



NAVIGATING  
THE FUTURE:  
SAFETY FIRST!



**W**  **R L D**  
Maritime Day



# CEO's Message



NMSA CEO, Mr Paul Unas

2024 marks 50 years since the adoption of the 1974 Safety of Life at Sea (SOLA) Convention which Papua New Guinea is a signatory to.

The Government through the National Maritime Safety Authority (NMSA) is committed to implement this International Convention such as setting international safety standards for ship construction, equipment and operation, preventing maritime disasters and protecting lives.

NMSA observes the annual World Maritime Day today and it's only fitting that this year's theme is "Navigating the Future: Safety First" complements the Authority's main goals of promoting Safety First at Sea.

This year's theme reflects the International Maritime Organisation's (IMO) work to enhance maritime safety and security, in tandem with the protection of the maritime environment, whilst ensuring its regulatory development process safely anticipates the fast pace of technological change and innovation.

This theme will allow us to focus on the full range of safely regulatory implications arising from new and adapted technologies.

The introduction of alternative fuels including measures to reduce Green House Gas emissions from ships is encouraged by IMO to ensure the safety and efficiency of shipping are maintained, and potentially improved, so that the flow of seaborne international trade continues to be smooth and efficient.

NMSA observes this Day and encourages all to acknowledge the hard work by our seafaring community.

Happy World Maritime Day 2024 commemoration.

## Secretary General IMO's Message

When we think about safety in maritime, the International Convention for the Safety of Life at Sea (SOLA) is one of the first things that comes to mind.

2024 marks 50 years since the treaty was adopted and we can be proud of the crucial role this Convention has played in settling maritime disasters and protecting lives.

But we cannot be complacent.

This year's World Maritime Day theme: "Navigating the future: safety first!" calls for a collective effort to ensure we keep pace with the ongoing transformation in shipping.

And at IMO, we must ensure the continued development and implementation of the regulatory regime, so as to prioritize safety as we steer towards tomorrow.

I encourage all stakeholders to mark this year's World Maritime Day and invite you to join the conversation online using the hashtag #WorldMaritimeDay

Let us all work to navigate the future with safety first!



Arsenio Dominguez, Secretary General, International Maritime Organisation



## Assessing the adequacy and efficiency of existing Aids to Navigation network in Papua New Guinea

Papua New Guinea as signatory to the Safety of Life at Sea Convention (SOLA) provides and maintains a network of aids to navigation (AtoN), generally called lights, along the coastal areas of PNG to support safety of navigation by ships.

In the last 5-10 years, PNG has experienced an unprecedented increase in shipping both for port calls and in transit shipping through its territorial waters.

In order to assess the adequacy and efficiency of the aids, the NMSA sought the assistance of IALA and AMSA to assist in risk assessment of main shipping routes.

The main aim of the exercise is to evaluate the adequacy and efficiency of the existing aids to navigation network in Papua New Guinea.

The assessment undertaken using IALA Port and Waterways Risk Assessment Tool (PAWSA) covered existing aids to navigation, nautical charting, traffic patterns and marine incident reports.

The primary shipping lanes for Jomard Passage in Milne Bay and the Vitiaz Strait just outside of Morobe are used by international transit shipping and domestic shipping, is assessed for navigation safety risks based on

the type and size of vessels, bends, traffic mix and density.

The secondary routes assessed include approaches to Kimbe Port and the China Strait due to reported grounding incidents.

The outcomes of this project identified a number of recommendations as follows:

- Establishing remote monitoring capacity for light availability;
- Improving certain lights and decommissioning those considered unnecessary;
- Developing risk assessment methodology and;
- A thorough assessment of some domestic waterways.

In the lead up to the project, there were a series of virtual sessions held weekly between Omar Frits Eriksson, Secretary General & Dean of IALA World-Wide Academy and Mahesh Alimchandani, Head of Navigation & Communication Systems, AMSA. This enabled a successful stakeholder consultation on the 12th March 2024 and engagement with key personnel from NMSA.

## KOREAN GOVERNMENT DONATES STATE OF THE ART ENGINE ROOM SIMULATOR TO NMSA



**(From left front) Captain Krzysztof Orłowski-Executive Manager, Maritime Operations, Mr Peter Humphreys-NMSA Board Member, Mr Paul Unas-NMSA CEO, Ambassador HE KANG Ho Jeung and Deputy Chief of Mission, Mr Mark Chunsik inside the engine room simulator.**

The National Maritime Safety Authority is a proud recipient of a state of the art Engine Room Simulator, donated by the government of the Republic of Korea.

The Korean Ambassador His Excellency Kang Ho Jeung handed over the simulator to the NMSA Management at the head office, downtown Port Moresby.

CEO Mr Paul Unas on receiving the simulator expressed his utmost gratitude to the people and government of the Republic of Korea.

“This donation will greatly change the way, we at NMSA carry out assessing and qualifications of PNG National Seafarers.

