, fuel prices and currency exchange rates[93]; **3. geopolitical risk** as the maritime industry is exposed to conflicts, disputes, sanctions, piracy and terrorism in various regions of the world[94]; and **4. digital**

[90]Revised Guidelines for the Conduct of Harbor Pilots Examination and Issuance of License on 16 June 2016.
[91] Training and Assessment, International Maritime Organization (IMO) STCW Convention 1978, as amended, 2017 Edition, p. 28.
[92]Marsh McLennan, "Top Global Maritime Issues Facing the Shipping Industry". Last accessed 10 September 2023. https://www.marsh.com/uk/industries/marine/insights/top-global-maritime-issues-facing-the-shipping-industry.html.
[93]Ibid.
[94]Ibid https://www.un.org/oceancapacity/sites/www.un.org.oceancapacity/files/monje_-_un_nippon_paper_aprl_9_final.pdf.

transformation as the industry is undergoing a significant changes, providing not only opportunities for innovation, efficiency and competitiveness, but also poses challenges such as cyber attacks, data protection and skills gap.[95]

9. Maritime manpower in government

Developing the capacity of government policy makers, planners and regulators should be given utmost attention by an archipelagic country like the Philippines as they constitute the corps of maritime experts who will take on the task of putting into motion the government programs and direction for the maritime industry. The absence of an education program focused on preparing those who will assume the role of managing government maritime plans, strategies and programs hampers the optimum benefits available to the country.

Except for merchant marine officers, the majority of government personnel in the various maritime agencies enter the service with little or no knowledge in the maritime field. Even then, merchant marine officers prefer employment in the private sector due to the uncompetitive salary scale in government.

The situation adversely affects the delivery of services as entrants into the maritime agencies spend some time learning the most fundamental subjects and concepts of the field. Industry stakeholders look up to the government for direction and leadership in matters relating to maritime affairs but often express disappointment over the inefficiency in handling maritime issues. The fast-paced development in shipping further increases the burden for those officials and personnel charged with maritime functions to measure up according to expectations. Such expectations can at times lead to inaction or to swift but inadvertent actions which may, in the long-term, be detrimental to the industry or the country's interest.

Notwithstanding that a number of short courses, training and post-graduate studies are made available to government personnel, having a basic maritime educational background will facilitate better understanding of the industry and the allied issues and subjects that go with it.

An educational program dedicated to preparing those who are interested to build their career in the maritime bureaucracy will greatly help in optimizing the benefits of a maritime nation. Having gained maritime education will certainly help boost the confidence of those in the maritime agencies who, with their knowledge, will be able to gain the respect of the stakeholders. Moreover, credentials in maritime-based studies will contribute to getting the cooperation of the regulated sector, thus improving a better governance record.

V. CHALLENGES

1. **Bias in favor of seafaring educational programs**. Manpower development in the country reflects partiality towards producing seafarers. This is to ensure that Filipino seafarers maintain their comparative advantage vis-à-vis other countries' shipboard nationals. However, in building up a pool of seafarers in the long run, the government

[95] Ibid.

should also consider the development of other maritime professions such as in the areas of naval architecture, oceanography, marine science and skills trades, among others.

The attractiveness of seafaring is evident based on the number of enrollees in the merchant marine programs this, despite the low success rate in getting onboard training (OBT) berths necessary to complete the academic requirement of the baccalaureate programs. As the government proposes to address this particular issue, promoting entry into the other maritime-related professions should not be sidelined in the process.

2. **Sustaining compliance with the STCW Convention and other international conventions, instruments and protocols**. While the European Union extended the recognition of the Philippines' STCW system, there is a continuing call for the country to pursue further improvement in various areas and to keep a steady progress in achieving the measures which the Philippines laid down in its response to the EU evaluations. The government must earnestly keep track of its obligations under the STCW Convention in order to maintain the country's status under the IMO White List.

   Overall, the country should be able to implement and enforce the IMO instruments related to maritime safety, security and environmental protection as a flag, port and coastal state, which shall be subjected to a regular audit through the International Maritime Organization's Member State Audit Scheme (IMSAS), the frequency of which is once every seven years.

3. **Inadequacy of berths for Filipino cadets**. One dilemma in the education and training of seafarers is the inability of students of merchant marine programs to undergo onboard training (OBT).

   The OBT issue, though not limited in the Philippines, must be addressed soonest if the country wishes to continue its prominence in the global seafaring market. The inadequacy of OBT berths is a major factor for the low turnout of graduates of the Maritime Discipline Group (as shown in Table 5.4), onboard training being a mandatory requirement for completing the baccalaureate degree.

4. **Low number of Filipino merchant marine officers**. A noticeable situation in the seafaring sector is the relatively low number of Filipino seafarers who get to assume higher ranks onboard even as there is a recorded high number of certificated seafarers for management and operational levels. MARINA records show that in 2022 alone, a total of 31,625 certificates were issued for management and operational level certificates which indicates a high degree of interest in assuming higher level positions.

   However, there seemed to be a reluctance to take on higher positions (management and operational levels) at work and may unnecessarily create a negative impression on the competence and ability of Filipino seafarers. While accepting higher responsibilities is largely dependent on a seafarer's personal decision, such hesitation can taint the reputation of the Filipino seafarers.

Moreover, the aggressive efforts by other labor-supplying countries to develop and promote their seafarers should be a continuing reminder that the global prominence of Filipino seafarers as the shipowners choice is being challenged. How to withstand this challenge serves to motivate further improvement in building the confidence of Filipino seafarers for high level shipboard positions.

Table 5.4
Higher Education Graduates by Discipline Group - Maritime
For the period 2007 – 2017

Academic Year	Number	Number of Graduates	% of Graduates
2007-2008	74,853	11,360	15.18%
2008-2009	68,115	11,352	16.67%
2009-2010	88,567	11,716	13.23%
2010-2011	111,469	14,439	12.95%
2011-2012	125,905	14,430	11.46%
2012-2013	152,657	19,515	12.78%
2013 – 2014	156,794	23,506	14.99%
2014 – 2015	161,229	23,401	14.51%
2015 – 2016	156,087	26,040	16.68%
2016 - 2017	119,387	18,322	15.35%
TOTAL	**1,215,063**	**174,081**	**14.33%**

Source: Commission on Higher Education (CHED)[96]

5. **Lack of interest in non-seafaring educational programs**. The popular appeal of the seafaring career reflects the high enrolment record in the BSMT and BSMarE programs. While there is little interest in the other maritime educational programs such as naval architecture, another option for shipboard employment which is gaining headway is the educational and training programs pertaining to tourism and hotel and restaurant management which caters to the demands of the cruise industry. Such development calls for the adoption of a blueprint to entice the population to join maritime careers and professions.

6. **Mainstreaming gender awareness.** Entry into a maritime career/occupation is founded on the treatment of gender issues in the training and educational systems. Access of women in maritime educational and technical skills programs dictate their level of participation such as the number of women in the workplace related to the level of interest generated to encourage them to join the maritime industry especially at school. This is most evident in the shipbuilding and ship repair industry which in 2019 were dominated by male workers to the extent of 93% out of the 13,479 personnel, based on the SBSR Capability and Capacity Assessment Report. Likewise, the seafaring sector is not in a better position than those in the shipyards when it comes to gender mainstreaming.

[96]CHED Statistics as published in its website https://ched.gov.ph/wp-content/uploads/Higher-Education-Graduates-by-Discipline-Group-AY-2010-11-to-2018-19.pdf

There are initiatives to enhance gender awareness at the workplace as part of the increasing campaign for wider women participation in the maritime sector. However, unless efforts are taken to integrate gender issues at the school level, it will be difficult to close the gap between genders in the workplace.

7. **Rapid technological advancements**. The rapid technological advancements specifically for maritime workforce in general have both positive and negative effects on seafarers. Some of which are the increased efficiency and safety, as technology can help workforce perform their tasks more efficiently and safely, such as using sensors, automation, artificial intelligence, and data analytics to monitor and optimize the ship's performance, cargo and navigation; the changed skill requirements, as technology can also change the skill requirements, such as requiring more digital literacy, adaptability, problem - solving and communication skills, as well as less manual labor and routine work; the reduced social interaction, as technology can also reduce the social interaction and human contact among the workers, like in the case of seafarers, especially with the development of autonomous ships that may operate within minimal or no crew on board. This can affect the seafarer's mental health and well-being.

8. **Lack of implementation of other options relating to OBT equivalency provided by the STCW Convention.** The STCW Regulations II/1 and III/1 provide that all candidates for certification shall, among others, have an approved seagoing service of not less than 12 months as part of an approved training program to include onboard training that meets the requirements of the STCW Code. To date, not all students who have completed the academic requirements can simultaneously avail of this program due to limited shipboard opportunities.

   As such, the MARINA, as the administration in the implementation and enforcement of the STCW Convention in the Philippines, is currently conducting a study on how those seafarers who were onboard ships below 500GT be qualified to take the examination and assessment for purposes of issuance of COC for 500GT and above, subject to remediation and additional training requirements. This study is being done alongside with the formulation of Policy on Certification of Operational Level Officers and Masters on ships of less than 500GT.

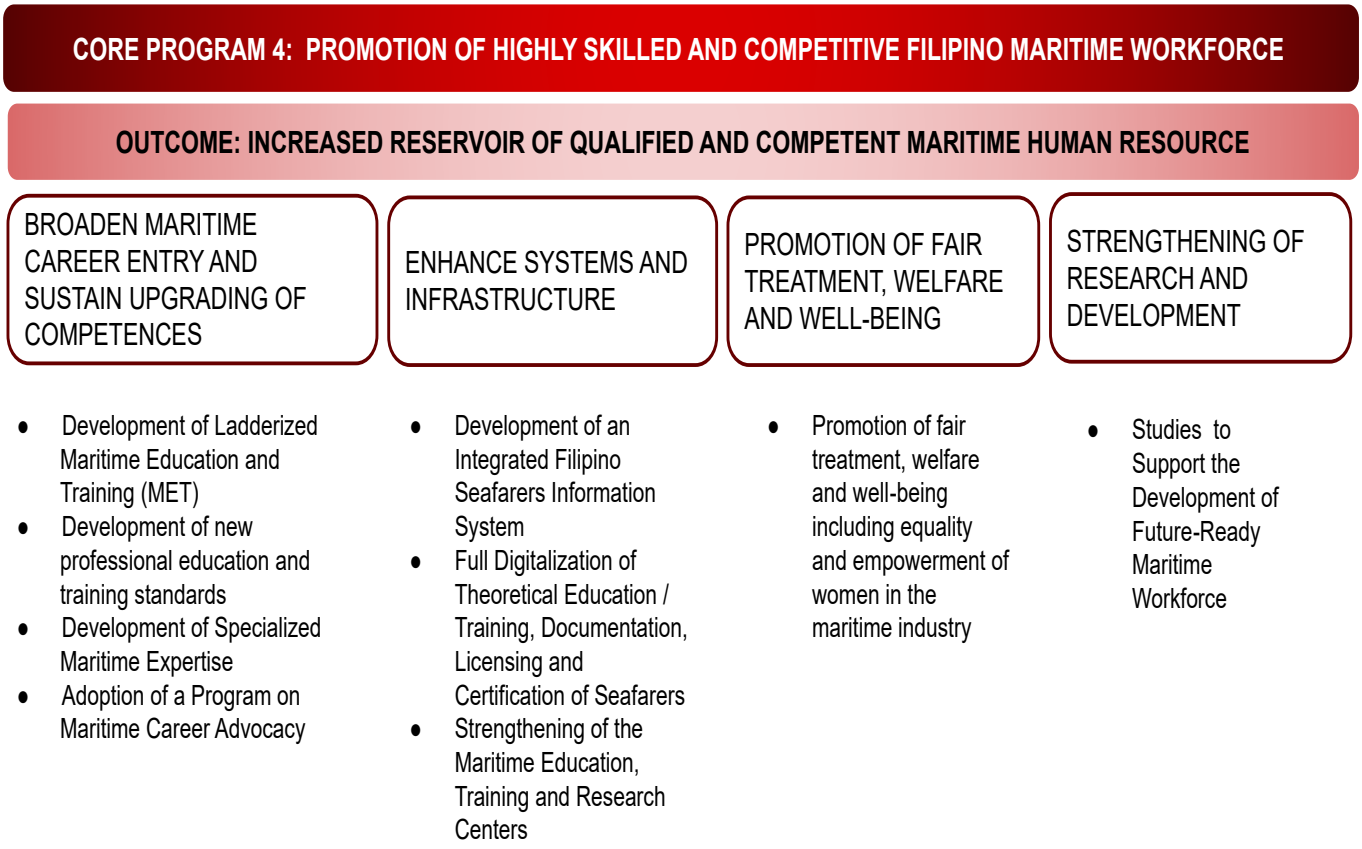
9. **Lack of integrated systems on Filipino seafarers** that will provide real time data on their identity documents, licenses or competence certificate, as well as their deployment and retirement. To have such a portal will expedite the regulatory/ verification process, as well as the monitoring and enforcement of compliance, among others. It will likewise prevent illegal activities such as the submission of fraudulent documents or information.

   While the rapid pace of technological advancement promises efficiency, safety and sustainability, their swift integration demands significant investment, training and adaptation. Autonomous vessels, smart navigation systems and digitalized logistics require a workforce with advanced skills. The maritime sector must foster collaboration among industry stakeholders, government, and educational institutions to ensure a smooth transition towards a technologically advanced and resilient future.

VI. PROGRAM FRAMEWORK, STRATEGIES, COMPONENTS AND PROJECTS

This core program on the promotion of highly skilled and competitive maritime workforce supports the MIDP's mission of "ensuring access of passengers and shippers to a safe, secure, economical, environment friendly and sustainable sea transport." The overall objective of this core program is to increase the reservoir of qualified and competent maritime human resource through a) broadening maritime career entry and sustain upgrading of competences; b) enhancement of systems and infrastructure; c) promotion of fair treatment, welfare and well-being; and, d) strengthening research

Figure 5.2
Core Program 4 Framework



If the country's human resources are given the opportunity to be trained and educated, there should be sufficient workforce who can fill the needs of the maritime industry. Opening new maritime programs in addition to seafarers' education should be seriously studied. The reason forwarded why there are only a few higher institutions offering the naval architecture program is the negligible number of enrollees; even so, the government should continue exploring ways to encourage young students to pursue this career. It also applies to other potential educational programs which could open other maritime professional careers to the Filipino.

The country has a readily available and trainable workforce, with good work ethics and generally lower wages compared to the competing nations like Japan, Korea, Singapore, and China. In responding to the need at the local shipyards and in complementing efforts to meet anticipated global demand for skilled workers, there is a compelling reason for the Philippines to increase its reservoir of welders,

and development.
painters, operators of equipment for heavy lifting such as cranes. The provision and delivery of technical training for shipyard workers to enhance their skills will boost their ability to fill the requirements not only of the local shipyards but also make them competitive in the global market. This holds true for other maritime careers.

The Program on Maritime Workforce is geared towards the education and training, upskilling and reskilling of the maritime workforce thus, increasing employability as shown in Figure 5.2. The projected outcome of increased reservoir of qualified and competent maritime human resource is deemed possible through the four strategies, to wit:

1. Broadening of maritime career entry and sustained upgrading of competences;
2. Enhancing of systems and infrastructure;
3. Promoting fair treatment, welfare and well-being; and,
4. Strengthening of research and development.

The following strategy components are critical contributors to the program outcome.

1. Broaden maritime career entry and sustain upgrading of competencess

As a strategy, this is the main driver in achieving the desired outcome of addressing the issues and challenges of the maritime industry's labor supply. This strategy has four (4) components and corresponding projects to be pursued or implemented by relevant agencies.

a. Development of Ladderized Maritime Education and Training (MET)

The contemplation of this component is that the maritime education and training (MET) encompasses all required knowledge, understanding and/or proficiency for employability in the maritime industry. It shall primarily be anchored on the existing programs of the government, such as the **Ladderized Education Program (LEP)**[97], the **Expanded Tertiary Education Equivalency and Accreditation Program (ETEEAP)**[98], the **Alternative Learning System (ALS)**[99], and the two **Senior High School (SHS) Maritime Specializations**[100] which were developed, a *Technical-Vocational Livelihood (TVL)*[101] Maritime specialization and a *Pre-baccalaureate Maritime specialization.*

ETEEAP is an alternative education program which allows working professionals but were either unable to finish their college education or were completely unable to step into college for different reasons, to earn a bachelor's degree without going through traditional schooling methods. Under this program, professionals

[97]CR.A. No. 10647 or the "Ladderized Education Act of 2014"
[98]ETEEAP operates by virtue of the Executive Order Number 330 signed by former President Fidel V. Ramos on May 10, 1996. It is currently administered by the Philippine Commission on Higher Education (CHED) through deputized and qualified colleges and universities who applied to offer the program. It had become part of the academic programs of these institutions and graduates are not treated differently from regular students.
[99]The Alternative Learning System (ALS) is a parallel learning system in the Philippines that provides opportunities for out-of-school youth and adult (OSYA) learners to develop basic and functional literacy skills, and to access equivalent pathways to complete basic education.
[100]Pursuant to Joint DepEd Memorandum and STCW Circular No. 1 Series of 2016
[101]Ibid.

with five or more years of work experience can use the knowledge, experiences, achievements and skills they obtained through their jobs to earn school credits that are then deducted from the total number of units or credits that they are required to earn before they graduate. This way, the more professional experience the ETEEAP students demonstrate, the sooner they can earn their bachelor's degree.

ALS is a parallel learning system in the Philippines that provides opportunities for out-of-school youth and adult (OSYA) learners to develop basic and functional literacy skills, and to access equivalent pathways to complete basic education.

The curriculum of Senior High School (SHS) Maritime Specializations is based on the STCW Convention. The SHS graduates of the TVL Maritime Specialization may eventually take the assessment for Certification of Ratings Forming Part of a Watch (Deck and Engine). This will allow them to qualify for career opportunities in the maritime industry upon graduation and evaluation. As stipulated in the Curriculum Guide, this maritime course focuses on competencies that a Senior High School (SHS) student ought to possess toward a career in the maritime industry. The course is designed to enhance the knowledge, skills, positive attitude, and work values in accordance with workplace standards. A sub-component of which is capacitating MHEIs/MTIs to be able to develop or enhance flexible learning modality for seafarers on-board whose upgrading of competence requires going back to school. Many of these seafarers are prevented from completing their upgrading courses because they need to keep their shipboard jobs hindering them from completing a degree program and therefore miss the opportunity for promotion onboard.

Through the ladderized MET, students will have several options including that of a professional career in the shipbuilding sector. On top of the possibility of opening degree programs on maritime administration and port management, upgrading of competences of maritime administration personnel shall be undertaken by the agencies within the purview of their respective mandates.

PROJECTS:

1. Development of Ladderized Maritime Education and Training;
2. Development of New Bridging and Reintegration for Maritime Programs;
3. Strengthening of the Bridging Program for Electro – Technical Officers (ETO);
4. Strengthening of Senior High School Maritime Track.

b. Development of new professional education and training standards

This component focuses on preparing aspiring professionals to enter into maritime administration work or leadership careers in ship management or port operations. This will take into consideration new, emerging and advancing technologies, and human-centered design principles, including digitalization. This also covers higher educational pursuits such as post graduate studies (Master's or Doctorate degrees).

PROJECTS:

1. Development of Professional Education and Training Standards for the Shipbuilding/Ship Repair Industry such as but not limited to:
   a. Ship Management and Logistics;
   b. Shipbuilding / Ship Repair; and
   c. Master's Degree on Naval Architecture and Marine Engineering

2. Development of Professional Education and Training Standards relating to ports such as but not limited to:
   a. Ports Administration;
   b. Ports Management and Operations; and,
   c. Continuing Professional Development for Harbor Pilots.

3. Continuing collaboration with reputable universities and educational institutions world wide in order to continually provide scholarship grants on maritime-related programmes.

4. Train the Trainers Program for Technical Courses for Seafarers and MARINA personnel such as but not limited to instructors, assessors, trainors, curriculum developers, evaluators, auditors, inspectors, surveyors, port state officers, flag state officers, and port enforcers.

c. Development of Specialized Maritime Expertise

This component deals with specific skills and best practices learned over time. This has to be backed up by standardized training modules and updated materials to support the reskilling and upskilling of personnel. Interestingly, the ICS Workforce Report 2021 calls on seafarers to be prepared and trained with the right skills to meet the demands for a greener and digitally connected future. The said Report likewise highlighted an 11.8% rise in officer demands since 2015. As such, shipping must significantly increase its recruitment levels, otherwise a shortfall of 26,000 officers is expected by 2026.

PROJECTS:

1. Development of Standardized Training for Welders, Fitters and Machinists for Onboard Works;

2. Development of Standardized Training Programs for Manpower in Shipbuilding and Ship Repair, such as but not limited to welders, fitters, machinist, mold lofters, training and certification program for shipbuilding non-destructive testing inspectors, and training and certification for marine fiberglass construction;

3. Development of Training Standards for Fishers in preparation for the Philippines' compliance to ILO Convention 188, and the STCW-F; and,

4. Development of Professional Education and Training Standards for Ship Chandling Management.

d. Adoption of a Program on Maritime Career Advocacy

This component aims to encourage young people to chart their career in the maritime industry promoting gender equality and the empowerment of women. This will be backed by scholarship grants, training incentives, internship and annual job fairs.

PROJECT:

1. Development of an Institutionalized Maritime Career Advocacy.

2. **Enhance systems and infrastructures.** As the maritime industry keeps pace with digitalization and automation, so must government services catch up with technological developments. This complements the strategy on broadening the entry to maritime career. It has three (3) components and corresponding projects to be pursued or implemented by relevant agencies, as follows:

a. Development of an Integrated Filipino Seafarers Information System

The web-based portal is primarily intended for verification purposes of seafarers' data and information culled from government-issued documents (SRB/SID), licensing (CMP/MARINA ID License), certification (COC/COP), deployment (validity of contract, embarkation, disembarkation) and the reason for disembarkation, such as end of contract, death, sickness or full disability claim. In effect, the portal will contribute to improved efficiency in the processing of statutory documents of seafarers, as well as generating real-time data on the number of certified seafarers in all levels; data for active (meaning currently on-board) seafarers and other pertinent data that may be required by decision makers.

The portal design shall abide by the provisions of the Data Privacy Law and other applicable laws. Safeguards on the confidentiality of information shall be instituted to preserve the credibility and integrity of the system.

PROJECT:

2. Development of Filipino Seafarers Portal.

b. Full Digitalization of Theoretical Education/Training, Documentation, Licensing and Certification of Seafarers

This component will increase efficiency in the processing of statutory documents required from a seafarer. It will hasten the process of upgrading competences as theoretical education and training can be done online. All regulators involved in seafaring education and training must be able to provide access to flexible learning modality, such as distance learning or blended face to face.

PROJECTS:

1. Integration of Seafarers Record Book (SRB) and Seafarer's Identification Document (SID) regulatory processes with the MARINA Integrated Seafarers

Management Online (MISMO) System.

2. Integration of Onboard Training Portal in the MISMO System; and

3. Electronic Training Record Book (E-TRB).

These will form part of MARINA's BEST (Blockchain Enabled Automated Certification System) and support the e-Gov Ph Super App.

c. Strengthening of the Maritime Education, Training and Research Centers.

This component intends to empower institutions dedicated for maritime education, training and research, including existing state-run maritime institutes/academies of maritime administration, and enable them to undertake programs and activities pertaining to upgrading the competence of their respective personnel and stakeholders.

Central to this component is the transformation of existing government maritime institutions to be the Centers for Advanced Maritime Education and Research in the Asian Region with focus on improving infrastructure and capacity.

There are projects which are being pursued under this component, one of which is the acquisition and operation of training ships for state-run institutions and SMART Campuses, to be equipped with modern technologies, e.g. Cloud Simulation on Radar, ARPA, ECDIS, and Engine Room, among others; E-Learning Modules; and Augmented Reality / Virtual Reality.

On research, quite a number of studies were completed by various entities such as the National Maritime Polytechnic (NMP), and the Philippine Merchant Marine Academy (PMMA) primarily focusing on the seafaring sector. In addition to these studies, plans are underway to draw up researchable areas such as those dealing with other maritime career and employment opportunities to beef up the capacity of the country to respond to the manpower requirements of the maritime industry.

PROJECT:

1. Establishment, operationalization and management of training hubs for seafarers on board fishing vessels

3. Promotion of Fair Treatment, Welfare and Well-being

This strategy aims to address human element related issues, such as safe manning and fatigue management, operational safety, security and environment protection, among others. It promotes fair treatment, welfare and well-being including equality and empowerment of women in the maritime industry.

PROJECTS:

1. Study on the Factors Affecting Stress of Filipino Seafarers Boarding Ocean-going Vessels, Sexual Abuse and Harassment, Bullying and Gender Sensitivity;

2. Profile of Filipino Women in Maritime; and,
3. Strengthening of Mental Health and Wellness Program for Seafarers, Shipyard and Port Workers, and Maritime Administration Personnel.

4. Strengthening of research and development

This strategy, includes undertaking studies to support the development of a future-ready maritime workforce, which is key to preparing the maritime workforce for exacting eventualities and adopting modern technologies which the global maritime industry is bent to embrace.

Covered under this component is the completed drafts on the proposed ratification of the International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (STCW-F) 1995.

PROJECT:

1. Study to support the development of future-ready maritime workforce.

VII. RESULTS MATRIX

The Program shall be measured through the following indicators (See Table 5.6 for the specific number targets):

1. Increase in certified seafarers competent for ocean-going ships[102];
2. Increase in certified seafarers competent for domestic ships[103];
3. Number of new education and training standards, developed on professional, skills or expertise programs[104];
4. Increase of certified seafarers for Operational and Management Levels (officers);
5. Increase in the number of licensed Naval Architects and Marine Engineers;
6. Increase of graduates of Naval Architecture and Marine Engineering Degree Program; and,
7. Increase of Filipino graduates of maritime-related programmes[105]

[102]Data of MARINA as to the number of issued COCs for Management Level/Operational Level and issued COP for Support Level positions. All COP issued under Regulation VI are NOT included in the data for this indicator.
[103]Data of MARINA as to the number of issued D-COCs and CMPs
[104]Covers all new maritime education and training standards developed by CHED, TESDA, DEPED, MARINA, PPA, PCG.
[105]Data should include but not limited to Senior High Maritime Track, BS Marine Transportation, BS Marine Engineering, BS Naval Architecture and Marine Engineering and Basic Seaman Course (vocational)

Table 5.6
Program Output Indicators

#	Indicators	BASELINE		TARGETS							Means of Verification	Responsible Agency/ies
		YEAR	VALUE	'23	'24	'25	'26	'27	'28	EOP		
1	% Increase in certified seafarers competent for ocean-going ships[106]	2022	394,978	-	5 %	5 %	5 %	5 %	5 %	25 %	MARINA Report	MARINA
2	% Increase in certified seafarers competent for domestic ships[107]	2022	8,295	-	5 %	5 %	5 %	5 %	5 %	25%	MARINA Report	MARINA
3	Number of new education and training standards, developed on professional, skills or expertise programs[108]	2022	TBD	-	2	2	2	2	2	10	Reports from CHED MARINA TESDA PCG PPA	CHED MARINA TESDA
4	% increase of certified seafarers for Operational and Management Levels (officers)	2022	41,659	-	5%	5%	5%	5 %	5%	25%	MARINA Report	MARINA
5	% increase in the number of licensed Naval Architects and Marine Engineers	2022	48	-	25 %	25 %	25 %	25 %	25 %	125 %	PRC Result	PRC

[106]Data of MARINA as to the number of issued COCs for Management Level/Operational Level and issued COP for Support Level positions. All COP issued under Regulation VI are NOT included in the data for this indicator.
[107]Data of MARINA as to the number of issued D-COCs and CMPs
[108]Covers all new maritime education and training standards developed by CHED, TESDA, DEPED, MARINA, PPA, PCG.

#	Indicators	BASELINE		TARGETS							Means of Verification	Responsible Agency/ies
		YEAR	VALUE	'23	'24	'25	'26	'27	'28	EOP		
6	% increase of graduates of Naval Architecture and Marine Engineering Degree Program	2022	TBD	-	5 %	5 %	5 %	5 %	5 %	25 %	CHED Report	CHED
7	% increase of Filipino graduates of maritime-related programmes [109]	2022	TBD	-	5 %	5 %	5 %	5 %	5 %	25 %	CHED Report DEPED Report	MARINA

[109]Data should include but not limited to Senior High Maritime Track, BS Marine Transportation, BS Marine Engineering, BS Naval Architecture and Marine Engineering and Basic Seaman Course (vocational)

MARITIME INDUSTRY DEVELOPMENT PLAN (MIDP) 2019-2028

EXTERNAL VALIDATION WORKSHOP

01and 04 July 2022

Chapter

06

Overriding Program 1

Enhancement of Maritime Transport Safety and Security
(Merchant Ships and Fishing Fleets)

Chapter VI

ENHANCEMENT OF MARITIME TRANSPORT SAFETY AND SECURITY (MERCHANT SHIPS AND FISHING FLEETS)

I. OVERVIEW

Today's maritime transport is becoming more sophisticated with the increasing trends of development in technology replacing the rudimentary flotilla of past centuries. The international character of shipping became the foundation of the fundamental principles for ensuring maritime safety and security, and the efficient conduct of trade and commerce were developed and made applicable beyond national jurisdiction. This paved the way for the adoption of rigorous standards to enable the ship and its crew to overcome the challenges and perils of the sea. Working within their respective national perspectives, countries laid down national legislation to implement these internationally adopted maritime convention guidelines and standards on ships falling within their authority and jurisdiction.

The United Nations Law of the Sea Convention (UNCLOS), adopted in 1982, requires Member States to take the necessary steps in ensuring that ships registered under their flags are at all times seaworthy. Taking its commitment to UNCLOS, the Philippines, as a responsible Flag State, continuously strives to maintain the seaworthiness and adherence of all Philippine-registered ships to maritime safety and security standards.

Mandated under Republic Act No. 9295 and Executive Order No. 125, as amended, the Maritime Industry Authority (MARINA) prescribes and implements safety standards of ships in accordance with applicable conventions and regulations. The domestic requires the vessels to be at all times in seaworthy condition: properly equipped with adequate and functional life-saving, appliances, machineries, radio communications, and other safety appliances maintained in accordance with the standards set by MARINA. All Philippine-flagged ships are required to be manned by duly licensed and competent Filipino officers and crew. Likewise, the Philippine Merchant Marine Rules and Regulations (PMMRR) which generally apply to all Philippine-flagged ships is also applicable to those ships engaged in domestic and international trading.

Integral to maritime safety is the strengthening of the safety standards of Philippine-registered fishing vessels in terms of design, construction, and equipment. Ascertaining the safety of fishing vessels in terms of the minimum number of crew who are likewise trained and qualified to undertake fishing ventures, forms part of the mandate of MARINA.

Relative to the International Convention of Safety of Life at Sea (SOLAS), the MARINA, as the flag administration in the Philippines is the primary government agency responsible for the implementation of the rules and regulations imposed by the Convention. It is noteworthy that the SOLAS Convention as amended, has incorporated the International Ship and Port Facility Security (ISPS) Code under Chapter XI-2. The SOLAS amendment mandates strict implementation of security measures on ships and ports facilities after the attacks on the World Trade Center in 2001 (9/11 attack). The probability of piracy, armed robbery and terrorism on ships and ports facilities could greatly affect the world's economic status.

Primarily to protect ships, crews, passengers and marine environment, security measures were adopted and enhanced by every Member State of the International Maritime Organization (IMO). Likewise, state-of-the-art technology has since been explored to keep up with the increasing and evolving maritime safety and security threats around the globe. In May 2010, the IMO introduced the concepts of Automatic Identification System (AIS), Vessel Monitoring System (VMS), Vessel Traffic Services (VTS), and Maritime Domain Awareness (MDA).

Various legislations and regulations were passed to further strengthen the safety and security of the maritime domain and port facilities in the country. Likewise, inter-agency protocols were drafted to further facilitate cooperation. Such efforts were perceived to be significant steps towards defining each agency's roles and responsibilities with regard to maritime security policy.

The government is currently focused on its efforts to ratify/accede other equally important international maritime safety and security instruments and effectively implement and enforce those that were already ratified by the Philippines. This government initiative supports the declared policy of adopting and promoting the Philippine "Blue Economy" Strategy and the "whole-of-nation" approach.

The inclusion of the overriding program on Enhancement of Maritime Transport Safety and Security is grounded on the concept that maritime safety and security provides substantial support for the achievement of the over-all objectives of the MIDP 2028.

II. RATIONALE

Focused integration of maritime safety and security is of paramount importance to achieve the long-desired development and expansion of the Philippine maritime industry sector.

With the current trends in the global economy, the growing number of merchant and fishing fleet and cruise ships complements the increasing density of shipping and capacity trades and routes. Hence, enhancement of maritime safety and security through the operationalization of this overriding program in the next five (5) years is crucial.

Aside from the maritime safety-related Conventions, the ratification and implementation of security conventions such as the 1988 Convention on the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA Convention 1988) and its Protocol shall further strengthen the country's capacity in addressing maritime security threats.

III. PROGRAM OBJECTIVES

The main objective of this overriding program is to ensure the safety and security of all ships operating within the Philippine maritime jurisdiction. To realize the program objective, the following strengthening measures and strategies will be undertaken:

a. Implementation and Enforcement of Comprehensive Maritime Plan encompassing the fundamental elements of maritime safety and security, namely:

i. Implementation and enforcement of safety and security standards for ship design and construction;

ii. Implementation and enforcement of standards for safe and healthy operations;
iii. Implementation and enforcement of security program on sea transport and maritime infrastructure;
iv. Continuous training and capacity-building;
v. Enhancement of Compliance Monitoring and Enforcement (CME) processes and mechanisms;
vi. Development and dissemination of Information, Education and Communication (IEC) materials;
vii. Digitalization including maintenance of integrated database platform; and
viii. Establishment and maintenance of Aids to Navigation Vessel Traffic Monitoring System (VTMS), Reception Facilities, and other maritime infrastructures.

b. Ratification and Effective Implementation of Relevant International Conventions and Instruments

The significant impact of this overriding program will be measured in the reduction of maritime accidents and incidents involving Philippine merchant ships and fishing fleets, providing the passengers and shippers with improved and reliable sea transport. High passenger and shipper satisfaction ratings are expected to follow as a result of increased compliance with international and national safety and security conventions, laws and protocols on merchant and fishing fleets.

IV. ASSESSMENT

An assessment of the country's maritime safety and security was undertaken to evaluate the efforts and initiatives developed and implemented by pertinent maritime agencies.

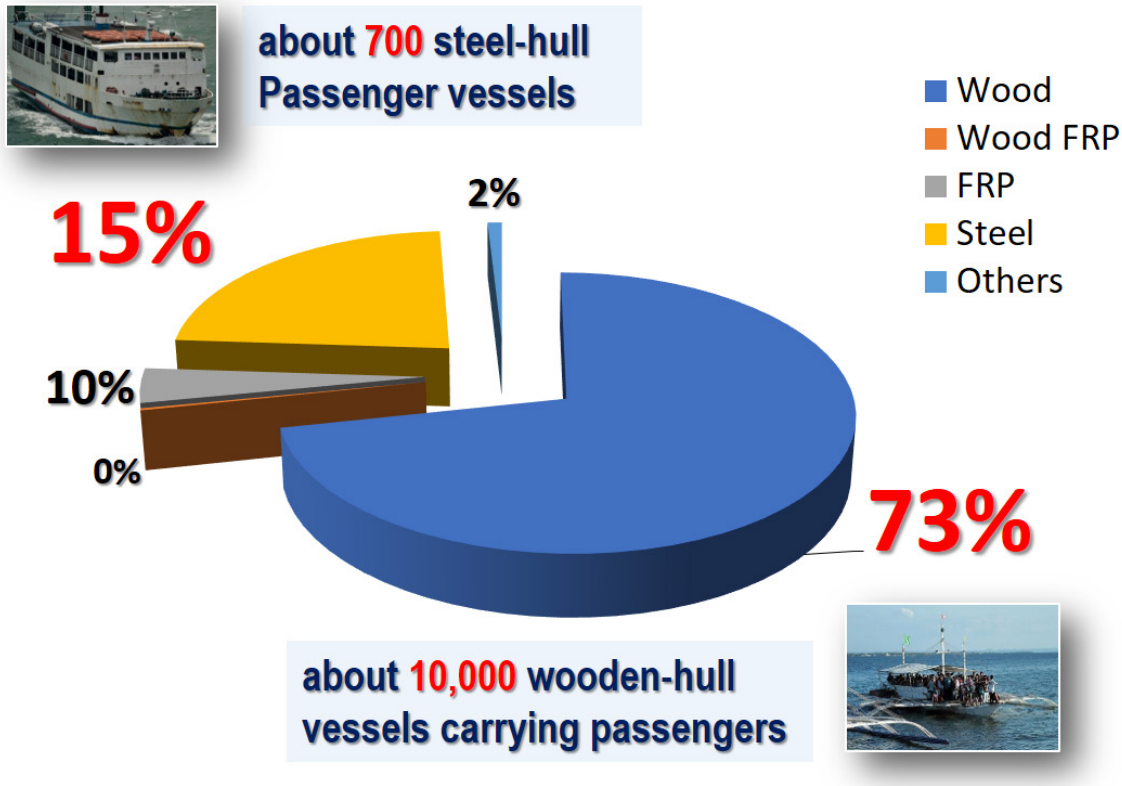
Philippine-Registered Domestic Ships

As shown in Figure 6.1 in the next page, the profile of the Philippine-registered domestic ships in 2020 reveals that out of 29,974 ships, 15% or 4,496 ships are steel-hulled, while 73% or 21,881 ships are wooden-hulled and the remaining 12% or 3,597 ships are Fiber Reinforced Plastic (FRP)-coated wood, FRP and ships of other hull material. Of the 4,496 steel-hulled ships, 700 are classified as passenger ships. About 10,000 ships from the 21,881 wooden-hulled ships also carry passengers.

The highest level of safety and security regulations is applied on passenger-carrying ships and tankers. For instance, MARINA MC No. 2017-04 imposes size and age restrictions on the importation of passenger ships: it should be more than 500 GT and less than 20 years old. Similarly, the age limit for the importation of tankers is below 15 years old, under MARINA MC No. 2010-01. At the time of the approval of these regulations, most passenger ships and tankers were imported as secondhand ships. These underwent modification, alteration, conversion, and rebuilding, subject to MARINA's approval.

Statutory certification pertaining to the safe construction and operations of all Philippine-registered ships is a mandatory requirement prior to the grant of authority to operate in domestic and international routes. The PMMRR, as supplemented and amended by MARINA memorandum circulars and Flag State advisories, provides an extensive and detailed set of maritime safety regulations.

Figure 6.1
Profile of Philippine Registered Domestic Ships by Hull in 2020



Source: MARINA

Other government agencies in-charge of maritime safety and security-related functions such as the PCG and various port authorities of the country formulated rules and regulations within the scope of their respective mandates. Notwithstanding significant undertakings by pertinent maritime agencies to ensure the safety and security of Philippine merchant and fishing fleets, maritime casualty accidents involving domestic ships continue to occur.

Based on MARINA's records from 2018-2022, grounding incidents have the highest number of accidents with a total of 222 cases. Subsequently, capsizing accidents and collision/ramming incidents account for 79 cases. Ranking third are man overboard/ occupational accidents with a recorded number of 69 cases, followed by fire/explosion incidents which was reported to have 50 cases, while swamping incidents account for 45 cases.

Table 6.1 shows that there was a spike of marine accidents in 2021. The increase in the number of accidents/incidents was caused by the occurrences of adverse weather conditions. In 2021, Typhoon Odette hit the provinces of Cebu, Surigao and other parts of Visayas and Northern Mindanao, which resulted in numerous maritime incidents.

Conversely, a significant decrease was visible in 2020 due to the onslaught of the COVID-19 pandemic, where the epidemic paralyzed and adversely affected the domestic shipping operations of the country.

