

CESMA IN THE WORLD MARITIME DAY (WMD) SEPTEMBER 2024 AND EXTREME WEATHER SEMINAR

World Maritime Day 2024 was celebrated in London on September, 26th at IMO Headquarters in London. The event was preceded by the 2nd World Meteorological Organization (WMO) – IMO Symposium on Extreme Maritime Weather. The first symposium had been in 2019. The seminar was officially opened by the IMO Secretary General Arsenio Dominguez. The purpose of it is to bridge the knowledge gap towards safer shipping in line with the WMD motto “Navigating the future – safety first”. Welcome speeches had been delivered by Ko Barrett – Deputy Secretary General WMO (World Meteorological Organization), Peter Tompson who mentioned significant changes in the oceans and need for sustainable use of ocean resources. Capt. Rhadika Menon – first India female captain and recipient of 2016 IMO award for exceptional bravery at sea pointed out that extreme weather events became more frequent, they endanger maritime operations, delayed weather warnings caused fishermen to lose their lives and stressed on preparedness for extreme weather and need for more information to help taking right decisions. Sarah Grimes from WMO mentioned collaboration across Communities, knowledge opportunities for seafarers and forecasters, observations and data collection – 2500 ships out of 80000 ships sailing worldwide provide voluntarily meteo data, use of Iridium SafetyCast Service to provide meteo information to ships and Nautical Institute (NI) survey among seafarers – participation in the voluntary reporting scheme, training of seafarers in use of meteo data and warnings. The opening session completed with the presentation of Hiroyuki Yamada – Director, Maritime Safety Division, IMO – WMO and IMO to be in cooperation to improve maritime services. He gave detailed explanation about MetOcean program.

Session 2 Extreme Weather and Safety at Sea was with objectives:

- Discuss recent cases of extreme and hazardous weather events and the impacts of climate change on maritime activities, highlighting the need for enhancing collaboration among the meteocean, maritime, insurance, and other relevant communities and stakeholders for safety at sea
- Overview of recent extreme and hazardous maritime weather events and the concept of meteorological maritime safety information.
- Recent indications in weather related maritime incidents: Are better forecasts reducing loss of life and property at sea?
- Perspectives from the insurance industry.
- Impacts of extreme weather and climate change on port infrastructure.

Joseph Sienkiewicz spoke about Hazardous Maritime Weather – the governments should warn ships of gales, storms and tropical cyclones (SOLAS Ch V). He gave example of cruise ship with damaged azipod due to extreme winds/ waves, containerships lost containers due to bad weather, breaking wave – ingress of water into the ship in Drake Strait, training for mariners – parametric rolling, extreme waves. Peter Broadhurst from INMARSAT, President CIRM presented many fatalities due to bad weather (more in fishing industry), on the bridge in

congested waters – 72 alarms per hour, engine room – 250 alarms per hour, difficult to handle and to separate important from less important alarms, commercial pressure on seafarers to take the risk. Capt. Andrew Kingsey delivered presentation about current impacts on hull and cargo, impact on global supply chain, crew at risk, many seafarers lost their life in bad weather especially when ships capsized and sank on the point of view of the insurance. Peter Gede, Maersk, spoke about the impact of climate change and extreme weather to port infrastructure.

Session 3 Enhancing Knowledge Opportunities for Seafarers and Forecasters was with objective to highlight the state of training in marine weather for both seafarers and metocean forecasters and consider possible enhancements to training programmes. Hakkan Storhaug spoke about STCW revision and cyber security. David Patraiko, NI, explained the connection between weather knowledge and situational awareness, seeing, understanding, making good decisions, changing weather patterns, technology, changing relationship to technology, impact on responsibility / accountability. John Parker spoke about strengthening metocean service delivery over last 5 years – WMO training courses, raising awareness. At the end of the session there was interactive scenario between participant about analysis of development of meteo situation in the area near Strait of Gibraltar, change of forecast and what it'll change in ship/ port operations and what additional information meteo information providers could give to seafarers or port operators. The moderators summarized the first day pannels as follows:

- Mariners rely on detailed and reliable information provided by meteorologists, so are port operators and offshore operators, meteorologists look for models to provide meteorological information
- Extreme maritime weather – ice, hurricanes, ...
- Economic prospective of people ashore versus safety of life on board the ship

The second day began with session 4: Observations and Data Collection. The objective was to provide an overview of current weather and ocean observations at sea, highlighting the complementary nature of ship observations with other ocean observing systems and their impact on the quality of maritime weather early warnings and forecasts.