This state of the art simulator resembles those found on vessels, and it is undoubtedly a major boost in addressing our capacity gaps, he added.

The Simulator room was also given a name Kitach Lim Engine Room

Simulator, the name fitting for the room as the outgoing IMO Secretary General is of Korean origin.

He was a champion in seafarer welfare during his tenure.

Ambassador His Excellency Kang Ho Jeung, told the NMSA management that his Government was happy to assist in this course as it further strengthens the relationship between PNG and the Republic of Korea.

“This project costs hundreds of thousands from procurement to installation. We hope it will serve its rightful purpose,” the ambassador added.

The Engine Room Simulator will be used for 3 specific purposes:

- Orals examination for higher grade engineering candidates;
- Training of Ship Inspectors for Port State Control and;
- Refresher for Gazette Examiners for Marine Engineers.



# NMSA INSTALLS FIRST ENGINE ROOM SIMULATOR



**Senior Qualifications Officer for Marine Engineers -George Tatireta (R) Qualifications Officer- Marine Engineers Cindy Manau, Raphael Apisai ( ICT) and Samuel Kewie Manager Ship Survey with the UNITEST technical team inside the newly installed Engine Room Simulator.**

In addressing capacity gaps, the NMSA has undertaken funding from the Government of the Republic of Korea for the procurement and installation of a Full Mission Engine Room Simulator.

General Manager/CEO of NMSA, Mr Paul Unas has expressed gratitude to the Korean Government for its continued support in addressing NMSA's capacity gaps, and this timely assistance will go a long way in the training and certification for its in-house ship inspection officers and inspectors, including the engineering examiners.

The department of Qualifications and Crew is taking carriage of this project.

Senior Qualifications Officer-Marine Engineer, George Tatireta said the simulator will be used for in-house training and oral examinations and certifications of national seafarers.

The simulator will be used for the following purposes:

#### **NMSA Port State Control/Flag State Control Inspectors**

Noting that most of our inspectors have not served on larger sized vessels and thus are not acquainted with the complexities of this engine system and for training of inspectors with deck back ground, so that they are familiar with what to look out for during inspection in an engine room.

Assist Engineering Examiners Conduct Oral Examinations

To aid examiners who are staff of the NMSA Qualifications department in the conduct of their Oral Exams through an interactive demonstration of this at the simulator gives confidence to the issuance of Certificate of Competencies (CoCs).

#### **Engine Room Simulator can also be used for training and refreshing Gazette Examiners**

Constantly using the E/R simulator can also be seen as a training and refreshing tool for Gazette Examiners. There are 5 different E/R simulations which gives examiners the chance to refresh their knowledge and also facilitate training on large vessels and LNG fuel vessels.

The licensed engine room applications are similar to those found on vessels of low speed or medium speed. They are:

- RT-flex50DF-Low Speed Engine Room Simulator Winterthur Gas and Diesel RT-Flex 50DF
- W-X92-Low Speed Engine Room Simulator Winterthur Gas and Diesel 10X92
- MER3D-Medium Speed Engine Room Simulator Engine type Roll Royce
- MED3D-Medium Speed Engine Room Simulator Engine type MAK 6M43
- LNG-DE3D-Diesel Electric Engine Room Simulator Engine type Wartsila BL20DF

A 3-day training was conducted by UNITEST trainer for Mr Tatireta and his team for familiarisation.

*This training was for:*

- Operation of the simulator equipment/hardware
- General hardware configuration of UNITEST Engine-room simulators hardware components details description
- Network/cables connection description
- Simulator starting procedures
- Simulator shutdown procedures
- Fault finding
- Operational level training (1. RT-fex50DF, 2. W-X92, 3. MER3D, 4. MED3D & 5. LNG-DE3D) introduction
- General introduction to navigation and operation concept
- Engine room general configuration software options (setup, resources, fault simulation, assessment)

#### **Normal operating procedures**

Electric power plant preparation from dead condition, generators starting and synchronization Auxiliary System preparation (steam system if available, sanitary water system, sewage system, refrigeration system, AC plant system, ballast system, etc)

Main propulsion preparation (all system related to main propulsion-fuel system, lubricating oil system, compressed air system, cooling, cpp system (if present).

#### **Emergency operating procedures**

Main engine emergency operation from local control panel CPP system emergency operation from local control panel fire fighting procedure general manual operation steering gear emergency operation.

Instructor station operation/software options cooperation between simulation software and instructor station faults simulation engine room simulation software and instructor station faults simulation engine room resources automatic assessment.

Furthermore, the team also witnessed the installation of hardware and software that consist of:

#### *Hardware:*

Engine Control Room-Hardware console with 6 LCD 22" touchscreen monitors Engine Room-Hardware console with 2 LCD 65" touchscreen monitor signalling column instructor station.

#### *Software:*

Full Mission Engine Room Simulator-software (engine room models) Desktop classroom-software  
The installation took 2 and a half days and successfully completed on March 13, 2024.