Table 6.1
Marine Accidents Investigated by MARINA by Type of Accident For the Period 2018 to 2022

Indicators	Number of Reported Accidents/Incidents					
	2018	2019	2020	2021	2022	TOTAL
Grounding	35	37	28	75	47	222
Hull Failure/ Heavy Weather Damage	1	1	1	3	4	10
Steering Failure	8	0	2	9	5	24
Listing/Capsizing	13	20	9	28	9	79
Swamping/Flooding	10	0	4	27	4	45
Sinking	12	0	10	12	4	38
Ramming/Collision/Allision	16	13	5	31	14	79
Fire/Explosion	6	5	22	9	8	50
Man Overboard/ Occupational Accident[110]	10	33	7	14	5	69
Others[111]	2	0	2	39	3	46
Total	**113**	**109**	**90**	**247**	**103**	**662**

Source: 2017-2021 MARINA Statistical Report[112] and 2022 MARINA Annual Statistical Report[113]

Table 6.2 shows accidents under the IMO Classification of marine accidents/incidents in the years 2018 – 2022. There are 99 cases Very Serious accidents involving either total loss of the ship, loss of life or severe damage to the marine environment. It also shows that Serious Marine Casualty (SMC) were the highest type from 2018 to December 2022 with 439 cases on record.

Table 6.2
Number of Accidents based on IMO Classification For the Period 2018 to 2022

IMO Classification	Number of Reported Accidents/Incidents					
	2018	2019	2020	2021	2022	TOTAL
Very Serious	23	21	16	26	13	99
Serious	80	86	72	111	90	439
Less Serious	31	26	7	116	12	192
Total	**134**	**133**	**95**	**253**	**115**	**730**

Source: 2017-2021 MARINA Statistical Report[114] and 2022 MARINA Annual Statistical[115]

Based on records of accidents per vessel type in Table 6.3, it showed that passenger vessels still ranked the highest number with 319 in 5 years. However, there was a noticeable decrease in the number of accidents for the year 2022. It was also observed that there are 65 recorded cases of marine accidents involving unregistered vessels.

[110]Occupational Accident includes "Man OverBoard", fall, electric shock, eye damages and burns among others.
[111]Others include "Anchor Dragging," "Damage to Port and Structure," etc.
[112]2017-2021 MARINA Statistical Report. The Maritime Industry Authority. 2022. Accessed on 29 May 2023 at https://marina.gov.ph/wp-content/uploads/2022/06/2017-2021-MARINA-Statistical-Report_FINAL_revised.pdf.
[113]2022 MARINA Annual Statistical Report. The Maritime Industry Authority. 2022. Accessed on 29 May 2023 at https://marina.gov.ph/wp-content/uploads/2022/06/2022-MARINA-Annual-Statistical-Report-1FINAL.pdf.
[114]Supra 3.
[115]Supra 4.

Table 6.3
Number of Accidents based on type of Vessel
For the Period 2018 to 2022

IMO Classification	Number of Reported Accidents/Incidents					
	2018	2019	2020	2021	2022	TOTAL
Passenger[116]	75	56	32	94	62	319
Cargo[117] (including Tug and Barges)	56	53	45	102	56	312
Fishing	15	9	11	26	12	73
Others[118]	1	3	2	7	0	13
No data/ unregistered	2	17	13	30	3	65
Total	**149**	**138**	**103**	**259**	**133**	**782**

Source: 2017-2021 MARINA Statistical Report[119] and 2022 MARINA Annual Statistical[120]

Table 6.4 showed that over a five-year period, 197 cases or 61.56% of the total 320 incidents/accidents were steel-hulled passenger vessels. This was followed by wooden-hulled passenger vessels with 87 cases or 27%. FRP vessels recorded a total number of 29 incidents or 9.06%. Aluminum-hulled passenger vessels constituted a total of 7 or 2.18% of the reported marine incidents/accidents.

Table 6.4
Number of Accidents per Hull Type
For the Period 2018 to 2022

IMO Classification	Number of Reported Accidents/Incidents					
	2018	2019	2020	2021	2022	TOTAL
Wooden (motorbanca)	27	20	12	11	17	87
Fiber-Reinforced Plastic (FRP)	1	3	5	17	3	29
Steel	46	32	13	60	46	197
Aluminum	2	1	2	0	2	7
Total	**76**	**56**	**32**	**88**	**68**	**320**

Source: 2017-2021 MARINA Statistical Report[121] and 2022 MARINA Annual Statistical[122]

Based on records, the country's maritime mishaps are attributed to the following factors:

a. human error;
b. lack of updated rules on ship safety;
c. ship type/design is not suited to the sea conditions where such services operate;
d. inadequate aids to navigation, maritime infrastructure and limited local weather forecasting capacity; and,
e. low level of safety culture.

To address these factors, MARINA developed and implemented stringent safety rules and regulations to address domestic ferry safety and further strengthen compliance monitoring and enforcement.

[116]PASSENGER category includes Recreational Boats.
[117]CARGO category includes Tugs and Barges.
[118]OTHERS category includes Yachts and Specialized Vessels, etc.
[119]Supra 5.
[120]Supra 6.
[121]Supra 10.
[122]Supra 11.

1. **Policies, Rules and Regulations Adopted and Implemented on Safety and Security**

   a. **MC SR 2021-01,** *Revised Rules and Regulations on the Tonnage Measurement of Philippine Registered Ships*;

   b. **MC MS 2021-02,** *Requirement of Life-Saving Appliances (LSAs) and Arrangements Onboard Philippine Registered Ships Engaged in International Voyages*;

   c. **MC SR 2021-02,** *Revised Rules and Regulations on the Load Line Survey, Assignment, Marking and Certification for the Philippine Registered Ships*;

   d. **MC MS 2021-03**, *Rules and Regulations on Fire Safety and the Implementation of the Fire Safety Systems (FSS) Code for Philippine Registered Ships Engaged in International Voyages*;

   e. **MC SR 2021-04,** *Revised Rules and Regulations on Intact Stability Requirement of Philippine Registered Ships*;

   f. **MC MS-2022-01,** *Rules and Regulations on the Conduct of Marine Safety Investigation into Marine Casualty/Incident*;

   g. **MC SC 2022-01,** *Guidelines for the Onboard Training of Cadets on Philippine Registered Ships Engaged in Domestic Shipping* and, to maintain a list of Philippine registered vessels showing the number of cadets that each vessel can accommodate for Onboard Training (OBT) based on the criteria of this MC;

   h. **MC MS 2023-01,** *Revised Rules and Regulations on Inspection, Drydocking and Issuance of Certificates*;

   i. **MC SC 2023-01,** *Rules and Regulations on Seafarers' Required Hours of Rest for Philippine Registered Ships Engaged in International Trade*;

   j. **MC SC 2023-02,** *Rules and Regulations on the Prevention of Drugs and Alcohol Abuse Onboard Philippine Registered Ships Engaged in Domestic and International*;

   k. **MC MS 2023-02,** *Rules and Regulations for the Classification Requirements for Philippine Registered Ships Engaged in the Domestic Trade; and*

   l. **MC MS 2023-03,** *Implementation of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) to Philippine-Registered Vessels.*

   The revision of the 1997 PMMRR is underway, in which a practical approach of developing safety standards per specific vessel type will be adopted. Its completion is targeted within the next five (5) years by which time the safety rules and regulations for the other types of vessels should have been developed. To date, Fishing Vessel Safety Rules and Regulations (FVSRR) and the Philippine Ship Safety Rules and Regulations for Passenger Vessels (PSSRR Part A and Part B) have been completed.

As part of ensuring that Philippine-flagged ships adhere to national and international safety and security regulations, MARINA is strengthening the exercise of its oversight function on the system and procedure relating to the conduct of ship inspection, survey and audit, including the issuance of corresponding statutory certificates.

Pursuant to MARINA Memorandum Circular No. 193, as amended by MC No. 200 and MC No. 2012-02, Philippine-registered ships engaged in international voyages are required to maintain a Continuous Synopsis Record (CSR). With respect to domestic merchant ships, the CSR is required and regulated by MARINA MC No. 05, series of 2006. The CSR which chronicles/records the history of a ship's operation and registration and is kept on board during the economic life of a ship.

Consistent with their respective mandates, the MARINA, PCG, PPA, NAMRIA, PAGASA, PNP-MG, BFAR, NTC and DOH-BOQ also formulated and issued their respective maritime safety and security related policies and regulations.

On 20 March 2020 Executive Order No. 107 was issued reconstituting the Office for Transportation Security (OTS) and the National Civil Aviation Security Committee (NCASC), and designating the Department of Transportation (DOTr) as the appropriate authority to oversee the development, implementation and maintenance of National Civil Aviation Security Programme (NCASP) in accordance with the Convention on International Civil Aviation. Meanwhile, OTS was reconstituted as the Office for Civil Aviation Security (OCAS). The security of sea transport and maritime infrastructure shall remain with the PCG, PPA and MARINA taking into consideration the E.O. No. 197, series of 2016.

2. Compliance Monitoring and Enforcement (CME)

As mandated by Republic Act No. 9295 and E.O. No. 125A, MARINA, as the Flag Administration, prescribes and implements the standards and conditions by which ships are granted the privilege to fly the Philippine flag and the authority to undertake shipping operations. This core function is done through the formulation and implementation of policies and regulations which stipulates the terms which Philippine-registered ships must observe, specifically the technical, social, and administrative requirements of safety, security, efficiency, and environment protection. MARINA also laid down a system of rules and regulations in marine transport and the Philippine merchant marine Compliance Monitoring and Enforcement (CME), which currently is being reviewed and updated.

Under RA 9993, the PCG is mandated to enforce regulations in accordance with all relevant maritime international conventions, treaties or instruments, and national laws for the promotion of safety of life and property at sea within the maritime jurisdiction of the Philippines. PCG also conducts port state control implementation. This function of the PCG is complementary to the mandate of the Flag Administration to ensure maritime safety and security.

Other maritime agencies such as the PPA, BFAR, NAMRIA, OTS, Philippine Navy (PN), and the PNP-MG are likewise involved in CME activities within the context of their respective mandates.

As the country's merchant and fishing fleets expand, there is a compelling need to automate the existing CME system. The overriding program of MIDP on Sustainable Maritime Innovation, Digitalization, Transformation and Knowledge Center (SMIDTKC) will enhance and integrate all existing CME activities currently performed by the MARINA and related enforcement agencies.

3. Ratification and/or Implementation of International Maritime Conventions

The Philippines has ratified and implemented international conventions which specify minimum standards for the construction, equipment and operation of ships to ensure ship safety and security.

Shown in Table 6.5 are the international conventions, protocols and agreements on maritime safety and/or security ratified/acceded and implemented by the country.

Eight (8) of the thirteen (13) international conventions on maritime safety that were ratified by the Philippines were transposed into national laws/policies. These ratified conventions are currently being implemented on Philippine-flagged ships engaged in international and domestic trades. The Philippines is yet to develop and implement national laws/policies for the remaining ratified international conventions.

Table 6.5
List of International Convention/s, Protocol/s and Agreement/s on Maritime Safety and Security Ratified/Acceded and Implemented by the Philippines

International Convention/s, Protocol/s, Agreement/s	Date Ratified/ Acceded	Issued National Law, Circular, Policy, Rules and Regulations	Implementing Agency/ies
Maritime Safety			
1. Convention on the International Regulations for Preventing Collisions at Sea, 1972, as amended	10 June 2013	PSSRR	MARINA, PCG
2. International Convention on Load Lines, 1966	4 March 1969	MC SR 2021-02	MARINA
3. Protocol of 1988 relating to the International Convention on Load Lines, 1966	24 April 2018	MC SR 2021-02	MARINA
4. Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, 1988	6 January 2004	-	PCG, PNP-MG
5. Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf	6 January 2004	-	PCG, PNP-MG
6. Convention on the International Maritime Satellite Organization, 1976, as amended	30 March 1981	-	NTC
7. Operating Agreement on the International Maritime Satellite Organization, 1976, as amended	30 March 1981	-	NTC

International Convention/s, Protocol/s, Agreement/s	Date Ratified/ Acceded	Issued National Law, Circular, Policy, Rules and Regulations	Implementing Agency/ies
8. Special Trade Passenger Ships Agreement, 1971	2 July 1973	-	-
9. International Convention for the Safety of Life at Sea, 1974, as amended	15 December 1981	PSSRR	MARINA, PCG, NTC, NAMRIA
10. Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974, as amended	24 April 2018	PSSRR	MARINA, PCG, NTC, NAMRIA
11. Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974, as amended	6 June 2018	PSSRR	MARINA, PCG, NTC, NAMRIA
12. International Convention on Tonnage Measurement of Ships, 1969, as amended	6 September 1978	MC SR 2021-01	MARINA
13. STCW 1978 International Convention on Standard of Training, Certification, and Watchkeeping for Seafarers 1978, as amended	12 February 1984	RA10635	MARINA
Maritime Security			
International Code for the Security of Ships and Port Facilities (ISPS Code) covering all companies operating/managing Philippine ships engaged in international voyages & all Philippine registered ships engaged in inter-island shipping	Ratified through tacit acceptance	MC 193, s. 2003 (as amended by MC 200 and MC 2012-02); MC 05, s. 2006	MARINA
		EO 311, s. 2004; EO 197, s. 2016; EO 107, 2020	PCG, PPA, MARINA

Source: MARINA

4. Fishing Vessel

In view of the unique operations of the fishing vessels, the IMO considered the following international instruments as the four (4) pillars of fishing vessel safety:

a. **IMO 2012 Cape Town Agreement (CTA)**. Not yet in force. This agreement aims to facilitate better control of fishing vessel safety by flag, port, and coastal States and contribute to the fight against illegal, unreported and unregulated fishing (IUUF). It also includes mandatory international requirements for stability, construction, and associated seaworthiness of fishing vessels at least 24 meters in length, as well as requirements for life-saving appliances, communication equipment, and fire protection.

b. **IMO STCW-F Convention on Training of Fishers.** This convention entered into force in 2012. It seeks to promote the safety of life at sea and the protection of the marine environment, taking into account the unique nature of the fishing industry and its working environment.

c. **International Labour Organization (ILO) Work in Fishing Convention 2007 (Convention No. 188).** This entered into force in 2017 and sets minimum requirements for work on board, including hours of rest, food, minimum age, and repatriation.

d. **Food and Agricultrure Organization (FAO) Agreement on Port State Measures to Prevent, Deter and Eliminate IUUF (PSMA), 2009.** This agreement entered into force in 2016. It seeks to prevent, deter, and eliminate IUUF through adoption and implementation of effective port State measures.

The Philippines commenced the preparation of the National Interest Analysis (NIA) and collaterals to support the proposal to ratify the CTA and STCW- F Conventions.

5. Digitalization of Existing Maritime Safety and Transport Security Processes and Transactions

The MARINA is working on the development and maintenance of an integrated database on fishing vessels and crew to curb IUUF. MARINA and the BFAR started their respective programs toward recording and tracking of Philippine fishing vessels.

BFAR utilizes the Integrated Marine Environment System in the licensing of fishing vessels, while monitoring the location and the volume of catch of these vessels is done through the use of the Automatic Identification System (AIS). MARINA, for its part, started developing the Municipal Fishing Vessel Registry (MFVR) and Commercial Fishing Vessel Registry (CFVR), which are web-based programs for the processing of applications for fishing vessel registration. These application systems are intended to be integrated through an Application Programming Interface (API). Eventually, this system will be integrated with MARINA's BEST (Blockchain-Enabled Automated Certification System). Likewise, the MARINA is currently using the EU-funded information sharing platform, using AIS function, known as the "Indo-Pacific Regional Information Sharing (IORIS)" platform.

6. Education and Training on Maritime Safety and Security for government surveyors and auditors

A sustained implementation of maritime safety and security-related training courses/programs for MARINA technical personnel and the corresponding impact assessment of the program will ensure consistency and effectiveness.

The MARINA conducts maritime safety-related training courses for MARINA personnel in various areas, such as, but not limited to: (a) Training on the Survey of Hull and Fittings above water line; (b) Ship Surveyors Training Course - Electrical and Machinery; (c) ISM Code Auditors Course; (d) MARINA Ship Inspection Orientation for Newly Hired Technical and Non-Technical Personnel; (e) Training on Survey; (f) ISM Advanced Training; (g) Marine Casualty Investigation; and, (h) Compliance, Monitoring and Enforcement (CME) Training.

The MARINA institutionalized the MARINA Technical Personnel Certification System (MTPCS) in November 2022. The MTPCS establishes the MARINA Certification System that defines the qualification, training and competence of the Agency's technical

personnel as prerequisite to any upward movement in the ranks of surveyors, inspectors, auditors or investigators.

V. CHALLENGES

The following are the challenges that MTSS sector is facing:

1. Lack of intensive Information, Education and Communication (IEC) campaign on existing vessel safety and security standards, policies, rules and regulations for Philippine merchant and fishing fleets to increase safety and security awareness among passengers, shippers, communities and sea transport users;

2. Inconsistent implementation of CME systems and procedures of existing maritime safety and security standards, policies, rules and regulations under an integrated system involving the various maritime enforcement agencies;

3. Protracted modernization of Philippine merchant ships and fishing fleets;

4. Low priority for investment in maritime safety and security of sea transport and maritime infrastructure;

5. Lack of an accurate, complete and updated database systems covering data/ information from ship vessel construction, operation, decommissioning/recycling/ship breaking, including physical configurations and safety and security components of vessels operating within Philippine waters;

6. Lack of organizational resources (administrative, financial and human development) to address the requirements and capabilities in the implementation of the program;

7. Need to codify and streamline existing regulations to eliminate unnecessary and repetitive documentary requirements and steps; and,

8. Overlapping of safety and security-related mandates and functions.

   Maritime safety and security functions are spread out among various agencies, which creates confusion and misunderstanding. The overlapping of functions and mandates results in unnecessary redundancy and additional cost to the government.

   The following are the summary of maritime agencies' mandates on maritime safety and security:

   MARINA exercises regulatory technical and administrative control over all Philippine-registered ships, both domestic and international, including fishing vessels. It administers the ship registry and regulates ships from construction or acquisition to the conduct of ship inspection, surveys, issuance of statutory ship safety certificates and Certificates of Public Convenience, until deletion from the Philippine Registry. The agency conducts the assessment, certification and licensing of Filipino Officers and crews in accordance with the qualification standards. MARINA also exercises control over the accreditation and licensure of shipbuilding and ship repair facilities including shipbreaking entities. The Agency likewise conducts compliance monitoring

and enforcement to ensure compliance.

PCG conducts pre-departure inspections and oversees the construction, maintenance and operation of aids to navigation as well as the operation of vessel traffic management systems. It also perform's search and rescue operations and Port state control inspections to ensure the safety of foreign-registered ships calling within Philippine ports, and issues notices to mariners which provides guidance to ship operation.

Port Authorities such as the PPA, CPA, SBMA, and other similar entities ensure smooth and safe interaction of port-ship operations in handling, loading and unloading of cargoes and the controlled and secured embarking or disembarking of passengers. The mandate includes the proper weighing of cargoes, segregation in ports of cargoes, specifically of dangerous goods, and the observance of occupational safety in ports.

DOTr is the department primarily responsible for the safety and security of sea transportation system and maritime infrastructure in the country, it ensure the accomplishment of the duties and responsibilities of the Contracting Government under the ISPS Code.

NAMRIA provides hydrographic services through the survey and updating of navigation charts, tides and tables and in addition, the issuance of notice to mariners for navigational safety within the Philippine maritime jurisdiction.

PAGASA issues meteorological warnings and forecasts.

PNP-MG performs law enforcement, which includes the suppression of unlawful acts at sea, such as smuggling, human trafficking, terrorism.

BFAR focuses on fishing vessel operations' sustainability through the issuance of commercial fishing vessel licenses.

NTC issues licenses on navigational communications equipment to be installed on board ships.

DOH-BOQ ensures that communicable diseases and other health safety risks are controlled and addressed on board both domestic and foreign ships.

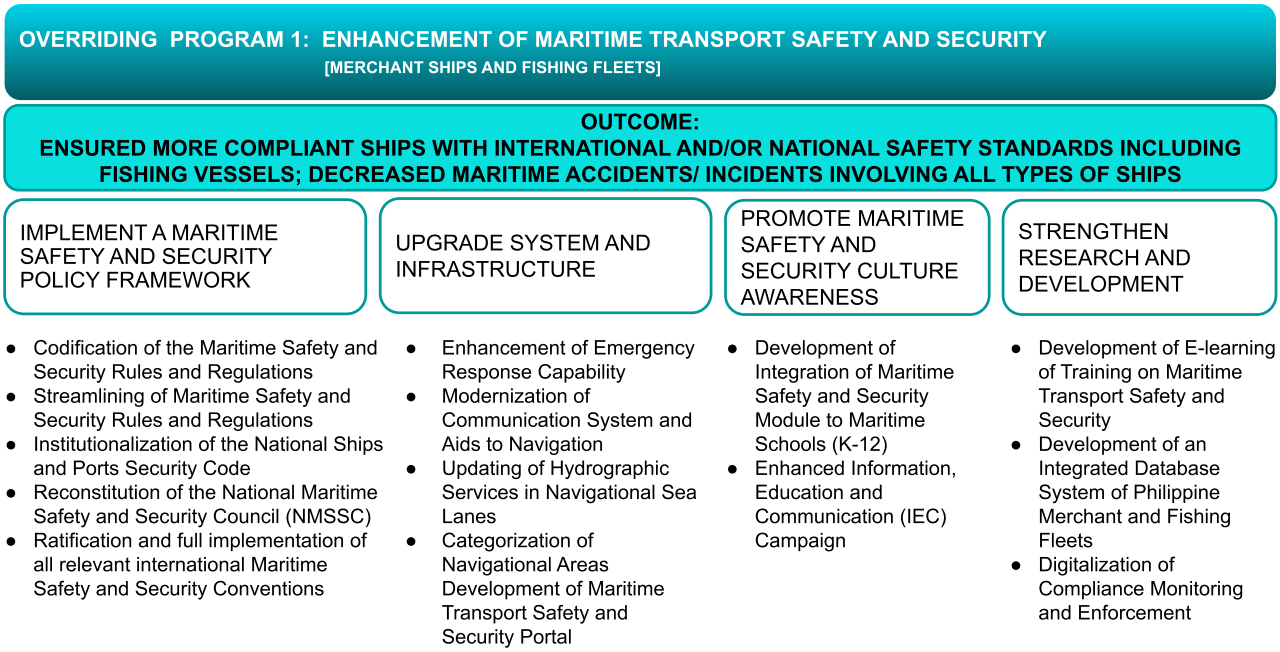
While the aforementioned agencies adopted policies and implemented regulations within their respective mandates, there are overlaps in undertaking certain activities which impose additional burden on the part of the stakeholders. It is incumbent on the government to rationalize the conduct of regulatory activities to give credence to the policy on "ease of doing business" in the Philippines.

There is also probability of creating gaps in the monitoring and enforcement of maritime safety and security-related functions which highlights the need to establish strong and close institutional coordination and linkage. There should be an effort to reconcile the rules and regulations issued by the agencies to come up with a more coherent set of safety and security regulations.

VI. PROGRAM FRAMEWORK, STRATEGIES, COMPONENTS, PROJECTS

This overriding program supports the MIDP is mission of "ensuring access of passengers and shippers to a safe, secure and economical sea services." The overall objective of this overriding program is to ensure that all Philippine merchant ships and fishing fleets are seaworthy through the implementation of a maritime safety and security policy; framework, upgrading of system and infrastructure; promotion of maritime safety and security culture and strengthened research and development.

Figure 6.2
Overriding Program 1 Framework



The following program strategies, components, and projects are created to ensure that the Philippine merchant and fishing fleet are more compliant with international and/or national safety and security standards, and to decrease maritime accidents/ incidents involving all types of vessels. The issues arising from the challenges identified are expected to be resolved through the following:

1. Implement a Maritime Safety and Security Policy Framework

a. Codification of the Maritime Safety and Security Rules and Regulations refers to the process of arranging in a systematic legal form or order all maritime safety and security regulations. These are incorporated into a single new code to enhance clarity for all stakeholders. Codification shall be undertaken in collaboration with concerned service units of the agency to cover the different stages in the life cycle of a vessel from acquisition/construction, launching, operation, certification up to decommissioning.

PROJECTS:

1. Codification of Maritime Transport Safety Rules and Regulations;

2. Codification of maritime Transportation Security Regulations (TSRs) and other transport security policies and regulations; and
3. Codification of Rules on the Enforcement of Maritime Regulations.

b. Streamlining of Maritime Transport Safety and Security Rules and Regulations refers to the process of identifying and eliminating repetitive and unnecessary steps and requirements for applications in existing maritime safety and security regulations to make them more efficient, effective, and responsive.

PROJECTS:

1. Streamlining of Maritime Transport Safety Rules and Regulations;
2. Streamlining of maritime Transportation Security Regulations (TSRs); and
3. Streamlining of Rules on the Enforcement of Maritime Regulations.

c. National Protocol for the Adoption and Implementation of Emergency Measures to Protect Commercial Shipping and Filipino Seafarers within the Philippine Waters. This is an initiative that ensures the integrity and protection of our maritime domain, the Philippine government targets to develop a national protocol for the adoption and implementation of emergency measures to protect commercial shipping and Filipino seafarers within the Philippine water; such as:

1. Vessel Safety Standard;
2. Certification Requirements;
3. Emergency Response Protocols;
4. Maritime Terrorism;
5. Environmental Protection; and
6. Crew Training.

d. Institutionalization of a National Policy Ships and Ports Security Code. This policy if institutionalized, shall require applicable domestic merchant vessels and ports to adopt a Vessel Security Plan (VSP) or Port Facility Security Plan (PFSP), respectively.

PROJECT:

1. Implementation and enforcement of the Security Program for Sea Transport and Maritime Infrastructure

e. Reconstitution of National Maritime Safety Coordinating Council (NMSSC). Once reconstituted, the council is expected to provide advice to the MARINA Administrator and relevant agencies on priority actions that will improve the implementation of maritime safety measures; suggests options based on the recommendations from maritime accident investigations. The NMSSC will coordinate and monitor the implementation of maritime safety measures with relevant government agencies.

f. Ratification and/or Full Implementation of all relevant International Maritime Safety and Security Conventions including those directly affecting the safety standards of fishing vessels. This refers to the continuing efforts of the Philippine government in collaborating with relevant international organizations and

agencies to ensure effective implementation and to sustain its role as a responsible member of the IMO. It also aims to ensure that all Philippine fishing fleets are seaworthy and strictly adherent to maritime safety and security standards and regulations.

PROJECTS:

1. Ratification of CTA; and
2. Ratification of SUA 2005 Protocol

2. Upgrade System and Infrastructure

a. Enhancement of Emergency Response Capability. This is part of the key activities under the Institutionalization of the Ships and Ports Security Code in the Philippines. It aims to improve preparednes, develop and implement an emergency response plan for maritime security incidents and emergencies within the Philippines.

b. Modernization of Communication System and Aids to Navigation. Radio communication equipment is significant in the safety and security of ships. Its utilization ranges from assistance in vessel navigation; determination of accurate ship position; collision avoidance; vessel identification and tracking; communication with other ships and with coastal or terrestrial stations; to search and rescue. On the other hand, aids to navigation (ATON) are used to determine position and a safe course to mark navigational hazards and signify hidden dangers.

There is a need to complete the installation of coast networks to support the Global Maritime Distress and Safety System (GMDSS) mandated under Chapter IV of SOLAS. Maintenance, upgrading, and modernization of ATON in the country should also be sustained.

Meanwhile, the AIS, one of the navigational communication equipment on board ships, is required by MARINA through MC No. 2015-02. The AIS provides functions on vessel identification and monitoring, collision avoidance, and search and rescue. In support of the said policy, the DOST-PCIEERD, in coordination with MARINA and selected higher education institutions, greenlit the project of a locally developed AIS for ship tracking and monitoring in 2017 with the intention of catering to smaller ships sized less than 300 GT. The project successfully developed the low cost AIS which is still subject to further testing.

In 2022, the Maritime and Ocean Affairs Office (MOAO) of the DFA introduced MARINA to the CRIMARIO II Project Team. CRIMARIO II is a European Union-supported project which introduced the IORIS platform, a communication platform that can be utilized by government agencies to enhance the inter-agency coordination and collaboration in ensuring the safety and security of the country's maritime domain. The IORIS platform comprises AIS features, which are able to identify vessels even with their AIS switched off, and provides a Sky Light application that can capture an area with the most recent or real time satellite imaging.

The NCWC leads the management of the IORIS platform in the country. Other

government agencies that signified their intent to take part in the utilization of the platform are the PN, PCG, BFAR, Bureau of Immigration (BI), PNP-MG, National Bureau of Investigation (NBI) and MARINA. The project aims to further enhance the relationship between and among government agencies in sharing information for a faster response in times of emergency.

c. **Updating of Hydrographic Services in Navigational Sea Lanes as a sequel to the established navigational sea lanes embodied in MARINA MC No. 2015-03.** This is a sequel to previous efforts of MARINA to categorize navigational waters in the country as embodied in MC No. 2015-03. The aforementioned Circular lists geographical features, weather, and hydrographic conditions as parameters in the categorization process using the Geographic Information System (GIS) to arrive at three (3) types of navigational waters, namely: open sea, coastal waters, and protected waters. Revalidation and updating of the previously categorized navigational areas in the country will be conducted. It shall be undertaken with the Domestic Shipping Industry Program Strategy and Component.

d. **Categorization of Navigational Areas Development of Maritime Safety and Security Portal (Information Sharing under the SMIDTKC Program)**. This is a centralized portal that will facilitate data access and interchange between MARINA offices and other government agencies. This will provide status updates, enable monitoring, reporting, and aid in policy formulation. The database shall include information such as:

1. weather information, including sea conditions;
2. total and underwater current information (use of sensors – real time);
3. vessel information from Automatic Identification Systems (AIS) data;
4. vessel and route inventory database;
5. vessel traffic reporting; and,
6. maritime accident / incident reports.

Eventually, this effort shall pave way for the modernization and upgrading for the established Maritime Operations Center.

3. Promote Maritime Safety and Security Culture and Awareness

a. **Development of Integration of Maritime Safety and Security Module to Maritime Schools (K-12)** under the Core Program on Promotion of Highly Skilled and Competitive Maritime Workforce

b. **Enhanced Information, Education and Communication (IEC) Campaign**

PROJECT:

1. Enhancement of IEC on Maritime Safety and Security

4. Strengthen Research and Development

a. **Development of e-learning for the Training on Maritime Safety and Security** in collaboration with Core Program 4 and Overriding Program 3.

b. Development of an Integrated Database System of Philippine Merchant Ships and Fishing Fleets. This includes all aspects of safety and security and database on maritime accidents/incidents in collaboration with Overriding Program 3.

PROJECTS:

1. **Development of Integrated Database System of Philippine Merchant Fleet**. This project forms part of the Development of Maritime Safety and Security Portal, which refers to a web-based application system that will automate processes and improve data capturing; application processing; production; and issuance of the different certificates/licenses/approval covering Philippine merchant fleet.

2. **Development of Integrated Database System for Fishing Vessels (IDSFV).** This is a web-based application system that will automate processes and improve data capturing, application processing, production, and issuance of different certificates/licenses/approval for fishing vessels, monitoring and verification. In view of this, the Municipal Fishing Vessel Registration System or MFVRS was conceptualized to strengthen safety standards of Philippine-registered fishing vessels and the establishment of a SMIDTKC.

The IDSFV is an application system which aims to (a) establish and implement a web-based processing of fishing vessel registration; (b) improve efficiency and increase office productivity by speeding up registration and data generation; (c) generate reliable and comprehensive data on fishing vessels 3GT and below to satisfy the needs of the government and private sectors involved in policy making on water transport; and (d) effectively monitor and verify certificates/licenses to deter illegal, unreported and unregulated fishing.

IDSFV system's design is geared towards the attainment of the automatic capturing of fishing vessel data from transactions; the implementation of automatic printing of registration certificates; and the provision of on-demand and scheduled management reports and statistical data necessary in planning, policy formulation, program implementation, among others. It shall provide security and audit controls throughout the system through passwords and security level access.

c. Digitalization of Compliance Monitoring and Enforcement (CME) refers to the automation of the CME which will serve as the database of the MARINA - Enforcement Service when conducting compliance monitoring. The authorized users will be able to tag the vessels as compliant or non-compliant in real time and attach necessary evidence to justify.

This system will contain the following information:

1. all issued certificates of the vessel to prove validity and authenticity of document;
2. pieces of media evidence gathered by authorized MARINA personnel on-site;
3. historical photos of registered vessels;
4. related compliance monitoring checklist; and,
5. oustanding recommendations, if any.

VII. RESULTS MATRIX

The success of this Program shall be measured in terms of the following indicators: (1) reduction in the number of maritime accidents/incidents involving Philippine merchant ships and fishing fleets by 50% by EO 2028 from baseline; (2) Satisfactory Client Satisfaction Rating on ship's safety & security; and, (3) Illegal, Unregulated and Unreported Fishing (IUUF) practices reduced by 10% per year from baseline (*see Table* 6.6)

Table 6.6
Results Matrix for Overriding Program 1

#	Indicators	BASELINE		TARGETS							Means of Verification	Responsible Agency/ies
		YEAR	VALUE	'23	'24	'25	'26	'27	'28	EOP		
1	% reduction in the number of maritime accidents/incidents involving Phil merchant and fishing fleets reduced by 50% by EO 2028 from baseline											
	1.1 Domestic	2022	115	-	10 %	10 %	10 %	10 %	10 %	50 %	MARINA/ PCG Report	MARINA
	1.2 Overseas	2022	-	-	10 %	10 %	10 %	10 %	10 %	50 %	Recognized Organization's Report	MARINA
2	Satisfactory Client Satisfaction Rating on ship's safety & security											
	2.1 Passengers	2022	80%	-	80 %	80 %	80 %	80 %	80 %	80 %	Survey Results	MARINA
	2.2 Shippers	2022	80%	-	80 %	80 %	80 %	80 %	80 %	80 %	Survey Results	MARINA
3	Illegal, Unregulated and Unreported Fishing (IUUF) practices reduced by 10% per year from baseline	2022	-	-	10 %	10 %	10 %	10 %	10 %	50 %	BFAR Report	BFAR

Chapter

07

Overriding Program 2

Promotion of Environmentally
Sustainable Maritime Industry

Chapter VII

PROMOTION OF ENVIRONMENTALLY SUSTAINABLE MARITIME INDUSTRY

I. OVERVIEW

The Philippines' efforts to promote and implement the updated MIDP 2028 is based on the concept of "blue economy" which seeks to promote economic growth, social inclusion, and the preservation or improvement of livelihoods while ensuring environmental sustainability of the oceans and coastal areas. Encompassing a broad spectrum of maritime and coastal activities, the blue economy serves as the backdrop of the MIDP as the latter deals with the various aspects of sea transportation while invariably affecting the other uses of the oceans-from fisheries and aquaculture to extraction of minerals and energy as well as in the conduct of commerce, trade and tourism.

The blue economy also highlights stewardship of the ocean in order for people and society to reap the benefits generated from the earth's waters. Maritime and coastal sectors therefore assume the responsibility of making sure their activities are carried out with utmost care to preserve the health of the ocean, and bodies of water in the archipelago.

Cognizant of the crucial role maritime transport plays in an archipelago and the concomitant obligation of protecting the marine environment from pollution coming from ships, the Philippine government is committed to implementing the necessary steps to ensure that ships operating in its waters are compliant with national and international regulations on marine environment protection.

Part of introducing policies on the blue economy is the government's initiative to promote green shipping, extending to ports and shipyards. The increasing pressure to take action to mitigate the effects of global warming and climate change creates a corresponding awareness on the contribution of maritime transport to these crises. Improving fuel efficiency of ships and progressing decarbonization in shipping will be actively pursued for the Philippine merchant fleet.

With this the MIDP lays down government policies and programs to clearly stipulate the promotion of an environment-friendly and sustainable Philippine maritime transport. The MIDP through its Overriding Program; or the Promotion of Environmentally Sustainable Maritime Industry reflects the government's paramount concern for the protection of the environment from ship-generated pollutants.

II. RATIONALE

Every year, a huge number of containers-solid, liquid, and dry bulk cargo are being transported across the world's oceans. This significantly enhances the availability of food, raw materials, and goods which improves the economies of many nations. The sheer volume of maritime activities and actors needed to make this possible are likely to produce a significant amount of pollution. Therefore, the need to lessen environmental degradation from shipping can be achieved through a whole of nation approach.

However, promoting environmental protection is the shipping industry's biggest challenge when it comes to ensuring sustainability. Air pollution, the spread of aquatic invasive species, the usage of antifouling coatings, oil and chemical spills from tanker accidents, and undersea noise pollution are some of the recognized environmental issues that are being faced by the industry.

According to the Fourth IMO Greenhouse Gas (GHG) Study conducted in 2020, GHG emissions, which include carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O), went from 977 million tonnes in 2012 to 1,076 million tonnes in 2018, reflecting a 9.6% increase. The amount of human-made emissions that come from shipping went from 2.76% in 2012 to 2.89% in 2018 (IMO, 2021). Recent studies also revealed that between 2% and 3% of the world's CO2 emissions come from the shipping industry, and that number could rise to 17% by 2050 if nothing is done to contain and prevent it.

On the other hand, marine litter which is considered as one of the fastest-growing environmental problems in the world threathens biodiversity, ecosystems and livelihoods. A study conducted by the World Wide Fund for Nature (WWF), through a project funded by the Grieg Foundation revealed that Filipinos consume about 2.15 million tons of plastics in a year, 9% of which are recycled and 35% leaks into an open environment. Further, about 114,927 kg of plastic wastes are generated from ports and 128,970 kg of plastic wastes from vessels.

Meanwhile, abandoned or discarded fishing gear in the oceans make up around 10% (640,000 tonnes) of all marine litter as indicated in the study jointly conducted by the Food and Agriculture Organization (FAO), and United Nations Environment Programme (UNEP).

Indeed, Philippine waters are threatened by the introduction of invasive aquatic organisms, typically from ships engaged in international trade. Numerous marine species that are transported in ships' ballast water or on their hulls may form a reproductive population, become invasive, outcompete local species, and proliferate to pest levels in the local host environment. Due to increased trade and traffic, the issue of invasive species carried by ships worsened over the past few decades, and since seaborne trade volumes are still growing, the issue may not have peaked yet.

On the other hand, oil spills are catastrophes that can have negative effects on society, the economy, and the environment.

The Panay Gulf MT SOLAR 1 oil spill event, which took place in August 2006 and is regarded as the worst oil spill in the nation's history, is proof of how catastrophic it was for the coastal towns that were negatively impacted. Since many sectors rely on the sea for their existence, environmental damage brought by an oil spill translates into social and economic hardship. Communities in coastal areas that depend on fishing for their primary means of subsistence are cut off from the seas when an oil disaster happens nearby.

These are some of the environmental impacts of shipping, which highlight the importance of promoting an environmentally sustainable maritime industry to ensure a blue economy that will support the country's national development agenda and promote quality of life of Filipinos. Thus, there is a need for holistic and practical measures to the pressing environmental problems associated with the shipping industry. It is imperative and timely

that the government regulate the shipping industry in accordance with environmental considerations.

III. PROGRAM OBJECTIVES AND IMPACT

To support the long-term objectives of the MIDP 2028 in developing and expanding the Philippine merchant fleet as well as in producing future-ready maritime human capital, the overriding program on the Promotion of Environmentally Sustainable Maritime Industry aims to establish a sustainable maritime industry that will result to livable communities and creation of green jobs.

This program comprises strategies and specific program components that encompasses the four (4) core programs of MIDP 2028. It aims to strengthen existing policies and regulatory frameworks, introduce new supporting measures, and promote research and development in addressing environmental issues resulting from maritime transport activities.

It facilitates compliance with various international conventions and national regulations on the prevention of marine pollution from ships and environmental protection in general. This overriding program also supports the national government's commitment to reduce its GHG (CO2) emissions by 75% by 2030, a commitment of the Philippines expressed in its submission of the intended Nationally Determined Contribution (NDC) and communicated to the United Nations Framework Convention on Climate Change (UNFCCC) in 2021. Reduction of CO2 emissions will come from energy, transport, wastes, forestry and industry sectors. Hence, the contribution of maritime transport to this international commitment is essential.

With the implementation of the program, the following impacts are expected to be realized:

1. Strengthened policy and regulatory frameworks that address environmental issues associated with the shipping industry through the development and implementation of national strategic action plans and a robust compliance monitoring and evaluation system;

2. Strengthened mechanism for the ratification and implementation of relevant marine environment protection conventions and regulations through the establishment of a dedicated Marine Environment Protection (MEP) office in MARINA;

3. Enhanced systems and infrastructure that provide access to data and information, facilitate development of policies, effective and systematic implementation of relevant environment protection conventions through an integrated marine environment protection information management system;

4. Strengthened research and development of innovative homegrown technologies and solutions to support the implementation of the following programs:
    a. Prevention of marine pollution from ships;
    b. Management of marine biofouling ;
    c. Promotion of decarbonization in domestic ships;
    d. Reduction of GHG emissions from ships;
    e. Reduction of underwater noise emission from ships;

IV. ASSESSMENT

The Philippines is considered a global center for marine biodiversity. Located within the Coral Triangle, there is a higher concentration of species per unit area in the Philippines than anywhere in neighboring archipelagic territories such as Indonesia and Wallacea[123]. It has 3,212 fish species, 731 of which are considered commercially important.