- Value of the ocean observing system.
- Forecaster perspective on ship observations.
- Overview of the Voluntary Observing Ship (VOS) Scheme.
- Seafarers view of ship observations.
- Future of shipboard observations.

During the opening by the moderators they again mentioned the need more ships to participate in VOS to ensure more detailed meteo information for forecasters. Darin Figurskey presented observations as portholes. Emma Steventon gave more information about VOS (Voluntary Observing Ships Scheme) as part of Global Ocean Observing Scheme. VOS is more than 150 years old. In 2023 2874 ships participate mainly from USA, UK, Canada, Germany, France, number of ships with automatic weather stations is increasing, TurboWin – global software to collect and disseminate meteorological data, financed by EUMETNET (EU) and run by Netherlands Royal Navy. Dirk Windmuller spoke about developments in the maritime meteorological data acquisition – manual data provided by ships participating voluntary, automatic stations. Erwann Gabriel from Brittany Ferry presented data collection from ship operator's point of view, the ship operator needs proper forecast to do his job properly. Mathiu Belbeoch – VOS / GOOS, the ships to be urged to provide meteo data via UNCLIS tools.

Session 5 Dissemination of MetOcean Information to Ships was with objective to discuss the status of and possibilities for improving dissemination of metocean early warnings and

forecasts to vessels and the maritime community, enabling seafarers to make sound routing and other operational decisions at sea. Geoff Dunsworth spoke about status of S-41X sea ice and weather overlays in S-100 based product specifications for Electronic Chart Display and Information Systems. The SMART-Navigation was explained with implementing e-Navigation for Ships. Keld Ovistgaard spoke about dissemination of MSI in the Polar Regions - Satellite coverage and user experience.- Safety Net/ Inmarsat, Safety cast/ Iridium, NAVTEX, VSAT, Mobile Networks, VDES, Starlink. Alexandro de la Maza, meteorologist from Chile gave information about meteo services in Southern oceans – Chile, Argentine, Australia, South Africa. Dr Marcel Nicolaus told the participants information about the use of emerging technologies to support dissemination of MSI at sea. - sea ice, life data used for navigation.

Session 6 Better Products and Services for Improved Weather Warnings and Forecasts with moderator Mr Michael Martens (DWD) was with objective to explore how metocean products and services, including early warnings and services, can better meet seafarers' current and future needs to support safe and efficient maritime operations. Dr Philip Belcher from INTERTANCO presented Optimizing ship routing for safety, fuel efficiency, and reduced emissions mentioning route optimised for speed, fuel reduction, cargo care, ship masters are happy receiving meteo advice, charterers dictating routing company's advice against master's advice, bad advises from meteo service not taking into account all the factors and concentrating on one or several factors, master's overriding authority as per ISM Code to be reconfirmed by charterers. Captain Daniel Peixoto de Carvalho – Brazil CHM-DHN) spoke about early warnings and impact-based forecasting for maritime safety (– impact based forecast – impact to the environment to be considered and early warning messages to be sent to the parties concerned). Dr Alice Soares, MetOcean consultant presented WMO Guide to Marine Emergency Response (MER), metocean support for emergencies at sea, including both safety and environment related, and search and rescue. Craig Setzer, Royal Caribbean Group, spoke about products and services for cruise ships and tourism: how public and private sector providers support forecasts at sea and change of the ship's schedule to avoid extreme weather and accidents.

