

OCEANS AND THE LAW OF THE SEA: REPORT OF THE SECRETARY-GENERAL (2024)

CONTRIBUTION BY THE WORLD METEOROLOGICAL ORGANIZATION (WMO)

TO THE IMPLEMENTATION OF GA RESOLUTION 78/69

For Submission June 2024

Pursuant to United Nations General Assembly [Resolution 78/69](#)

Organization (WMO) to the report of the UN Secretary-General, between 1 September 2023 and 31 August 2024.

1. INTRODUCTION

The World Meteorological Organization (WMO) is the authoritative voice on the state and behaviour of the resulting distribution of water resources. The ocean provides essential natural resources to humankind and regulates the global climate. WMO contributes to ocean-related issues through the observation and monitoring of the ocean and climate; research on the climate and connected Earth systems; development and delivery of services including forecasts and early warnings for reducing the risk of disaster caused by marine hazards; capacity development and training; and the provision of science-based information and tools for decision-making, including for policymakers and the general public at national, regional and global levels.

PART A: ACTIVITIES, INCLUDING ADOPTION OF MEASURES, DEVELOPMENT OF PROGRAMMES ETC WHICH HAVE BEEN UNDERTAKEN OR ARE ONGOING IN THE IMPLEMENTATION OF SPECIFIC PROVISION OF GENERAL ASSEMBLY RESOLUTION 74/19

WMO is steadily striving to step up its capacities to advance and support the provision of weather, water, and climate knowledge and services, WMO programs are designed to advance Earth system prediction and projection capacities, support, disseminate, and expand ocean observation networks, develop and expand ocean and marine services on timescales of minutes to centuries. Of high global significance are the recent marked increase in ocean surface temperature, ongoing decrease of ice shelves, and efforts to provide Early Warnings for All by 2027. It is estimated that more than 90% of the excess energy accumulating in the climate system as a result of increased concentrations of greenhouse gases goes into the ocean. The *WMO Annual Global Statement on Climate for 2023* ([WMO-No. 1347](#)), released in March 2024, already indicated that:

- x Ocean heat content reached its highest level in the 65-year observational record;
- x Global mean sea level reached a record high in the satellite record (from 1993 to present), reflecting continued ocean warming as well as the melting of glaciers and ice sheets; The rate of global mean sea-level rise in the past 10 years (2014–2023) is more than twice the rate of sea-level rise in the first decade of the satellite record (1993–2002);

The MER Guide provides guidance for Members to support emergency operations at sea, including environmental emergencies such as responses to oil and chemical spills in the ocean.

XI Marine science

Through the programs and initiatives mentioned above, WMO activities also continues to support the weather, climate and water.

Sustained oceanographic and marine meteorological observations and their free and unrestricted exchange are critical to address meteorological hazards, strengthen resilience in the face of climate change and variability, and build the scientific knowledge base for sustainable development.

WMO continues strengthening the global observing systems through implementation of the WMO

framework used by Subsidiary Body for Scientific and Technological Advice³ (SBSTA) to improve estimates of GHG concentrations and fluxes. The WMO-

data-processing and forecasting systems operated by WMO Members, including designation of specialized centres. In this context, there are 24 WIPPS-

Decade Conference included representation on panels and side events. The 2nd WMO and IMO *International Symposium on Extreme Maritime Weather ± Safety of Life at Sea and Sustainable Blue Economy*

CREWS

Climate Risk & Early Warning Systems

DBCP

JCB	Joint WMO-IOC Collaborative Board
JCOMM	Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology
JCOMMOPS	The JCOMM insitu Observations Programme Support Centre
JPL	NASA Jet Propulsion Laboratory
LDC	Least Developed Countries
LLGHGs	Long-Lived Greenhouse Gases
MCDS	Marine Climate Data System
METAREA	Geographical sea region for the purpose of coordinating the transmission of meteorological information to mariners on international voyages through international and territorial waters
Metocean	Meteorology and (physics) Oceanography
MHEWS	Multi-Hazard Early Warning System
NAPs	National Adaptation Plans
NASA	National Aeronautics and Space Administration
NMC	National Meteorological Centre
NMHS	National Meteorological and Hydrological Services
NRT	(Near) Real-Time
NWP	Numerical Weather Prediction
OceanObs'19	Decadal Ocean Observn2-9(l)felrem1 0 0 1 *11G.83 Tm0 G[(NMHS)] TJETQ.25

SROCC	Special Report on the Ocean and Cryosphere in a Changing Climate
TC	Tropical Cyclone
TCC	Tropical Cyclone Committee
TCP	WMO Tropical Cyclone Programme
TMA	Tropical Moored buoy Array
TPOS	Tropical Pacific Observing System
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	UN Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
WCRP	World Climate Research Programme
WG	Working Group
WIGOS	