The Philippines is a signatory to the following IMO conventions which pertain to marine environment protection:

1. The International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978, or "MARPOL 73/78" including the following Annexes:
   - Annex I: Regulations for the Prevention of Pollution by Oil (entered into force 2 October 1983);
   - Annex II: Regulations for the Control of Pollution by Noxious Liquid Substances in Bulk (entered into force 2 October 1983);
   - Annex III: Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form (entered into force 1 July 1992);
   - Annex IV: Prevention of Pollution by Sewage from Ships (entered into force 27 September 2003);
   - Annex V : Prevention of Pollution by Garbage from Ships (entered into force 31 December 1988); and
   - Annex VI: Prevention of Air Pollution from Ships (entered into force 19 May 2005).
2. The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention), 2004;
3. The International Convention on the Control of Harmful Anti-fouling Systems in Ships (AFS Convention), 2001;
4. Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention), 1972, as amended;
5. 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972;
6. International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC Convention), 1990;
7. International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Fund Convention), 1992; and
8. International Convention on Civil Liability for Oil Pollution Damage (CLC Convention), 1992.

Moreover, the Philippines is a member of the United Nations Law of the Sea (UNCLOS), Convention on Biological Diversity, United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. The Philippines also ratified the Paris Agreement on Climate Change on 25 April 2016 and Basel Convention on the Control of Transboundary Movements of Hazardous and their Disposal (Basel Convention) in 1993.

Measures to Enhance and Facilitate the Implementation of Ratified Conventions

With the signing of the abovementioned international instruments, relevant and concerned agencies adopted the following measures to enhance and facilitate the implementation of the ratified conventions:

[123]Convention on Biological Diversity, 2009

1. Formulation of the Philippine Biodiversity Strategy and Action Plan (PBSAP)[124] as a strategic instrument that envisions that by 2028, biodiversity is restored and rehabilitated, valued, effectively managed and secured, maintaining ecosystem services to sustain healthy, resilient Filipino communities and delivering benefits to all. The PBSAP integrates and mainstreams the Convention on Biological Diversity (CBD) objectives into the national development and sectoral planning framework that includes measurable targets for CBD commitments. These objectives are: a) Conservation of biological diversity; b) Sustainable use of its components; and c) Fair and equitable sharing of benefits arising out of the utilization of genetic resources.

2. Implementation of Republic Act No. 9729 or the Climate Change Act which provides the policy framework to systematically address the growing threats of climate change on community life and its impact on the environment. The national climate change framework strategy was translated into a National Climate Change Action Plan (NCCAP)[125], which prioritizes food security, water sufficiency, ecological and environmental stability, human security, climate-smart industries and services, sustainable energy, and knowledge and capacity development as the strategic direction for 2011 to 2028.

   The NCCAP strategic directions that cover the maritime industry is the Strategy on Climate- friendly Industries and Services which prioritizes the creation of green and eco-jobs; and sustainable consumption and production; and focuses on the development of sustainable cities and municipalities. In addition, the strategy on Sustainable Energy is relevant to the maritime sector. It prioritizes the promotion and expansion of energy efficiency and conservation; the development of sustainable and renewable energy; environmentally sustainable transport; and climate-proofing and rehabilitation of energy systems infrastructures which is also relevant to the maritime sector.

3. Filing of House Bill No. 735 entitled "An Act Providing for the Full and Effective Implementation and Enforcement of International Maritime Instruments to which the Philippines is a State Party" in the 19th session of Congress.

4. Completed the drafting of the Implementing Rules and Regulations for the BWM and AFS Conventions which are currently undergoing legal review and updating pending further deliberation of House Bill No. 735.

5. Issuance of the following MARINA rules and regulations to implement the BWM and the AFS conventions:

   a. MARINA Memorandum Circular No. SR 2020-04 aims to ensure that all marine/ anti-fouling paints entering/ manufactured in the Philippines are compliant with the international standards. With this MARINA is closely coordinating the implementation of said circular with the Bureau of Philippine Standards (BPS) under the Department of Trade and Industry (DTI); and

   b. MARINA Memorandum Circular No. SR 2020-05 provides rules for the implementation of the BWM Convention and covers all Philippine registered ships engaged in international trade. Currently, MARINA, PCG, and PPA, with DOST and the University of the Philippines (UP) are conducting a

[124]Department of Environment and Natural Resources - Biodiversity Management Bureau (2015); The Philippine Biodiversity Strategy and Action Plan (PBSAP)
[125]Climate Change Commission (2011); National Climate Change Action Plan 2011-2028

port microbiological baseline survey which will serve as scientific basis for determining the need to implement the circular in the domestic shipping sector. The MARINA and the DOST are making steps to develop a low cost BWM treatment system.

6. Developed and implemented the National Strategic Action Plan 2018-2022 during the IMO-MARINA MEPSEAS Project which serves as a roadmap in accelerating the Philippines' implementation of the BWM Convention.

7. Crafted the Marine Environment Protection Strategy, **Green Maritime Philippines: Protect and Conserve** to further advance the full and effective implementation of relevant marine environment protection policies and standards in the country. This strategy serves as the roadmap in the implementation of the marine environment protection conventions and the initiatives of the maritime industry.

8. Strengthened collaboration between the MARINA and the DOST-PCIEERD for the development and implementation of policies and programs, in the identification of same-risk areas, groups of fouling organisms as well as data analysis methods with respect to port biological baseline survey techniques.

9. Issuance of MARINA Memorandum Circular No. SR-2020-06 (Rules and Regulations on the Mandatory Use of 0.50% m/m Sulphur Limit on Fuel Oil for all Philippine-Registered Ships in Compliance with Annex VI of MARPOL 73/78, as amended) to address issues and concerns relating to the emission of Sulfur Oxide (SOx) from ships.

10. Issuance of MARINA issued Memorandum Circular No. SR-2021-05 (Rules and Regulations on the Implementation of Ships' Energy Efficiency Management Plan (SEEMP) and Data Collection System (DCS) for Fuel Oil Consumption for all Philippine Registered Ships). The Circular aims to ensure that all Philippine registered ships shall comply with Part 1 and 2 of the SEEMP Regulation 22A of MARPOL 73/78 Annex VI to promote operational measures that establish a mechanism to improve a ship's energy efficiency in a cost-effective manner. It promotes the effective control of all sources of marine pollution and requires that all practicable steps to reduce air pollutions and greenhouse gases from ships be, undertaken.

11. Conducted the National Rapid Assessment on Biofouling Management under the IMO-MARINA Biofouling Management Project in 2021.

12. Issuance of PPA of Administrative Order Nos. 01-2020 and 08-2021 – Provision of shore reception facilities which aims to comply with the requirements of MARPOL 73/78, on the provision of efficient and adequate port reception facilities for all type of wastes and quantities from ships without causing undue delay to the ships operations and prevent/reduce marine pollution by controlling or prohibiting illegal disposal of wastes from ships.

13. Issuance of PPA of Memorandum Circular No. 11-2021 entitled "Ban on the Use of Unnecessary Single-Use Plastic Products."

14. The DENR is spearheading a National Plan of Action (NPOA) to help prevent, reduce and

manage marine litter in the country. It also promotes shared responsibility, accountability and participatory governance in addressing Marine Litter.

15. Concluded a Memorandum of Understanding on 23 September 2022 between the MARINA and the World Wildlife Fund (WWF) – Philippines to work together in reducing plastic pollution by preventing plastic leakage into ports and the ocean. Consequent to this, the MARINA issued an advisory on 10 May 2023 requiring domestic passenger vessels to play the video on proper disposal of plastics onboard ships.

    The vast waters of the country make it vulnerable to incidents of oil spills, generally discharged from ships. MARINA, in collaboration with the PCG, persists in its efforts to prevent and address oil spills by undertaking the following:

    a. Strict implementation of MARINA Memorandum Circular No. 2015-11 which requires a Safety Management System (SMS) for all domestic ships. The SMS covers "instructions and procedures to ensure safe operations of ships and protection of the environment in compliance with relevant international and flag state legislation.";
    b. Checking of vessel compliance to sewage and oil pollution prevention policies;
    c. Strict implementation of MARINA Memorandum Circular No. SR-2020-02 (Rules and Regulations on the Construction of Tank and Installation of Equipment to Collect, Store and Treat Sewage from Ships in Compliance to Annex IV of MARPOL 73/78, As Amended);
    d. Checking of ships' compliance with the Garbage Management Plan, in which proper disposal of garbage generated onboard is carried out;
    e. Participation in coastal cleanup drives initiated by the PCG along coasts and shorelines; and
    f. Strict implementation of MARINA Memorandum Circular No. 2010-01 which requires tankers in the domestic trade to ensure safety and the protection of the marine environment.

V. CHALLENGES

The government's objective of protecting the environment finds basis in Section 16, Article II of the 1987 Constitution which provides that the "*State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature*". All sectors of society are therefore called to contribute to realizing this Constitutional provision, more so for the government to institute the needed policy, legislation and institutional framework. Efforts to comply with this Constitutional directive are confronted by numerous roadblocks which stall progress in achieving the targets of environment protection, particularly in the maritime transport sector.

The more evident challenges which need urgent resolution are the following:

1. Long and tedious process in transposing the provisions of conventions and international instruments into national legislation;

2. Lack of a long-term marine environment protection strategy framework and roadmap address various environmental issues associated with shipping activities;

3. Ambiguous functions of government agencies with environment protection related mandates which result in overlaps and gaps in the exercise thereof;

4. Lack of port reception facilities for the proper disposal of marine solid and liquid wastes generated from domestic ships;

5. The need to gain greater control over the future of marine environment protection development through strengthened and enhanced skills, knowledge and resources for legislators/regulators, seafarers, trainers, shipyard and port workers, and other maritime workforce;

6. Lack of compliance monitoring and evaluation system for marine environment protection regulations relating to shipping activities;

7. Lack of a national strategic action plan to address the following: (a) Mitigation of greenhouse gases from the maritime sector; (b) Proliferation of the spread of invasive aquatic species; (c) Control and management of air pollution from ships in the domestic trade; (d) Decarbonization of the maritime industry particularly in the domestic trade and (e) Establishment of Green ports and shipyards;

8. Lack of baseline studies to determine the extent on the spread of invasive aquatic species in Philippine waters; and

9. No inventory of GHG emissions from ships and ports.

VI. PROGRAM FRAMEWORK, STRATEGIES, COMPONENTS AND PROJECTS

Consistent with the National Transport Policy, the MIDP's mission includes the commitment to provide access to environment-friendly and sustainable maritime transport. This is a recognition of the fact that economic gains is not the sole measure of progress, and that there is no true progress unless we ensure that a healthy environment is preserved for the next generations to use and enjoy.

The overall objective of this program is to pursue a blue economy and promote livable and sustainable communities through the implementation of a marine environment protection policy framework; enhancement of systems and infrastructure; implementation of the marine environment protection strategy; and promotion of research and development.

Figure 7.1
Overriding Program 2 Framework

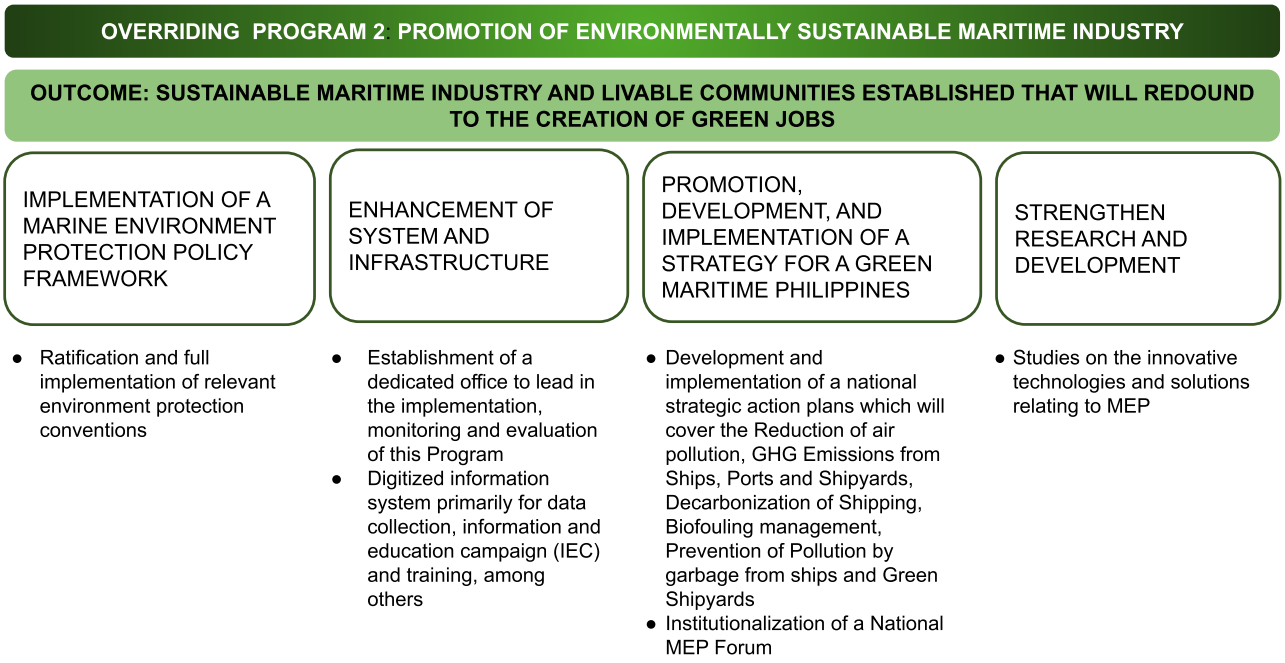


Figure 7.1 as being shown above illustrates the program framework consisting of the program objectives, outcome, strategies and components of this overriding core program of MIDP 2028.

The following are the strategies identified to achieve the objectives of an environmentally sustainable maritime industry.

1. Implementation of a Marine Environment Protection Policy Framework

The promotion of an integrated and systematic approach in preventing and regulating pollution created by ships to minimize the impacts of any harm that may occur from marine operations and accidents is required by current policies in compliance with international conventions with which the Philippines is a State Party. It should include the principles of sustainable development, along with measures to maintain economic progress and advancement while preserving the long-term worth of the environment.

To prevent marine pollution from ships, it is necessary to develop, review and update current policies, rules, and regulations. It is also important to emphasize in the promotion of marine environment protection collaborative and coordinating mechanisms among the relevant regulatory agencies and to create incentives for businesses that support environmentally friendly operations and practices. This strategy's sole component is the ratification and full implementation of international conventions, agreements, instruments or protocols relevant to environment protection.

PROJECTS:

1. Formulation of national policies and guidelines for the implementation of the following instruments:

    a. The International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978, or "MARPOL 73/78" including Annexes I to VI;

b. The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention), 2004;
c. The International Convention on the Control of Harmful Anti-fouling Systems in Ships (AFS Convention), 2001;
d. Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972, as amended;
e. 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972;
f. International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990;
g. International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992;
h. International Convention on Civil Liability for Oil Pollution Damage (CLC), 1992

2. Ratification of the Hong Kong Convention.

2. Enhancement of Systems and Infrastructure

Institutional reforms, system improvements, and infrastructure development are required to facilitate the implementation of strategies, programs, and activities of this program. It would be necessary to establish a dedicated office - the Marine Environment Protection Office - that would perform oversight functions and provide general direction for the implementation of the program strategies and projects.

To enable the creation of relevant and responsive policies and programs, access to data and information is crucial. A database with statistics on vessel information, fuel types and consumption, incidents of marine pollution, compliance and monitoring reports, and studies, research, technologies, and best practices relating to the implementation of conventions related to marine pollution and the environment are all part of the vision for the development of an integrated marine environment protection database. The strategy's components are enumerated below with their respective projects to be pursued:

a. Establishment of a dedicated office to lead in the implementation, monitoring and evaluation of this Program

PROJECT:
1. Creation of the Marine Environment Protection Service, a service unit in MARINA

b. Digitized information system primarily for data collection and awareness-raising materials

PROJECTS:
1. Development of Integrated MEP Information System (IMEPS);
2. Development of e-learning modules on marine environment protection; and
3. Development of IEC materials and collaterals.

3. Promotion, Development and Implementation of a Strategy for a Green Maritime Philippines

The purpose of developing a Marine Environment Protection Strategy (MEPS) is to establish a shared vision, common objective and long-term environmental goals that would assist the maritime industry stakeholders in deciding on a more focused course of action. The strategy will cover priority areas and environmental issues associated with shipping activities.

An Annual Marine Environment Protection Forum will be conducted to report on progress in the implementation of national strategic action plan on the identified priority areas of the MEPS, share good practices and initiatives both at the international and national level relating to environmental issues associated with shipping operations.

Under the identified strategy are program components which include:

a. Development and implementation of a national strategic action plans which will cover the Reduction of air pollution, GHG Emissions from Ships, Ports and Shipyards, Decarbonization of Shipping, Biofouling management, Prevention of Pollution by garbage from ships and Green Shipyards

PROJECT:
1. National Strategic Plan for Marine Environment Protection

b. Institutionalization of a National MEPS Forum which shall serve as a platform for knowledge sharing, best practices and discussions on issues related to implementation of the MEPS

PROJECTS:
1. Annual MEP Forum
2. Annual Exhibit of Best Practices on Marine Environment Protection

4. Strengthen Research and Development

The program strategy on strengthening Research and Development (R&D) aims to promote collaboration and information-sharing across key maritime sectors and communities. Additionally, it will combine cutting-edge scientific and technological knowledge with socio-economic, legal, and political will to enhance the industry's conservation efforts. The sole component of this strategy is more on studies and development of innovative technologies and solutions with the following projects to be pursued, among others:

PROJECTS:
1. Development of technological solutions for the prevention of Marine Pollution from Ships;
2. Development of technological solutions for the Management of Biofouling, and decarbonization;
3. Development of technological solutions for the reduction GHG Emission from Ships; and
4. Development of technological solutions for the reduction of underwater noise emission from ships.

VII. LEGISLATIVE AGENDA

Table 7.1
Legislative Agenda for Overriding Program 2

Legislative Agenda	Rationale / Key Features	Responsible Agency/ies
Enactment of a law on the Prevention and Control of Pollution from Ships and to Provide Penalties and for other purposes[126]	The proposal law shall cover different types of ship-generated pollution such as oil pollution, pollution from chemicals carried in bulk, pollution from packaged goods, pollution sewage, pollution from garbage and air pollution from ships. It intends to achieve the limitation of international pollution of the marine environment by oil and other harmful substances as well as the minimization and control of accidental discharge of such substances.	MARINA, PCG, PPA, DOTr, DENR, DILG, LGUs, other private/LGU ports and other relevant authorities/agencies
Ratification of Hong Kong Convention (HK Convention)	As a responsible member State, the Philippines needs to ratify the IMO's HK Convention. It will also strongly support the promotion and development of a shipbreaking / ship recycling industry. The HK Convention aims at ensuring that ships, when being recycled after reaching the end of their operational lives, do not pose any unnecessary risk to human health and safety or to the environment. It intends to address all the issues around ship recycling, including the fact that ships sold for scrapping may contain environmentally hazardous substances such as asbestos, heavy metals, hydrocarbons, ozone depleting substances and others. It will address concerns about working and environmental conditions in many of the world's ship recycling facilities.	MARINA, PCG, PPA, DOTr, DENR, DILG, LGUs, other private/LGU ports and other relevant authorities/agencies
Legislation on Shipbreaking and Ship Recycling	The Philippines should have a national legislation for the promotion and development of the shipbreaking / ship recycling industry. The national policy may be patterned from the key features of HK Convention, as follows: 1. Scope: applies to all types of ships, including fixed and floating platforms, regardless of their size, age, or flag. 2. Ship recycling facilities: sets out the requirements for ship recycling facilities, including the need for a permit, the availability of adequate infrastructure, and the requirement to comply with environmental and safety standards. 3. Hazardous materials: requires the safe removal and disposal of hazardous materials, such as asbestos, PCBs, and other toxic substances, before the ship is recycled. 4. Training and certification: requires the training and certification of workers involved in ship recycling, as well as the development of guidelines for the safe and environmentally sound recycling of ships. 5. Reporting and monitoring: requires the reporting and monitoring of ship recycling activities, including the submission of annual reports by ship recycling facilities and the establishment of a database of certified ship recycling facilities. 6. Enforcement: provides for the enforcement of its provisions by the flag state, port state, and coastal state, as well as the imposition of penalties for non-compliance. Overall, the HK Convention aims to promote the safe and environmentally sound recycling of ships, reduce the negative impact of ship recycling on human health and the environment, and ensure the sustainable use of marine resources.	MARINA, PCG, PPA, DOTr, DENR, DILG, LGUs, other private/LGU ports and other relevant authorities/agencies

[126]Senate Bill 2440 entitled, "An Act to Prevent and Control Pollution from Ships, Provide Penalties Therefor, and for Other Purposes" was filed.

VIII. RESULTS MATRIX

The outcome of this program will be measured through the (1) Percentage Decrease in the number of marine pollution related illness/ cases; (2) Percentage Decrease in the Solid waste from ships; (3) Percentage Decrease in the Liquid waste from ships; (4) Percentage Decrease in the GHG emissions of Philippine-registered convention-sized ships[127]; and (5) Percentage of ships compliant with the sulfur limit for Ph-registered convention sized ships[128].

Table 7.2
Results Matrix for Overriding Program 2

#	Indicators	BASELINE		TARGETS							Means of Verification	Responsible Agency/ies
		YEAR	VALUE	'23	'24	'25	'26	'27	'28	EOP		
1	Percentage Decrease in the number of marine pollution related illness/ cases	2023	-		10 %	10 %	10 %	10 %	10 %	**50 %**	Hospitals, Health Research Institutes	MARINA
2	Percentage Decrease in the Solid waste from ships	2023	-	-	10 %	10 %	10 %	10 %	10 %	**50 %**	PPA Report	MARINA
3	Percentage Decrease in the Liquid waste from ships	2023	-	-	10 %	10 %	10 %	10 %	10 %	**50 %**	PPA Report	PPA
4	Percentage Decrease in the GHG emissions of Ph-registered convention-sized ships[129]	2023	-	-	-	-	10 %	10 %	10 %	**30 %**	Shipping Companies Report	MARINA
5	% of ships compliant with the sulfur limit for Ph-registered convention sized ships[130]	2023	-	-	-	-	10 %	10 %	10 %	**30 %**	PCG Report	MARINA

[127]Pursuant to MARINA Memorandum Circular SR No. 2021-05 entitled, "Rules and Regulations on the Implementation on Ship's Energy Efficiency Management Plan (SEEMP) and Data Collection System (DCS) for Fuel Oil Consumption for all Philippine-Registered Ships".
[128]Pursuant to MARINA Memorandum Circular SR2020-06 "Rules and Regulations on the Mandatory Use of 0.50% MM Sulphur Limit on Fuel Oil for All Philippine Registered Ships in Compliance to Annex VI of MARPOL 73/78, as amended.
[129]Pursuant to MARINA Memorandum Circular SR No. 2021-05 entitled, "Rules and Regulations on the Implementation on Ship's Energy Efficiency Management Plan (SEEMP) and Data Collection System (DCS) for Fuel Oil Consumption for all Philippine-Registered Ships".
[130]Pursuant to MARINA Memorandum Circular SR2020-06 "Rules and Regulations on the Mandatory Use of 0.50% MM Sulphur Limit on Fuel Oil for All Philippine Registered Ships in Compliance to Annex VI of MARPOL 73/78, as amended.

Chapter

08

Overriding Program 3

Implementation of a Sustainable Maritime Innovation, Digitalization, Transformation, and Knowledge Center (SMIDTKC)

Chapter VIII

IMPLEMENTATION OF A SUSTAINABLE MARITIME INNOVATION, DIGITALIZATION, TRANSFORMATION, AND KNOWLEDGE CENTER (SMIDTKC)

I. OVERVIEW

The importance of digitalization and innovation cannot be overstated. As emphasized in various relevant industry reports over the years, there is no other way but to innovate and to digitalize. Innovation is the fuel of technology, it is an essential component in any maritime digital strategy or structure shifts. The general impression is that integrating the culture of innovation is a very valuable asset in the process of maritime operation appealing to many aspects of its stakeholders, hence, it is vital to develop or design a culture for stakeholders to adopt technology as a supplementary tool for learning and operation. Initiating this culture may be difficult but not impossible. It may be challenged with resistance by the stakeholders and other reasonable factors, hence, the government should take the lead and enable all related efforts towards this end.

With maritime transport responsible for the carriage of over ninety percent (90%) of global merchandise trade, totaling to some eleven (11) billion tons of cargo per year, digitalizing the maritime industry is expected to bring wide-ranging economic benefits and contribute to a stronger, more sustainable recovery from the economic impact of the COVID-19 pandemic. However, digitalizing is more than just infrastructure or technological innovation. While these are critical factors to consider, it is equally important for the government to consider the preparedness and ability of the stakeholders and the general public to utilize and adapt to the trends with regard to the newly introduced systems and technology.

In line with the efforts to institutionalize technical innovation in the maritime industry, SMIDTKC was adopted as an overriding program to lay down the foundation and support for all other programs of the MIDP 2028.

II. RATIONALE

International Maritime Organization (IMO) Secretary-General Kitack Lim emphasized that "*Digitalization, big data, and new technologies will play a key role in enabling post-COVID recovery*", during the webinar on Digital Connectivity and Data Standards in July 2020. He further stressed that digitalization and new technologies will also be the key to allowing standardization and therefore enhancing efficiency in shipping.

The contributions of the maritime industry throughout the years were instrumental to the advancement of the Philippine economy. In 2021, the country ranked as the fourth (4) biggest shipbuilding nation with a total of 643,000 gross tons of newly-built ships.

To remain a regional powerhouse in shipbuilding and ensure that Filipino sea-based workers will thrive, the government must invest heavily in digitalization, innovation, and data and knowledge generation. Breakthroughs, such as advanced technologies, new forms of automation, new energy sources, and mobile internet are expected to increase productivity in the maritime industry. Energy innovations need to be developed for more efficient and green vessels.

On the same note, the Philippines is also recognized as one of the largest supplies of seafarers for the world merchant fleet; seafarers contributed a total of 21.77% of the country's total remittances from 2012 to 2022 amounting to $644.91 million by December 2022 with an average growth rate of 3.8% annually, making them a critical factor in boosting the country's GDP. By nurturing and adopting current technologies, the maritime industry projected to reach greater heights through the expansion of investment opportunities and production of more competent seafarers.

With the favorable decision by the European Commission (EC) on its assessment of the country's maritime education, training and certification system, the deployment of Filipino seafarers is expected to surge in the coming years. In keeping with this advantage, the Philippines has to pursue aggressive programs to prepare Filipino seafarers and maritime educators to face relevant anticipated challenges brought about by the demands of green shipping and emerging technologies, like Maritime Autonomous Surface Ships (MASS) through the use of appropriate technologies and on-line learning platforms. Overall, the maritime industry now demands highly educated maritime professionals who are not only technically competent in handling advanced Information Communication Technology (ICT), but also possess leadership qualities and soft skills.

Previous studies on innovation in the Philippines identified the government's role to: (i) provide meaningful and impactful support to innovators; (ii) invest in the required technology, research infrastructure, and R&D researchers; (iii) carry out appropriate reforms in education, the investment climate, and trade; and (iv) remove barriers and bottlenecks to innovative initiatives in regulatory frameworks.[131]

The Philippine maritime industry responds to these global and national developments through this overriding program on SMIDTKC. This program aims to accelerate the digitalization of MARINA core processes and products such as the registration and licensing of vessels, applications of seafarer documents, accreditation of maritime enterprises, monitoring and investigation, among others, to ensure efficient and sustainable operations.

The introduction of digital technologies and solutions will increase competitiveness and enhance operational efficiency, which will elevate the satisfaction of industry stakeholders. Through digital transformation, all application processes shall be in accordance with the requirements under pertinent regulations on ease of doing business. Enhancing public service and governance through digitalization of government processes and transactions is highlighted as part of the socio-economic agenda of the Marcos administration.

Standardization is operationalized through the mandatory electronic information exchange between ships and ports, which came into effect on 8 April 2019. The aim is to make cross-border trade simpler and the logistics chain more efficient. Cooperation between shipping, ports and logistics is vital for enhancing the efficiency and sustainability of shipping.

The inclusion of this program as one of the overriding programs of the MIDP (2023-2028) will contribute to the attainment of outcomes of the four MIDP core programs of increased access to a safe, efficient and affordable sea transport, more jobs created, increased employability of Filipino maritime workforce, green ships and shipyards and increased capacity and production of Philippine shipyards.

[131]Jose Ramon G. Albert, et. al. Measuring and Examining Innovation in Philippine Business and Industry. Philippine Institute for Development Studies. Discussion Paper Series No. 2017-28. Last Accessed 10 September 2023. 55, https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1728.pdf.

III. PROGRAM OBJECTIVE AND IMPACT

This overriding program aims to ensure competitiveness of the Philippine maritime industry through seamless services, increased efficiency, improved performance and productivity.

The main impact of this overriding program is to improve the technological capacity of MARINA and other partners in order to innovate and operate modern technologies in shipping, fishing, maritime tourism, CIWT system, SBSR/ship management, and other ancillary businesses. This impact will be measured by increased client/stakeholder satisfaction with maritime industry policies, programs, and services, and positive feedback and sound suggestions on maritime administration received from clients/stakeholders. The program outcomes will be: (i) increased number of data searches on government websites related to the maritime sector; (ii) enhanced and integrated database; (iii) developed and applied improved and new products, services and processes associated with this MIDP; and (iv) forged and strengthened partnership with local, regional and international stakeholders.

IV. ASSESSMENT

The disruptions brought about by the restrictions due to the COVID-19 pandemic opened new horizons for digitalization as a key mechanism to enhance the resilience of the maritime industry. Automation and digitalization played a critical role in daily operations despite limited infrastructure, budget, and manpower during the height of the pandemic. One of the key lessons that emerged was that the digitalization of the maritime industry is an immediate priority in order to enhance data collection processing and interconnectivity.

Increased automation in the industry is perceived to contribute largely to the enhancement of safety and security in maritime transport for more efficient and sustainable shipping. However, the higher goal of the digitalization and innovation agenda of the government should redound to a strong digital quality of life. The digital well-being of a country is based on five (5) pillars: *Internet affordability*, *Internet Quality*, *e-Infrastructure*, *e-Security and e-Government*. According to the 2021 Digital Quality of Life (DQL) Index report[132], the Philippines ranked 48th with an index of 0.4520 out of 110 countries and 12th in Asia (out of 32 countries).

[132]DQL is a study on the quality of digital wellbeing across 117 countries (92% of the global population) conducted by the cybersecurity company Surfshark. The study indexes each country according to five pillars that impact a population's overall digital quality of life. https://surfshark.com/dql2021?country=PH accessed on 14 June 2023.

Table 8.1 shows the country's ranking per pillar and its components where the best criteria rankings are broadband internet stability, mobile speed improvement and broadband speed improvement, while the worst criteria rankings are mobile affordability, mobile speed and broadband speed.

Table 8.1
Digital Quality Life (DQL) Index: Philippines

Pillars And Criteria	Rank (Out 110 Countries)	Remarks
A. Internet Affordability	72nd	-
• Time to work to afford the cheapest mobile internet in seconds	104th	1914
• Time to work to afford the cheapest mobile internet in minutes	72nd	301
B. Internet Quality	20th	-
• Mobile Speed	84th	20.49Mbps
• Broadband Speed	78th	31.37Mbps
• Mobile Internet Stability	23rd	-
• Broadband Internet Stability	1st	-
• Mobile speed improvement	1st	-
• Broadband speed improvement	1st	-
C. Electronic Infrastructure	63rd	-
• Individual using the internet per 100 inhabitants	58th	77.00 per 100 inhabitants
• Network readiness	71st	-
D. Electronic Security	63rd	-
• Cybersecurity	31st	-
• Data Protection Laws	High	Score: 2
E. Electronic Government	67th	-
• Online Service Index	57th	-
• Artificial Intelligence Readiness	70th	-

Source: The Surfshark

In 2021, a study conducted by Pulse Internet Society revealed that the Philippines had an Internet Resilience Index of 45.42% and was ranked 23rd out of 37 Asia-Pacific (APAC) countries and 7th in Southeast Asia.[133] The study describes resilient internet as an internet connection which maintains an acceptable level of service in the face of faults and challenges to normal operation. This Index is a composite indicator built from 30 different indicators categorized into 11 dimensions and four pillars, namely: Infrastructure, Performance, Security, and Market Readiness.

Key reforms were also initiated through the issuance of a policy on pole, fiber ducts, and cable laying pursuant to the Joint Memorandum Circular No. 01 series of 2020[134] and Joint

[133]Mitchell, Robbie, "Philippines Internet Resilience Trending in the Right Direction." Pulse Internet Society https://pulse.internetsociety.org/blog/philippines-internet-resilience-trending-in-the-right-direction. Last accessed on 14 June 2023
[134]Joint Memorandum Circular by ARTA along with the Department of Information and Communications Technology, Department of the Interior and Local Government, Department of Human Settlements and Urban Development, Department of Public Works and Highways, and other key agencies

Memorandum Circular No. 01 series of 2021[135] which provided guidelines for the issuance of permits, licenses, and certificates for the construction of shared Passive Telecommunications Tower Infrastructures (PTTIs) be constructed by Public Telecommunications Entities (PTEs) and Independent Tower Companies (ITCs) duly registered with the Department of Information and Communications Technology (DICT), in order to facilitate the accelerated rollout of telecommunication infrastructure and service projects that will redound to better connectivity.

According to the 2022 Network Readiness Index (NRI) Report,[136] the Philippines was identified as one of the digital transformation champions and credited as the biggest mover in the NRI rankings, jumping 12 notches from its 83rd rank to 71st of the world's 130 economies that are most ready to go digital. It was reported that the "lower-middle and low-income economies appear to be bouncing back to performance levels of network readiness seen prior to the pandemic faster than high and upper-middle income group economies, as evidenced by digital transformation champions such as India, Kenya, Philippines, Cote d'Ivoire, Ethiopia, and Madagascar."[137] The results suggested that, "post-COVID speed towards digital transformation is uneven, yet middle and lower-income economies seem to be recovering faster than more developed peers."[138]

Emergence of Digital Natives in the Workforce

Soumitra Dutta, co-founder and President of Portulans Institute, Dean of Oxford Saïd Business School and co-author of the 2022 NRI Report said that, "Gen-Z and millennials are digital natives who are pointing to the direction of our digital futures. The shape of business and society tomorrow is being influenced by digital technologies in ways that we are only starting to understand today."

The 2022 NRI Report defines "digital natives as people who have never experienced life without internet connectivity and digital devices, a phenomenon that cuts across all regions and income groups" (except those from the more remote and poorer regions of the world). This reflects the geography of mobile phone networks and internet connectivity. Hence, collaboration and information sharing are an inherent part of their culture and lifestyle. They seek to connect with their peers and live fulfilled, sustainable, and flexible lives.

The said report further claims that sooner or later, the "digital natives will soon dominate the workforce, which is why businesses and policy-makers need to anticipate and address their needs, habits, and beliefs." With this prospect, the Report enjoins all relevant government and private institutions to start preparing by asking the right questions, such as "*What does the future of work look like?*," "*How are digital natives going to reshape the roles and responsibilities at the workplace?*," "*Do they possess the required mix of knowledge, technical skills, and social competencies?*," "*Are we collecting the right metrics at the national, regional, and city levels? Particularly about the new, emerging talent demographics and categories of these workers?*".

[135]Entitled, "Revising and Expanding Joint Memorandum Circular No. 01, s. 2020 or the Standard Guidelines for the Issuances of Permits, Licenses and Certificates for the Construction of Shared Passive Telecommunication tower Infrastructure.
[136]Portulans Institute, et. al., "The 2022 Network Readiness Report". Washington DC: Portulans Institute, 2022. https://networkreadinessindex.org/ . Last accessed on 11 September 2023.
[137]Ibid.
[138]Portulans Institute. "NRI 2022 Edition - Press Release." 13 November 2022. https://networkreadinessindex.org/nri-2022-edition-press-release/, Last accessed 11 September 2023.

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Mobile registration and similar initiatives by the MRO's in remote areas in the country often use unstable internet connection, thus it is imperative that faster connection be established. Fostering this overriding program and improving the business environment will be crucial in supporting the demands of the growing Philippine digital economy.

MARINA started to make a significant transition to digital platforms when it assumed the mandate to implement the STCW Convention, as amended in 2014, vis-a-vis the issuance of Competency and Proficiency Certificates required for seafarers onboard ocean-going ships. These issuances should be verifiable online, thus the Seafarers Verification System was developed and verification of certificates by port states, among others can be made through the MARINA official website.

In 2019, the development of the MARINA Integrated Seafarers Management Online (MISMO) System commenced and was gradually implemented. Through the MISMO System, seafarer's certificates can be viewed and printed through the seafarer's account. The certificates may also be verified on the online verification portal using the system-generated serial number and certificate number, which are assigned on all digitally-issued certificates.

Today, the MARINA is embarking on a blockchain enabled certification system that will consolidate all of these systems as well as integrate all other regulatory processes pertaining to ships, including compliance monitoring and enforcement. However, to tap the full potential of digitalization, the government should be able to fund the necessary digital infrastructure.

V. CHALLENGES

Manual transactions that were the norm in MARINA became inefficient upon introduction of digital technology. In comparison to digitalized processes, manual application processes are slower and inconvenient monitoring, audit reports, and communication among offices are prone to delays and inaccuracies. There was a gradual transition to digitalization of processes with the prioritization of frontline service units. However, some of the systems deployed are stand-alone systems that only eases the bottle-neck caused by manual transactions.

The gradual transition to digitalization was fast-tracked due to the global outbreak of the COVID-19. With this, MARINA accelerated the transition to digitalization to provide assistance and convenience to its essential stakeholders.

Below are some of the challenges that hindered the introduction of digitalization and technology solutions in the Philippine maritime industry:

1. **Difficulty in data exchange and access.** The domains of the maritime emerging technologies such as 1) Green Technology, 2) Electric Ships, 3) Autonomous Ships, 4) Blockchain, 5) Big Data and Predictive Analysis, and 6) Cybersecurity encountered challenges in data exchange and access due to the functionality of the different maritime sectors, which poses a huge obstacle in database connectivity.

Through Application Programming Interface (API) Integration, maritime stakeholders can optimize seamless integration that is derived from API economy, enabling new maritime business models.

2. **Limited Digital and Communications Infrastructure.** The limited digital and communications infrastructure and shift to online applications proved to be a major concern with regard to information dissemination and transparency. While MARINA made a significant transition to digital platforms to continue its operation, there is still a need for sufficient budget for the procurement of digital infrastructure under the capital outlay. It is therefore essential that the communication departments use new technologies to respond to the acceleration of the digital and to the new working methods predominant in the Philippine archipelago[139].

3. **Lack of digital literacy skills and digital divide.** The gap in digital knowledge and limited access to technology hinder the adoption and efficient operationalization of digital platforms. This constrained opportunities, overall productivity, economic advancement and competitiveness in the maritime industry.

4. **Unstable internet connectivity to provide seamless services to maritime stakeholders.** At 16.76 megabytes per second (Mbps), the Philippines' mobile broadband speed is much slower than the global average of 32.01 Mbps. There are regions that have LTE, 3G, and 4G connectivity which have a slower connectivity of 7 mbps[140]. Maritime operations are running with this on a daily basis and this greatly affects the productivity of its workers and the services they render to their stakeholders.

5. **Semi-structured data**. The semi-structured data and end-user type of database are predominant scenarios in the stand-alone systems developed in the maritime sector. This proved to be functional but became outdated as the need to integrate data and enhance portability for decision-making became apparent. The lack of reliable data caused operational inefficiencies for agencies using digital platforms. Establishing a culture of digitalization is necessary but there is an acknowledgment the high risk of losing its credibility. There is also a need to standardize the data fields in conformance with existing guidelines and user's needs.

6. **Unstructured disaster recovery.** One of the key challenges posed to the maritime sector by the COVID-19 pandemic was how to maintain operational continuity despite sectors not having the mechanism in place to facilitate remote operations whilst maintaining the previous level of operational productivity.

   Physical backup became an obsolete activity. Leveraging data back-ups became an integral part of data governance. Keeping the systems operational during pandemic relied heavily on the back-end structure that opens to all vulnerabilities in data security.