Side Event Metocean forecasting support in polar regions was moderated from Erik Van De Groot (ECCC) with objective panellists to discuss ideas for working together to meet the unique challenges of providing metocean forecasting support to increased maritime activity in the polar regions in a changing environment.

Session 6 continued with moderator Ramon Oosterkamp (Met Service New Zealand) and Dr Anita Mäkinen – IMO Sub-Committee on Pollution Prevention and Response presented “Metocean Information for SOLAS and Polar Code Requirements: Are user needs being met?”. Captain Derek Cardno, Scottish Fishermen's Federation, UK spoke about enhancing metocean support for non-SOLAS ships and Dr Nelly Florida Riama - Indonesia BMKG explained the public – private partnership in ensuring weather safety for domestic ferry operations. Amy Buhl, Weathernews, spoke about the role of non-government service providers in support of maritime operations, forecast technology of data driven risk management, high resolution forecast data for in-port risk management, better voyage planning.

Session 7 Strengthening Collaboration, moderated by John Parker, Canada, was with objective to discuss how to improve the dialogue across all sectors of the maritime and metocean

communities to enhance safety at sea and strengthen continued collaboration after the Symposium. Panellists from various relevant maritime related organizations discussed how improved collaboration in maritime weather support can better support their members. Similarly, representatives of meteorological agencies from various regions discussed how they work within their nation/region to connect to authorities and work with users, as highlighted through examples specific to their geographic area.

Summary of key outcomes and issues emerging from the Symposium and looking to the future was done by Ian Lisk (WMO SERCOM). He mentioned:

- exchange of information, networking between providers of meteorological services public and private, national or international and users of that information like shipping companies BIMCO, ICS, companies, etc.
- Knowledge Opportunities for Maritime personnel and forecasters
- Key considerations – climate change impacts, rapid change in technology, fit-to-purpose graphical products and impact-based forecasting
- Key outcomes – competences, capacity development and training, observations for better forecasts and early warnings, encourage rapid development of underpinning S-41x product specification documentation, define baseline metocean services for end-users in changing environment (climate and technology changes), outreach and regional engagement and collaboration
- Capacity development and training – promote the WMO VOS scheme to ensure greater participation in VOS, engage in the comprehensive review of STCW Convention, convene maritime personnel safety webinar (NI), development of MET refresher courses and other training opportunities.



On September, 25th IMO Goodwill Maritime Ambassadors (IMO GMA) meeting took place at IMO headquarters. The meeting commenced with presentation of IMO GMAs present in the hall or on line. Then the meeting was opened by the Secretary General of IMO Arsenio Domingues mentioning geopolitical challenges to maritime profession. The head of legal

department and responsible for IMO GMA scheme explained that in 2025 IMO GMA scheme will end in that format and it'll be reorganised as per the rules of UN. The other discussed topics were:

- Adoption of Code of conducts of IMO meeting attendants Circ. Letter 4908
- Till the end of the year 2024 MEPC and MSC meetings will be done, GHG emissions intercession is working at that moment
- Guidelines for fair treatment of seafarers committed to crimes
- Abandonment of seafarers – dedicated person in the Legal Committee to deal with the matter
- All Council meetings and documents will be available in public

The meeting continued with ambassadors updates:

- Oleg Grigoryuk (Ukraine) - activities in Ukraine – cadets sponsored, humanitarian missions;
- Carlos Salinas – Philippines – adopt a ship program;
- Dimitar Dimitrov – Global Compass forum in Bulgaria, sentence of Croatian captain to prison in Turkey – need of support from IMO;
- Carleen (USA) – USA flag ships 0.4 percent of the world merchant fleet;
- George Hoytt – the role of education in the maritime industry;
- Akanksha Batura, Singapore – foundation to promote maritime profession and deal with young students.

The meeting concluded with the decision all existing IMO GMAs to continue working never mind what will be the changes in the scheme as the maritime industry needs motivated well educated young people to meet future challenges.



Capt. Dimitar Dimitrov, PHD, FNI,
President of CESMA and IMO GMA for Bulgaria