

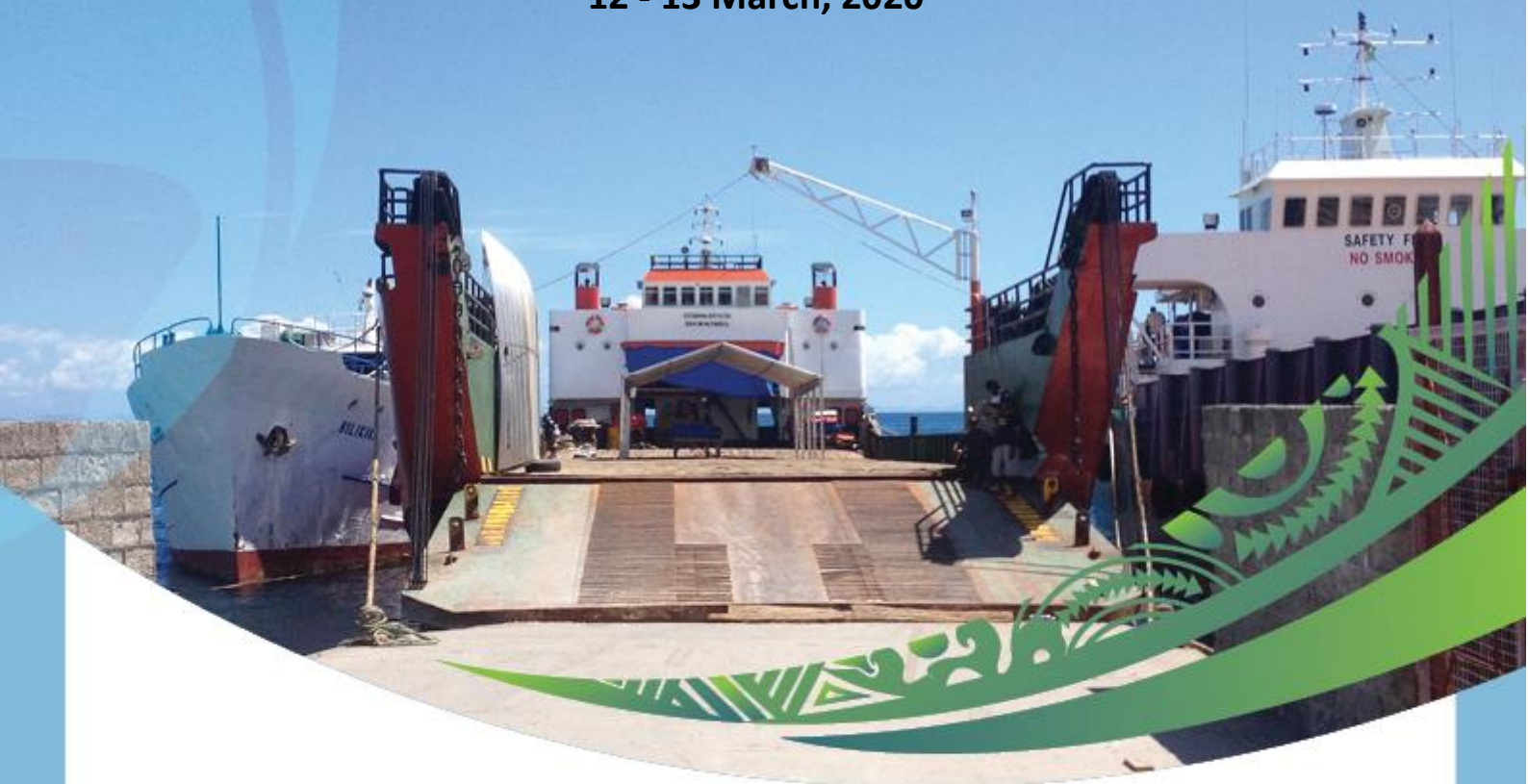


MARITIME TECHNOLOGY COOPERATION CENTRE IN THE PACIFIC (MTCC-PACIFIC)

CAPACITY BUILDING FOR CLIMATE MITIGATION IN THE MARITIME SHIPPING INDUSTRY
THE GLOBAL MTCC NETWORK (GMN) PROJECT

MTCC-PACIFIC Follow Up Meeting with Domestic Ship Operators On MARPOL Annex IV

Tarawa, Kiribati
12 - 13 March, 2020



HOST INSTITUTIONS
OF MTCC-PACIFIC



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Table of Contents

EXECUTIVE SUMMARY.....	1
1. INTRODUCTION.....	2
2. TECHNICAL WORKSHOP.....	3
2.1. Recap of Kiribati NW Workshop Outcome.....	3
2.2. Safety Management System - Pacific Island Ship Safety (PIDSS) Program.....	3
2.3. MARPOL Annex VI - Prevention of air pollution from ships.....	4
2.4. MARPOL Annex VI Chap4, Ship Energy Efficiency.....	4
2.5. MTCC-Pacific Pilot Project Updates.....	5
3. Closing Remarks.....	5
1 List of Participants	
2 Agenda	
3 Presentations	
5 Photos	
7 Communications and Visibility Activities	

EXECUTIVE SUMMARY

The follow up workshop on MARPOL Annex VI was held in Tarawa, Kiribati from 12-13 March 2020. The follow up meeting was organised by Ministry of Information, Communication, Transport and Tourism Development (MICTTD), Marine Department with ship operators. The list of participants is attached in Annex 1.