   While most government agencies took the initiative for the Data Cleaning to calculate

[139] The World Bank, "Harnessing Digital Technologies Can Help Philippines Overcome Impact of Pandemic, Hasten Recovery." 05 October 2020. Last accessed 11 September 2023. https://www.worldbank.org/en/news/press-release/2020/10/05/harnessing-digital-technologies-can-help-philippines-overcome-impact-of-pandemic-hasten-recovery

[140] Ibid.

the present and current state to cure data that contains invalid values, the structural and lexical data variation can cause data loss and irreparable errors.

VI. PROGRAM FRAMEWORK, STRATEGIES, COMPONENTS AND PROJECTS

This overriding program supports the mission to increase access to a reliable, efficient and safe sea transport system. The overall objective of this program is to foster healthy competition within the Philippine maritime industry by providing seamless services; increased efficiency, improved performance and productivity through digital technology transformation and innovation; enhanced systems and infrastructure and strengthened research and development.

Figure 8.1 as being shown illustrates the program framework consisting of the program objectives, outcome, strategies and components of this overriding core program of MIDP 2028.

Figure 8.1
Overriding Program 3 Framework

OVERRIDING PROGRAM 3: IMPLEMENTATION OF A SUSTAINABLE MARITIME INNOVATION, DIGITALIZATION TRANSFORMATION, AND KNOWLEDGE CENTER (SMIDTKC)

OUTCOME: ENHANCED COLLABORATION BETWEEN AND AMONG PRIVATE AND PUBLIC ENTITIES ON DIGITALIZATION AND INNOVATION ACROSS THE MARITIME SUPPLY CHAIN THAT WILL REDOUND IN SIGNIFICANT EFFICIENCY GAINS, SAFER, SECURE AND MORE RESILIENT MARITIME INDUSTRY

SUSTAIN DIGITAL TECHNOLOGY TRANSFORMATION AND INNOVATION	ENHANCE SYSTEMS AND INFRASTRUCTURE	STRENGTHEN RESEARCH AND DEVELOPMENT
• System Design, Development and Implementation • Data Sharing through the Development of MARINA Application Programming Interface (API) Integration Facility • Promotion of ICT Awareness and Competencies Development • Data Sources Identification	• Maritime Data Center/Facility • Information Systems Disaster Recovery Plan • Digitalization of Information and Education Campaign • Global Shipping Information System • Ship Safety Rating System	• Establishment of a Philippine Maritime e-Library • Study on the Applicability of the Geospatial Technology to the Philippine marine environment

1. **Sustain Digital Technology Transformation and Innovation**
This strategy supports the government's direction towards digitalization of government services in the country to make it more accessible to the public. The introduction of digital technology, transformation and innovation will include the following:

   a. **System Design, Development and Implementation**. This program consists of development, maintenance, and updating systems that satisfy the specific needs and requirements of the maritime sector.

   PROJECTS:

   1. **Blockchain Enabled Automated Certification System.** This system aims to maximize the digitalization and automation effort of the Agency. This initiative supports the Marcos Administration's Eight (8) Point Socioeconomic Agenda on "Bureaucratic Efficiency," through enhanced online services for contactless transactions from applications to release of statutory certificates and documents; established protocols for the automation of assessments and inspections; and safety nets and data security for all MARINA online services.

      This system aims to create an information system that will integrate the existing information systems being used by different MARINA service units/offices and will institutionalize a highly efficient information system for MARINA and its stakeholders. This will enable the stakeholders to apply and submit documents online up to issuance of certificates under the following services:

      <u>SHIPS</u>

      1. Shipyard Regulation;
      2. Maritime Safety;
      3. Domestic Shipping;
      4. Franchising;
      5. Overseas Shipping;
      6. Enforcement.

      <u>SEAFARERS</u>

      1. Manpower Development;
      2. Standards of Training, Certification and Watchkeeping (STCW).

      <u>ADMINISTRATIVE PROCESS</u>

      1. Management, Financial and Administrative;
      2. Legal;
      3. Management, Information Systems.

      The blockchain technology project will provide 24/7 online verification of certificates and ensure data protection and security. Meanwhile, the Seafarers module will support mobile applications in accessing MARINA issued certificates and applications.

The development of modules under the Blockchain Project are successfully updated on the MARINA Production Server and Test Server for the following users:

1. MARINA Admin;
2. End-User (Company);
3. End-User (Seafarer).

Full system deployment is expected to be launched by 2024.

Figure 8.2
Blockchain Modules

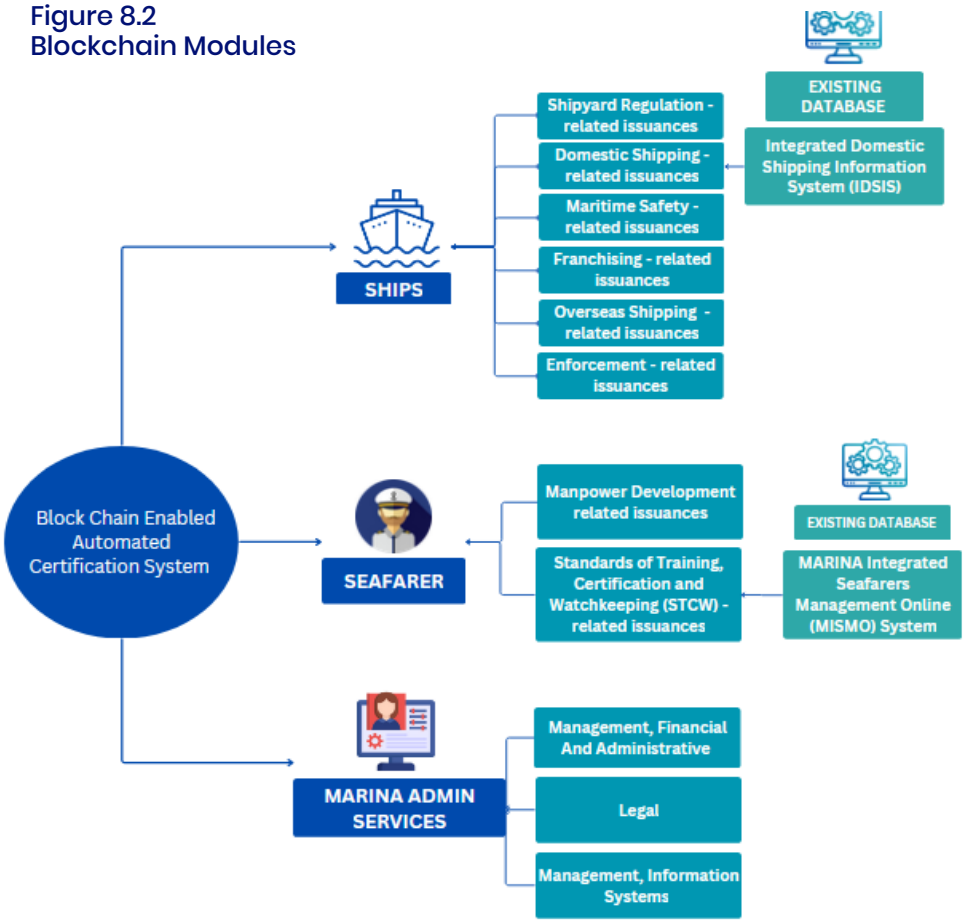
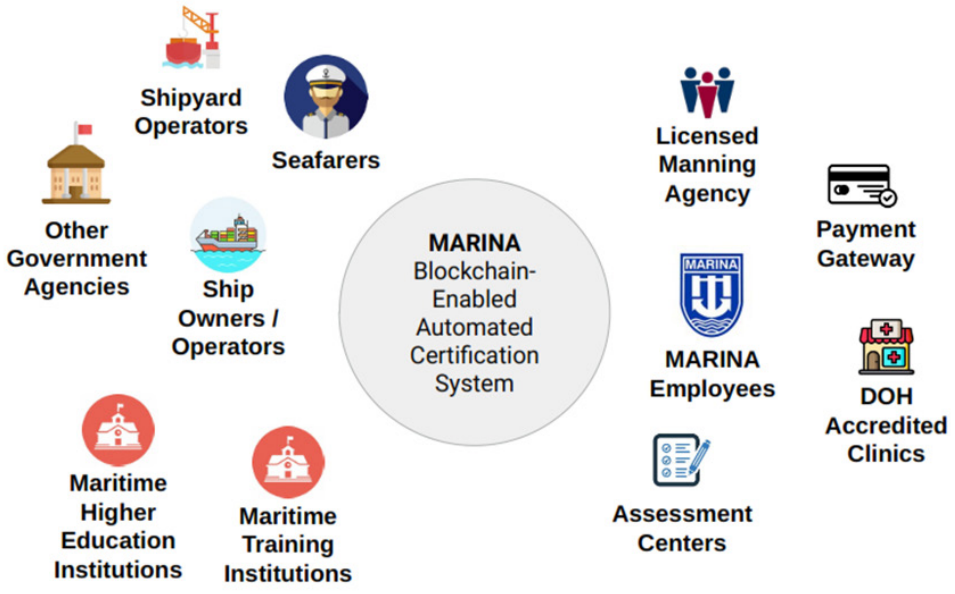


Figure 8.3
MARINA Blockchain Target Users



This MARINA Blockchain Project will update and integrate the following systems of the agency:

i. **MARINA Integrated Seafarers Management Online (MISMO) System**. An online application system that enables seafarers to apply for their STCW documents.

In 2022, the STCW Office enhanced the system for seafarers to download and print their certificates, eliminating the need for personal appearance. All MARINA STCW Certificates are verifiable via barcode or QR Code, depending on the certificate issued.

ii. **Integrated Domestic Shipping Information System (IDSIS)**. A web-based system developed by MARINA that digitizes the registration process of domestic vessels and the application of its corresponding licenses. Due to its nature, the system harmonizes the data from different MARINA offices for an accurate representation of the domestic maritime fleet.

The initial version of the IDSIS include the generation of the following certificates and licenses:

1. Certificate of Ownership;
2. Certificate of Philippine Registry;
3. Bay and River License;
4. Coastwise License;
5. Certificate of Ownership - Recreational Boat;
6. Recreational Boat Certificate;
7. Fishing Vessel Safety Certificate;
8. Cargo Ship Safety Certificate;
9. Cargo Ship Safety Equipment Certificate;
10. Cargo Ship Safety Construction Certificate.

Meanwhile, a user's training was conducted in October 2022 until November 2022 in all MARINA Regional Offices, simultaneous with the deployment of IDSIS. All applications for registration starting January 2023 were processed using the system. The MARINA has undertaken a clean up of Domestic Shipping Data registered prior to 2023 which will be integrated into the MARINA Blockchain Enabled Automated Certification System (BEST).

iii. **MARINA Online Application System (OAS).** A web-based system that provides an integrated seafarer's identity document issuance for both the Seafarers Identity Document (SID) and the Seafarers Record Book (SRB). The system includes an online appointment system, and an online payment gateway which uses Digitized Official Receipt System (DORS) in collaboration with DICT - Cybercrime Investigation and Coordinating Center (CICC) to enhance cyber security protection.

This is on top of the biometric enrollment, verification using facial recognition, and scanning of documentary requirements for SID and SRB. It performs quality check, security and data conformity to the standards set by the International Labour Organization (ILO), International Civil Aviation Organization (ICAO) and International Organization for Standardization (ISO).

In addition to its continuous operation, a supplementary system SRB/SID *Expedite Application System* was developed where an applicant can apply for expedited processing on their document by complying with submission of additional documentary requirements.

iv. **The Maritime Route Rationalization and Information System (MARRIS).** A modular program with software and related tools for an effective route capacity measurement. The main component of the program is the NAVIS software the Automated Route Capacity Measurement Software with three (3) main features:

1. Single Route Analysis;
2. Mode Shift Analysis;
3. Network-wide Analysis.

The project is a collaboration between the MARINA and the PPA on development and validation, and funded by the DOST.

The development of the Single Route Analysis was completed in 2022. Meanwhile, the second phase containing Mode Shift Analysis and Network-wide Analysis is in the pipeline. MARINA is in constant coordination with DOST and the University of the Philippines (UP) on the development of the aforementioned modules.

b. **Data Sharing through the Development of MARINA Application Programming Interface (API) Integration Facility.** This project aims to establish connections between two or more applications from different maritime sectors that keep data in sync, enhance productivity and drive revenue. Its objectives are for the API to be:

1. Discoverable - APIs are easy to find use by the entire maritime sector;
2. Complete/Consistent/Compliant - APIs are high quality and deliver reliable source of data,
3. Reusable - APIs can be easily reused/updated/extended;
4. Secure - Data is secure and compliant with regulations.

Data-sharing using the MARINA API Integration Facility will be operationalized through the following:

i. **Signing of a Memorandum of Understanding (MOU) - Data Sharing.** Establishment of a framework for the collaboration, intended outcomes, and the purpose of the data use. These will include mutual roles and responsibilities of the lead agency and the partner agency.

MARINA will initiate a MOU initially with the DICT and other government agencies by 2024 for their access to relevant data. Subsequently, MARINA shall sign an MOU with relevant stakeholders such as private maritime enterprises, accredited maritime schools and training centers, accredited medical institutions, among others, for access to data for verification.

ii. **Development of API Integration Facility.** Establishment of the Technology Integration Agreement which will cover the following:

1. License Grant;
2. Restrictions;
3. Responsibilities;
4. Support and Updates;
5. Confidential Information;
6. Security;
7. Collection and Use of Information;
8. User Agreement;
9. Intellectual property Ownership;
10. Terms and Termination.

iii. **Data Harmonization.** Simplification and harmonization of existing data from different maritime sectors to provide a holistic vision of the industry can contribute significantly to the reduction of processing time and cost. Harmonizing data used in maritime trades / processes and aligning them with international standards ensures data interoperability among maritime sector domestic and international linkages which includes the following activites:

- **Data Clean-Up** - The process of fixing incorrect, incomplete, duplicate or erroneous data. This involves updating and removing data to correct them prior to data merging to harmonize maritime data;

- **Standardization of Data Fields** - Data standardization is a processing technique of transforming data from different sources into a consistent format that adheres to the standard format. This is critical to facilitate and to improve the use of data relative to data portability and interoperability;

- **Alignment of the Policy** - Policy and IT-alignment leads to more effective performance and use of technology, while a lack of alignment tends to lead to inefficient use of resources;

- **Single storage of data / providing a single source of truth** - The practice of aggregating the data from many systems within the organization to a single location. This will provide decision-makers with a clear scenario of the data to address the obstacle, and optimize data strategy.

c. Promotion of ICT Awareness and Competencies Development.

i. **Users' Training for Developed Systems.** The Users' Training shall be conducted for all newly developed systems to empower workers and promote efficiency and productivity. This would allow the users to familiarize themselves with the digital process, guided by the system owner and/or developers;

ii. **Development of Manuals / User's Guide.** Upon development of a new system, the developers shall provide its users with a manual of instructions on the system's processes, usage, and solutions for common problems that may arise.

Prior to the deployment of MARINA systems, the systems developers shall prepare manuals to be distributed to all MARINA offices to supplement the organized users' training;

iii. **Tutorial Video Productions.** Based on the manual, video productions on the instructions of the system's process and proper usage will be created. It shall efficiently guide the external stakeholders and due to its video format, it shall be easily consumable and understood.

In line with another strategy of the program, the MARINA Digital Studio shall initiate the production of tutorial videos for the agency's processes for both in-person and online.

2. Enhance Systems and Infrastructure

As the technological landscape keeps rapidly evolving, maintenance and updating of MARINA's systems and infrastructure is vital to remain relevant, efficient, and competitive. Enhancing systems and infrastructure aims to progress and sustainably grow as a digital nation.

In order to support the projects intended for the industry without compromising the integrity and quality of service provided by the government, the following projects that will provide the necessary assistance:

a. **Information Systems (IS) Disaster Recovery Plan / Facility.** The development of an IS Disaster Recovery Plan and Facility will cover external and internal threats. The facility will act as a load balancer to all MARINA systems vital in the operational continuity.

i. **Establishment of an IS Disaster Recovery Plan (DRP) and Construction of Disaster Recovery / Load Balancer Facility (DR/LB).** The IS Disaster Recovery Plan (DRP) is an essential part of operational continuity, which will reduce downtime and increase efficiency of service delivery despite disruptions brought about by disasters. It should be noted that the absence of IT infrastructure or Disaster Recovery Facility (DRF) during the pandemic prompted the slowing of operation in the maritime sector.

The absence of a Maritime Data Center and the semi-structured data type that uses different applications by different maritime sectors proved to be a threat to data merging. Profiling of data sources can quantify the data attributes and its statistical significance. Thus, the creation of a formal document that contains detailed instructions on how to respond to unplanned scenarios that affect the maritime infrastructure such as natural disaster, power outages, cyberattack and other disruptive events will be beneficial. System load balancing is an efficient way to maximize operational infrastructure capacity utilization.

ii. **Cybersecurity.** As the program aims to collectively share data between the government sectors and its private stakeholders, there is a need to protect this collected data from unauthorized access. The target of the program is to provide the proper infrastructure in both hardware and software to keep all data protected in compliance with the Data Privacy Act of 2012.

b. Digitalization of Information and Education Campaign (IEC) Materials

i. **Digital Communications**. Direct and proper communication between stakeholders and authority figures with the use of the internet as a main source of accurate information.

ii. **MARINA Digital Studio / MARINA TV**. MARINA increases stakeholders' awareness and engagement with the creation and production of quality maritime-related educational content. It enhances the effectiveness of MARINA digital communication and channels data analytics for continuous optimization in maritime services.

c. Strengthen Research and Development

i. **Establishment of the Philippine Maritime e-Library.** Aims to provide a platform for maritime stakeholders to gain access to reliable and relevant data regarding the maritime industry to aid on further research, development, and decision-making.

PROJECT:

1. **Study on the Establishment of the Philippine Maritime e-library.** Intended project shall be a collection of maritime reference materials contributed by all members of the maritime sector. This covers maritime books, reports, periodicals, research, etc. for the consumption of the public.

   MARINA did initial research on the establishment of the MARINA e-Library hosted within the agency in 2021. In 2022, an in-house development for the MARINA e-Library system was undertaken. Testing will be conducted once a new server is procured. The agency intends to expand its research on the feasibility of a Philippine Maritime E-Library intended to be achieved through API Integration and sequentially, the enhancement of the platform to be used for the aforementioned E-Library.

2. **Study on the applicability of the Geospatial Technology to the Philippine marine environment.** The aim of the study is to ascertain the applicability of Geospatial Technology to the Philippine maritime marine environment to which it can be a leverage to solve maritime related issues such as decarbonization, domestic marine pollution, domestic oil spill, environmental impact etc., embedded on geospatial mapping to identify the location of the affected area and find solutions to address the situation.

VII. RESULTS MATRIX

The Program outcome is enhanced collaboration between and among private and public entities through digitalization and innovation across that will redound in significant efficiency and a safer, secure and more resilient maritime industry.

The impact of this Program as shown in Table 8.2 will be measured by the (1) percentage increase in operational efficiency; (2) percentage increase in workforce engagement; (3) percentage increase in customer satisfaction.

Table 8.2
Program Outcome Indicators for Overriding Program 3

#	Program Outcome Indicators	Baseline (2022)	TARGETS							Means of Verification	Responsible Agency/ Inter-Agency Body
			'23	'24	'25	'26	'27	'28	EOP		
1	% decrease in processing time of transaction		-	25%	10%	40%	50%	50%	50%	Data Logs	MARINA
	Simple	3 days	-	25%	TBD	TBD	TBD	TBD	50%	Data Logs	MARINA
	Complex	7 days	-	20%	TBD	TBD	TBD	TBD	30%	Data Logs	MARINA
	Highly Technical	20 days	-	10%	TBD	TBD	TBD	TBD	20%	Data Logs	MARINA
2	% increase in operational efficiency in regulatory processes	TBD	TBD	TBD	TBD	TBD	TBD	TBD		Data Logs	MARINA
3	% increase in Satisfaction rating		70%	75%	80%	85%	90%	100%	100 %	Survey	MARINA
4	% increase in number of e-library users		-	-	Bl	25%	50%	100%	100 %	Data Logs Number of active users	MARINA
5	Utilization rate of agencies involved in data sharing agreement		0		TBD	TBD	TBD	TBD	100 %		

Table 8.3
Program Output Indicators for Overriding Program 3

OUTPUT INDICATORS	Baseline	TARGETS					
	2022	2023	2024	2025	2026	2027	2028
STRATEGY 1: SUSTAIN DIGITAL TECHNOLOGY TRANSFORMATION AND INNOVATION							
C1. Systems Design, Development and Implementation							
a. Blockchain Enabled Automated Certification System							
1. No. of modules developed / deployed / enhanced	0	6	6	3	3	3	3
2. No. of stand alone systems weaned off	7	2	1	1	1	1	1
3. Percentage of system utilization							
– Ships	0%	50%	100%	100%	100%	100%	100%
– Seafarers	0%	50%	100%	100%	100%	100%	100%
– MARINA Services	0%	50%	100%	100%	100%	100%	100%
b. Maritime Route Rationalization and Information System (MARRIS)							
1. MARRIS Phase 1 - Single Route Analysis Developed	100%						
2. Deployment of MARRIS Phase 1	0	TBD	TBD	TBD	TBD	TBD	TBD
C2. Data Sharing through the Development of MARINA Application Programming Interface (API) Integration Facility							
a. Development of API Integration Facility							
1. Systems developed/enhanced	0	0	0	1	1	1	1
2. Number of agencies with data sharing agreement with MARINA	0	0	1	1	1	1	1
3. Percentage Utilization of agencies involved in data sharing agreement	0	0	0	100%	100%	100%	100%
C3. Promotion of ICT Awareness and Competencies Development							
1. Number of ICT seminars/workshops conducted		6	6	1	1	1	1
2. Number of User's guide / manual published (depends on number of systems developed)		6	6	TBD	TBD	TBD	TBD
STRATEGY 2: ENHANCE SYSTEMS AND INFRASTRUCTURE							
C1. Establishment of Maritime Data Center / Facility							
1. Established of Maritime Data Center / Facility	0	TBD	TBD	TBD	TBD	TBD	TBD
C2. Information Systems Disaster Recovery Plan / Facility							
a. Establishment of Disaster Recovery Plan (DRP) and Construction of Disaster Recovery / Load Balancer Facility (DR/LB)							
1. Establishment of Disaster Recovery Plan (DRP)							
2. Establishment of Disaster Recovery / Load Balancer Facility	0	TBD	TBD	TBD	TBD	TBD	TBD
b. Cybersecurity							
1. Number of Training conducted	0	0	1	1	1	1	1
2. Number of internal policy developed	0	0	1	1	1	1	1
C3. Digitalization of Information and Education Campaign (IEC)							
a. MARINA Digital Studio / MARINA TV							
1. Number of informational videos broadcasted	12	24	24	24	24	24	24
2. Number of newsletter published	12	12	12	12	12	12	12
3. Number of digital content published on online platforms	60	60	70	70	80	90	100
STRATEGY 3 STRENGTHEN RESEARCH AND DEVELOPMENT							
C1. Study on the Establishment of the Philippine Maritime E-Library							
1. Study on the Establishment of Philippine Maritime E-Library	Approved MARINA E-Library Concept Paper	Development of System for MARINA E-Library	Establishment / Implementation of MARINA E-Library (dependent on server budget)	Feasibility study on Philippine Maritime E-Library	TBD	TBD	TBD
C2. Study on the Applicability of Geospatial Technology							
1. Number of collaborations through MOUs/MOA amongst maritime e-libraries in the world			Feasibility Study on Geospatial Technology	TBD	TBD	TBD	
2. Percentage of e-library users		TBD					

Chapter

09

Enabling Program

Adoption and Implementation of an Effective and Efficient Maritime Administration Governance System

Chapter IX

ADOPTION AND IMPLEMENTATION OF AN EFFECTIVE AND EFFICIENT MARITIME ADMINISTRATION GOVERNANCE SYSTEM

I. OVERVIEW

The maritime administration and governance system of the Philippines is unique as compared to other maritime administration as its institutional framework consists of various government agencies, including government financing institutions assuming specific functions for the development, regulation, supervision, and monitoring of the maritime industry to make it more competitive and productive. Presently, several government agencies and institutions are currently implementing plans, programs and policies which by themselves influence the development of the maritime sector of the Agency.

Although interventions have been implemented through inter-agency collaboration and coordination, in the forms of joint memorandum circulars, joint department orders or Memoranda of Agreements (MoAs), the lack of an integrated maritime industry development plan to ensure that the initiatives of the agencies and institutions complement and reinforce each other to achieve global competitiveness.

Under its current organizational structure, the Department of Transportation (DOTr) is the primary government agency with legal mandate to develop, promote, and regulate a dependable coordinated network of water, land, rail, and air transportation systems and ensure fast, safe, efficient, and reliable transportation services to narrow the geographic divide by connecting the country, its islands and people, with the rest of the world.

The MARINA was established as an attached agency mandated to advance the country's maritime industry through the promotion, development, regulation, and supervision of the domestic and overseas shipping, shipbuilding and shiprepair, boatbuilding, maritime education and training, maritime safety and marine environment protection.

As a result of the review of the 10-Year Maritime Industry Development Plan (MIDP) 2019-2028 that was launched in 2019, MARINA saw the need to come up with an Enabling Program that will fuel its effective implementation. Pursuant to the whereas clause of PD 474, series of 1974, "*it is urgently necessary to provide a strong organizational framework to effect the accelerated and integrated development and effective regulation of shipping enterprises*".

This MIDP Program relating to the adoption of an efficient and effective maritime administration governance system seeks to provide the necessary support to enable the MARINA to discharge its responsibility of implementing the updated MIDP 2028.

II. PROGRAM ASSESSMENT

The MIDP provided a clear framework on the various institutional mechanisms or implementation arrangements for relevant government agencies with identified roles or responsibilities in the accomplishment of a particular project or an initiative in each of the eight (8) key priority programs. However, the effectiveness of such institutional

arrangement, viewed as the primary driver for the implementation of various projects, was not tested in view of the onslaught of the COVID-19 beginning 2020 that practically paralyzed the national economy until 2022. Given the unprecedented impact of the global health pandemic on the maritime and shipping industry, the MIDP was reviewed to make it more relevant, responsive and attuned to the emergence of the "new normal," as well as the anticipated impact of technological innovations, artificial intelligence, decarbonization, and their associated challenges in the maritime and shipping industry. Nonetheless, the MIDP included programs or projects which can be implemented within the purview of the MARINA mandates, and those which the Agency plays a supporting function with partner-agencies identified as the lead.

Noting that majority of the year-on-year targets of the MIDP from 2020 to 2022 were not fully carried out, the MARINA, in taking into account of the need to provide appropriate support for the continued issuance of STCW-related certificates and ILO-related documents to Filipino seafarers to secure their employment, and to ensure that domestic ships operated continuously for the distribution of medical supplies as well as cargoes from one island to another, has stepped up to diffuse uncertainties of the times.

1. **Accelerated automation and online-processing of seafarer-related documents as key initiative to sustain the competitiveness of Filipino seafarers.** As an off-shoot to the strict observance of quarantine protocols, the MARINA accelerated the automation and online processing of seafarer-related applications pertaining to the issuance of COP, COC and other STCW-related issuances. The information system serves as a platform for concerned seafarers to file their applications and, pay the corresponding fee online, and receive their QR coded certificates online.

2. **Strengthened cooperation between, and among partner-agencies through formal partnerships as a means for integration and alignment of functional mandates and organizational expertise, plans and resources.** A benefit of inter-agency consultation and focus group discussions to resolve issues that pertain to specific mandates including of sharing of expertise and resources is the forging of formal partnerships through MoAs or MoU. From 2019 to 2022, the MARINA was able to enter eight (8) partnerships related to science and technology, shipbuilding, environment protection, advance maritime education and training, good governance, to quality management systems.

3. **Employment and adoption of virtual platforms for capacity building, consultations with stakeholders, and information dissemination through digital and social media platforms.** Seizing opportunities brought about by the COVID-19 pandemic, the MARINA pursued a number of highly technical capacity building programs for its suitable personnel through virtual and hybrid platforms. These include those delivered and facilitated by the IMO in the areas of maritime education, training and certification system as well as marine accidents and casualty investigations, maritime safety and flag state implementation; those arranged in-house and facilitated by the CSC, ARTA, DAP, among many other entities. It also proved the efficiency of utilizing the Agency's official social media platforms in the dissemination of information to maritime stakeholders.

4. **Availability of government training facilities in the development of expertise of maritime administration personnel.** Given that majority of employees entered the Agency without, or with limited background on the basics of the maritime industry or in maritime affairs, the pandemic opened opportunities for collaboration with government

agencies in managing or hosting training centers, or training institutes as possible venues for capacity building programs for maritime administration personnel. With this, the MARINA launched its MarTI in Bacolod City in 2021, which was a commitment made during the MEPSEAS, that will serve as a venue for the conduct of relevant training programs for suitable personnel in the area of marine environment protection.

III. CHALLENGES

The challenges identified and presented on this Program are those matters pertaining to the MARINA as the government agency that is vested primarily with the responsibility of ensuring the effective and full implementation of the updated MIDP 2028.

1. **Obsolete Organizational Structure.** MARINA's organizational structure under PD No. 474, series of 1974 is no longer responsive to the growing demands and challenges of the fast changing landscape of the national and international maritime industry. The Agency's presence is limited to areas where it has regional or extension offices. Unlike other government agencies with frontline services, the MARINA does not have Regional Offices in Cagayan Valley (Region 2); Central Luzon (Region 3); National Capital Region (NCR); and the MIMAROPA Region (Region 4-B). It has also taken on additional functions while still retaining its original plantilla positions from its creation in 1974 when it was performing considerably less functions. Likewise, the Agency has yet to secure approval for the retention of 50% of its collection from fines, penalties, fees and charges to fund its promotional and developmental programs, projects, and activities.

2. **Weak institutional capacity to implement a comprehensive and medium term maritime industry development plan as a result of the Agency's primary focus in the discharge of its regulatory and supervisory functions over its promotional and developmental activities.** Since its creation in 1974, the MARINA focused the discharge of its regulatory and supervisory activities owing to the demands for more aggressive approach in ensuring the seaworthiness of ships operating in the domestic shipping trade. To fully realize the strategic shift for the Central Office to perform promotional and developmental programs, the MARINA has yet to pursue aggressive efforts for massive capacity building for its officials and employees as well as come up with a medium-term research agenda with the immediate view to establishing baselines for the maritime sector for evidence-based strategic planning for the Agency.

3. **Relatively small administrative agency to interface with Departments to pursue a comprehensive development plan for the maritime sector.** Noting that there is not one government agency that has taken the driver's seat to steer the maritime sector towards a single direction, the MARINA was envisioned to lead the formulation and implementation of a comprehensive maritime industry development through the MIDP. However, it was confronted with the dilemma of bringing together government agencies that have direct participation in the effective implementation of the Plan since these government agencies that are either Departments by themselves or agencies under different Departments. While inter-agency mechanisms have been developed for the coordination of plans and programs, there is at present a limited ability to ensure the alignment of the priorities of the various government agencies and entities with the primary development objective of the maritime sector.

4. **Inadequate Baseline for Target Setting for the Maritime Sector.** Target setting for the maritime sector remains a huge challenge in view of the unavailability of information or data to determine baselines of major maritime industry activities. This is mainly because the maritime industry is a complex organization that involves series of activities, some of which fall under transport and agriculture, manufacturing, cruise tourism, maritime ancillary business, and maritime education and training, as evidenced by the large number of government agencies and instrumentalities with development, promotion, regulation and oversight functions.

5. **Tedious Treaty Ratification/Accession and Domestication of International Instruments.** As a responsible member of the international maritime community, the Philippines remains saddled with the challenge of ratifying or acceding to international maritime conventions and instruments with which it is a State Party. Accordingly, it takes numerous years before a national provision of a Treaty or an international instrument is enacted by Congress.

6. **Weak narratives to highlight the importance of the maritime sector in the over-all national economic agenda.** Advancing the maritime sector agenda in the mainstream of country's national economic development has been significantly difficult for the MARINA to pursue in view of its inability to come up with strong narratives to generate awareness and secure support from Congress for the sector's needed reforms including funding for the projects identified in the MIDP.

IV. PROGRAM OBJECTIVE AND OUTCOME

This Program seeks to strengthen the institutional capacity of the MARINA to effectively implement the updated MIDP 2028. This could be realized through the adoption of an expanded organizational structure and staffing plan; embarkation into a competency-based comprehensive human capacity building program; adoption of good governance practices; and communication of strong narratives for lobbying funding support for the various projects identified in the MIDP 2028.

From 2023-2028, the MARINA has to transition itself as a reputable and responsive frontline agency in order to realize its critical role in the national socio-economic agenda of the government through the accelerated integration of the maritime industry of the country. Banking on the inter-agency commitments and support conveyed during the series of consultations and focus group discussions, the MARINA, as a start-up, has to pursue formal arrangements with relevant government agencies whose participations are necessary for the completion of an identified project or initiative in the MIDP 2028. It should also work on the issuance of a national policy creating a national coordination mechanism, composed of several government agencies performing maritime-related functions with primary responsibility for providing the MARINA with the necessary operational, strategic support and policy guidance to ensure that the intended goals and outcomes are achieved and fully realized.

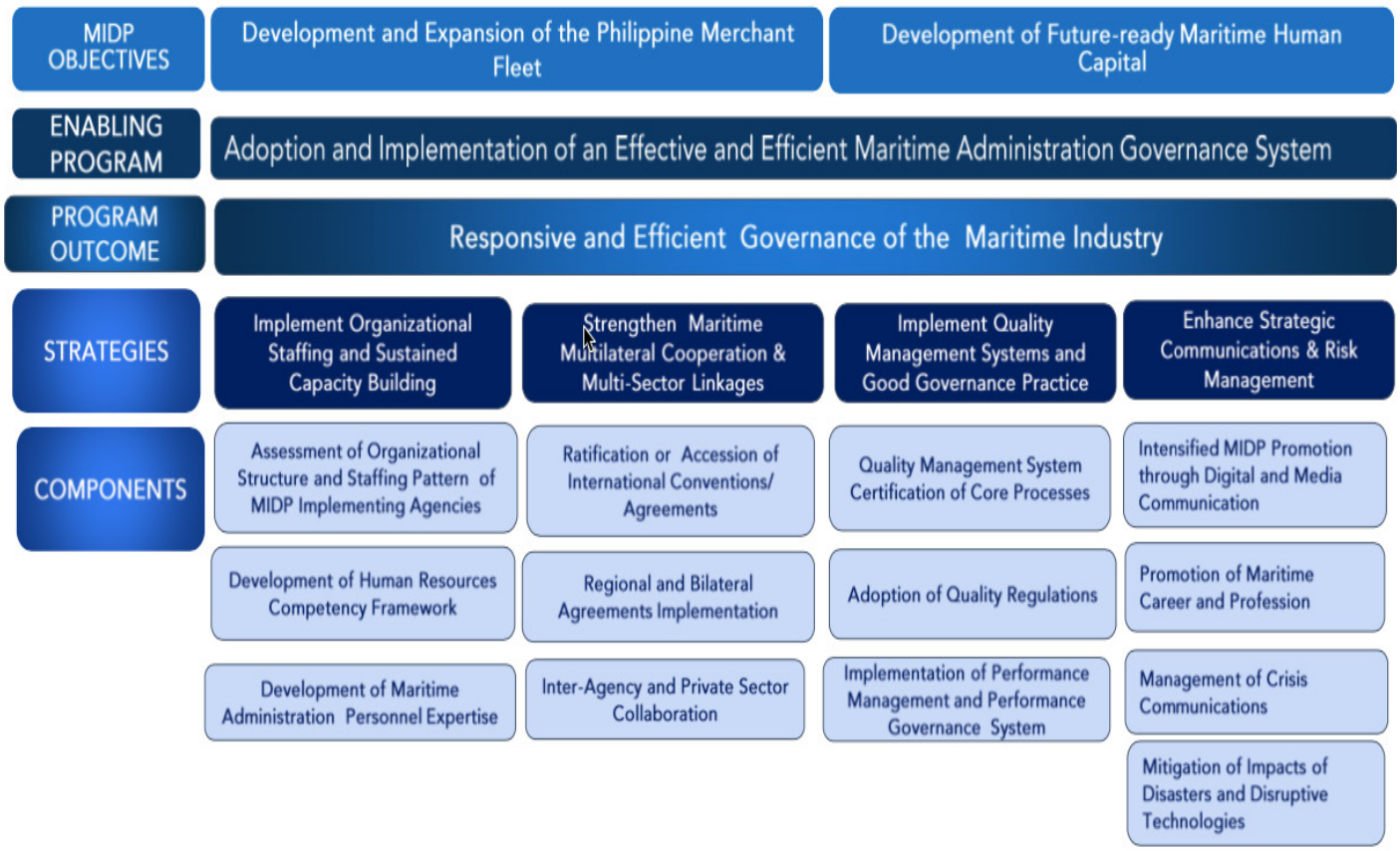
By 2028, the MARINA shall have achieved a strong and dynamic maritime Authority, manned by competent workforce, and responsible for realizing the huge potential of the country's maritime industry for socio-economic development.

But to do this, the MARINA has to build on its strengths given its existing limited resources and start from prioritizing those measures that can be achieved from 2023 to 2028.

V. PROGRAM FRAMEWORK, STRATEGIES AND COMPONENTS

The Framework for the Enabling Program below illustrates how the identified outcomes are achieved through the employment of various strategies and program components.

Figure 9.1
Enabling Program Framework



STRATEGIES AND COMPONENTS

1. **Implement Organizational Staffing and Sustained Capacity Building.** The successful implementation of the MIDP rests upon a strong organizational structure that is manned by competent workforce. As such, the MARINA will pursue a continuing organizational development program with emphasis on the following: (a) Lobby for MARINA's organizational expansion through the creation of additional offices and plantilla positions; (b) Development of Human Resources Competency Framework; (c) Development of Maritime Administration Personnel Expertise; and (d) Implementation of Maritime Administration Curriculum as part of the core of the internal capacity building program for MARINA personnel.

2. **Strengthen Maritime Multilateral Cooperation and Multi-Sector Linkages.** As an archipelagic state with a strong interest in seafaring and shipbuilding industries, the Philippines has to pursue an aggressive effort to undertake maritime multilateral cooperation and bilateral arrangements with other Maritime Administrations and regular forum for representatives of foreign principals of various manning agencies operating in the Philippines. In this way, the Philippines would be able to promote the flag registry and secure the continued recognition of Philippine certificates issued under revelant international conventions or agreements.

   Recognizing the important role of local maritime industry organizations and associations, the MARINA will strengthen its partnership with them through the establishment of a regular channel for communications, focus group discussions, public consultations, among other mechanisms. Cultivating a proactive collaboration between the MARINA and these local maritime industry associations will elevate trust and confidence on the work of the maritime administration.

   To establish presence in the international maritime community, the MARINA will endeavor to submit Philippine papers as part of the agenda items of meetings of the International Maritime Organization (IMO), the Maritime Transport Working Group (MTWG) of the Association of Southeast Asian Nations (ASEAN), the Transportation Working Group (TPT) of the Asia Pacific Economic Cooperation (APEC) and other international or regional multilateral associations.

3. **Implement Quality Management Systems (QMS) and Good Governance Practices.** This will be pursued through the Certification of all MARINA offices, both Central and Regional Offices under ISO 9001:2015, Certification for Levels III (Proficiency) and Level IV (Institutionalization) of the Performance Governance System (PGS) under the Institute for Solidary in Asia (ISA); Certification for Level III (Deregulated) and recognition for the MARINA as Center for Excellence in Human Resources Management and Seal of Excellence in Human Resources Management by the Civil Service Commission (CSC). It will also strengthen the implementation of Customer Service Satisfaction and regulatory reforms to ensure that MARINA regulations do not impose undue or unnecessary burdens on its stakeholders.

4. **Enhanced Strategic Communications and Risk Management.** This will be implemented through the adoption of a comprehensive Communication Plan to generate deeper awareness of the potentials and hidden wealth of the maritime industry, including the importance of the MIDP 2028 in the attainment of the Administration's priority socio-economic agenda. An Information and Education campaign for the MIDP 2028 may come in various forms such

as, but not limited to the following: audio-video production of the salient points of the Plan; regular conduct of symposia, conferences or focus group discussions; digital publication of collaterals, assessment reports, policy papers, if any; and information campaign visits to higher maritime educational institutions, maritime associations or organizations shall be conducted to increase presence of the maritime sector to key stakeholders, as well as the production of print materials for dissemination in various parts of the country.

It will likewise develop a Risk Management Policy for major initiatives under the MIDP in order to avoid or mitigate their impact on the completion of the desired programs or projects of the Plan. Through this program, potential problems will be identified before they occur. In case of opportunities, it will be able to leverage and cause them to occur for the benefit of the targets set for the MIDP. It is therefore necessary for the MARINA to support its Risk Management Policy by coming up with a risk reporting guideline, statement of risk appetite, risk mitigation strategy, and risk eliciting techniques among others.

As part of its responsibility as Flag State Administration for the Philippines, the MARINA is compelled to institute measures to lead in the development of a National Action Plan for the mitigation of impacts on Philippine-registered ships and Filipino seafarers on-board ocean going ships as a result of security concerns in some parts of the world, particularly the growing tensions in the West Philippine Sea. Careful consideration should likewise be made on the impact of decarbonization, artificial intelligence and autonomous ships on existing Philippine-registered ships and on the upskilling and re-skilling of Filipino seafarers.

VI. LEGISLATIVE AGENDA

Table 9.1
Legislative Agenda for Enabling Program

No.	Title	Brief Description
1	Draft Bill Amending Presidential Decree No. 474, series of 1974 otherwise known as the Maritime Industry Decree of 1974	This proposed measure seeks to consolidate and update functions provided by various legislative enactments, and to modernize the organizational structure of the MARINA
2	Issuance of Executive Order Adopting the MIDP	This will provide legal basis for the adoption and for participation of relevant government agencies in the formulation, implementation and assessment of the MIDP
3	Joint Resolution of the House of Representatives and the Senate authorizing the retention of 50% of MARINA's collection from fees, charges and fines to finance the various projects of the MIDP 2028	The amount collected will be used to fund projects identified in the MIDP 2028. This will likewise operationalize Section 20 of PD 474, series of 1974 which specifically provided the authority of the MARINA to retain a portion of its income. This has never been explored since 1974
4	Approval of the proposed MARINA Organizational Structure and Staffing Plan (OSSP)	The proposed MARINA OSSP will expand the Agency's organizational structure and increase the number of its employees to perform mandates and functions assigned to the MARINA over the years by reason of legislative enactment/ executive issuance or part of the country's compliance with relevant international conventions under the auspices of the IMO
5	Legislative Enactment for the creation of Regional Offices of the MARINA in the (1) National Capital Region (NCR); (2) Cagayan Valley Region; (3) Central Luzon Region; (4) MIMAROPA Region	To ensure the presence of the Agency in the various Regions that will improve the accessibility of government services for the public

VIII. RESULTS MATRIX

Table 9.2
Results Matrix for Enabling Program

No	PROGRAM OUTPUTS	Baseline 2021	YEAR							MOV	OPR
			23	24	25	26	27	28	EOP		
1	**Institutional Capacity Building Strengthened and Implemented**										
	a. No of MARINA personnel certified as ISM Auditors, QMS Lead Auditors, Flag State Inspectors/ Auditors	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Certificates	MARINA
	b. No of MARINA personnel trained under the Maritime Administration Curriculum	0	0	80	80	80	80	80	400	Certificates	MARINA
	c. No of MARINA personnel certified as Trainors by relevant certifying/ accrediting entities	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Certificates	MARINA
2	**Institutional**										
	a. No of new formal partnerships/ agreements signed	15	3	6	6	6	6	6	33	Signed MOUs MOAs	MARINA
	b. No of Philippine papers submitted to relevant international organizations and accepted as agenda item	0	3	3	3	3	3	3	18	Published Agenda	MARINA
3	**Quality Management System and Good Governance Practice Implemented**										
	a. No of Offices Certified under ISO 9001:2015 standards	1	-	12	4	4	4	1	25	ISO 9001: 2015	MARINA
	b. HR PRIME Accreditation for Level III and attainment of Center and Seal of Excellence for HR PRIMA	Level II	-	1		1		1	3	Plaques	CSC/ MARINA
	c. PGS Revalida completed for Proficiency and Institutionalization Stage	Level II	-	1		1			2	Plaques	ISA/ MARINA
	d. No of MARINA policies subjected to and completed the RIA process	0	0	8	8	8	8	8	40	Certificates from ARTA	ARTA/ MARINA

No	PROGRAM OUTPUTS	Baseline 2021	YEAR							MOV	OPR
			23	24	25	26	27	28	EOP		
4	**Strategic Communications and Risk Management Enhanced**										
	a. No of information/ learning materials promoting the MIDP published digitally	20	20	30	30	30	30	30	170	Records	MARINA
	b. No of actual/physical engagements with relevant government agencies and private sector associations disseminating key programs of the MIDP 2028	0	10	15	15	20	20	20	100	Reports	MARINA

INSTITUTIONAL ARRANGEMENTS

The MARINA will enter into formal arrangements with relevant government agencies on areas that would further the realization of the goals and objectives of the MIDP 2028. For agencies with no MoA or MOU with the MARINA, partnerships will be established with relevant government agencies, including but not limited to the following: DA: BFAR and PFDA; DENR: EMB, NAMRIA; DOF: BOC, BI, and BIR; DICT; DILG: PNP-MG; DOLE: BLE; DTI-BOI and BITR; LBP; NEDA; TESDA; UP-MSI; OCAS, and ULAP.

Chapter

10

Action Plan

Chapter X

ACTION PLAN

A. Projects and Activities Identified Under the MIDP

CORE PROGRAM NO. 1:
MODERNIZATION AND EXPANSION OF PHILIPPINE DOMESTIC SHIPPING INDUSTRY [INCLUDING TOURIST DESTINATION AREAS (TDAS) AND THE COASTAL INLAND WATERWAYS TRANSPORT SYSTEM (CIWTS)]

Projects and Activities	Responsible Agency	Contributing Agency/ies
1. Codification of Domestic Shipping Policies, Rules and Regulations	MARINA	
2. Streamlining of Existing Domestic Shipping Policies, Rules and Regulations to Promote Competition and Ease of Doing Business	MARINA	
3. Feasibility Study Establishing and Rationalizing the Passenger and Cargo Traffic in the Country using MARRIS and PAROLA	MARINA	DOST, UP, NMP
4. Study on the Economic Impact of Existing Tramp Service Operations in the Philippines on Liner Shipping Routes	MARINA	NMP
5. Study on the Effectiveness of the Implementation of RA 11659 and its IRR (to include possible reclassification of the domestic shipping industry from "public service" to "public utility")	MARINA	NMP
6. Domestic Fleet Modernization Program	MARINA	PPA, NMP
7. Development and Implementation of the Alternative Voyage Routing Software for Local Navigation or "ALON" Project	DOST	MARINA
8. Study on the Impact of Fuel Cost (present Excise Tax in Addition to 12% VAT) to shipowners	MARINA	DTI, Domestic Shipping Companies
9. Development Financing Programs/Schemes between MARINA and GFIs for the Modernization of Domestic Shipping	MARINA	DBP, LBP, and other financial institutions
10. Port Project Development/ Enhancement/ Improvement in Congested Routes	PPA	DPWH, MARINA
11. Surveys on the Availability of Infrastructure (e.g., ports and terminals) to Support Cruise Ship Calls	MARINA	NEDA, PPA, Domestic Shipping Operators
12. Road Development/Expansion/Improvement Project in Port Congested Areas	PPA	MARINA, DPWH, LGUs
13. Expansion of the Philippine Nautical Highway System covering the South-Western Mindanao RORO Connection	MARINA	NEDA, PPA, LGUs
14. Automation and Digitalization of Domestic Shipping Service Processes (MARINA BEST)	MARINA	DOST, DICT
15. Development of a Domestic Shipping Portal System	MARINA	DICT

Projects and Activities	Responsible Agency	Contributing Agency/ies
16. Development of Identified CIWT Routes	MARINA	PPA, PCG, LGUs
17. Development of Inter-island Cruising in the Philippines	MARINA	DOT, LGUs
18. Enhanced Information and Promotional Campaign in Tourist Destination Areas (TDAs)	DOT	MARINA, PPA, LGUs
19. Identification of Cruise Routes in the Identified Tourist Destination Areas (TDAs)	DOT	MARINA, PPA, LGUs
20. Development and Promotion of the Domestic Shipping Investment Folio	MARINA	DOF, DTI-BOI

CORE PROGRAM NO. 2:
PROMOTION AND EXPANSION OF THE OVERSEAS SHIPPING INDUSTRY

Projects and Activities	Responsible Agency	Contributing Agency/ies
1. Philippine Ship Registry Bill	MARINA	DOF - BIR, DTI - BOI
2. Adoption of a National Guidance Document on Compliance, Monitoring and Enforcement	MARINA	PCG, Recognized Organizations
3. Implementation of the Ratification of / Accession to International Maritime Organization (IMO) Conventions	MARINA	ICCFRAIMC member agencies, NMP
4. Study on the Promotion of Associated Maritime Services	MARINA	Relevant Agencies
5. Policy on Operational Flexibility of Philippine-registered Ships	MARINA	NTC, BOC, PPA, DOLE, OCAS, PCG

CORE PROGRAM NO. 3:
MODERNIZATION, EXPANSION AND PROMOTION OF THE PHILIPPINE SHIPBUILDING AND SHIP REPAIR INDUSTRY

Projects and Activities	Responsible Agency	Contributing Agency/ies
1. Enactment of Shipbuilding and Ship Repair Bill	MARINA	Government agencies and private sectors
2. Establishment of the Eco-Industrial Maritime Park	MARINA	Government agencies and private sectors
3. Feasibility Study of the following: • Technology Efficiency • Development of Maritime Hub[141] • Value and Cost Chain	MARINA	DTI – BOI , NEDA, DOF

[141] 2028 MIDP

Projects and Activities	Responsible Agency	Contributing Agency/ies
4. Skills Mapping Projects	MARINA	TESDA
5. Feasibility Study on the Viability of Localization of Shipbuilding Materials	MARINA	DTI – BOI, NEDA
6. Environmental Compliance Project	MARINA	DENR, LGUs
7. Business Continuity Plan Template (suited for shipyards; how business will continue despite calamities, disruption, pandemic, etc)	MARINA	NEDA, DTI-BOI
8. Research projects for modernization Transport System Technology such as: • Hybrid Trimaran Fast Craft Passenger-Cargo using Multi Engine and Alternative Energy Sourced from Ocean Waves • Severe Weather Amphibious Navigator • Hull Design Standards for Philippine Sea Typology • Design and development of MASS prototype	DOST DOST DOST DOST	MARINA, LGUs, UP MARINA, UP MARINA, UP MARINA, UP
9. Feasibility Study on the Establishment of Ship Recycling Facilities in the Philippines	MARINA	DENR, environment organizations
10. Development of Attractive Financing Program . Products for the SBSR Industry	DBP, LBP and other financial institutions	MARINA

CORE PROGRAM NO. 4
PROMOTION OF HIGHLY SKILLED AND COMPETITIVE FILIPINO MARITIME WORKFORCE

Projects and Activities	Responsible Agency	Contributing Agency/ies
Strategy 1: BROADENING MARITIME CAREER ENTRY AND SUSTAIN UPGRADING OF COMPETENCES		
1. Development of Ladderized Maritime Education and Training	CHED	MARINA, TESDA, DepEd, MHEIs/MTIs, NMP, UP, Private sector, PAMI, PAMTCI, PRC
2. Development of New Bridging and Reintegration for Maritime Programs	CHED	DMW, MARINA, TESDA, DepEd, NMP, UP, MHEIs/MTIs
3. Strengthening the Bridging Program for Electro-Technical Officers (ETO)	CHED	MARINA, TESDA, DepEd
4. Strengthening of Senior High School Maritime Track	DepEd	MARINA, TESDA, MHEIs
5. Development of Professional Education and Training Standards for the Shipping and SBSR industry	CHED, TESDA	MARINA, PMMA, MHEIs, NMP, SONAME

Projects and Activities	Responsible Agency	Contributing Agency/ies
6. Development of professional education and training standards relating to ports	CHED, TESDA	MARINA, PPA, PMMA, MHEIs, NMP
7. Development of professional education and training standards relating to logistics	MARINA	DTI
8. Scholarship Grants for Maritime-related Programmes from Reputable Universities and Institutes Worldwide.	MARINA	NEDA, DOTr, DOST, PPA, PCG, CHED, NMP, Maritime Universities Maritime Charity Association and foundations
9. Train the Trainers Program for Technical Courses for Seafarers and MARINA Personnel	MARINA	(Respective Agencies' training institutes) PCG, PPA
10. Development of Standardized Training for Welders, Fitters and Machinists for Onboard Works	TESDA, MARINA	Private Sector, Academic and Training Institutions
11. Development of Standardized Training Programs for Manpower in SBSR	TESDA	MARINA, SONAME, Training Institutions
12. Development of Training Standards for Fishers in Preparation for the Philippines' Compliance with ILO Convention 188, and the STCW-F	BFAR, TESDA, CHED, MARINA, DMW	Training Institutions, DOLE
13. Development of Professional Education and Training Standards for Ship Chandling Management.	CHED, TESDA	Academic and Training Institutions
14. Development of an Institutionalized Maritime Career Advocacy	MARINA	CHED , TESDA, DepEd, Academic and Training Institutions, DOLE
Strategy 2: ENHANCEMENT OF SYSTEMS AND INFRASTRUCTURE		
15. Development of Filipino Seafarers Portal	MARINA	DMW, DOH, Manning Agencies, Medical Clinics
16. Integration of Seafarers Record Book (SRB) amd Seafarers Identification Document (SID) regulatory processes with the MARINA Integrated Seafarers Management Online (MISMO)	MARINA	
17. Integration of Onboard Training Portal in the System of MARINA	MARINA	CHED Shipping companies
18. Electronic Training Record Book (E-TRB) for Seafarers	MARINA	CHED

Projects and Activities	Responsible Agency	Contributing Agency/ies
19. Establishment, Operationalization and Management of Training Hubs for Seafarers on Board Fishing Vessels	MARINA, BFAR	DMW, OWWA, DOLE
Strategy 3: PROMOTION OF FAIR TREATMENT, WELFARE AND WELL BEING		
20. Study on Factors Affecting Stress of Filipino Seafarers Boarding Ocean-going Vessels, Sexual Abuse and Harassment, Bullying, and Gender Sensitivity	Shipping Companies Agencies Institutions Organizations	Relevant Agencies
21. Profile of Filipino Women in Maritime	MARINA	Shipping Companies Agencies Institutions Organizations
22. Strengthening of a Mental Health and Wellness Program for Seafarers, Shipyard and Port Workers, and Maritime Administration Personnel	MARINA, DMW	Shipping Companies Agencies Institutions Organizations
Strategy 4: STRENGTHENING OF RESEARCH AND DEVELOPMENT		
23. Study to Support the Development of Future-ready Maritime Workforce	MARINA, DMW, NMP	Shipping Companies and other concerned or relevant agencies

OVERRIDING PROGRAM NO. 1:
ENHANCEMENT OF MARITIME TRANSPORT SAFETY AND SECURITY [MERCHANT SHIPS AND FISHING FLEETS]

Projects and Activities	Responsible Agency	Contributing Agency/ies
1. Codification and Streamlining of Maritime Safety Rules and Regulations	MARINA	PCG, BFAR
2. Codification and Streamlining of Maritime Transportation Security Regulations (TSRs) and relevant Transport Security Policies and Regulations	OCAS	MARINA, PCG, PNP-MG, PN, PPA and other port authorities
3. Codification and Streamlining of Rules relating to the Enforcement of Maritime Safety Rules and Regulations	PCG, MARINA	
4. Implementation and Enforcement of the Security Program for Sea Transport and Maritime Infrastructure	OCAS	Maritime Security Committee (MARSEC)
5. Ratification of 2012 Cape Town Agreement (CTA) Convention	MARINA	BFAR, PCG
6. Ratification of the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA) 2005 Protocol	PCG	ICCFRAIMC Members
7. Enhancement of Emergency Response Capability	PCG	PNP-MG, PPA and other authorities
8. Modernization of Communication System and Aids to Navigation	PCG	NTC, PPA
9. Updating of Hydrographic Services in Navigational Sea Lanes (as a sequel to the established navigational sea lanes)	NAMRIA	PCG
10. Application Programming Interface (API) (Information Sharing under the SMIDTKC Program)	MARINA	With relevant agencies
11. Enhancement of Information Dissemination Strategy on Maritime Safety and Security	MARINA	With relevant agencies
12. Development of an Integrated Database System for Monitoring of Maritime Accidents and Incidents involving Philippine Merchant and Fishing Fleets	MARINA	PCG
13. Implementation of Real-time Data Generation of the Result of Compliance Monitoring and Enforcement System	MARINA	With relevant agencies
14. Enactment of a law creating or establishing an independent safety investigation body; Philippine Transport Safety Board	DOTr	MARINA, PCG

OVERRIDING PROGRAM NO. 2:
PROMOTION OF ENVIRONMENTALLY SUSTAINABLE MARITIME INDUSTRY

Projects and Activities	Responsible Agency	Contributing Agency/ies
1. Formulation of national policies for the implementation the following instruments: a. International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978, or "MARPOL 73/78" including the following Annexes: b. The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention), 2004 c. The International Convention on the Control of Harmful Anti-fouling Systems in Ships (AFS Convention), 2001 d. Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972, as amended e. 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 f. International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990 g. International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992 h. International Convention on Civil Liability for Oil Pollution Damage (CLC), 1992	MARINA, PCG, PPA	OP, DOTr, DOE, BFAR, SBMA, CPA, DFA, DENR, DOH, DOST, CCC, LGUs, ICCRIMC members, Academe
2. Ratification of the Hong Kong Convention	MARINA	DOH, DENR, Shipyards, Shipbreakers, Scrap Collectors, Recycling Associations, Manufacturing Firms, Class Society
3. Creation of the Marine Environment Protection Development Service (MEPDS) unit in MARINA	MARINA	DOTr, DBM, CSC
4. Development of Integrated MEP Information System (IMEPS)	MARINA	PCG, DICT, PPA, BFAR, DENR, CCC, LGUs, Shipping Companies, Shipyards
5. Development of E-learning Modules on Marine Environment Protection	MARINA, PPA, PCG	DOST, DENR, DOE, TESDA, NMP, BFAR, Academe, CHED
6. Development of IEC Materials and Collaterals	MARINA	DOST, DENR, DOE, TESDA, NMP, BFAR, Academe, CHED
7. National Strategic Plan for Marine Environment Protection (NSP-MEP)	MARINA, PCG, PPA	OP, DOTr, NEDA, DOE, DFA, BFAR, CPA, SBMA, DBP, DENR, DOH, DOST, CCC, LGUs, ICCFRAIMC members, Academe

Projects and Activities	Responsible Agency	Contributing Agency/ies
8. Annual MEP Forum	MARINA	OP, DOTr, PPA, PCG, CPA, BFAR, SBMA, DOST DENR, CCC, DOE, DOH, DBP
9. Exhibit of Best Practices	MARINA	DOTr, PPA, PCG, CPA, SBMA, BFAR, DOST, DENR, CCC, DOE
10. Development of Technological Solutions for the Prevention of Marine Pollution from Ships	MARINA, PCG, PPA	DOST, UP, NMP
11. Development of Technological Solutions for the Management of Biofouling, and Decarbonization	MARINA, PCG, PPA	DOST, CCC, Academe, NMP, BFAR, Shipyards, Shipping Companies
12. Development of Technological Solutions for the Promotion of GHG Emission from Ships	MARINA, PCG, PPA	DOST, CCC, BFAR, Academe, NMP Shipyards, Shipping Companies
13. Development of Technological Solutions on the Underwater Noise Emission from Ships	MARINA, PCG, PPA	PCG, PPA DOST, BFAR, Academe, NMP Shipyards, Shipping Companies

OVERRIDING PROGRAM NO. 3: IMPLEMENTATION OF A SUSTAINABLE MARITIME INNOVATION, DIGITALIZATION, TRANSFORMATION AND KNOWLEDGE CENTER (SMITDKC)

Projects and Activities	Responsible Agency	Contributing Agency/ies
1. MARINA's BEST or Blockchain Enabled Automated Certification System	MARINA	DICT
2. Signing of Memorandum of Understanding (MOU) - Data Sharing	MARINA	DICT, UP, NAMRIA, BFAR, POEA, PCG, PPA, DMW, BI, NBI
3. Streamlining of Maritime Transportation Security Regulations (TSRs) and other Transport Security Policies and Regulations	MARINA	DICT, UP, NAMRIA, BFAR, POEA, PCG, PPA, DMW, BI, NBI
4. Data Harmonization	MARINA	NAMRIA
5. Tutorial Video Productions	MARINA	KWF, PTV, PIA
6. Establishment of Maritime Data Center / Facility	MARINA	DICT, PSA
7. Information Systems (IS) Disaster Recovery Plan / Facility	MARINA	PCG, DICT

Projects and Activities	Responsible Agency	Contributing Agency/ies
8. Digitalization of Information and Education Campaign (IEC) Materials	MARINA	CHED, DICT
9. Study on the Establishment of the Philippine Maritime e-Library	MARINA	DICT, National Archives of the Philippines, UP, NAMRIA
10. Application of Geospatial Technology	MARINA	PCG, DENR, World Bank, DOST, UP, NAMRIA, PPA
11. Study on the Applicability of the Geospatial Technology to the Philippine Marine Environment	MARINA	PCG, DENR, DOST, UP, NAMRIA

B. Legislative Agenda

CORE PROGRAM NO. 1:
MODERNIZATION AND EXPANSION OF PHILIPPINE DOMESTIC SHIPPING INDUSTRY [INCLUDING TOURIST DESTINATION AREAS (TDAS) AND THE COASTAL INLAND WATERWAYS TRANSPORT SYSTEM (CIWTS)]

Legislative Agenda	Rationale / Key Features	Responsible Agency
1. Amendment to Republic Act 9295 also known as "Domestic Shipping Development Act of 2004"	• Extension of Investment Incentives under Chapter II, Section 4 of RA 9295	DOTr, MARINA, DOF, DBP, BOI, BIR, BOC, NAMRIA
2. Merging of PPA and MARINA through creation of Maritime and Port Administration similar to Singapore	• To simplify planning of port and domestic shipping operation	MARINA, PPA, Stakeholders
3. Amendment of TRAIN Law to exempt excise tax on fuel used by domestic shipping companies in operating their vessel	• 12% VAT + excise tax causes domino effect on prices of goods and services • 50% of their operating cost consumed	MARINA, DOF, BIR

CORE PROGRAM NO. 2:
PROMOTION AND EXPANSION OF THE PHILIPPINE OVERSEAS SHIPPING INDUSTRY

Legislative Agenda	Rationale / Key Features	Responsible Agency
1. An Act Establishing the Scope and Procedure for Philippine Ship Registry, Recognition and Enforcement of Maritime Claims, and Limitations of Liability, as well as Providing Essential Incentives, which Collectively Will Promote a Comprehensive and Orderly Philippine Ship Registry System for the Regulation of Vessels Carrying the Flag State (Philippine Ship Registry System Act)	• To establish the Philippines as a leading maritime nation and respected flag State; • To ensure that Filipino-owned-and-manned maritime fleets or vessels are strengthened and assisted to meet the minimum global standards for reliability, safety, competitiveness, and effectiveness; • To provide protection to merchant marine fleets, and help expand Philippine international trade; • To encourage Philippine vessel acquisition, development, modernization, and expansion through systemized and sustainable Programs; • To provide policies that will attract more ship owners to register under Philippine flag, thus ensuring the country's economic growth; • To align the tax structure for its domestic and overseas shipping fleet to make it competitive; and, • To provide a mechanism for the early adoption and implementation of international maritime regulations and conventions	**Proponent office:** MARINA **With support from:** • OP • Senate • HoR • DOTr • PCG • PPA and other port authorities • DOF/BIR • DTI/BOI • Relevant Private stakeholders
2. An Act Providing for the Full and Effective Implementation and Enforcement of International Maritime Instruments of which the Philippines is a State Party (Maritime Safety, Security and Prevention of Ship-sourced Pollution Act)	• To provide for the full and effective implementation and enforcement of international maritime instruments that cover safety of life at sea, prevention of pollution from ships, load lines, tonnage measurements of ships, and regulations for preventing collisions at sea; • To serve as a platform for the adoption of regulations implementing the technical annexes, provisions and requirements of these international maritime instruments; and • To serve as a mechanism for the full and effective implementation of Port State Control (PSC) guidelines as provided by regional agreements or Memoranda of Understanding.	**Proponent office:** MARINA **With support from:** • OP • Senate • HoR • DOTr • PPA and other port authorities • PCG • NTC

CORE PROGRAM 3:
MODERNIZATION, EXPANSION AND PROMOTION OF THE PHILIPPINE SHIPBUILDING AND SHIP REPAIR INDUSTRY

Legislative Agenda	Rationale / Key Features	Responsible Agency
1. Legislative Issuance for the Comprehensive Development of the SBSR Industry	The Shipbuilding and Ship Repair Bill recognizes the role of the SBSR industry as one of the vital components of the maritime sector. It also highlights the key role of the SBSR industry in the economic growth of the country. The enactment of the Bill would pave the way for the country's global competitiveness on SBSR industry. This will promote additional investments to the SBSR sector as well as grant more incentives such as but not limited to the Exemption from Value-Added Tax, Income Tax Holiday, Additional Deduction for Labor Expense and Tax Credit on Domestic Capital Equipment among others. Being its overarching goal, it is very important to pass this bill to holistically promote the Philippine shipbuilding and ship repair industry. This would attract private capital to invest in the shipbuilding sector by creating a healthy and competitive investment and operating environment; provide necessary assistance and incentives for the continued growth of the Philippine shipbuilding and ship repair industry; encourage the improvement and upgrading of the existing Philippine shipping and naval fleet; enhancement of the Filipino shipyard workers' skills to meet international standards; and, encourage the development of a viable shipbuilding and ship repair industry. This industry would support the expansion and modernization of the Philippine shipping and naval fleet and its strict adherence to safety standards ensuring the seaworthiness of all sea-borne structures.	MARINA, Congress (Senate & HOR), OP, PCG, PPA, DOTr, DOST-PCIEERD, DENR, PN, CPA, DTI, BOI, DOF, DBM, DBP, BIR, BMB, CCC, DOLE, PSA, LGUs
2. Ratification of Hong Kong Convention	The ratification and implementation of the Convention will serve as an essential step towards the country having its National Maritime Transport Policy and Strategy in order to foster safety and marine environment protection, in conjunction with the international regulatory regime. The formulation of the implementation plan for the ratification of the Convention will serve as a guide for the effective execution of plans and strategies which are confined within the drafted National Interest Analysis.	MARINA, Congress (Senate & HOR), OP, PCG, PPA, DOTr, DOST-PCIEERD, DENR, PN, CPA, DTI, BOI, DOF, DBM, DBP, BIR, BMB, CCC, DOLE, PSA, LGUs
3. Draft Bill on Hong Kong Convention	Being a responsible member of the international community, the Philippines is expected to meet its obligations in supporting global initiatives, specifically with respect to the United Nations Convention on the Law of the Sea, 1982 (UNCLOS) which provides for nations, to adopt generally accepted international rules and standards when implementing laws and regulations governing safe and environmentally sound recycling of ships.	MARINA, Congress (Senate & HOR), OP, PCG, PPA, DOTr, DOST-PCIEERD, DENR, PN, CPA, DTI, BOI, DOF, DBM, DBP, BIR, BMB, CCC, DOLE, PSA, LGUs

OVERRIDING PROGRAM 2:
PROMOTION OF ENVIRONMENTALLY SUSTAINABLE MARITIME INDUSTRY

Legislative Agenda	Rationale / Key Features	Responsible Agency
1. Enactment on the Prevention and Control of Pollution from Ships and to Provide Penalties and for other purposes[142]	This bill shall cover different types of ship-generated pollution such as oil pollution, pollution from chemicals carried in bulk, pollution from packaged goods, pollution sewage, pollution from garbage and air pollution from ships. It intends to achieve limitation of international pollution of the marine environment by oil and other harmful substances and the minimization and control of accidental discharge of such substances	MARINA, PCG, PPA, DOTr, DENR, DILG, LGUs and other private/LGU ports and other relevant authorities/agencies
2. Ratification of Hong Kong Convention (HK Convention)	As a responsible IMO Member State, the Philippines needs to ratify the Hong Kong Convention. It will also strongly support the promotion and development of a shipbreaking / ship recycling industry. The HK Convention aims at ensuring that ships, when being recycled after reaching the end of their operational lives, do not pose any unnecessary risk to human health and safety or to the environment. It intends to address all the issues around ship recycling, including the fact that ships sold for scrapping may contain environmentally hazardous substances such as asbestos, heavy metals, hydrocarbons, ozone depleting substances and others. It will address concerns about working and environmental conditions in many of the world's ship recycling facilities.	MARINA, PCG, PPA, DOTr, DENR, DILG, LGUs and other private/LGU ports and other relevant authorities/agencies
3. Legislation on Shipbreaking and Ship Recycling	The Philippines should have a national legislation for the promotion and development of the ship breaking / ship recycling industry. The national policy may be patterned from the key features of HK Convention, as follows: 1. Applies to all types of ships, including fixed and floating platforms, regardless of their size, age, or flag. 2. Ship recycling facilities set out the requirements for ship recycling facilities, including the need for a permit, the availability of adequate infrastructure, and the requirement to comply with environmental and safety standards. 3. Hazardous materials require the safe removal and disposal of hazardous materials, such as asbestos, PCBs, and other toxic substances, before the ship is recycled. 4. Training and certification requires the training and certification of workers involved in ship recycling, as well as the development of guidelines for the safe and environmentally sound recycling of ships. 5. Reporting and monitoring requires the reporting and monitoring of ship recycling activities, including the submission of annual reports by ship recycling facilities and the establishment of a database of certified ship recycling facilities.	MARINA, PCG, PPA, DOTr, DENR, DILG, LGUs and other private/LGU ports and other relevant authorities/agencies

[142]In 2014, Senate Bill 2440 entitled, "An Act to Prevent and Control Pollution from Ships, Provide Penalties Therefor, and for Other Purposes" was filed.

	6. Provides for the enforcement of its provisions by the flag state, port state, and coastal state, as well as the imposition of penalties for non-compliance. Overall, the HK Convention aims to promote the safe and environmentally sound recycling of ships, reduce the negative impact of ship recycling on human health and the environment, and ensure the sustainable use of marine resources.	

ENABLING PROGRAM:
ADOPTION AND IMPLEMENTATION OF AN EFFECTIVE AND EFFICIENT MARITIME ADMINISTRATION GOVERNANCE SYSTEM

In support of this Program, the following proposed measures are envisioned to strengthen the institutional capacity of the MARINA to perform its mandates functions and in the management of the Maritime Industry Development Plan (MIDP):

Title	Brief Description
1. Draft Bill Amending Presidential Decree No. 474, series of 1974 otherwise known as the Maritime Industry Decree of 1974	This proposed measure seeks to consolidate and update functions provided by various legislative enactments and to modernize the organizational structure of the MARINA.
2. Issuance of Executive Order Adopting the Maritime Industry Development Plan (MIDP)	Issuance of an Executive Order will provide legal basis for the adoption and for participation of relevant government agencies in the formulation, implementation and assessment of the MIDP.
3. Joint Resolution of the House of Representatives and the Senate authorizing the retention of 50% of MARINA's collection from fees, charges and fines to finance the various projects of the MIDP 2028	A Joint Resolution of the House of Representatives and the Senate has its goal of retaining 50% of the collection of the MARINA from fees, charges and administrative fines and penalties, the amount collected will be used to fund projects identified in the MIDP 2028. This will likewise operationalize Section 20 of PD 474, series of 1974 which specifically provided the authority of the MARINA to retain a portion of its income. This has never been explored since 1974.
4. Approval of the proposed MARINA Organizational Structure and Staffing Plan (OSSP)	Currently under review by the Department of Budget and Management (DBM), the proposed MARINA OSSP will expand the Agency's organizational structure and increase the number of its employees to perform mandates and functions assigned to the MARINA over the years by reason of legislative enactment/executive issuance or part of the country's compliance with relevant international conventions under the auspices of the IMO.
5. Legislative Enactment for the creation of Regional Offices of the MARINA in the (1) National Capital Region (NCR); (2) Cagayan Valley Region; (3) Central Luzon Region; (4) MIMAROPA Region	The establishment of four (4) additional Regional Offices of the MARINA ensures the presence of the Agency in the aforementioned Regions in order to bring government services closer to the public.

Chapter

11

Results Matrices

Chapter XI

RESULTS MATRICES

Core Program No. 1
Modernization and Expansion of Philippine Domestic Shipping Industry
[including Tourist Destination Areas (TDAs) and Coastal Inland Waterways Transport System (CIWTS)]

Societal Goal:
Strongly rooted, comfortable and secure life (Matatag, Maginhawa at Panatag na Buhay)
Intermediate Goal:
Strong and reliable Philippine Merchant Fleet that addresses the sea transport requirement of the archipelago in support of the national development agenda
Overall Plan Outcome:
Increased access to a reliable, efficient and integrated sea transport system for passengers and shippers

Program Outcome	PDP 2028 Strategy	8 Pt.Socio-Economic Agenda	Indicators
Increased modern, safe and efficient domestic merchant fleet	Sustainable, resilient, integrated, and modernized infrastructure facilities and services delivered (Chap 12)	• Protect the purchasing power of families by ensuring food security, reducing transport and logistics costs, and reducing energy costs. • Create more jobs by promoting investments, improving infrastructure, and ensuring energy security, among others	1. % increase in the number of new domestic shipping sea routes established/ opened
			2. % increase in the number of modern ships deployed
			3. % increase in the number of ports and roads established/ rehabilitated/ improved
			4. Very satisfactory ratings of passenger sustained
			5. % increase in the number of passengers
			6. % increase in the number of cargoes
			7. Number of interisland cruise routes established/ opened
			8. Number of identified CIWTS

Core Program No. 2
Promotion and Expansion of the Philippine Overseas Shipping Industry

Societal Goal:
Strongly rooted, comfortable and secure life (Matatag, Maginhawa at Panatag na Buhay)
Intermediate Goal:
Strong and reliable Philippine Merchant Fleet that addresses the sea transport requirement of the archipelago in support
Overall Plan Outcome:
Increased employability, upskilled, reskilled maritime workforce and new jobs created

Program Outcome	PDP 2028 Strategy	8 Pt.Socio-Economic Agenda	Indicators	Baseline	
				Year	Value
Program Outcome:					
Emergence of a Philippine Ship Registry preferred by shipowners worldwide thereby contributing to the country's socioeconomic and polictical advancement	Sustainable, resilient, integrated, and modernized infrastructure facilities and services delivered (Chap. 12)	Ensure a level playing field by strengthening market competition and reducing barriers to entry and limits to entrepreneurship	1. % increase in gross tonnage of Ph-registered overseas ships	2021	2.2M gT
			2. Increase in number of Ph-registered overseas ships	2021	97[143]
			3. % increase of seafarers employed on Ph-registered overseas ships*	2021	1,940[144]
			4. % increase in collection of withholding tax for bareboat-chartered ships	2021	29.5M

[143]MARINA Data of registered ships for 2021

[144]Based on the average of 20 actual crew deployed by the shipping companies, employment covers safety operation of the ship and other services required on-board, e.g. messman and cook

Baseline		Annual Plan Targets					End-of-Plan Target	Means of Verification	Responsible Agency	Reporting Agency	Assumption and Risks
Year	Value	2024	2025	2026	2027	2028					
2021	47	12%	12%	12%	12%	12%	60% or 75 Routes	MARINA Report	MARINA	PPA, CPA & LGUs	
2021	210	5%	5%	5%	5%	5%	25% or 263 ships	MARINA Report	MARINA	PPA & CPA	
2021	37	TBD	TBD	TBD	TBD	TBD		Annual Report of PPA/ DPWH/ LGUs	PPA	CPA, LGUs & DPWH	
2021	-	VS	VS	VS	VS	VS		PSRS Survey	MARINA	PPA, CPA, LGUs & Private Ports	
2022	59M	2%	2%	2%	2%	2%	10%	PPA Report	PPA		
2022	98 Mmt	2%	2%	2%	2%	2%	10%	PPA Report	PPA		
2023	-	-	-	-	2	2	4	MARINA Report	MARINA		
2021	-	-	-	2	2	2	6	MARINA Report	MARINA		

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Annual Plan Targets					End-of-Plan Target	Means of Verification	Responsible Agency	Reporting Agency	Assumption and Risks
2024	2025	2026	2027	2028					
2%	2%	4%	6%	6%	20%	MARINA Report	MARINA	Shipping Companies	
2	2	4	4	8	20	MARINA Report	MARINA	Shipping Companies	
2%	2%	4%	4%	8%	20%	DMW Report	DMW	DMW	
2%	2%	4%	4%	8%	20%	BIR Report	BIR	BIR	

Core Program No. 3
Modernization, Expansion and Promotion of the Philippine Shipbuilding and Ship Repair Industry

Societal Goal:
Strongly rooted, comfortable and secure life (Matatag, Maginhawa at Panatag na Buhay)
Intermediate Goal:
Strong and reliable Philippine Merchant Fleet that addresses the sea transport requirement of the archipelago in support
Overall Plan Outcome:
Increased capacity and production in shipbuilding and ship repair industry

Program Outcome	PDP 2028 Strategy	8 Pt.Socio-Economic Agenda	Indicators	Baseline	
				Year	Value
Increased production of vessels by local shipyards; Increased revenues from the shipbuilding and ship repair entities; Created more jobs for shipyard workers	Transform production sectors to generate more quality jobs and competitive products (Chapter 7) Sustainable, resilient, integrated, and modernized infrastructure facilities and services delivered (Chapter 12)	Create more jobs by promoting investments, improving infrastructure, and ensuring energy security, among others	1. % increase in the number of modern and green ships built by local shipyards	2022	TBD
			2. % increase in the number ships retrofitted	2022	TBD
			3. Upgraded or expanded facilities of local shipyards	2022	TBD
			4. % increase in the revenue from the SBSR entities	2022	TBD
			5. Increase in the number of shipyard workforce	2022	TBD

Core Program No. 4
Promotion of Highly Skilled and Competitive Filipino Maritime Workforce

Societal Goal:
Strongly rooted, comfortable and secure life (Matatag, Maginhawa at Panatag na Buhay)
Intermediate Goal:
Strong and reliable Philippine Merchant Fleet that addresses the sea transport requirement of the archipelago in support
Overall Plan Outcome:
Increased reservoir of qualified and competent maritime human resource

Program Outcome	PDP 2028 Strategy	8 Pt.Socio-Economic Agenda	Indicators	Ba
				Year
Increased reservoir of qualified and competent maritime human resource	Improved Education and lifelong learning (Chapter 4, Subchapter 2.2)	• Create quality jobs by increasing employability, encouraging research and development and innovation, and enhancing the digital economy	1. % Increase in certified seafarers competent for ocean-going ships[145]	2022
			2. % Increase in certified seafarers competent for domestic ships[146]	2022

[145]Data of MARINA as to the number of issued COCs for Management Level/Operational Level and issued COP for Support Level positions. All COP issued under Regulation VI are NOT included in the data for this indicator.
[146]Based on the average of 20 actual crew deployed by the shipping companies, employment covers safety operation of the ship and other services required on-board, e.g. messman and cook

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Annual Plan Targets					End-of-Plan Target	Means of Verification	Responsible Agency	Reporting Agency	Assumption and Risks
2024	2025	2026	2027	2028					
2%	2%	2%	2%	2%	10%	MARINA Report	MARINA/ PCIEERD	Shipping Companies; Shipyards	
2%	2%	2%	2%	2%	10%	MARINA Report	MARINA	Shipping Companies; Shipyards	
2%	2%	2%	2%	2%	10%	MARINA Report	MARINA	DTI BOI Shipyards/ GFIs	
2%	2%	2%	2%	2%	10%	MARINA Report	MARINA	BIR/ DOF/ PSA Shipyards/ Related Industries	
2%	2%	2%	2%	2%	10%	DOLE Report	MARINA	Shipyards DOLE PSA	

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seline	Annual Plan Targets					End-of-Plan Target	Means of Verification	Responsible Agency	Reporting Agency	Assumption and Risks
Value	2024	2025	2026	2027	2028					
394,978	5%	5%	5%	5%	5%	25%	MARINA Report	MARINA	MARINA	
8,295	5%	5%	5%	5%	5%	25%	MARINA Report	MARINA	MARINA	

Program Outcome	PDP 2028 Strategy	8 Pt.Socio-Economic Agenda	Indicators	Ba Year
			3. Number of new education and training standards, developed on professional, skills or expertise programs[147]	2022
			4. % increase of certified seafarers for Operational and Management Levels (Officers)	2022
			5. % increase in the number of licensed Naval Architects and Marine Engineers	2022
			6. % increase of graduates of Naval Architecture and Marine Engineering Degree Program	2022
			7. % increase of Filipino graduates of maritime-related programmes [148]	2022

Overriding Program No. 1
Enhancement of Maritime Transport Safety and Security Merchant Ships and Fishing Fleets

Societal Goal:
Strongly rooted, comfortable and secure life (Matatag, Maginhawa at Panatag na Buhay)
Intermediate Goal:
Strong and reliable Philippine Merchant Fleet that addresses the sea transport requirement of the archipelago in support
Overall Plan Outcome:
Maritime transport safety and security upheld and enhanced.