The purpose of the meeting was to recall the outcome of the first NW and report on the MTCC-Pacific pilot projects results. The meeting also provided opportunity with ship operators to discuss again the technical tools to progress toward ship energy efficiency to comply with the Marine Environment Protection Committee (MEPC) Resolution 72, 'IMO Strategy' to reduce greenhouse gas emissions by at least 50% by 2050 compared to 2008. The meeting agenda is attached in Annex 2.

The meeting was held with two groups of ship operators. An overview of MARPOL Annex VI was provided including practical exercises on enforcement practices as well as a presentation on Sulphur Cap. A refresher was provided in the areas of ship energy efficiency operations, operational measures, management plans and systems. Demonstration project highlighted the critical need for data collection.

The participants agreed to implement relevant actions to progress toward a sustainable maritime Industry with a focus on data collection in Kiribati in order to support a long-term objective for low-carbon maritime transport and contribute to the reduction of GHG emissions in Kiribati and the Pacific region.

All NW presentations are attached in Annex 3 in consecutive order as outlined in the Agenda.

1. INTRODUCTION

The meeting was held in Tarawa, Kiribati on 12 and 13 March 2020. The meeting was coordinated and facilitated by the Maritime Technology Cooperation Centre in the Pacific (MTCC-Pacific) and attended by representatives from Marine Department and ship operators. The list of participants is attached in Annex 1.

The purpose of the meeting was to review the progress of the first National Workshop outcome and share information and results on demonstration projects in Vanuatu and Samoa. Built capacity for data collection and improve the knowledge on MARPOL Annex VI and introduce of Sulphur Cap. Discussion were also done with participants on how they can contribute towards Nationally Determined Contributions (NDCs). The meeting agenda is attached in Annex 2.

The meeting provided capacity building on MARPOL Annex VI whereby a thorough overview was provided covering issues related to Nitrogen Oxides, Sulphur, Ozone Depleting Substances, etc. The training also included practical exercises on enforcement practices as well as a presentation on Sulphur Cap. A refresher was provided in the areas of ship energy efficiency operations, operational measures, management plans and systems. Demonstration project highlighted the critical need for data collection. The meeting provided motivation to ship operators to provide the essential baseline data on fuel oil consumption in order to gain an understanding of where they are now and then determine what could be done to improve ship energy efficiency, reduce fuel, costs and greenhouse gas emissions (GHGE).

2. TECHNICAL WORKSHOP

Agenda item 1 - Recap of Kiribati NW Workshop Outcome

The meeting was opened by the Marine Department Director and started the discussion on the NW workshop outcome document. The following items were recalled:

- i. Agreed to participate in the MTCC-Pacific pilot-project on uptake of energy efficient technologies in conjunction with the PIDSS Programme;
- ii. Agreed to continue efforts to implement Safety Management Systems (SMS), Safe Operation Plans (SOP) and Ship Energy Efficiency Management Plans (SEEMP) on board domestic ships in Kiribati under the PIDSS and MTCC-Pacific Programmes;
- iii. Agreed to strengthen activities of Kiribati Islands Ship Owners Association (KISOA) to lead the maritime sector toward safe and efficient operations in collaboration with the Marine Division;
- iv. Agreed to collect fuel oil consumption data to inform further action on SEEOs in Kiribati.

The following discussions were noted;

- In Kiribati, SOP integrated SEEMP was circulated to all ship operators. Data collection trainings were also provided to some ship operators on board the vessels.
- The driving factor of the Kiribati ship operators is financial gains and they can understand the importance of the SEEMP in conserving fuel and reducing their operational cost.
- Ship operators acknowledged the need to collect data but highlighted the challenges with crew in filling ship logs. The data collection template was simplified for the ship operators to collect fuel oil data at ports. MTCC-Pacific analysis will provide them of insight, and ideas on how the fuel consumption can be reduced during particular operations.
- It was re-iterated that data collection is part of PIDSS SOP which is integrated with SEEMP. Data collection is voluntary and will be submitted in confidence to Maritime Administration. MTCC-Pacific will analyse the data and will provide ship performance graphs with recommendations to improve operations.
- Ship operators raised issues with the confidentiality of data collected as it can be used by competitors. Ship operators were assured the data will not be shared with anyone.
- Ship operators also highlighted the lack of maintenance and availability of parts in the region.
- It was agreed that during the SOP assessment, implementation of the SEEMP measures and consistencies of the data collection will also be assessed.