Program Outcome	PDP 2028 Strategy	8 Pt.Socio-Economic Agenda	Indicators	Ba Year
Ensured more compliant ships with international and/or national safety standards including fishing vessels; decreased maritime accidents/ incidents involving all types of ships.	Develop and protect capabilities of individuals and families (Chapter 4) Sustainable, resilient, integrated, and modernized infrastructure facilities and services delivered (Chapter 12	• Protect the purchasing power of families by ensuring food security, reducing transport and logistics costs, and reducing energy costs. • Uphold public order and safety, peace, and security	1. % reduction in the number of maritime merchant and fishing fleets reduced by	
			1.1 Domestic	2022
			1.2 Overseas	2022
			2. Satisfactory Client Satisfaction Rating	
			2.1 Domestic	80%
			2.2 Shippers	80%

[147]Covers all new maritime education and training standards developed by CHED, TESDA, DEPED, MARINA, PPA, PCG.
[148]Data should include Senior High Maritime Track, BS Marine Transportation, BS Marine Engineering, BS Naval Architecture and Marine Engineering and Basic Seaman Course (vocational)

seline	Annual Plan Targets					End-of-Plan Target	Means of Verification	Responsible Agency	Reporting Agency	Assumption and Risks
Value	2024	2025	2026	2027	2028					
TBD	TBD	2	2	2	2	10	CHED Reports from MARINA, TESDA, PPA, PCG	CHED MARINA TESDA	CHED MARINA TESDA	
41,659	5%	5%	5%	5%	5%	25%	MARINA Report	MARINA	MARINA	
48	25%	25%	25%	25%	25%	125%	PRC Result	PRC	PRC	
TBD	TBD	5%	5%	5%	5%	25%	CHED Report	CHED	MHEIs	
TBD	5%	5%	5%	5%	5%	25%	CHED & DepEd Report	MARINA	MHEIs DepEd	

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seline	Annual Plan Targets					End-of-Plan Target	Means of Verification	Responsible Agency	Reporting Agency	Assumption and Risks
Value	2024	2025	2026	2027	2028					
accidents/incidents involving Phil 50% by EOP 2028 from baseline										
115	10%	10%	10%	10%	10%	50%	MARINA/ PCG Report	MARINA	PCG MARINA	
-	10%	10%	10%	10%	10%	50%	Recognized Organization's Report	MARINA	MARINA Recognized Organizations	
on ship's safety & security										
-	80%	80%	80%	80%	80%	80%	Survey Results	MARINA		
-	80%	80%	80%	80%	80%	80%	Survey Results	MARINA		

Program Outcome	PDP 2028 Strategy	8 Pt.Socio-Economic Agenda	Indicators	Ba Year
			3. Illegal, Unregulated and Unreported Fishing (IUUF) practices reduced by 10% per year from baseline	2022

Overriding Program No. 2
Promotion of Environmentally Sustainable Maritime Industry

Societal Goal:

Strongly rooted, comfortable and secure life (Matatag, Maginhawa at Panatag na Buhay)

Intermediate Goal:

Strong and reliable Philippine Merchant Fleet that addresses the sea transport requirement of the archipelago in support

Overall Plan Outcome:

Sustainable maritime industry and liveable communities enhanced.

Program Outcome	PDP 2028 Strategy	8 Pt.Socio-Economic Agenda	Indicators	Baseline Year	Baseline Value
Sustainable maritime industry and livable communities established that will redound to the creation of green jobs	Establish Livable Communities (Chapter 2, Subchapter 2.3)	• Create green jobs by pursuing a green and blue economy and establishing livable and sustainable communities	1. % Decrease in the number of marine pollution related illness/ cases	2023	-
			2. % Decrease in the Solid waste from ships	2023	-
			3. % Decrease in the Liquid waste from ships	2023	-
			4. % Decrease in the GHG emissions of Ph-registered convention-sized ships[149]	2023	-
			5. % of ships compliant with the sulfur limit for Ph-registered convention sized ships[150]	2023	-

Overriding Program No. 3
Implementation of a Sustainable Maritime Innovation, Digitalization, Transformation, and Knowledge Center (SMIDTKC)

Societal Goal:

Strongly rooted, comfortable and secure life (Matatag, Maginhawa at Panatag na Buhay)

Intermediate Goal:

Strong and reliable Philippine Merchant Fleet that addresses the sea transport requirement of the archipelago in support

Overall Plan Outcome:

Collaboration between and among private and public entities on digitalization and innovation across the maritime supply

[149]Pursuant to MARINA Memorandum Circular SR No. 2021-05 entitled, "Rules and Regulations on the Implementation on Ship's Energy Efficiency Management Plan (SEEMP) and Data Collection System (DCS) for Fuel Oil Consumption for all Philippine-Registered Ships"
[150]Pursuant to MARINA Memorandum Circular SR2020-06 "Rules and Regulations on the Mandatory Use of 0.50% MM Sulphur Limit on Fuel Oil for All Philippine Registered Ships in Compliance to Annex VI of MARPOL 73/78, as amended

seline	Annual Plan Targets					End-of-Plan Target	Means of Verification	Responsible Agency	Reporting Agency	Assumption and Risks
Value	2024	2025	2026	2027	2028					
-	10%	10%	10%	10%	10%	50%	BFAR Report	BFAR	BFAR PCG LGUs	

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Annual Plan Targets					End-of-Plan Target	Means of Verification	Responsible Agency	Reporting Agency	Assumption and Risks
2024	2025	2026	2027	2028					
10%	10%	10%	10%	10%	50%	Hospitals, Health Research Institutes	MARINA, DOH		
10%	10%	10%	10%	10%	50%	PPA Report	MARINA	PPA PCG DENR LGUs	
10%	10%	10%	10%	10%	50%	PPA Report	MARINA	PPA PCG DENR LGUs	
-	-	10%	10%	10%	30%	Shipping Companies Report	MARINA	DOST/UP MARINA/ DOE/ DENR/PCG/ PPA Other Ports Authorities Shipping Companies	
-	-	10%	10%	10%	30%	PCG Report	PCG	PCG	

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chain enhanced

Program Outcome	PDP 2028 Strategy	8 Pt.Socio-Economic Agenda	Indicators	Baseline	
				Year	Value
Enhanced collaboration between and among private and public entities on digitalization and innovation across the maritime supply chain that willl redound in significant efficiency gains, safer, secure and more resilient maritime industry	Transform production and services sectors to generate more quality jobs and competitive products and services (Chapter 9) Promote Competition and Improve Regulatory Efficiency (Chapter 10)	Bureaucratic Efficiency	% decrease in processing time of transaction		
			Domestic		3 Days
			Domestic		7 Days
			Domestic		20 Days
			% increase in operational efficiency in regulatory processes	TBD	TBD
			% increase in Satisfaction rating		70%
			% increase in number of e-library users		
			Utilization rate of agencies involved in data sharing agreementw		0%

Enabling Program
Adoption and Implementation of an Effective and Efficient Maritime Administration Governance System

Societal Goal:
Strongly rooted, comfortable and secure life (Matatag, Maginhawa at Panatag na Buhay)
Intermediate Goal:
Strong and reliable Philippine Merchant Fleet that addresses the sea transport requirement of the archipelago in support
Overall Plan Outcome:
Efficient governance of the maritime industry enhanced.

Program Outcome	PDP 2028 Strategy	8 Pt. Socio-Economic Agenda	Indicators
Responsive and efficient governance of the maritime industry	Transform production and services sectors to generate more quality jobs and competitive products and services (Chapter 9) Promote Competition and Improve Regulatory Efficiency (Chapter 10) Expand and upgrade Infrastructure (Chapter 12)	Ensure sound macroeconomic fundamentals by improving bureaucratic efficiency and ensuring sound fiscal management Ensure a level playing field by strengthening market competition and reducing barriers to entry and limits to entrepreneurship	1. % rate if digitized/automated regulatory processes. 2. % rate if digitized/automated regulatory processes. 3. % satisfactory rating on policy formulation 4. % rate of agencies with ISO[151] Certification[152] / PQA Awardees/ agencies 5. % rate of agencies with PGS Proficient Status[153]

[151]ISO (International Organization for Standardization) is an independent, non-governmental international organization with a membership of 168 national standards bodies.
[152]The Philippine Quality Award Program or PQA is the national quality award for Total Quality Management (TQM) in the Philippines
[153]Performance Governance System (PGS)

Annual Plan Targets					End-of-Plan Target	Means of Verification	Responsible Agency	Reporting Agency	Assumption and Risks
2024	2025	2026	2027	2028					
25%	30%	30%	40%	50%	50%	Data Logs	MARINA	DOTr	
25%	10%	10%	10%	10%	50%	Data Logs	MARINA		
20%	10%	10%	10%	10%	50%	Data Logs	MARINA		
10%	80%	80%	80%	80%	80%	Data Logs	MARINA		
TBD	TBD	TBD	TBD	TBD				DOTr	
75%	80%	85%	90%	100%	100%	Survey	MARINA	DOTr	
-	BL	25%	50%	100%	100%	Data Logs Number of active users	MARINA	DOTr DICT National Archives of the Philippines, NAMRIA	
	TBD	TBD	TBD	TBD	100%			DICT UP NAMRIA BFAR POEA PCG PPA DMW BI NBI	

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Baseline		Annual Plan Targets					End-of-Plan Target	Means of Verification	Responsible Agency	Reporting Agency	Assumption and Risks
Year	Value	2024	2025	2026	2027	2028					
2022	TBD	25%	10%	10%	10%	10%	50%	Agency Report	All Concerned Agencies		
2022	TBD	85%	85%	85%	85%	85%	85%				
2022	TBD	85%	85%	85%	85%	85%	85%				
2022	TBD	20%	20%	20%	20%	20%	100%				
2022	TBD	20%	20%	20%	20%	20%	100%				

Chapter

12

Monitoring and Evaluation

Chapter XII

MONITORING AND EVALUATION

The progress towards achieving the identified outcomes will be monitored and assessed using the baselines and annual targets as embodied in the accompanying Results Matrices (RM). The RM was formulated as a tool designed to provide results orientation to the MIDP. It is anchored on results-based management, which highlights the outcomes and impact. It aims to strengthen inter-agency-wide results orientation, which shall allow for regular performance assessment of the Maritime Industry Development Plan (MIDP).

The RM is a document that should be referred to and updated regularly to ensure the responsiveness of the Plan and its continuous development. To assess the progress towards achieving the target deliverables, the Program heads shall conduct a periodic formal evaluation of plans through the conduct of Annual Updating and Assessment of the MIDP 2028. Each Program shall prepare the Assessment Report to present actual accomplishments in terms of outputs and outcomes as contained in the MIDP and the RM. This report shall also identify key challenges towards the achievement of results and provide policy directions to determine constraints and potentials to meet future demands (e.g. unavailable data and absence of appropriate methodology to measure indicator progress).

The monitoring of the Plan will likewise be identified in the Assessment Report. To address the gaps, the following strategies will be used:

1. **Strengthening the collection of data.** The Management Information Systems Service (MISS), in collaboration with relevant implementing agencies, will remain the primary office to address the data requirements for the monitoring of the MIDP. It is envisioned to set the directions, thrusts, and priorities of the Agency in the medium term for the generation and dissemination of statistical information for policy and decision making of the government, private sector, and general public.

2. **Improving analysis, reporting, and use of monitoring data**. Making the information on the annual accomplishment of RM indicators and the likelihood of attaining end-of-plan targets available in an online platform are important in maintaining public accountability and enhancing stakeholders' engagement. This may be facilitated through the use of data visualization solutions such as storyboards, infographics, and dashboards, among others. Following the open data policy of the government, the creation of such platform shall improve the accessibility and comprehension of MIDP monitoring data.

3. **Enhancing capacities to monitor the Plan.** The reporting agencies identified in the RM should continue to enhance their capacities to monitor the Plan toward ensuring the provision of quality and timely data. To facilitate this, human and financial resources to strengthen capacities for data collection, analysis, and reporting, as well as statistical literacy at the national and sub-national levels should be adequately allocated. Stronger partnerships with development partners, civil society organizations, and academe shall be pursued to support continuous enhancement of knowledge, skills, processes, and systems on monitoring.

ACCOUNTABILITY

The utilization of RMs for the Program Teams likewise outlines the accountable officials for the execution of plans, programs, and activities integrated in the MIDP. The Program Heads shall spearhead the regular conduct of informal evaluation through the results matrices. Monitoring and evaluation should be evident throughout the implementation and execution of projects incorporated in the MIDP.

As the implementing agencies are expected to integrate the MIDP in their respective strategy maps, they are likewise accountable to monitor progress of their commitments and to provide the MARINA with updates vis-a-vis achievement of targets year on year until the end of Plan in 2028.

LIFE CYCLE

The MIDP has a ten-year life cycle and is being updated annually, or when some significant changes in the Philippine Development Plan (PDP) are made.


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FAME/ISP_Capt Jess Morales
Jaime Bea

Chapter

13

Communication Plan

Chapter XIII

COMMUNICATION PLAN

The communication strategy matrix for the updated MIDP 2028 shall aid in ensuring effective dissemination of information and engagement with stakeholders. It focuses on knowledge building, attitude shaping, and practical implementation.

Activities include informational materials, training programs, stakeholder consultations, collaboration initiatives, and communication campaigns. The strategy leverages diverse channels and aims to foster a united effort towards sustainable development in the maritime industry.

STRATEGIC ELEMENTS				
Communication Objective	Key Communication Risks	Audience	Current Behavior / Desired Change	Message / Info Needs
To effectively communicate and raise awareness about the MIDP 2028 among internal and external stakeholders, ensuring a comprehensive understanding of its goals, benefits, and the role of stakeholders in its successful implementation.	**External and Internal:** Stakeholders' misinterpretation of the plan's objectives due to lack of awareness leading to confusion or incorrect assumptions about its purpose and implementation.	**INTERNAL** • **Lead Agency** MARINA [Central and Regional Offices] **EXTERNAL** • **National Government Agencies** DOTr, PCG, PPA, SBMA, DENR, DOLE, CHED Other national government gencies involved in maritime affairs • **Maritime Service Providers** Shipping Companies; Shipbuilders and Shipyard Operators; Classification Societies; Maritime Training Institutions; Marine Insurance Companies; Logistics and Freight Forwarding Companies; Ship Chandlers and Suppliers; Other service providers in the maritime sector • **Maritime Workforce:** Seafarers Manning Agencies Maritime Labor Organizations and Unions • **Industry Associations and Chambers of Commerce:** Filipino Shipowners' Association (FSA); Philippine Inter-island Shipping Association (PISA); Philippine Association of Maritime Institutions (PAMI); Philippine Association of Ship Agents (PASA); Other industry-specific associations and chambers • **Academic and Research Institutions** Universities and Colleges with maritime programs Research institutions specializing in maritime studies • **Local Government Units (LGUs)** Coastal LGUs Port Cities and Municipalities • **International Bodies** International Maritime Organization (IMO) Other international maritime organizations • **Environmental and Conservation Groups** Organizations focused on marine conservation and environmental protection	Lack of awareness to the plans, and programs of MIDP 2028 / High-level of awareness on the plans, and programs under the updated MIDP 2028	Complete and updated information about the programs under the MIDP 2028

	WORKPLAN			EVALUATION
Channel / Activity	Time	O/PR	Resources Needed	Expected Outcomes

Conduct of Awareness Campaigns
• Creation of social media posts/ videos highlighting the overview, key objectives and benefits of the MIDP 2028.
  • Design brochures, fact sheets, and posters that explain the main components, goals, and target outcomes of the MIDP 2028.
  • Publish articles, infographics, videos, or vlogs on the official website, and official social media pages of MARINA, and have it cross-posted to partner agencies to provide external stakeholders detailed insights into the plan's strategies and implementation processes.
• Collaborate with local media outlets to feature articles, interviews, or news segments that raise awareness about the plan and its impact on the maritime industry.
• Leverage social media influencers, industry experts, or well-known personalities who are passionate about sustainable maritime practices to endorse and spread awareness about the plan.
Engaging Stakeholders [Face-to-Face/ Hybrid]:
• Organize workshops/ seminars targeting specific stakeholder groups, such as shipowners, port operators, or maritime workers, to increase their understanding of the plan's relevance to their sector.
• Collaborate with industry associations, professional organizations, and academic institutions to host panel discussions or conferences that explore different aspects of the plan and foster dialogue among stakeholders..
	Q1-Q2 of Year 1	**MARINA**	**Conduct of Awareness Campaigns [Face-to-Face/ Hybrid]:**
			Creative team for social media post/video creation
			Printing services for brochures, fact sheets, and posters
			Content writer for articles and blog posts
			Webinar platform or meeting software for informational sessions
			Collaboration with local media outlets for coverage and features
			Engaging Stakeholders:
			Event organizer/ coordinator for workshops/ seminars
			Collaboration with industry associations, professional organizations, and academic institutions for panel discussions and conferences
			Feedback management system (email hotline, online survey) for gathering input and suggestions
			Partnerships and Collaborations:
			Collaboration coordinator or partnership manager Networking and relationship-building with government agencies, industry associations, environmental organizations, and educational institutions
			Collaboration with social media influencers, industry experts, or personalities for endorsements and awareness promotion
				Heightened knowledge:
				Stakeholders and the public will have a comprehensive understanding of the goals, objectives, and benefits of the MIDP 2028 through social media posts, videos, brochures, fact sheets, articles, and news features.
				Improved perception:
				The communication efforts will contribute to shaping a positive perception of the plan, emphasizing its importance in modernizing and enhancing the sustainability of the maritime industry.
				Expanded reach:
				By leveraging various communication channels, such as social media, websites, and local media outlets, the plan's message will reach a wide audience, including industry professionals, government agencies, maritime workers, and the general public.
				Increased engagement
				Awareness campaigns, webinars, and meetings will provide opportunities for stakeholders to actively engage with the plan, ask questions, and seek clarifications, fostering a sense of involvement and ownership.
				Support and advocacy
				Through effective communication, the plan is more likely to gain support and advocacy from stakeholders, encouraging them to actively participate in its implementation and promoting a collective commitment to its success.

STRATEGIC ELEMENTS				
Communication Objective	Key Communication Risks	Audience	Current Behavior / Desired Change	Message / Info Needs
		• **Media [local, and international]** • **General Public** Consumers and Users of maritime services Individuals with an interest in maritime affairs		
To ensure that stakeholders and the general public have a comprehensive understanding of the key objectives, strategies, and benefits of the MIDP 2028 by disseminating clear and accessible information through various communication channels.	External and Internal: Information Overload: The extensive nature of the plan and its components may overwhelm stakeholders with excessive information, making it challenging for them to grasp the key points and understand the plan's relevance to their respective sectors. **Resistance to Change:** Some stakeholders, particularly those who may be directly affected by the plan's implementation, may resist the proposed changes or be hesitant to adopt new practices.	**INTERNAL** • **Lead Agency** MARINA [Central and Regional Offices] • **EXTERNAL** **National Government Agencies** DOTr, PCG, PPA, SBMA, DENR, DOLE, CHED Other national government agencies involved in maritime affairs • **Maritime Service Providers** Shipping Companies; Shipbuilders and Shipyard Operators; Classification Societies; Maritime Training Institutions; Marine Insurance Companies; Logistics and Freight Forwarding Companies; Ship Chandlers and Suppliers; Other service providers in the maritime sector • **Maritime Workforce:** Seafarers Manning Agencies Maritime Labor Organizations and Unions • **Industry Associations and Chambers of Commerce:** Filipino Shipowners' Association (FSA); Philippine Inter-island Shipping Association (PISA); Philippine Association of Maritime Institutions (PAMI); Philippine Association of Ship Agents (PASA); Other industry-specific associations and chambers • **Academic and Research Institutions** Universities and Colleges with maritime programs Research institutions specializing in maritime studies	Limited knowledge and understanding on MIDP 2028 / Clear understanding of the plan's components, strategies, and implementation processes; Comprehend the relevance of the plan to their respective sectors and recognize the potential benefits of adopting sustainable practices.	Provide a clear and concise overview of the plan's key objectives, strategies, and benefits; explain how the plan is relevant to their respective sectors and the potential advantages of adopting sustainable practices; ensure accessible information through various communication channels; and provide regular updates on the plan's progress to maintain engagement and awareness.

	WORKPLAN			EVALUATION
Channel / Activity	Time	O/PR	Resources Needed	Expected Outcomes
Development of comprehensive informational materials: • Creation of MIDP Accomplishment Report • Creation of detailed explanations of MIDP objectives, strategies, and benefits in the form of articles, infographics, videos, or vlogs on the official website, and official social media pages of MARINA, and have it cross-posted to partner agencies to provide external stakeholders detailed insights into the plan's strategies and implementation processes. **Online resources and platforms:** • Establish a dedicated tab for MIDP in the MARINA's official website which will serve as the centralized hub for information, providing downloadable resources, case studies, success stories, and updates on the plan's progress. **Webinars and workshops:** • Conduct online webinars or face-to-face workshops to provide in-depth knowledge about the plan's components, implementation processes, and sector-specific relevance. The webinar shall be uploaded to the official social media platforms of MARINA for a wider reach. **Stakeholder consultations:** • Engage in focused consultations with stakeholders to gather their input, address their specific knowledge needs, and clarify any questions or concerns they may have about the MIDP 2028.	**Q3-Q4 of Year 1** **Q1-Q2 of Year 2** **Every quarter of Year 3 to Year 4**	**MARINA**	**Dev't of comprehensive informational materials:** Graphic designers and video editors for infographic design, layout of MIDP Accomplishment Report, videos Copywriters and subject matter experts to provide detailed explanations of plan components, strategies, and benefits. Printing services or digital platforms for producing and distributing the materials. **Webinars and workshops:** Webinar hosting platforms or physical venues for face-to-face workshops. Presenters and facilitators with expertise in MIDP 2028 to deliver in-depth knowledge sessions. Audiovisual equipment and technical support for online webinars. **Stakeholder consultations:** Organizational representatives or consultants to engage in focused consultations with stakeholders. Communication channels for gathering input and addressing questions or concerns, such as email or online survey tools.	**Increased Knowledge and Understanding:** Stakeholders and the general public have a comprehensive understanding of the key objectives, strategies, and benefits of the MIDP 2028. Clear comprehension of the plan's components, implementation processes, and sector-specific relevance. Recognition of the potential benefits of adopting sustainable practices in the maritime industry. **Informed Decision-Making:** Stakeholders are equipped with the necessary knowledge to make informed decisions related to their respective sectors and the MIDP 2028. Enhanced ability to identify opportunities, address challenges, and align their actions with the goals of the plan. **Stakeholder Engagement and Collaboration:** Active participation and engagement from stakeholders in consultations, workshops, and industry conferences.

STRATEGIC ELEMENTS				
Communication Objective	Key Communication Risks	Audience	Current Behavior / Desired Change	Message / Info Needs
		• **Local Government Units (LGUs)** Coastal LGUs Port Cities and Municipalities • **International Bodies** International Maritime Organization (IMO) Other international maritime organizations • **Environmental and Conservation Groups** Organizations focused on marine conservation and environmental protection • **Media [local, and international]** • **General Public** Consumers and Users of maritime services Individuals with an interest in maritime affairs		

	WORKPLAN			EVALUATION
Channel / Activity	Time	O/PR	Resources Needed	Expected Outcomes
Educational campaigns: • Collaborate with educational institutions to develop educational campaigns targeting students and professionals in the maritime industry, focusing on the importance and implications of the MIDP 2028. • Continuous conduct of Usapang STCW to address concerns of the present, and the future maritime workforce, maritime training institutions, among others. **Industry conferences and forums:** • Participate in industry conferences and forums to present and discuss the MIDP 2028, facilitating knowledge-sharing and networking opportunities among industry experts and stakeholders. **Online resources and platforms:** • Website development or hosting services for a dedicated MIDP 2028 tab in the MARINA website. Web developers and designers to create user-friendly interfaces and functionalities **Media collaborations:** • Partner with media outlets to feature articles, interviews, and news segments that provide in-depth coverage and analysis of the MIDP 2028, increasing awareness and understanding among a broader audience.			**Educational campaigns:** Reliable data for content development and outreach efforts. Marketing and promotional materials to raise awareness about educational campaigns. **Industry conferences and forums:** Participation fees or sponsorship for industry conferences and forums. Presentation materials and visual aids to effectively communicate information about MIDP 2028. **Online resources and platforms:** Content management system for organizing and updating downloadable resources, case studies, success stories, and progress updates. **Media collaborations:** Partnerships with media outlets for featuring articles, interviews, and news segments. Media relations personnel to establish and maintain relationships with media partners. Media production support for video interviews or news segments.	Increased dialogue and collaboration among stakeholders, fostering a sense of ownership and shared responsibility in implementing the MIDP 2028. **Knowledge Sharing and Dissemination:** Availability of comprehensive informational materials, such as brochures, fact sheets, and infographics, that effectively communicate the plan's details to a wide audience. Access to online resources and platforms that provide downloadable materials, case studies, success stories, and updates on the plan's progress. Media coverage and dissemination of in-depth articles, interviews, and news segments, increasing awareness and understanding among a broader audience.

STRATEGIC ELEMENTS				
Communication Objective	Key Communication Risks	Audience	Current Behavior / Desired Change	Message / Info Needs
To foster a positive and supportive attitude among stakeholders towards the MIDP 2028, encouraging a mindset shift that embraces sustainable practices, innovation, and collaboration in the maritime industry.	**External** **Resistance to Change:** Stakeholders may exhibit resistance to change, particularly if the plan requires them to adopt new practices, technologies, or ways of doing business. **Lack of Engagement or Involvement:** Some stakeholders feel excluded or not actively involved in the development and implementation of the MIDP 2028, it can result in a passive or indifferent attitude. Ensuring meaningful engagement and involvement opportunities can mitigate this risk.	**EXTERNAL** • **National Government Agencies** DOTr, PCG, PPA, SBMA, DENR, DOLE, CHED Other national government agencies involved in maritime affairs • **Maritime Service Providers** Shipping Companies; Shipbuilders and Shipyard Operators; Classification Societies; Maritime Training Institutions; Marine Insurance Companies; Logistics and Freight Forwarding Companies; Ship Chandlers and Suppliers Other service providers in the maritime sector • **Maritime Workforce:** Seafarers Maritime Labor Organizations and Unions • **Industry Associations and Chambers of Commerce:** Filipino Shipowners' Association (FSA); Philippine Inter-island Shipping Association (PISA); Philippine Association of Maritime Institutions (PAMI); Philippine Association of Ship Agents (PASA); Other industry-specific associations and chambers • **Academic and Research Institutions** Universities and Colleges with maritime programs Research institutions specializing in maritime studies • **Local Government Units (LGUs)** Coastal LGUs Port Cities and Municipalities • **International Bodies** International Maritime Organization (IMO) Other international maritime organizations	Stakeholders skepticism, resistance, or indifference towards the MIDP 2028. Lack of enthusiasm or a negative attitude towards the plan, perceiving it as unnecessary or irrelevant to their interests or concerns./ The desired change in attitude involves stakeholders developing a positive and supportive attitude towards the MIDP 2028. This includes a shift in their perception, where they recognize the plan's importance, relevance, and potential benefits to their respective sectors and the maritime industry as a whole. Stakeholders should embrace the plan with enthusiasm, openness to change, and a willingness to actively participate and contribute to its successful implementation.	**Clear and compelling explanations of the MIDP 2028:** Stakeholders need comprehensive information that highlights the plan's vision, goals, and the positive impact it can have on the maritime industry. This includes providing details on the strategies, initiatives, and expected outcomes. **Relevance to stakeholders' interests and concerns:** Messages should emphasize how the plan addresses specific challenges and opportunities faced by stakeholders in their respective sectors. Highlighting the alignment between the plan and their interests will help foster a sense of ownership and engagement. **Benefits and advantages of the plan:** Stakeholders need to understand the potential benefits they can gain by supporting and actively

	WORKPLAN			EVALUATION
Channel / Activity	Time	O/PR	Resources Needed	Expected Outcomes
Leadership and Advocacy Training: Conduct training sessions or seminars targeting key industry leaders and influencers to enhance their understanding of the plan and equip them with the necessary knowledge and skills to advocate for its implementation. **Recognition and Awards Program:** Establish an awards program that recognizes and celebrates exemplary practices aligned with the objectives of the MIDP 2028. Establish a framework for the recognition and awards program, including the criteria, nomination process, and evaluation methods. **Collaboration Initiatives:** Create digital platforms or online tools to facilitate collaboration, knowledge sharing, and networking among stakeholders. Engage stakeholders in collaborative activities that promote shared interests, foster innovation, and drive positive change within the maritime industry. Highlight the positive outcomes and benefits of such collaborations to shape a favorable attitude towards the plan. **Training and Capacity Building Programs:** Develop and implement training programs aimed at enhancing the skills and knowledge of stakeholders, enabling them to effectively participate in the plan's implementation. These programs can include workshops, seminars, webinars, and online courses that provide practical insights and tools for stakeholders to contribute meaningfully. **Stakeholder Feedback Mechanisms:** Establish clear and accessible channels for stakeholders to provide feedback, suggestions, and concerns related to the plan. Actively listen to stakeholders' perspectives and address their feedback promptly and transparently. This fosters a sense of inclusivity, demonstrating that their voices are heard and valued, which can positively influence their attitude towards the plan.	**Year 4 to Year 5**	**MARINA**	**Trainers and Facilitators:** Skilled professionals who can design and deliver leadership and advocacy training sessions, as well as facilitate collaborative initiatives and capacity building programs. **Training Materials:** Develop or source training materials, modules, presentations, and resources that support the leadership and advocacy training programs, as well as the capacity building initiatives. **Recognition and Awards Framework:** Allocate resources for the establishment of recognition and awards framework including the designing and producing certificates, trophies, plaques, or other forms of recognition. **Collaboration Platforms:** Provision of communication portals, project management platforms, or online discussion forums. **Communication Channels:** Allocate resources for developing and maintaining communication channels such as websites, social media accounts, email newsletters, and mailing lists to disseminate information, updates, success stories, and promote collaborative initiatives. **Feedback Mechanisms:** Systems for collecting and analyzing stakeholder feedback, including online survey tools, feedback forms, and dedicated staff to handle inquiries and address concerns. **Communication Materials:** Communication materials such as posters, brochures, videos, infographics, and success story narratives that promote a positive attitude towards the plan.	Increased stakeholder engagement and positive attitude, enhanced leadership and advocacy, recognition and inspiration for exemplary practices, a collaborative culture, capacity building, effective communication, and stakeholder satisfaction. These outcomes foster a supportive attitude, drive collaboration, and promote successful implementation of sustainable practices in the maritime industry.

STRATEGIC ELEMENTS				
Communication Objective	Key Communication Risks	Audience	Current Behavior / Desired Change	Message / Info Needs
		• **Environmental and Conservation Groups** Organizations focused on marine conservation and environmental protection • **Media [local, and international]** • **General Public** Consumers and Users of maritime services Individuals with an interest in maritime affairs		participating in the implementation of the MIDP 2028. Messages should outline how the plan can lead to improved efficiency, competitiveness, sustainability, and overall growth of the maritime industry.
To facilitate the adoption and implementation of sustainable practices outlined in the MIDP 2028 by providing stakeholders with practical guidance, resources, and incentives to to actively integrate sustainable measures into their operations, fostering a culture of sustainability within the maritime industry.	**Lack of Implementation Support:** Stakeholders may face barriers in implementing sustainable practices due to limited resources, technical know-how, or inadequate support systems. Insufficient support can hinder the successful integration of sustainable measures into day-to-day operations.	**INTERNAL** • **Lead Agency** MARINA [Central and Regional Offices] **EXTERNAL** • **National Government Agencies** DOTr, PCG, PPA, SBMA, DENR, DOLE, CHED Other national government agencies involved in maritime affairs • **Maritime Service Providers** Shipping Companies; Shipbuilders and Shipyard Operators; Classification Societies; Maritime Training Institutions; Marine Insurance Companies;	Inconsistent or inadequate implementation of sustainable practices, with stakeholders prioritizing conventional approaches over sustainable alternatives./ Active adoption and integration of sustainable practices, prioritizing environmentally friendly and socially responsible measures in operations, and consistently implementing	**Clear guidance on sustainable practices:** Provide comprehensive and practical information about sustainable practices that align with the objectives of the MIDP. This includes guidelines, case studies, and success stories that demonstrate the positive impact of adopting sustainable measures. **Training and capacity building:** Offer training programs, workshops, and

	WORKPLAN			EVALUATION
Channel / Activity	Time	O/PR	Resources Needed	Expected Outcomes
Communication and Awareness Campaigns: Develop targeted communication campaigns that emphasize the positive impacts and benefits of the MIDP 2028. Utilize various channels such as social media, industry publications, press releases, and industry events to consistently communicate key messages and success stories. Incorporate powerful storytelling techniques.			**Event Management:** Allocate resources for organizing training sessions, seminars, workshops, collaborative events, and awards ceremonies, including venue rentals, audiovisual equipment, catering, and logistical support. **Staff and Personnel:** Assign dedicated staff or teams responsible for managing the various activities, including coordination, administration, facilitation, and communication with stakeholders. **Partnerships and Collaborations:** Allocate resources for building partnerships and collaborations with industry associations, government agencies, educational institutions, and other relevant stakeholders to leverage their expertise and support the attitude-focused initiatives.	
Developing sustainability guidelines and toolkits: Create comprehensive guidelines and toolkits that outline best practices for sustainable operations in the maritime industry. These resources will provide practical steps and recommendations for stakeholders to adopt sustainable practices. **Conducting training and workshops on sustainable practices:** Organize training sessions and workshops to educate stakeholders about sustainable including topics such as energy efficiency, waste management, and environmental conservation. These sessions will equip participants with the necessary knowledge and skills to implement sustainable measures. **Facilitating knowledge sharing platforms and forums:** Establish platforms and forums where stakeholders can exchange ideas,	**Year 5**	**MARINA**	**Expertise:** Subject matter experts and professionals with knowledge of sustainable practices and their implementation in the maritime industry. **Training materials:** Development of training modules, presentations, and educational resources for conducting training sessions and workshops. Collaboration platforms: Creation of online platforms or forums for stakeholders to collaborate, share ideas, and work on joint projects. **Research and Development:** Investment in research and development activities to explore innovative sustainable solutions	**Increased adoption of sustainable practices:** Stakeholders and industry participants demonstrate a higher degree of implementation of sustainable practices, leading to reduced environmental impact and improved resource efficiency. **Enhanced operational efficiency:** Implementation of sustainable practices improves operational processes, leading to cost savings, increased productivity, and streamlined operations. **Improved regulatory compliance:** Stakeholders align their operations with

STRATEGIC ELEMENTS				
Communication Objective	Key Communication Risks	Audience	Current Behavior / Desired Change	Message / Info Needs
	Compliance and Accountability: Ensuring compliance with sustainable practices and holding stakeholders accountable for their implementation can be a challenge. Lack of adherence to prescribed practices can undermine the effectiveness of the MIDP and impede progress towards sustainability goals. **Knowledge Transfer Gap:** Stakeholders may struggle with translating theoretical knowledge into practical actions. The gap between understanding the importance of sustainable practices and effectively implementing them can hinder progress and limit the desired impact of the communication efforts. **Measurement and Monitoring:** Establishing mechanisms to measure and monitor the	Logistics and Freight Forwarding Companies; Ship Chandlers and Suppliers; Other service providers in the maritime sector • **Maritime Workforce:** Seafarers Maritime Labor Organizations and Unions • **Industry Associations and Chambers of Commerce:** Philippine Shipowners' Association (PSA); Philippine Inter-island Shipping Association (PISA); Philippine Association of Maritime Institutions (PAMI); Philippine Association of Ship Agents (PASA); Other industry-specific associations and chambers • **Academic and Research Institutions** Universities and Colleges with maritime programs Research institutions specializing in maritime studies • **Local Government Units (LGUs)** Coastal LGUs Port Cities and Municipalities • **Environmental and Conservation Groups** Organizations focused on marine conservation and environmental protection	best practices outlined in the MIDP.	resources to enhance stakeholders' knowledge and skills in implementing sustainable practices. Provide access to tools, methodologies, and expert guidance to facilitate the adoption of sustainable approaches. **Best practice sharing:** Promote the sharing of best practices and lessons learned among stakeholders to inspire and educate. Highlight successful examples of organizations or individuals who have effectively implemented sustainable practices, showcasing the benefits and outcomes achieved. **Industry standards and certifications:** Communicate the importance of adhering to industry standards and certifications related to sustainability. Provide information on recognized certifications, their requirements, and the benefits they offer in terms of competitiveness, credibility, and access to new markets. **Collaboration opportunities:** Emphasize the

	WORKPLAN			EVALUATION
Channel / Activity	Time	O/PR	Resources Needed	Expected Outcomes
share experiences, and collaborate on sustainable initiatives. These knowledge-sharing opportunities will foster a community of practice, enabling stakeholders to learn from one another and drive collective progress. **Establishing industry standards and certifications for sustainability:** Work towards the development of industry-wide sustainability standards and certifications. These frameworks will provide benchmarks for measuring and recognizing sustainable practices, incentivizing stakeholders to strive for excellence in their operations. **Organizing collaborative projects and initiatives:** Encourage collaborative projects and initiatives that bring together stakeholders from different sectors of the maritime industry. By working together, stakeholders can pool resources, expertise, and innovation to implement large-scale sustainable solutions that benefit the industry as a whole. **Implementing monitoring and reporting systems for sustainability metrics:** Establish monitoring and reporting systems to track sustainability metrics such as greenhouse gas emissions, energy consumption, and waste reduction. These systems will enable stakeholders to measure their progress, identify areas for improvement, and demonstrate their commitment to sustainable practices. **Promoting economic benefits of sustainable practices through case studies and success stories:** Highlight the economic benefits of sustainable practices by showcasing case studies and success stories. These examples will demonstrate how sustainable initiatives can lead to cost savings, improved efficiency, and enhanced competitiveness in the maritime industry. **Engaging stakeholders through regular consultations and feedback mechanisms:** Foster ongoing engagement with stakeholders through regular consultations and feedback mechanisms. By actively involving stakeholders in decision-making processes,			applicable to the maritime industry. **Monitoring and reporting tools:** Software or tools to track and measure sustainability metrics, such as energy consumption or greenhouse gas emissions. **Communication resources:** Communication materials, including websites, social media accounts, newsletters, and industry publications, to disseminate information about sustainable practices. **Regulatory compliance resources** Provision of guidelines, manuals, or support systems to help stakeholders understand and comply with sustainability-related regulations. **Financial resources:** Allocation of funds to support the implementation of sustainable initiatives, such as training programs, collaborative projects, or technology upgrades. **Partnerships and networks:** Reliable data from relevant organizations, research institutions, and industry associations to leverage their expertise and resources in promoting sustainable practices. **Monitoring and evaluation mechanisms:** Provision of systems to monitor and evaluate the progress and impact of sustainable practices, ensuring continuous improvement and accountability.	relevant sustainability regulations and standards, ensuring compliance and avoiding penalties or reputational risks. **Strengthened stakeholder engagement:** Active participation and collaboration among stakeholders foster a sense of ownership and shared responsibility for sustainable practices, leading to stronger partnerships and a collaborative approach towards sustainability goals. **Innovation and technological advancements:** Adoption of sustainable practices encourages research, development, and innovation in the maritime industry, driving the emergence of new technologies and solutions that contribute to a greener and more efficient sector. **Positive industry reputation:** Demonstrating commitment to sustainable practices enhances the industry's reputation, attracting investment, talent, and partnerships, while also fostering public trust and support. **Long-term sustainability:** The implementation of sustainable practices contributes to the long-term sustainability and resilience of the maritime industry, ensuring its viability and competitiveness in a rapidly changing global landscape.

STRATEGIC ELEMENTS				
Communication Objective	Key Communication Risks	Audience	Current Behavior / Desired Change	Message / Info Needs
	adoption and impact of sustainable practices can be complex. Without proper monitoring and evaluation systems in place, it may be challenging to assess the effectiveness and identify areas for improvement in the implementation of sustainable measures.			value of collaboration and partnerships in driving sustainable practices. Encourage stakeholders to seek collaboration with other industry players, research institutions, and government agencies to jointly develop and implement sustainable initiatives. **Monitoring and reporting mechanisms:** Communicate the significance of regular monitoring and reporting of sustainability indicators and metrics. Provide guidance on data collection, reporting frameworks, and the benefits of transparently tracking progress to identify areas for improvement and showcase achievements. **Economic benefits of sustainability:** Highlight the economic advantages of sustainable practices, such as cost savings, improved operational efficiency reduced environmental impact, and access to green financing opportunities. Emphasize that sustainability is not just an environmental responsibility but

	WORKPLAN			EVALUATION
Channel / Activity	Time	O/PR	Resources Needed	Expected Outcomes
their perspectives and concerns can be addressed, fostering a sense of ownership and commitment to sustainable practices. **Providing resources and support for regulatory compliance:** Offer resources, guidelines, and support to help stakeholders navigate and comply with regulatory requirements related to sustainability. These resources will facilitate smooth implementation of sustainable practices while ensuring adherence to applicable laws and regulations. **Utilizing effective communication platforms to disseminate information and foster engagement:** Leverage various communication platforms, such as websites, social media, newsletters, and industry events, to effectively disseminate information about sustainable practices and engage stakeholders. Regular communication will raise awareness, promote knowledge sharing, and encourage active participation in sustainable initiatives.				

STRATEGIC ELEMENTS				
Communication Objective	Key Communication Risks	Audience	Current Behavior / Desired Change	Message / Info Needs
				also a strategic business decision. **Stakeholder engagement:** Stress the importance of engaging and involving stakeholders at all levels in the implementation of sustainable practices. Encourage collaboration, active participation, and the sharing of ideas and experiences to foster a collective commitment to sustainability. **Regulatory compliance:** Communicate the regulatory requirements and obligations related to sustainable practices in the maritime industry. Provide guidance on how stakeholders can ensure compliance and navigate regulatory frameworks effectively. **Communication platforms:** Establish effective communication platforms, such as dedicated websites, newsletters, social media channels, and industry events, to provide ongoing updates, resources, and opportunities for dialogue and knowledge exchange on sustainable practices.

	WORKPLAN			EVALUATION
Channel / Activity	Time	O/PR	Resources Needed	Expected Outcomes

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Annex

A

Executive Order No. 55

Adopting the Ten-Year Maritime Industry Development Plan 2028

MALACAÑAN PALACE
MANILA

BY THE PRESIDENT OF THE PHILIPPINES

EXECUTIVE ORDER NO. 55

ADOPTING THE TEN-YEAR MARITIME INDUSTRY DEVELOPMENT PLAN 2028

WHEREAS, Presidential Decree (PD) No. 474 (s. 1974) or the "Maritime Industry Decree of 1974," as amended, created the Maritime Industry Authority (MARINA) to accelerate the integrated development of the maritime industry of the Philippines;

WHEREAS, Section 5 of PD No. 474 mandated the preparation and annual updating of a Ten (10)-Year Maritime Industry Development Program (MIDP) that contains a rational and integrated development plan of the maritime industry for submission to, and approval by, the President;

WHEREAS, to fully realize our potential as a maritime nation, the country requires a clearly defined and coordinated roadmap that shall accelerate the integrated development of the Philippine Maritime Industry;

WHEREAS, the MIDP envisions a strong and reliable Philippine Merchant Fleet that addresses the sea transport requirements of the archipelago in support of national development, consistent with the country's *AmBisyon Natin* 2040 of a strongly rooted, comfortable and secure life for all Filipinos;

WHEREAS, the Administration's Eight (8)-Point Socioeconomic Agenda seeks to improve transportation and the Philippine Development Plan 2023-2028 aims to enhance inter-sectoral linkages by accelerating the development of a globally competitive maritime industry while positioning the country as a key aviation hub in Asia;

WHEREAS, to ensure the effective implementation of the MIDP, it is imperative that all government agencies and instrumentalities align and harmonize their policies and courses of action with the 10-Year MIDP; and

WHEREAS, Section 17, Article VII of the Constitution vests in the President the power of control over all Executive departments, bureaus and offices, and ensure the faithful execution of laws;

NOW, THEREFORE, I, FERDINAND R. MARCOS JR, President of the Philippines, by virtue of the powers vested in me by the Constitution and existing laws, do hereby order:

Section 1. Adoption and Implementation. Pursuant to Section 5 of PD No. 474, the Maritime Industry Development Plan 2028 is hereby approved and adopted as the whole of nation roadmap for the integrated development and strategic direction of the maritime industry.

Towards this end, the MARINA Board shall adopt a system for the effective implementation, monitoring and review of the MIDP, and its component programs as follows:

a. Modernization and expansion of domestic shipping;

b. Promotion and expansion of the overseas shipping industry;

c. Modernization, expansion and promotion of shipbuilding and ship repair industry;

d. Promotion of highly-skilled and competitive maritime workforce;

e. Enhancement of maritime transport safety and security;

f. Promotion of environmentally sustainable maritime industry;

g. Implementation of a sustainable maritime innovation, transformation, digitalization and knowledge center; and

h. Adoption of an effective and efficient maritime administration governance system.

Section 2. Convergence. Pursuant to Section 5 of PD No. 474, all relevant national government agencies and instrumentalities, including government-owned or -controlled corporations, government financial institutions, and state universities and colleges, are hereby directed, and all local government units are hereby encouraged, to implement the MIDP, as well as the plans, programs and strategies identified therein that are relevant to their respective mandates.

Section 3. MIDP Technical Board. An MIDP Technical Board (TB) is hereby created to assist the MARINA Board in the implementation, monitoring, updating and review of the MIDP.

The MIDP TB shall be initially composed of the representatives of the MARINA Board under Section 7 of PD No. 474, with rank not lower than that of an Assistant Secretary or its equivalent. The MARINA Board may invite or enjoin participation of other relevant agencies or instrumentalities as additional members, whenever necessary in the performance and functions of the MIDP TB.

The MARINA Board may create technical working groups (TWG) based on the component programs identified in the MIDP, consisting of representatives of agencies

and instrumentalities with relevant mandates. Representatives to the TWG/s shall have a rank not lower than that of a Director or its equivalent.

The MIDP TB and the TWGs shall meet every quarter, or as frequently as may be deemed necessary by the MARINA Administrator or the MARINA Board.

The MARINA shall provide secretariat services to the MIDP TB and its TWGs.

Section 4. Functions of the MIDP Technical Board. The MIDP TB shall perform the following functions, subject to the control and supervision of the MARINA Board:

a. Review, monitor and recommend approval of MIDP-related policies and programs to the MARINA Board;

b. Periodically conduct comprehensive review of the MIDP, using evidence-driven approaches and internationally recognized standards and best practices, and develop pertinent policy and implementation guidelines thereof for the approval of the MARINA Board;

c. Establish an integrated database and information system following a specific statistical framework for the maritime industry which will address the information needed for monitoring, reviewing and updating the MIDP-related policies and programs, in coordination with the Philippine Statistics Authority;

d. Prepare progress and performance reports for review and information of the MARINA Board; and

e. Perform other functions as may be requested by the MARINA Administrator or the MARINA Board.

Section 5. Funding. The funding requirements for the implementation of this Order shall be charged against current and available appropriations of MARINA and other relevant agencies, subject to pertinent budgeting, accounting, and auditing laws, rules and regulations. Thereafter, the funding requirements necessary for the continued implementation of this Order shall be included in the budget proposals of the MARINA and other relevant agencies, subject to the usual budget preparation process.

Section 6. Communication Plan. The MARINA shall implement the Communication Plan included as part of the MIDP, in coordination with the Presidential Communications Office.

Section 7. Report. A progress report on the status of implementation of this Order and the MIDP shall be submitted by the MARINA to the Office of the President, through the Office of the Executive Secretary, within six (6) months from the implementation of this Order, and every year thereafter.

Such progress report shall contain annual targets, accomplishments and data on budget utilization, as may be applicable, on each of the programs identified in the MIDP.

Section 8. Separability. If any section or part of this Order is declared unconstitutional or invalid, the other sections or provisions not otherwise affected shall remain in full force and effect.

Section 9. Repeal. All other orders, guidelines, rules, regulations, and issuances or parts thereof, which are inconsistent with the provisions of this Order, are hereby repealed or modified accordingly.

Section 10. Effectivity. This Order shall take effect immediately upon publication in the Official Gazette or in a newspaper of general circulation.

DONE, in the City of Manila, this 8th day of February, in the year of our Lord, Two Thousand and Twenty-Four.

By the President:

LUCAS P. BERSAMIN
Executive Secretary

REPUBLIC OF THE PHILIPPINES
PBBM003863

Office of the President
MALACAÑANG RECORDS OFFICE
CERTIFIED COPY
ATTY. KAMILLE N. ESPINO
2-12-2024 ACTING DIRECTOR IV

THE PHILIPPINE MARITIME INDUSTRY DEVELOPMENT PLAN

2028

MESSAGE FROM THE
INCUMBENT MARINA ADMINISTRATOR

This book containing the updated Maritime Industry Development Plan 2028 stands as a testament to our collective commitment to charting a course towards a vibrant, sustainable, and resilient maritime industry.

Within these pages lie the culmination of extensive collaboration, meticulous planning, and unwavering dedication from stakeholders across the maritime spectrum. It is a roadmap that reflects our shared vision for the future of our maritime sector—a vision grounded in innovation, sustainability, and inclusivity.

As we embark on this journey, it is imperative to acknowledge the pivotal role that each stakeholder plays in the realization of our aspirations. From government agencies to industry partners, academic institutions to maritime professionals, our collective efforts are essential in driving progress and shaping the future of our maritime landscape.

I am proud to note that the updated MIDP 2028 has received the endorsement of President Marcos Jr through Executive Order No. 55, underscoring the government's unwavering support for our endeavors.

As we navigate the challenges and opportunities that lie ahead, let us remain steadfast in our commitment to excellence, collaboration, and sustainability. Together, let us forge ahead with determination, knowing that our collective efforts will pave the way for a brighter future for the maritime industry and the nation as a whole.

I extend my heartfelt gratitude to all who have contributed to the development of this plan and express my sincere hope that this book serves as a guiding light in our journey towards a prosperous maritime future.

SONIA B. MALALUAN

Annex

B

MIDP Accomplishments 2019 to 2022

Annex B

Pursuant to Section 2 of the Maritime Industry Decree of 1974, the MARINA was mandated to "*adopt and implement a practicable and coordinated Maritime Industry Development Program which shall include, among others, the early replacement of obsolescent and uneconomic vessels; modernization and expansion of the Philippine merchant fleet, enhancement of obsolescent and uneconomic vessels; modernization and expansion of Philippine merchant fleet , enhancement of domestic capability for shipbuilding, ship repair and maintenance and the development of reservoir of trained manpower*".

The establishment of MIDP the MARINA envisions to accelerate and expand domestic shipping services that shall render the country's economic environment more conducive for flourishing of businesses, influx of investments and facilitation of trade within the country; build modern and seaworthy ships through a globally competitive ship building, ship repair and ship breaking industry; and promote and develop the Philippines as human resource capital for ship management and other maritime services.

As the lead implementing Agency of the 10- Year Maritime Industry Development Plan 2019 to 2028, the Maritime Industry Authority (MARINA) presents the updates of the Plan since it was initially implemented in the middle of 2019 based on the results of the MIDP Updating Workshop in September 2020 and the Government-Industry Forum in September 2021.

Following the unprecedented impact of the COVID19 health pandemic in 2020 which impacted heavily on the national economy due to the implementation of various levels of quarantine protocols that restricted movement of people, goods and services across the various islands of the archipelago, the implementation of the MIDP was derailed as it did not progress significantly to meet the desired outcomes.

Milestones

Despite the reeling effects of the pandemic, the MARINA, in partnership with the partner agencies and the private stakeholders managed to realize the following notable accomplishments for period 2019-2022 and enumerated per revised titles / programs:

Program 1: Development of Domestic Shipping. In support to the national government's Nautical Highway Development Program through the modernization and upgrading of the existing domestic merchant fleet, establishment of new shipping routes, and promotion of private sector participation in domestic shipping facility development and operation. The following projects/programs/activities were accomplished:

1. **Identified a total of 41 missionary routes for Roll-on, Roll-off (RORO) Routes;**

2. **50 billion pesos loan facility** of the Development Bank of the Philippines (DBP) as part of the ship financing program in support for the effective implementation of the MARINA's MIDP towards the modernization of the domestic shipping industry;

3. **Fiscal incentives as follows:**

a. ***Board of Investments (BOI) fiscal incentives under 2017 Investement Priorities Plan (IPP)***. Six (6)-year income tax holiday and duty-free importation of brand new International Association of Classification Societies (IACS)-classed ships has been extended to the domestic shipping industry.

b. ***Incentives Granted for Pioneer Status***. Protection of investment in pioneering routes and 50% discount in all fees and charges including the Annual Tonnage Fee (ATF) for a period of six (6) years.

c. ***Incentives Granted for RORO Missionary Status***. Route protection for a period of five (5) years and are granted 50% discount on all fees and charges including ATF.

4. **Rehabilitation and improvement of seventy one (71) ports and terminals of the national government;** (2019 - 37; 2020 - 27 and 2021 - 7); and

5. **Better quality shipping service** as a result of the RORO Transportation System Passenger Ships Rating Survey (RRTS-PSRS). This is in terms of service adequacy, boarding system, baggage stowage and security, ticketing system, and ship's crew & staff performance.

Program 2: Development of Shipping Services for Tourist Destination Areas. In support to the efforts to develop and upgrade of design and operational safety standards and promotion of local construction of cruise ships and the development of new cruise routes, the MARINA, in collaboration with its partners accomplished the following:

1. **MARINA MC No. DS- 2019-01** on Issuance of Rules on the Registration, Licensing and Operation of Recreational Boats";

2. **Facilitated the initial funding of 500 million pesos for the Puerto Princesa Cruise Port**;

3. Commenced Feasibility Study by Tourism Infrastructure and Enterprise Zone Authority (TIEZA) on the **Development of a Cruise Port and Passenger Terminal in Manila Bay Area**;

4. **Identified eighten (18) cruise destinations** out of the forty nine (49) TDAs determined by the Department of Tourism (DOT). These cruise destinations shall be the focus of the MIDP program to provide shipping services with;

5. **Forged MOA between MARINA and Philippine Council for Industry, Energy, and Emerging Technology Research and Development (PCIEERD) for the conduct of Study on the Development of Solar Assisted Electric Boat** a safe, efficient, and sustainable solar-assisted plug-in electric boat that could be utilized for island tourism and passenger transport and the **Study on the Development of Hybrid Trimaran**, a prototype vessel with multiple engines and alternative renewable energy system using wave ocean energy.

6. **Study on Domestic Cruise Tourism and other Nautical Products** by the DOT - Office of Product and Market Development (OPMD) Cruise Team.

Program 3: Development of Coastal and Inland Waterways Transport System (CIWTS). To provide an efficient, safe, and environmentally-sustainable CIWT system through the reduction of cost and time of transport and increased passenger satisfaction, this program aims to increase the efficiency in the movement of people, investments in CIWT boat and facility operations generated, the following accomplishments were achieved:

1. **Launch of the Manila – Cavite Ferry System** initiated by the private sector, which deployed modern ferry vessels in Sangley Point, Cavite to Philippine International Convention Center (PICC) Forum, Pasay Area; and

2. **Continuing discussions with various government and private agencies on expanding the ferry operations in Pasig River and Laguna Lake**.

Program 4: Improvement of the Efficiency of Fishing Operations and Vessel Safety

1. Development and Implementation of **New Fishing Vessels Safety Rules and Regulations;**

2. **National Interest Analysis (NIA) and collaterals** on the Proposed Ratification of Cape Town Agreement (CTA) and STCW – Fishing;

3. **Training Design and Syllabus on the Collaborative Training Program** (between MARINA and Bureau of Fisheries and Aquatic Resources (BFAR) for Boat Captain and Diesel Mechanics manning BFAR-boat grants to fisherfolks; and

4. **Ground works with BFAR for the development and maintenance of an integrated database on fishing vessels and crew**

Program 5: Promotion and Expansion of the Philippine Overseas Shipping

1. **MARINA MC OS-2020-01** on Amendment to MARINA Circular No. 2013-04 Providing for the Omnibus Rules on the Issuance of Special Permit for the Temporary Utilization of Philippine-registered Domestic Ships to Operate in International Voyages;

2. **MARINA MC-OS-2019-02** on Rules in the Registration and Documentation for Permanent Conversion of Ships Trading Status from Domestic to Overseas Trade;

3. **MARINA MC OS-2019-01** on Enhanced the Rules in Acquisition of Ships under Presidential Decree No. 760;

4. **Approval of the Philippine Model Merchant Shipping Agreement**

5. **Approval of Executive Order No. 84**, institutionalizing the Inter-agency Council on the IMO Member State Audit Scheme (IMSAS); and

6. **Approval of Executive Order No. 159**, adopting an integrated approach in the ratification and accession to international maritime organization conventions and instruments, and reconstituting the inter-agency coordinating committee for the purpose.

Program 6: Enhancement of Maritime Safety and Security in the Philippines

1. **MARINA Administrative Order No. 24-22** on Institutionalization of the MARINA Technical Personnel Certification System (MTPCS);

2. **Issuance and/or Improvement of nine (9) ship safety regulations**, as follows:

   a. ***Passenger Ships Safety Rules and Regulations (PSSRR);***

   b. **MARINA MC MS 2020-01** on *Accreditation of Classification Societies and Entities for the Purpose of Classification of Ships in the Domestic Trade*;

   c. **MARINA MC MS 2020-03** on *Safe Manning for Ships Operating in Philippine Waters*;

   d. **MC MS 2021-01** on *Rules and Regulations Governing Ships Carrying/ Storing/ Processing Liquefied Gases in Bulk*;

   e. **MC MS 2020-03** on *Rules and Regulations on Fire Safety and the Implementation of the Fire Safety Systems (FSS) Code for Philippine-Registered Ships Engage in International Voyages*;

   f. **MC MS 2021-02** on *Requirement of Life-Saving Appliances and Arrangements Onboard Philippine-Registered Ships Engage in International Voyages*;

   g. **MC SR 2021-01** *on Rules and Regulations on the Tonnage Measurement of Philippine-Registered Ships*;

   h. **MC SR 2021-01** *on Rules and Regulations on the Loadline Survey, Assignment, Marking and Certification for the Philippine-Registered Ship; and*

   i. **MC SR 2021-04** *on Rules and Regulations on Intact Stability Requirement of Philippine-Registered Ships*
      - Developed and implemented nine (9) safety related training courses for MARINA personnel

Program 7: Modernization / Expansion of the Shipbuilding and Ship Repair Industry

1. Draft Shipbuilding / Ship Repair House Bill; and

2. Produced SBSR Brochure

Program 8: Development of a Sustainable Maritime Innovation, Digitalization, Transformation and Knowledge Center (MIDKTC)

1. **Development of the Integrated Domestic Shipping Information Systems (IDSIS).** Pilot-testing of the System is on-going;

2. **Development of the Municipal Fishing Vessel Registration System (MFVRS);**

3. **Establishment of the MARINA E-Library System (MELS);**

4. **Development and implementation of the MARINA E-Payment System;**

5. **Development of Blockchain-Enabled Automated Certification System.** The project completed the following major documents:

   a. Project Planning and Requirement Analysis;
   b. Approval and implementation of the Project Implementation Plan;
   c. Assessment of MARINA's existing systems; and
   d. Requirements gathering and system prototyping.

6. **Development of the Maritime Route Rationalization and Information System (MARRIS)**, and the implementation of Phase I; and

7. **MARINA MC OS-2021-01** on **Establishment and Implementation of Overseas Shipping Service Information and Monitoring System (OSSIMS).**

Program 9: Development of a Globally Competitive Maritime Workforce

1. **Draft Bill on Maritime Education and Training Act** which includes the acquisition of training ships and establishment of additional government-owned maritime training centers;

2. **Proposal on the acquisition of training ship (PMMA);**

3. **Smart Campus Project (PMMA)**
   a. Cloud Simulation on Radar, ARPA, ECDIS, Engine Room, among others
   b. E-Learning Modules
   c. Augmented Reality / Virtual Reality

4. **Standard Course Package for the 1st Year Level of the Bachelor of Science on Marine Transportation (BSMT) and Bachelor of Science in Marine Engineering (BSMarE) Programs;**

5. Established and enhanced the **MARINA QBank System** and the **MARINA Competency Assessment System (MCAS);**

6. **Revised Table of Specifications (TOS) for the Theoretical Examination of Marine Deck and Engineer Officers;**

7. **Revised Competency Mapping for the Practical Assessment of Marine Deck and Engineer Officers;**
8. **Revised training standards for Refresher course on Personal Survival Techniques;**

9. **Refresher course on Fast Rescue Boat and Regular Course on Personal Survival Techniques;**

10. **Updated Outcomes-Based Monitoring Instrument** for Maritime Education Programs (MEPs) Offered by Maritime Higher Education Institutions (MHEIs);

11. **Ten (10) policy issuances on the country's continuing compliance with the STCW Convention.** [ADD TEXT]**:**

- *Policies, rules and regulations in the accreditation of Maritime Training Institutions (MTIs) and Assessment Centers (ACs);*

- *Revised rules and requirements in the issuance and revalidation of Certificate of Competency (COC) and Certificate of Proficiency (COP), including the new formats of the Certificates;*

- *Revised Guidelines in the Training and Assessment of Seafarers by Distance Learning and E-Learning;*
- *Revised Guidelines in the Assessment of Competence of Seafarers;*

- *Revised Rules on the Monitoring of Approved Training Courses conducted by MTIs, and Assessment of Seafarer's Competence carried out by ACs;*

- *Revised Joint Commission on Higher Education (CHED)-MARINA Policies, Standards and Guidelines for BSMT and BSMArE Programs;*

- *Revised Joint CHED-MARINA Guidelines on the Evaluation and Inspection of Higher Education Institutions Applying for Government Authority to Operate BSMT and/or BSMarE Programs;*

- *Revised Joint CHED-MARINA Guidelines in the Monitoring of BSMT and BSMarE Programs*
- *Guidelines for the Onboard Training of Cadets on PH-registered ships engaged in domestic shipping; and,*

- *Revised Training Standards for Global Maritime Distress and Safety System (GMDSS) Radio Operators.*

12. Twenty (20) research studies conducted by the National Maritime Polytechnic (NMP), the PMMA and STCW Office:

- *Philippine Employment Laws Affecting Seafarers: Focus on the Philippine Arbitration System and Ambulance Chasing;*

- *The Capacity of the Philippine Maritime Industry to Produce Officers-in-Charge per STCW Requirements: Focus on the Onboard Training of Cadets;*

- *Autonomous Ship Technology: Implications to the Philippine Maritime Industry;*

- *Employment Acceptability of Women Philippine Domestic Ships;*

- *An Examination on the Online Learning Readiness of Filipino Seafarers;*

- *An Assessment of NMP's Capability to Conduct Online Training;*

- *Managing the Threats of COVID-19 in Seafarers' Health and Well-being: Response of the*

Philippine Maritime Industry (Phase 1);

- *Managing the Threats of COVID-19 in Seafarers' Health and Well-being: Response of the Philippine Maritime Industry (Phase 2);*
- *Issues and concerns on Philippine Non-Ratification of STCW-F;*
- *Philippine Domestic Maritime Industry's Compliance with Maritime Labour Convention (MLC) 2006: Challenges of Implementation;*
- *Standardization and Updating of the Philippine Maritime Manpower Factbook 2020/2021;*
- *Proficiency of Graduates of BSMT and BSMar-E on Controlling the Operation of Ship and Care of Persons onboard at the Operational Level as Qualification for Shore-Based Jobs;*
- *A Proposed integrated ISO High-Level Structured Ship Management System Standard Requirement;*
- *Analysis of the Retirement Experiences of Filipino Seafarers: Towards developing a Comprehensive Seafarer's Reintegration Program;*
- *Implementation of Data Privacy Act in Philippine Manning Agencies;*
- *Proposed Integrated Digital Platform for Maritime Crew Resource Management;*
- *Marine Engineers' Level of Competence on Lubricating Oil Handling in Marine Diesel Engine: Basis for Training Program Development;*
- *Understanding the Seafarers' Career Motivation at Sea for a Strategic Retention Program;*
- *Comparative Analysis of the Navigational Safety Infrastructures in the Philippines and South Korea;*
- *The Lived Experiences of Women Leaders in a Male-Dominated World of Work: A Phenomenological Study; and*
- *Analysis of Domestic Mooring Practices of Filipino Seafarers.*

Program 10: Implementation of the Strategy on Marine Environment Protection.

Four (4) policy issuances, as follows:

1. **Memorandum Circular No. 2021- 05** on Rules and Regulations on the Implementation of Ships' Energy Efficiency Management Plan (SEEMP) and Data Collection System (DCS) for Fuel Oil Consumption for all Philippine-registered Ships;

2. **Memorandum Circular No. 2020-06** on Rules and Regulations on the Mandatory Use of 0.50% m/m Sulphur Limit on Fuel Oil for All Philippine-Registered Ships in Compliance with Annex VI of MARPOL 73/78, as amended;

3. **Memorandum Circular No. SR-2020-05** on Rules and Regulations for the Control of Ships' Ballast Water and Sediments in Compliance to Ballast Water Convention; and

4. **Memorandum Circular No. SR-2020-02** on Rules and Regulations on the Construction of Tank and Installation of Equipment to Collect, Store and Treat Sewage from Ships in Compliance with Annex IV of MARPOL 73/78, as amended.

As the PBBM Administration laid down its 8-Point Socioeconomic Agenda during his first State of the Nation Address (SONA) at the opening of the First Regular Session of the 19th Congress last 25 July 2022, the MARINA has commenced the ground works for the updating of the Maritime Industry Development Plan (MIDP).The updating of the MIDP shall ensure that all programs are consistent with and responsive to the Socioeconomic Agenda of His Excellency President Ferdinand R. Marcos Jr.

THE PHILIPPINE MARITIME INDUSTRY DEVELOPMENT PLAN

2028

Annex

C

Statements of Support from the Stakeholders

Annex C

STATEMENTS OF SUPPORT FROM THE STAKEHOLDERS

ASSOCIATED MARINE OFFICERS and SEAMEN's UNION OF THE PHILIPPINES (AMOSUP)

Representative, VADM EDUARDO MA R SANTOS AFP (RET)

On behalf of the General Membership of the AMOSUP, I express my support to the updated Maritime Industry Development Plan (MIDP) 2028. The MIDP's objective of developing future-ready seafarers is something that we, as a maritime community, strongly support, especially now that we are witnessing tremendous transformations in the global maritime industry. Filipino seafarers are the best in the world. Ship owners have always held our seafarers in high regard because of their excellence, discipline, dedication, and passion in the work they do.

Our seafarers, both women and men, are the most in demand labor force in the world's fleet today; and we want to keep it that way, to hold our reputation as the home of world class seafarers. I know that this is a goal that we all share. But this requires our collective commitment, willpower and strategic action.

We, at AMOSUP, are committed to working with all of you. Our government, the private sector, and our social partners, to successfully carry out the objectives and programs of the MIDP that will benefit our seafarers in the years to come.

In the dawn of decarbonization, automation, and digitalization in shipping, we are one with all of you in ensuring that Filipino seafarers are not left behind-that our maritime labor force is well-equipped, highly skilled, and globally competitive. But we can only do this if we work collaboratively and sail forward as one.

As AMOSUP founder, Capt Gregorio Oca said in his speech for the ratification of the Maritime Labor Convention 2006, "There is strength in numbers". He was a strong advocate of tripartism, of unity amidst differences, barriers and diversity.

And I believe his wisdom holds true for us to successfully move forward towards a strong, resilient, and sustainable Philippine maritime industry.

FILIPINO ASSOCIATION OF MARINERS EMPLOYMENT (FAME)

President, CAPT GAUDENCIO C MORALES

FAME would like to express our full support to the MARINA updated MIDP. In support of Program 3 of the said updated MIDP especially in shipbuilding and ship repair industry modernization, FAME members, together with members of Integrated Sea Members of the Philippines and the Philippine Association of Coastal and Inland Waters Ferry Inc., took the initiative to invest in the development of safe and environment friendly shipbuilding and ship repair facility in Albuera, Leyte which is named IMP Shipyard and Port Services Inc. It will be operational 2023. The general concept of the IMP Shipyard is centered on five (5) program of activities and they are shipbuilding, ship repair, capacity building, community empowerment, and seafarers eeintegration.

We expect these programs to generate at least three hundred (300) jobs and livelihood opportunities not only to the coastal community of Albuera but also to our displaced and returning seafarers. With reciprocal support from the government by providing local shipbuilders with tax incentives similar to the tax incentives given to foreign shipbuilders faithfully that we can achieve the modernization, expansion, and promotion of the shipbuilding and ship repair industry in our country. *Maraming salamat po at mabuhay ang* Philippine maritime industry.

ASSOCIATION OF LICENSED MANNING AGENCIES (ALMA) MARITIME GROUP

President, MS. CRISTINA H. GARCIA

On behalf of the 71 member companies of the ALMA Maritime Group, I, Cristina Garcia, president of the association, reiterate our unequivocal support to the Maritime Industry Development Plan 2028 as aligned with the President's 8-point agenda and the PDP 2023-2028.

As an association of manning agencies and companies providing ancillary services for the maritime sector, it is our main and foremost responsibility to support our government's initiatives in the furtherance of our maritime industry while keeping the safety, welfare and interests of our Filipino seafarers for domestic and international trade as our number one priority; maintaining our global position as the preferred nationality for overseas shipping; safeguarding our foreign and local employers with a well-balanced regulations; protecting the marine environment; and adopting to emerging technologies.

The MIDP will pave the way for our country to achieve our goals in becoming a major maritime nation and could address various issues and challenges that our sector currently faces here and in the international arena. This is an ambitious undertaking wherein all stakeholders are expected to communicate, collaborate, cooperate and even to compromise to ensure its success which will benefit the Philippine economy and positively impact the lives of our fellow countrymen.

We thank the Philippine government, through the Maritime Industry Authority, for giving us again an opportunity to be of service to the maritime sector with our representation in the Multi-Sector Governance Council and participation in various public consultations and fora. The ALMA Maritime Group, in its 2 years of existence, has been working with several government agencies on programs that have greatly benefitted the maritime sector, and will continue to do so, as we commit to support the implementation of the MIDP towards the realization of its programs by 2028. *Makakaasa po kayo na kaisa ninyo ang ALMA sa adhikaing ito. Maraming salamat po.*

WOMEN IN MARITIME – PHILIPPINES (WIMAPHIL)

President, MS. MERLE JIMENEZ SAN PEDRO

On behalf of the Women in Maritime Association Philippines (WIMAPHIL), which was established in 2007, with the support of no less than the International Maritime Organization (IMO) and representing six (6) regional chapters in the country, we express our strong support to the Updated Maritime Industry Development Plan of MARINA, We laud MARINA in consistency promoting UNSTG 5 on women empowerment and gender equality, and by recognizing WIMAPHIL as one of its major stakeholders in the maritime industry.

It is an affirmation of its commitment to provide a genderized in its core program on promoting highly skilled and competitive maritime workforce for its goal of job creation, not only to the seafaring but also in shipbuilding and ship repair, maritime education and training in fishing classification society, maritime tourism and other ancillary services. Women after all comprise almost half of the population in the country to be given equal opportunities and education and engage in meaningful work for careers to be productive in life. We talked about one (1) percent of the female seafarers in this country and we hope that with this MIDP we can double, triple and even go more than the percentage that we want to achieve. Indeed this is a significant and valued event to all women in celebration of the International Women's Day. We look forward to the diversity and inclusiveness the MIDP promises to empower women in maritime and allow them to be active partners who can contribute to the country's economic growth and development. *Mabuhay ang maritima industriya, mabuhay ang kababaihan ng industriya ng maritima.*

PHILIPPINE COASTWISE SHIPPING ASSOCIATION (PCSA)
President, LUCIO ROGER E. LIM

We congratulate and we fully support MARINA for coming up with the 10-year Maritime Industry Development Plan.

We are particularly interested in the promotion and modernization of the Roll-On Roll-Off (RORO) operation under the strong republic nautical highway of which our group forms the backbone.

The RORO passenger terminal highway of the strong republic nautical highway is acting like a bridge across our islands. Again, congratulations and our full support.

Thank you very much.

INTER-ISLAND DEEP SEA FISHING ASSOCIATION (IDSPA) AND ALLIANCE OF PHILIPPINE FISHING ASSOCIATION INC. (APFFI)
Representative, ATTY. HERSCHEL F. MAGRACIA

The Alliance of Philippine Shipping Federations, Inc., an umbrella group of various commercial fishing associations nationwide, expresses its unqualified support to the Maritime Industry Development Plan (MIDP) of the Maritime Industry Authority. As a unifying organization of all commercial fishing associations nationwide espousing the adoption of viable governmental policy framework, the Alliance is confident that the MIDP, as a significant maritime milestone, ushers blueprint that will ensure the adoption of pragmatic approaches for the country's fishing industry.

It must be underscored that captured fishery is not just significant sector of the maritime industry, but also plays a vital role for the country's food security. With more than one million people involved in captured fishing, the figures extensive multiplier reach is certainly more than substantial to warrant an effective and positive engagement of the government.

The Alliance understands that the MIDP, as the country's maritime master plan, will enable the adoption not just of broad but specific policies truly reflective of the requirements of the fishing industry. With the overriding policy on safety, the Alliance is confident that safe

fishing operations will continuously maintained and even upgraded. In recent years, none of the members of the Alliance encountered any serious or less serious maritime accident since the members take conscious effort to promote and observe safety culture which is also in line with the primary objective of MIDP.

The Alliance trusts that MIDP, just like the "Philippine Fishing Vessels Safety Rules and Regulations" (PFVSRR), which the commercial fishing sector actively sought for its passage, addresses various long-standing issues of fishing operators nationwide.

The Alliance of Philippine Fishing Federation, Inc., joins the rest of the maritime stakeholders in fully supporting the MIDP for safe fishing operations.

SHIPYARD ASSOCIATION OF THE PHILIPPINES (ShAP)
President, MR. MENELEO G. CARLOS III

Our members find strength in the administration's reaffirmed focus in the development of the maritime industry. During our meeting with the LMP, our President reiterated the government's shared responsibilities in shepherding our economy.

Through the DOTR, MARINA, and with their revised MIDP, the national government has laid out our path to growth. We trust that all stakeholders are moving in the same direction - let's ensure that for each step forward, there are no longer those moving us two steps back. We pray that this administration reduces inefficiency, red tape, and hurdles such as business permit refusals, and other barriers to development.

We in industry commit to creating capacity, modernizing the capability, maintaining the sea-worthiness, and keeping buoyant our maritime transport industry, all while providing quality skills & careers in the Philippines. We look forward to the national government's active development, steering, and monitoring of the successes, challenges, and operating environment faced by all stakeholders in the maritime industry. Working together, we will achieve the nationally integrated and globally competitive maritime industry that our country deserves. Thank you and *mabuhay*!

PHILIPPINE ASSOCIATION OF MARITIME INSTITUTIONS (PAMI)
President, MR. SABINO CZAR C. MANGLICMOT II

The essence of education is to empower individuals with the knowledge, skills, values, and attitudes necessary to lead a fulfilling life in meaningful contribution to our society. I represent the Philippine Association of Maritime Institution, the umbrella organization of all maritime schools in the Philippines.

It is an opportunity for us in the academe to participate in the development and promotion of the manpower requirements of the maritime industry as it is considered under the core programs of the MIDP. This will give us an open field to develop more educational programs designed to address the different manpower requirements of the maritime industry outside seafaring.

We are aware that this road or this journey will be rough and will be full of challenges despite of the scarce resources and indefinite end in mind: PAMI and all the men and women of its

75 member institutions will be one with the MIDP and which shall be our roadmap for our country to be indispensable in the maritime industry.

PHILIPPINE ASSOCIATION OF MARITIME TRAINING CENTERS INC. (PAMTCI)
President, MS. MARIA KATHERINE PAULINE R. AVELINO

On behalf of the Philippine Association of Maritime Training Centers Inc., it is our honor to support the Maritime Industry Development Plan. We pledge our full commitment to providing our global maritime professionals with quality and excellence in training by elevating the training standards of the Philippine maritime industry.

We will do this not only through compliance with the Standards of Training, Certification and Watchkeeping that has been set by to meet the future trainings of the International Maritime Organization but by going even further to meet the future training requirements of the shipping industry which, as we know, is evolving fast.

It is through training that we can transform our Filipino seafarers into global maritime professionals at par with the world's best. We are dedicated to doing everything to ensure that the Filipino will continue to be recognized as the most competent, skilled, and the industry's top of the mind choice.

The Filipino is the heart and soul of every ship, and we will continue to work hand in hand with MARINA and other government agencies so that the Philippines will continue to be the no. 1 provider of global maritime professionals, recognized for their dedication and passion.

Mabuhay at maraming salamat!

JOINT MANNING GROUP (JMG)
President, CAPT JUANITO G SALVATIERRA JR

The Joint Manning Group, an organization composing of five major manning associations in the Philippines, namely the FAME, PJMCC, PAMS, INTERMAP and FSA, in its advocacy to work with the government in the promotion and sustainability of Filipino seafaring industry, hereby expresses its full and utmost support to MARINA's updated 10-Year Maritime Industry Development Plan.

In particular, our sector focuses on the Program No. 9, the Development of the Future-ready Maritime Human Capital, which when fully implemented by the relevant government agencies spearheaded by MARINA and in collaboration with the private sector, is a feasible, doable and sustainable plan that will ensure more job opportunities for the Filipino seafarers and maritime professionals. The updated MIDP carries with it the solutions to challenges brought about by the perceived deficiencies in STCW compliance as found by European Union's EMSA.

Moreover, the Philippines, given its vast coastline, which doubles the size of United States and nearly 3-times more than China's coastline, our maritime trade and shipping services are in existence for decades and we firmly believe that a well-developed shipping and maritime industry can propel us to become a global maritime hub in the South East Asia.

The updated MIDP's flagship programs, notably the development of shipbuilding and ship repair

facilities, the upgrading of domestic shipping, the strengthening of Philippine flag registry, the modernization of coastal and inland waterways transport system, all these will certainly make a positive impact for the Philippine maritime industry, as MARINA and all stakeholders join hand behind our President's goal to reform, revitalize and sustain our seafaring and maritime industry, as a major contributor to the Philippine economy.

The Joint Manning Group is privileged to sail onboard MARINA's roadmap to MIDP as well as strive to achieve new heights into the future of a better Philippines. Mabuhay ang MARINA for its 10-Year Maritime Industry Development Plan. *Mabuhay ang Pangulong* Ferdinand Marcos Jr., for fully supporting this national endeavor under his administration.

PHILIPPINE-JAPAN MANNING CONSULTATIVE COUNCIL, INC (PJMCC)
President, CAPT EMMANUEL L REGIO

On behalf of the general membership of the Philippine-Japan Manning Consultative Council Inc. or PJMCC, I hereby express our support to the Maritime Industry Authority and the Philippines' updated Maritime Industry Development Plan 2028.

Through the MIDP's core programs, such as the enhancement of domestic and overseas shipping, modernization of shipbuilding and ship repair industry, and the promotion of a competitive maritime human resource, I believe that when accomplished, these would definitely propel the Philippines' status to becoming a major maritime nation in the world in the long run.

As part of the ship manning sector that is catering to the Japanese merchant marine fleet, we welcome the MIDP's co-equal focus on the continuous development of the competent Filipino seafarers, which is in line with what President Ferdinand R. Marcos Jr. has promised the Japanese Shipowners Association or JSA during his meeting with them in Tokyo, Japan last February 9, 2023.

Having said this, we look forward to receiving relevant updates as to MIDP's progress as well as the achievement of its milestones. Further, we commit to work with MARINA and all maritime industry stakeholders, in all aspects that we could, in order to help realize the grand vision of a "strongly rooted, comfortable and secure life for all Filipinos" as early as possible.

FILIPINO SHIPOWNERS ASSOCIATION (FSA)
Representative, MR. GERARDO A. BORROMEO

As an archipelagic country, the Philippines must see itself as a "maritime nation" interconnected by a series of nautical highways reliant on a vibrant shipping industry.

The Filipino Shipowners Association views our shipping industry as being at the core of a national logistics supply chain serving agriculture and food, energy, automotive, garments, real estate, infrastructure development and more.