Agenda item 2 - Safety Management System - Pacific Island Ship Safety (PIDSS) Program

An update on the PIDSS programme was discussed with a focus on the development of the safe operational plan.

The following discussions were noted;

- Training was requested by ship operators for their ship engineers to improve their skills on SMS and implement safety measures on board vessels.
- There is an opportunity for Kiribati ship operators to be part of the MTCC-Pacific and PIDSS pilot project, provide the effectively implement SOP and SEEMP.
- Ship operators are keen to take part in pilot project and will start submitting fuel oil consumption data. However, financial assistance has been requested to procure flow meters to capture accurate fuel consumption.

Agenda item 3 - MARPOL Annex VI - Prevention of air pollution from ships

The presentation provided an overview of air emissions and climate change issues as well as the international response and frameworks. It also dealt with international shipping response that highlights the past and on-going International Maritime Organization (IMO) activities and the wider industry; including all the relevant debates leading to the adoption and implementation of the Chapter 4 of the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 (MARPOL 73/78) Annex VI.

The following discussions were noted;

- Ship operators are aware of the climate change and impact but less aware of the climate mitigation measures.
- Reducing pollution is their least concern as some ship operators are still struggling to break even the operational cost with the fees they are collecting
- Technology uptake will provide relief and incentive to improve efficiency even through reduced speed.
- Reducing speed on the inbound voyages could reap some benefits on decreasing fuel consumption but this can only be achieved through data collection and measuring the ship efficiency on different operating conditions.
- The marine department is strengthening all the IMO adopted protocols to the vessels operators to adhere to safety and also the efficiency.
- The marine department representative updated the participants of the existing and new regulations coming into effect. He also highlighted the lack of basic ship regulations knowledge since some of the new ship operators do not have shipping background thus, the marine department will do more to support and promote existing and new regulations through media.

Agenda item 4 - MARPOL Annex VI Chap4, Ship Energy Efficiency

The presentation provided an awareness, knowledge, skills and motivation required of ship board and office based staff on ship-board energy management techniques and activities. Also provided an overview of IMO's energy efficiency regulations for ships and related guidelines. It described Chapter 4 of MARPOL Annex VI in detail and then specifically explained the EEDI (Energy Efficiency Design Index), SEEMP (Ship Energy Efficiency Management Plan) and EEOI (Energy Efficiency Operational Indicator) in detail using their relevant IMO guidelines.

The following discussions were noted;

- In Kiribati, ship operators have been actively working to implement the revised SOP which has been integrated with SEEMP and data collection. A follow up visit is planned for all the ship operators in attendance.
- The participants also highlighted that the high cost of maintenance in Kiribati leads to unconventional methods being applied to operate the vessels. Maintenance plans are not following frequently due to the non-availability of parts or due to non-availability of qualified engineers.
- Kiribati ship operators are interested to retrofit their vessels with energy saving devices but they do not have the basic ship documents
- Through the SOP, ship owners are interested in improving operational efficiency. One example is keeping the vessels hull clean through continuous observations and have a proper maintenance plan. The hull rough could also be picked from the fuel oil consumption analysis.

Agenda item 5 - Sulphur Cap 2020 Presentation

The presentation provided an overview of Benefits and knowledge on MARPOL Annex VI and more specifically on Sulphur Cap 2020

Discussion

- The participants were receptive of the idea of using low Sulphur fuel oil but are reluctant to be part of the pilot. Their understanding is that old vessels with old engines are susceptible to get damaged if new fuel or even lubrication oil is introduced.

Agenda item 6 - MTCC-Pacific Pilot Project Updates

The presentation provided an overview of the projects progress in Samoa and Vanuatu.

Discussion

- Currently, there are few vessels in Kiribati that have installed the solar system to charge deck equipment batteries and lights. The full potential of the solar system onboard the vessel has not been realized yet due to lack of knowledge on wider application of the solar system.
- Most of the vessels utilize a small portable generator at harbor for lights and reefers which add to the operational cost.
- Solar systems are considered as an option but due to the high price in Kiribati, ship owners opt for generators which can be fixed and replaced easily.
- Concerns were raised about the availability of technologies in the region and service provider accessibility.
- Maritime administration highlighted that safety on board vessels is paramount and followed by focus on the reduction of GHG emission mission.
- Some ship operators confirmed the LED lights were replaced on board the vessels but most operators prefer to replace with bulbs as it is cheaper.
- With maintenance running through late night, having a solar system with LED lights would be very beneficial for lighting.

3. Closing Remarks

(Capt. Ruoikabuti Tioon, Director of Marine, Ministry of Information, Communications, Transport and Tourism Development, Kiribati)

Capt. Ruoi thanked PIDSS & MTCC-Pacific from SPC for organizing the follow up workshop. He supported the importance of the data collection and contribution towards GHGE reduction and uptake of energy efficient technologies. Capt. Ruoi also acknowledged the issues raised by the participants and informed them that the Marine Department will be doing its best to address them.