Our shipping industry effectively acts as our export and import gateway, positioning our country as an important regional and international participant, ensuring our national economic security interests. This industry however, is not only about the ship but it is also about its people - our global maritime professionals. They are the "heart and the soul of shipping", who ensure the safe, secure, efficient, and effective movement of people and goods across the globe. If the Philippines is to rely to its key industries to drive our economy, we must provide a

strong enabling backbone through our maritime industry.

Over its 73-year history, the FSA has worked closely with the Philippine Government in promoting the development of the Philippine merchant fleet. We have espoused and supported legislation that seeks to simplify and strengthen ship registration, improve taxation, maritime adjudication, and ship modernization. We have likewise advocated for environmental regulations to protect our oceans and waterways-a vital platform for all that is maritime.

Today, we reiterate our commitment as a partner of government in its efforts to propel Philippine shipping. We wholeheartedly support and endorse the adoption of MARINA's MIDP, a national maritime agenda highlighting:

- The critical importance of our industry;
- Providing a vision; and
- Outlining key principles and courses of action.

The MIDP is an important first step. The work ahead, however, will entail that all of us work together to ensure that this voyage plan will be effectively achieved. It has been said that "the only way to predict the future is to build it. The FSA commends the government for providing this updated 10-year maritime agenda. In doing so, we not only see ourselves as a maritime nation, but we truly become one.

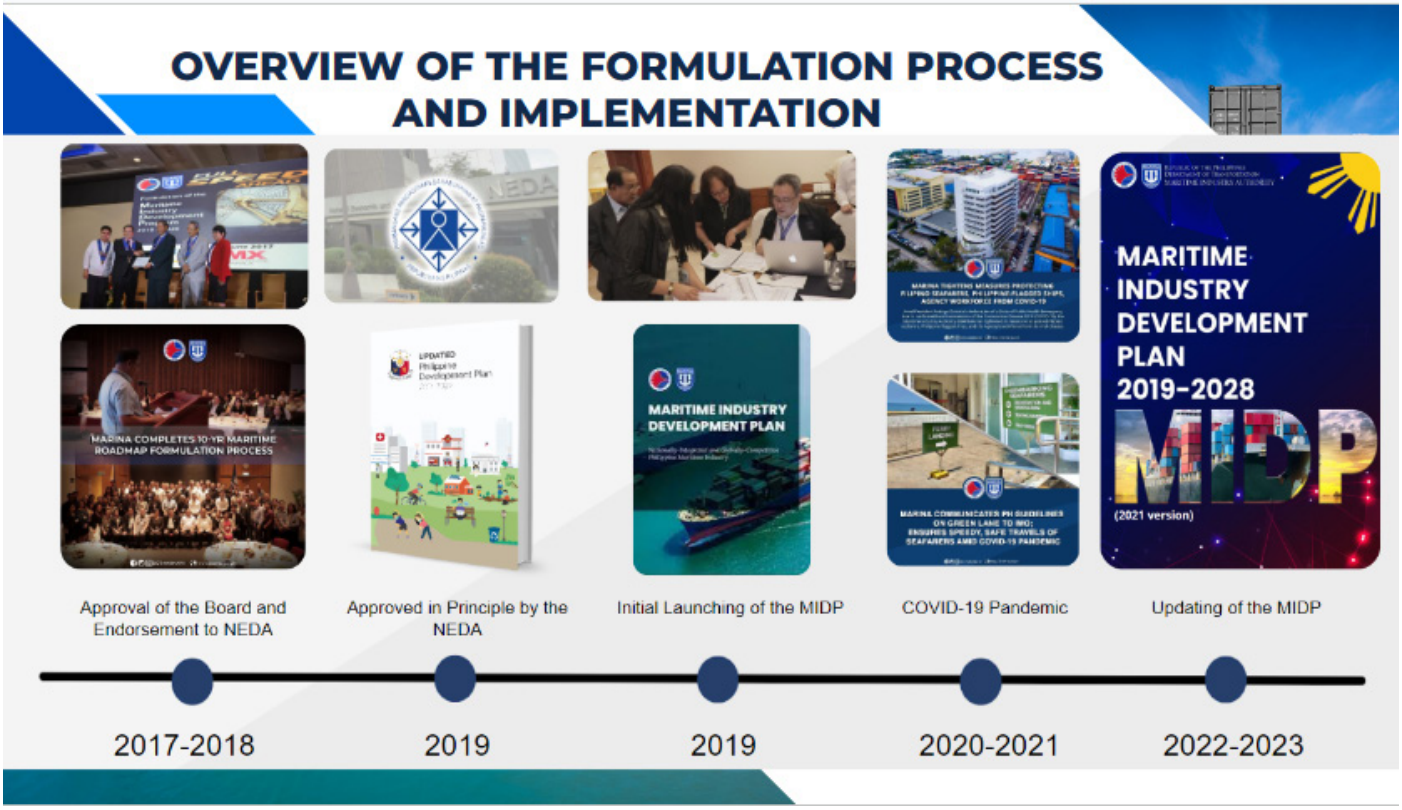
Annex

D

Process of Formulation Since 2017 to Updating

Annex D

PROCESS OF FORMULATION SINCE 2017 TO UPDATING



The formulation of the 10-Year Maritime Industry Development Plan (MIDP) commenced in 2017 through various roadmapping activities conducted by MARINA Central Service Units and Regional Offices. The approval of the MARINA Board as well as its endorsement to NEDA, secured in 2018. Meanwhile in 2019, the MIDP was approved by the NEDA in principle. Hence the initial launching of the industry plan on the same year. Despite budgetary contraints coupled with limitations brought about by the COVID-19 Pandemic, the MARINA and other implementing agencies embarked on the implementation of committed deliverables per program.

Annex

E

List of Participating Stakeholders

Annex E

LIST OF PARTICIPATING STAKEHOLDERS

A. GOVERNMENT AGENCIES

Bureau of Fire Protection (BFP)
Commission on Higher Education (CHED)
Cebu Port Authority (CPA)
Cooperative Development Authority (CDA)
Department of Agriculture (DA)
- Bureau of Fisheries and Aquatic Resources (BFAR)

Department of Budget and Management (DBM)
Department of Education (DepEd)
Department of Energy (DOE)
Department of Environment and Natural Resources (DENR)
- Environmental Management Bureau (EMB)
- National Mapping and Resource Information Authority (NAMRIA)

Department of Finance (DOF)
- Municipal Development Fund Office (MDFO)

Department of Foreign Affairs (DFA)
- Maritime and Ocean Affairs Office (MOAO)

Department of Justice (DOJ)
- Bureau of Immigration (BI)

Department of Information and Communications Technology (DICT)
Department of Labor and Employment (DOLE)
Department of Migrant Workers (DMW)
- National Maritime Polytechnic (NMP)

Department of Public Works and Highways (DPWH)
Department of Science and Technology (DOST)
- Advanced Science and Technology Institute (ASTI)
- Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD)

Department of the Interior and Local Government (DILG)
Department of Trade and Industry (DTI)
- Board of Investments (BOI)

Department of Transportation (DOTr)
- Office for Transportation Security (OTS)
- Philippine Coast Guard (PCG)
- Philippine Ports Authority (PPA)

Department of Tourism (DOT)
Tourism Infrastructure and Enterprise Zone Authority (TIEZA)
Development Bank of the Philippines (DBP)
Laguna Lake Development Authority (LLDA)
Land Bank of the Philippines (LBP)
Metropolitan Manila Development Authority (MMDA)
National Economic and Development Authority (NEDA)
Office of the President (OP)

Office of Transportation Cooperatives (OTC)
Philippine Economic Zone Authority (PEZA)
Philippine Information Agency (PIA)
Philippine Merchant Marine Academy (PMMA)
Philippine National Police-Maritime Group (PNP-MG)
Philippine Navy (PN)
Philippine Statistics Authority (PSA)
Technical Education and Skills Development Authority (TESDA)
University of the Philippines (UP)

B. PRIVATE SECTOR ASSOCIATIONS

Alliance of Philippine Fishing Federations, Inc. (APFFI)
Associated Philippine Seafarers Union (APSU)
Association of International Shipping Lines, Inc. (AISL)
Association of Licensed Manning Agencies (ALMA) Maritime Group
Associated Marine Officer's and Seamen's Union of the Philippines (AMOSUP)
Association of Tanker Operators of the Philippines, Inc. (ATOPHIL)
Boating Industries Association of the Philippines (BIAP)
Concerned Metro Manila Tugboat, Barge, and LCT Owners Association (CMMTBLA)
Conference of Maritime Manning Agencies (COMMA)
Filipino Association for Mariners' Employment, Inc. (FAME)
Filipino Shipowners' Association (FSA)
Institute for Maritime and Ocean Affairs (IMOA)
Integrated Seafarers of the Philippines, Inc. (ISP)
Inter-Island Deep Sea Fishing Association (IDSFA)
International Maritime Association of the Philippines, Inc. (INTERMAP)
International Seafarers' Welfare and Assistance Network (ISWAN)
Joint Manning Group (JMG)
Lighterage Association of the Philippines (LAP)
Manila Harbor Pilot Association of the Philippines (MHPAP)
Masters and Mates Association of the Philippines, Inc. (MAMAP)
Movement for Maritime Philippines (MMP)
Palafox Associates
Philippine Association of Manning Agencies and Ship Managers, Inc. (PAMAS)
Philippine Association of Maritime Institutions (PAMI)
Philippine Association of Maritime Training Centers, Inc. (PAMTCI)
Philippine Inter-Island Shipping Association (PISA)
Philippine Coastwise Shipping Association, Inc. (PCSA)
Philippine Liner Shipping Association (PLSA)
Philippine Petroleum Sea Transport Association (PHILPESTA)
Philippine Ship Agents Association (PSAA)
Philippine-Japan Manning Consultative Council, Inc. (PJMCC)
Philippines RORO Operators Association (PROA)
Philippine Transmarine Carriers, Inc. (PTC)
Shipyard Association of the Philippines (ShAP)
Society of Naval Architects and Marine Engineers (SONAME)
Supply Chain Management Association of the Philippines (SCMAP)
The Maritime League

United Filipino Seafarers (UFS)
Visayan Association of Ferry Boat & Coastwise Shipowners Operators (VAFCSO)
Women in Maritime Philippines (WIMAPHIL)

Annex

F

List of Participants during the Stakeholders Engagements

Annex F

LIST OF PARTICIPANTS DURING THE STAKEHOLDERS ENGAGEMENTS

I. 2023 PHILIPPINE MARITIME INDUSTRY PRE-SUMMIT; 21 February 2023 via virtual platform

A. Govenment Agencies

1. Bureau of Fisheries and Aquatic Resources (BFAR): Engr. Don George Ramos Tana, Ms. Khrisna P. Martinez
2. Civil Service Commission (CSC)- NCR: Mr. Genaro C. Mendi
3. Cooperative Development Authority (CDA): Mr. Samuel M. Gimpayan
4. Department of Energy (DOE): Mr. John Christopher Arceo Paculan, Mr. Erik Navarrete, Mr. RV Aguilar
5. Department of Environment and Natural Resources (DENR): Ms. Maria Theresa T. Lumdang, PPD M. Capistrano
6. Department of Finance (DOF): Mr. Walter Fernandez
7. Department of Foreign Affairs (DFA) - Maritime and Ocean Affairs Office (MOAO): Mr. Kirstoff Gail Ocampo, Ms. Geraldine Gamoso, Ms. Elaine Lorenzo
8. Department of Information and Communication Technology (DICT): Mr. David Almirol, Ms. Frances Loraine Valdez, Ms. Christine Apple Pre
9. Department of Labor and Employment (DOLE): Mr. Nick Romano, Mr. Camille Estanislao
10. Department of Migrant Workers (DMW): Mr. Jerome Pampolina, Ms. Karen Kelley Galang
11. Department of Tourism (DOT)-Office of the Undersecretary, TRCRG: Mr. Timothy S. Simpao
12. Development Bank of the Philippines (DBP): Ms. Raquel C Anzures
13. Laguna Lake Development Authority (LLDA): Engr. Jun Paul Mistica
14. Metropolitan Manila Development Authority (MMDA): Mr. Romano
15. National Economic and Development Authority (NEDA): Ms. Criselle S. Santos, Ms. Melorie DG. Lim, Ms. Millicent Urgel
16. National Mapping and Resource Information Authority (NAMRIA): LCDR Lorena Jasmin Lerio
17. National Maritime Polytechnic (NMP): Ms. Jasmin Andrade
18. Office of the President (OP): Asec. Angiereen Medina
19. Office of Transportation Cooperatives (OTC): Atty. Christian Oberio
20. Office for Transportation Security (OTS): Mr. Paul Rygel G. Burgonio, Atty. Cacho-Fernin, Mr. Enrico Bungalon
21. Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA): Mr. Robb Gile, Mr. Christopher F. Perez, Mr. Jun Galang
22. Philippine Drug Enforcement Agency (PDEA): Mr. Mat Jofry T. Rayala
23. Philippine Information Agency (PIA): Ms. Camille N. Serrano, Ms. Mary Rose C. Delos Santos, Mr. Sixto Paulo Agato
24. Philippine National Police - Maritime Group (PNP-MG): PCPT Alvin Eustaquio, PCPT Karen Rhea Basbas
25. Philippine Navy (PN): Mr. Alexander L. Benitez
26. Philippine Ports Authority (PPA): Mr. Jon Manansala
27. Professional Regulation Commission (PRC): Mr. Rizalito Lanoy
28. Technical Education and Skills Development Authority (TESDA): Mr. Ronaldo M. Demabasa
29. Tourism Infrastructure and Enterprise Zone Authority (TIEZA): Mr. Alex Travis H. Allan Jr., Archt. Arthur O. Añonuevo

B. Private Stakeholders

1. Association of Licensed Manning Agencies (ALMA) Maritime Group: Ms. Cristina Garcia, Mr. David Santos
2. Archipelago Philippine Ferries Corporation (APFC): Mr. Rexter Tupas, Mr. Romeo Carlo Casela, Ms. Cherryl Irene G. Bañaria, Ms. Danica Lyn G. Baldono
3. BW Shipping Philippines Inc.: Ms. Maria Theresa O. Tamano, Chief Engineer Manuel Umali, Mr. Noel Makasiar

4. Cargo Safeway, Inc.: Capt. Reynaldo D. Casareo
5. Dacanay & Magracia Law Offices: Atty. Herschel Magracia
6. Eagle Clarc Shipping Phils., Inc.: Mr. Anthony Alvarez
7. Filipino Shipowners' Association (FSA): Mr. Roy Alampay
8. Gothong Southern Freight: Mr. Paolo Diaz, Mr. Rex Yuvienco, Ms. Lolita Tan
9. Grace Marine & Shipping Corporation: Ms. Princess Mae Emia
10. Hartmann Crew Philippines, Inc: Ms. Divina Barena Repedro
11. International Seafarers' Welfare And Assistance Network (ISWAN): Mr. Renato C Pablo Jr
12. International Transport Workers' Federation (ITF) / Associated Marine Officer's and Seamen's Union of the Philippines (AMOSUP): Mr. Arvin Ivan Peralta, Ms. Camille A. Simbulan
13. Islands Integrated Offshore Services (ISLOFF) / Lighterage Association of the Phils. (LAP): Mr. Joaquin Garcia
14. JDA Inter-Phil Maritime Services Corp.: Ms. Rachel Marie Calangi
15. JEBSEN-PTC: Mr. Marlon Delatado Hontomin
16. Joint Manning Group / PAMAS / INTERMAP: Capt. Juanito G. Salvatierra Jr.
17. LV Fishing Enterprises: Ms. Helen Rosales Cervantes
18. Maersk Filipinas Crewing Inc.: Mr. Cyrus Taclob
19. MARINO Party List: Ms. Jasmin Miroy
20. Maritime Academy of Asia and the Pacific (MAAP)-AMOSUP Seamen's Training Center (ASTC): Capt. Diofonce F. Tuñacao
21. Marlow Navigation: Mr. Paul Galvez
22. Mariners Polytechnic Colleges Foundation (MPCF) Leg Acad Team: Ms. Norma Villanueva
23. Philippine Association of Maritime Institutions (PAMI): Ms. Czar Manglicmot
24. Philippine Association of Maritime Training Centers, Inc. (PAMTCI): Ms. Katherine "Karen" Avelino, Mr. Glenn Blasquez
25. Philippine Coastwise Shipping Association (PCSA): Mr. Edgardo G Nicolas
26. Philippine Liner Shipping Association (PLSA): Ms. Rona A. Gatdula
27. Philippine Transmarine Carriers, Inc. / Manning Agency: Mr. Ronald Macalintal
28. Scanmar Maritime Services Inc.: Ms. Lorraine Antonina D. Banta
29. Society of Naval Architects and Marine Engineers (SONAME): Mr. Samuel Lim
30. SOCSKSARGEN Federation of Fishing and Allied Industries, Inc (SFFAII): Ms. Shalimar Abdurahman
31. Solstad Offshore Crewing Services Philippines, Inc.: Ms. Jean Vincent Abobo
32. St. Peter Paul Medical Clinic (SPPMCI): Ms. Ava Ramirez
33. The Manila Times: Ms. Carmela Huelar
34. Top Ever Marine Management Phils., Corp.: CE Nestor G. Alilin
35. United Marine Training Center (UMTC): Mr. Isaias Jr. Pontrevida Despi
36. Wagenborg Manila Inc.: Ms. Edna De Luna, Mr. Ryan Tatel, Ms. Almira Matutina
37. Women In Maritime Philippines (WHIMAPHIL): Ms. Merle Jimenez-San Pedro

II. 2023 PHILIPPINE MARITIME INDUSTRY SUMMIT; 28 February 2023 at Manila Hotel, Manila

A. Govenment Agencies

1. Bureau of Fisheries and Aquatic Resources (BFAR): Atty. Michael S. Andayog
2. Bureau of Immigration (BI): Mr. Gilbert Q. Gervacio
3. Commission on Higher Education (CHED): Dr. Jose Prospero De Vera III
4. Consular Office, Belgium: H.E. Michel Parys
5. Consular Office, Korea: H.E. Kwon Soon Hyun
6. Consular Office, Netherlands: H.E. Patricia Sarmiento Alvendia
7. Consular Office, Norway: H.E. Frank Johansen
8. Consular Office, Ocea-France: H.E. Capt. Jerry Simon
9. Consular Office, Panama: H.E. Fabio Hidalgo Valdez
10. Consular Office, Spain: Mr. Rodrigo Baguilla, H.E. Silvia Torices
11. Development Bank of the Philippines (DBP): AVP Raquel C Anzures
12. Department of Environment and Natural Resources (DENR): Usec. Augusto D. Dela Peña
13. Department of Migrant Workers (DMW): Atty. Jerome T. Pampolina
14. Department of Energy (DOE): Usec. Giovanni Carlo J. Bacordo

15. Department of Labor and Employment (DOLE): Sec. Bienvenido E. Laguesma
16. Department of Tourism (DOT): Usec Shahlimar H Tamano, Mr. Timothy S. Simpao
17. Department of Transportation (DOTr): Sec. Jaime J. Bautista, Usec. Elmer Francisco U. Sarmiento, Usec. Reinier Paul R. Yebra, Asec. Julius A. Yano, Dr. Aurora Victoria Co Yano
18. Department of Public Works and Highways (DPWH): Mr. Abdulfatak A. Pandapatan
19. European Union (EU): Mr. Philipp Dupuis
20. IMO Goodwill Maritime Ambassador: H.E. Carlos Salinas, Ms. Danica Mae Madela, Atty. Karla Deles Gelle
21. Laguna Lake Development Authority (LLDA): Engr. Jun Paul Mistica
22. MARINO Party List: Mr. Johnlery Pugao, Ms. Jasmin D. Miroy, Mr. Mark Anthony L. Teodoro
23. National Economic and Development Authority (NEDA): Ms. Criselle S. Santos, Mr. Danela R. De Vera
24. Office of the Executive Secretary: Ms. Angielyn Medina
25. Office of the President: Mr. Carlo A. Paulino
26. Office for Transportation Security (OTS): PBGEN Rodelio B Jocson (Ret), Usec. Ma. O. R. Aplasca
27. Philippine Coast Guard (PCG): ADM Artemio Abu, CG Capt Jomark Angue
28. Philippine Information Agency (PIA): Mr. Sixto Paulo S. Agato
29. Philippine Navy (PN): COMMO Carlo V Lagasca
30. Philippine News Agency (PNA): Mr. Azer Parrocha
31. Philippine Ports Authority (PPA): Mr. Elmer Nonnatus A. Cadano, Atty. Jay Daniel R. Santiago
32. Philippine Merchant Marine Academy (PMMA): COMMO Joel Y Abutal PMMA
33. Presidential Management Staff (PMS): Mr. Jaypee Nardo, Ms. Maribel Montana, Ms. Sui Generis Santos, Ms. Zennette Mariano
34. Subic Bay Metropolitan Authority (SBMA): Atty. Martin Kristoffer F. Roman
35. Technical Education and Skills Development Authority (TESDA): Mr. Danilo Cruz
36. Tourism Infrastructure and Enterprise Zone Authority (TIEZA): Mr. Angelo Alhambra, Ms. Shang Quezon

B. Private Stakeholders

1. ABS-CBN: Mr. Jessie Tan, Ms. Joyce Balancio, Mr. Kirk Arlo Salazar
2. ADMarTECHS ENGINEERING SERVICES: Mr. Deo Jose G. Villanueva
3. Aglaia Sea Transport Inc.: Mr. Ayed Tugano, Capt. Vevencio Tugano Jr.
4. Association of Licensed Manning Agencies (ALMA) Maritime Group: Capt. Antonio Ladera, Ms. Cristina H. Garcia
5. Associated Marine Officer's and Seamen's Union of the Philippines (AMOSUP): Mr. Alexander F. Ragonjan, Mr. Emmanuel E. Partido
6. Alliance of Philippine Fishing Federations, Inc. (APFFI): Atty Herschel Magracia
7. Boating Industries Association of the Philippines (BIAP): Engr. Eugene T. Supangan
8. Buhay Marino: Ms. Marivic Sase
9. Business Mirror: Mr. Rodel Suarez, Mr. Samuel Medenilla
10. Byahe ni Edward: Mr. Edward Rex Nantes
11. CNN Philippines: Mr. Tristan Nodalo, Mr. Enrique B. Diagro, Mr. Nino Manalo
12. Daily Tribune: Mr. Jomelle Garner, Mr. Raffy Ayeng, Ms. Yummie Dingding
13. Radio Station DWIZ 882-AM: Mr. Gilbert Perdez
14. Radio Station DZBB 594-Super Radyo: Ms. Tuesday Niu
15. Radio Station DZME 1530-Radyo Uno: Mr. Harley Valbuena
16. Radio Station DZRH: Ms. Leth Narciso
17. E-Seaway: Mr. Eloi Calimoso
18. Filipino Association for Mariners' Employment, Inc. (FAME): Capt. Ronald Enrile, Capt. Gaudencio C. Morales
19. FAS Maritime: Mr. Wilmar Almeria
20. Far East Broadcasting Company (FEBC): Ms. Haydee Sampang
21. Federation of Fishing Association of the Philippines (FFAP): Mr. Fernando J. Elijera, Mr. Roy Gabinete
22. Filipino Shipowners' Association (FSA): Mr. Restituto Padilla, Mr. Gerardo Borromeo
23. GMA 7: Mr. Ivan Mayrina, Mr. Melchor Quintos
24. Harborscope: Ms. Susan Amoroso, Ms. Zenaida Magnial

25. Inquirer.net: Ms. Anna Felicia Bajo, Ms. Daphne Galvez
26. Institute for Maritime and Ocean Affairs (IMOA): Atty. Iris V. Baguilat
27. International Seafarers' Welfare and Assistance Network (ISWAN): Ms. Rhona Junsay
28. ITF - Philippines: C/E Arvin Ivan Peralta, Mr. Garizaldy Misa
29. Joint Manning Group (JMG): Capt. Juanito C. Salvatierra Jr.
30. Manila Bulletin: Ms. Betherina Unite
31. Manila Times: Ms. Carmela Huelar, Ms. Rene Dilan
32. Maritime: Ms. Rey Gambe
33. Maritime League: LTJG Christian R Chua PN (Ret), RADM Margarito V Sanchez Jr AFP
34. Maro: Ms. Grace Vinoya
35. Maxboat Marine Corp.: Mr. Eric Holohan
36. Media: Mr. Anthony Lanic, Mr. Ero L. Ancheta, Ms. Kc Abigail L. Chin
37. Metro Shipbuilder and Ship Repairers: Engr. Edward B. Cruz
38. Maritime Training Institutions (MTIs): Mr. Glenn Mark Blasquez, Mr. Rommel Pineda
39. NET 25: Mr. Eden Santos, Mr. Joel Gonzales, Mr. Mario Lodevice
40. NGO: Mr. Vince Lopez
41. Ocean Tankers Corporation: Mr. Anthony Tagacay, Mr. Ivan Gil K. Tuazon
42. ONE.PH: Ms. Julie Baiza
43. Philippine Association of Coastal and Inland Water Ferries Inc. (PACIWFI): Mr. Juan Miguel Gonzales
44. Philippine Association of Maritime Institutions (PAMI): Mr. Sabino Czar C Manglicmot
45. Philippine Association of Maritime Training Centers, Inc. (PAMTCI): Ms. Maria Pauline Katherine R. Avelino, Ms. Teresa H. Inocencio
46. Philippine Star: Ms. Kj Rosales
47. Philippine Coastwise Shipping Association, Inc. (PCSA): Mr. Lucio Roger E. Lim Jr
48. Philippine Dealing System Holdings Corp.: Ms. Evangeline D. Salazar
49. Philippine Span Asia Carrier: Mr. Johnny Rodriguez, Ms. Rochemar Ochenta
50. Philippines: Mr. Alfredo Jr G. Patriarca Jr, Ms. Yashika F Torib
51. Philippine Coast Guard (PCG) / WIMAPhil: CDR Christine Pauline B Diciano
52. Pinoy Catamaran Corporation: Ms. Meg Adriano
53. PJMCC: Capt. Emmanuel L. Regio
54. Police Files: Ms. Marianita Burgos
55. Port Calls: Ms. Roumina Pablo
56. Radio Atraka: Mr. Bien Carlo Galapon
57. Radyo Pilipinas: Ms. Racquel Bayan
58. Reporter: Ms. Bea Cupin
59. Supply Chain Management Association of the Philippines (SCMAP): Rey (With Sir Deo)
60. Seafarers' Shipping: Capt. Ernesto Figueroa, Capt. Nestor Bengil, Capt. Samuel Oliva
61. Seashore Ship Management: Mr. Rey Eustaquio
62. Shipyard Association of the Philippines (SHAP): Mr. Meneleo G. Carlos III
63. Ship Managers Association of the Philippines (SMAP): Mr. Vicente A. Puno
64. Society of Naval Architects and Marine Engineers (SONAME): Engr. Raymund Christopher Q. Puso
65. The Maritime League: VADM Eduardo Ma R Santos AFP
66. Trans-Pacific Journey Fishing Corp.: Mr. Raul Tuazon, Mr. Eduardo Esteban
67. TUDELA MARINE INC.: Mr. Edgardo Calderon
68. TV5: Ms. Maricel H. Gahol
69. UNTV: Mr. Allan Reyes
70. WIMAPHIL: Ms. Merle Jimenez - San Pedro

III. NATIONAL VALIDATION OF THE MARITIME INDUSTRY DEVELOPMENT PLAN (MIDP) 2028; 13 July 2023 at Midas Hotel, Manila

A. Govenment Agencies

1. Bureau of Fire Protection (BFP): F/INSP Mark Louie L Nones
2. Bureau of Immigration (BI): Mr. Simoun Miguel A. Salud, Mr. Demetrius Hermo L. Lopez, Ms. Jewell Leo M. Orbeta

3. Development Bank of the Philippines (DBP): Mr. Rustico Noli D. Cruz, Ms. Raquel C. Anzures
4. Department of the Interior and Local Government (DILG): Mr. John Joseph Tagle
5. Department of Finance (DOF): Ms. Leilani S. Lakandili
6. Department of Labor and Employment (DOLE): Mr. Benedicto Ernesto R. Bitonio, Jr., Ms. Carmela I. Torres
7. Department of Transportation (DOTr): Usec. Elmer Francisco U Sarmiento, Mr. Ricardo O. Romero
8. Department of Foreign Affairs-Maritime and Ocean Affairs Office (DFA-MOAO) : Mr. Joel Peralta, Mr. Kristoff Ocampo
9. Metropolitan Manila Development Authority (MMDA): Engr. Romano F. Ninalga, Mr. James Cedric L. Capistrano
10. National Mapping and Resource Information Technology (NAMRIA): Capt. Carter S. Luma-Ang, LTJG Angelica B. Prado
11. National Economic Development Authority (NEDA): Ms. Crisele S. Santos, Ms. Danela R. Rivera, Ms. Melorie DG. Lim, Ms. Ma. Millicent Joy N. Urgel
12. National Maritime Polytechnic (NMP): Ms. Elena M. Santos, Ms. Ma. Jasmin J. Andrade
13. Office of Civil Defense (OCD): Ms. Rebecca Rutchelle Q. Austria
14. Office for Transportation Security (OTS): Ms. Charina Flor A. Cacho-Fernin, Ms. Consuelo V. Tubban
15. Philippine Coast Guard (PCG): CG CAPT Patrick G Babag, CG LTJG Alwin Carl F Dulatre
16. Philippine Drug Enforcement Agency (PDEA): Mr. Edward A. Castillejos
17. Philippine Fisheries Development Authority (PFDA): Ms. Janet T. Manalo, Mr. Alfonso Louise P. Ortiz
18. Philippine Information Agency (PIA): Ms. Camille N. Serrano, Mr. Carlo P. Canares
19. Philippine Navy (PN): LT Kurt Winston T Layugan PN
20. Philippine National Police-Maritime Group (PNP-MG): PMAJ Reydian B Corales, PMSg Albert S Daluson
21. Philippine Ports Authority (PPA): Mr. Manolo R. Lumbao, Mr. Niño Paolo M. Biscocho
22. Professional Regulation Commission (PRC): Hon. William B. Hernandez
23. Philippine Statistics Authority (PSA): Ms. Soraya C. De Guzman, Mr. Gerald Junne L. Clariño, Ms. Mary Iren Pano
24. Technical Education & Skills Development Authority (TESDA): Mr. Ronaldo M. Demabasa
25. Tourism Infrastructure and Enterprise Zone Authority (TIEZA): ACOO Engr. Gregory Oller, Atty. Rebecca Rutchelle Austria
26. University of the Philippines (UP): Dr. Jay L. Batongbacal, Prof. Jacqueline Joyce F. Espenilla

B. Private Stakeholders

1. Association of Licensed Manning Agencies (ALMA) Maritime Group: Ms. Ma. Cristina Garcia, Ms. Divina Repedro
2. Associated Marine Officer's and Seamen's Union of the Philippines (AMOSUP): Atty. Emmanuel E. Partido
3. Boating Industries Association of the Philippines (BIAP): Engr. Eugene T Supangan
4. Filipino Association for Mariners' Employment, Inc. (FAME): Capt. Gaudencio C Morales
5. Institute for Maritime and Ocean Affairs (IMOA): Atty. Iris V. Baguilat
6. International Registries (Far East) Limited Representative Office: Mr. Angelo C. Gernale
7. Integrated Seafarers of the Philippines, Inc. (ISP): Capt. Danny Ricohermoso
8. Maersk Filipinas Inc.: Ms. Criselle Bago
9. Philippine Association of Maritime Institutions (PAMI) : Engr. Felix M. Oca
10. Philippine Association of Maritime Training Centers, Inc. (PAMTCI): Capt. Diofonce F. Tuñacao
11. Philippine Inter-Island Shipping Association (PISA): Atty. Pedro G. Aguilar, Mr. Mark Matthew F. Parco
12. Philippine Transmarine Carriers, Inc. (PTC): Ms. Gabbie S. Balor
13. Shipyard Association of the Philippines (SHAP): Mr. Meneleo G. Carlos III
14. MIDP Consultants/ Technical Writers: Ms. Brenda V. Pimentel, Ms. Myrna C. Calag, Ms. Diana C. Factuar

Annex

G

MARINA MIDP
Working Team

Annex G

UPDATED MIDP 2028 ADVISORY COMMITTEE

Atty. Hernani N. Fabia
MARINA Administrator

Ms. Sonia B. Malaluan
Deputy Administrator for Planning

Engr. Nannette Z. Villamor-Dinopol
Deputy Administrator for Operations

Mr. Samuel L. Batalla
STCW Office Executive Director

Captain Vicente C. Navarro
STCW Office Deputy Executive Director

MARINA MIDP WORKING TEAM

Core Program No. 1 | Modernization and Expansion of Domestic Shipping [including the Tourist Destination Areas (TDAs) and the Coastal Inland Waterways Transport System (CIWTS)]

Mr. Virvic Paul C. Erese, OIC-Director, Domestic Shipping Service (DSS)
Atty. Maria Rowena B. Hubilla, Director II, Franchising Service (FS)

Ms. Liberty R. Lingad
Atty. Korina Mae V. Pimentel
Ms. Rosel Ariane DC Cruz
Ms. Germaine B. Betero
Atty. May Maureen G. Dizon
Engr. Melchor Blaire M. Yap
Mr. Jeremiah M. Perez
Ms. Kristine Bernadette D. Padilla
Ms. Imelda D. Tatad
Ms. Dana Justine DC Natividad
Mr. Felipe R. Roa IV
Ms. Geraldina E. Evangelista
Ms. Melinda D. Ongayo
Engr. Marco C. Dela Cruz
Engr. Linberg Peter M. Vivas
Ms. Melinda E. Valderama
Mr. Carlo B. Cruz
Ms. Jeanne J. Madamba
Atty. Patrick D. Ferraro
Ms. Jemima Kezia Keren C. de Leon
Engr. Nikko Ariel B. Non
Ms. Jasmin Kaye F. Galindo
Atty. John Rommel V. Rafael

Core Program No. 2 | Promotion and Expansion of the Overseas Shipping Industry

Ms. Precila C. Jara, OIC-Director, Overseas Shipping Service (OSS)
Engr. Marc Anthony P. Pascua, Director II, MARINA Regional Office - National Capital Region (MRO-NCR)

Ms. Judy L. Honrado
Atty. Daniel Martin G. Oral
Ms. Katrina Marie G. Lapig
Ms. Perla S. Chua
Atty. May Maureen G. Dizon
Mr. Gerico John Vincent A. Magbojos
Mr. Charliemagne P. Nofuente
Ms. Althea Marie E. Calag-Colmenares
Ms. Ligaya V. Aruta
Ms. Anne Jennica T. Adan
Ms. Annaliza N. Honra
Ms. Pfarlin I. Cortes

Core Program No. 3 | Modernization, Expansion and Promotion of the Shipbuilding and Ship Repair Industry

Engr. Ramon C. Hernandez, Director II, Shipyards Regulation Service (SRS)
Engr. Jedini Nur A. Sibal, OIC-Director, Maritime Safety Service (MSS)
Engr. Ronaldo P. Bandalaria, Director II, Enforcement Service (ES)

Engr. Melchor Blaire M. Yap
Engr. Maria Teresa D. Mamisao
Engr. Nikko Ariel B. Non
Engr. Marco C. Dela Cruz
Engr. Margren C. Cator
Engr. Jeremiah M. Perez
Mr. Austin Bradley S. Magsino
Ms. Danica Joy C. Gangcuangco

Core Program No. 4 | Promotion of Highly Skilled and Competitive Maritime Workforce

Mr. Arsenio F. Lingad II, Director II, Manpower Development Service (MDS)
Capt. Vicente C. Navarro, Deputy Executive Director, Standards of Training, Certification and Watchkeeping Office (STCWO)
Ms. Rubina S. Badoy, OIC-Training Director, MARINA Training Institute (MarTI)

Atty. Ralph G. Torio
Mr. Harold G. Tarun
Mr. Erwin R. Lanestosa
Mr. John E. Guardaya
Capt. Ronald F. Sediego
2/E Yevhgeny L. Terrazola
Engr. Ronnie D. Gernato
Mr. Jose Louie B. Banua
Mr. Rollie James T. Torres
Mr. Gilbert T. Guerrero
Mr. Herbert V. Nalupa
Ms. Michelle U. Margallo
Ms. Mary Jane T. Tunacao
Mr. Dalmacio L. Gonzales Jr.
Mr. Benedict E. Baccay
Engr. Jett Julian B. Velasquez

Overriding Program No. 1 | Enhancement of Maritime Safety and Security [Merchants ships and Fishing fleets]

Engr. Ramon C. Hernandez, Director II, Shipyards Regulation Service (SRS)
Engr. Jedini Nur A. Sibal, OIC-Director, Maritime Safety Service (MSS)
Engr. Ronaldo P. Bandalaria, Director II, Enforcement Service (ES)

Engr. Maria Sarena C. Casas
Engr. Milbert DS. Lorico
Engr. Gerald Carl B. Gardiano
Engr. Rachel Erica G. Buesing
Engr. Linberg Peter M. Vivas
Engr. Margren C. Cator
Mr. Joshua D. Arrojo
Ms. Trisha May S. Zambrano
Engr. Divinagracia F. Tolosa
Atty. Benedicto G. Manlapaz
Engr. Carl Kenneth C. Caluza
Engr. Roland Kenneth M. Ballesteros
3M Elaiza Marie G. Perez
Engr. Shella D. Roldan
Engr. Rizalyn D. Magalong
Ms. Jinky M. Mendoza
Engr. Melchor Blaire M. Yap
Mr. Yassir I. Hassan, Jr.
Ms. Cheryl V. Pascua
Ms. Mharnie B. Perez

Overriding Program No. 2 | Promotion of Environmentally Sustainable Maritime Industry

Engr. Ramon C. Hernandez, Director II, Shipyards Regulation Service (SRS)
Engr. Jedini Nur A. Sibal, OIC-Director, Maritime Safety Service (MSS)
Engr. Ronaldo P. Bandalaria, Director II, Enforcement Service (ES)

Engr. Maria Teresa D. Mamisao
Engr. Melchor Blaire M. Yap
Engr. Jeremiah M. Perez
Engr. Nikko Ariel B. Non
Mr. Austin Bradley S. Magsino
Engr. Marco C. Dela Cruz
Mr. Justin James V. Tulio
Ms. Jinky M. Mendoza

Overriding Program No. 3 | Implementation of a Sustainable Maritime Innovation, Transformation, Digitalization and Knowledge Center

Ms. Lina Y. Maquera, OIC-Director, Management Information Systems Service (MISS)
Mr. Luisito U. Delos Santos, Director II, Planning and Policy Service (PPS)

Dr. Joseph Victor S. Generato
Ms. Buena G. Ramos
Ms. Dalmacio L. Gonzales, Jr.
Ms. Agnes M. Cayanan
Mr. Adrian G. Ramos
Ms. Mary Margareth C. Bandalaria
Mr. Austin Bradley S. Magsino
Mr. John Victor N. Torres

Enabling Program | Implementation of an Efficient and Effective Maritime Governance System

Mr. Luisito U. Delos Santos, Director II, Planning and Policy Service (PPS)
Atty. Sharon D. Aledo, Director II, Legal Service (LS)
Ms. Nenita S. Atienza, Director II, Management, Financial and Administrative Service (MFAS)

Ms. Cheryl V. Pascua
Ms. Rubina S. Badoy
Atty. Korina Mae V. Pimentel
Ms. Melinda E. Valderama
Ms. Karol C. Ponce
Atty. Marivic S. Ramos
Atty. May Maureen G. Dizon
Mr. Justin James V. Tulio
Ms. Kristine Bernadette D. Padilla
Ms. Merrowen M. Andong

Substantive and Technical Secretariat

Mr. Luisito U. Delos Santos, Director II, Planning and Policy Service (PPS)
RADM Rey T. Dela Cruz AFP (Ret)

Ms. Cheryl V. Pascua
Ms. Rubina S. Badoy
Atty. Korina Mae V. Pimentel
Ms. Melinda E. Valderama
Ms. Danica Joy C. Gangcuangco
Mr. Justin James V. Tulio
Ms. Pfarlin I. Cortes
Ms. Jasmin Kaye F. Galindo
Ms. Trisha May S. Zambrano
Ms. Kristine Bernadette D. Padilla
Mr. John David C. Benitez
Ms. Maria Krizel Hiyas H. Villanueva-Magbojos
Mr. John Victor N. Torres
Ms. Marlene U. Arellano
Ms. Merrowen M. Andong
Ms. Jennie Rose L. Mallanao
Mr. Paul Jordan R. Abejero
Mr. Carlo Roman E. Atento
Mr. William Carlo B. Valenzuela
Ms. Jane C. Chua
Ms. Maria Bianca Lee
Ms. Tiffany R. Punzalan