



(September 2018 to early July 2019)

*Noting with concern, in this regard, the findings by the World Meteorological Organization, in its annual Greenhouse gas bulletin, that, in 2016, carbon dioxide levels in the atmosphere surpassed 400 parts per million, and that changes in its concentration have never been recorded as happening, as based on measurements of carbon dioxide from ice core records, as fast as in the past 150 years, and the findings in its Statement on the State of the Global Climate in 2017 that global mean temperatures in 2017 were about 1.1°C above the 1850 to 1900 average,*

The 14th *WMO Greenhouse Gas Bulletin* (issued in November 2018) shows that levels of the main greenhouse gases continue increasing. The global averaged mole fraction of carbon dioxide reached a new high in 2017 at 405.5 ppm. The increase from 2016 to 2017 was equal to the averaged growth rate within the past 10 years and smaller than the one from 2015 to 2016 during the El Niño period.

According to the *WMO statement on the state of the global climate in 2018* (issued in March 2019), the year 2018 was the fourth warmest year on record, with average global temperature reaching approximately 1 °C above pre-industrial levels. 2015- 2018 were the four warmest years on record, confirming that the long-term warming trend continues.

*Noting with concern also that the World Meteorological Organization, in its Statement on the State of the Global Climate in 2017, highlighted that the world also continued to see rising sea levels, with some acceleration, and*

*increasing concentrations of greenhouse gases, while the cryosphere continued its contraction, with global sea ice shrinking,*



*reefs, plankton and other organisms which have a calcareous exoskeleton, or a shell, like crustaceans, and the potentially detrimental consequences for fisheries and livelihoods, as well as the fi*





data buoys to track progress toward implementation of the vandalism preventative measures.

*329. Recalls its invitation, in paragraph 326 of resolution 72/73, to the Intergovernmental Oceanographic Commission, the United Nations Environment Programme, the International Maritime Organization, the Food and Agriculture Organization of the United Nations, the World Meteorological Organization and relevant United Nations system organizations, bodies, funds and programmes, as appropriate, to assist in the implementation of the second cycle of the Regular Process with regard to the following activities: awareness-raising, the identification of experts for the Pool of Experts, technical and scientific support for the Bureau and the Group of Experts, hosting meetings of the writing teams and capacity-building;*

There were no developments since the recommendations of experts for the pool of experts in March 2018.

The eighteenth World Meteorological Congress adopted a historical reform of the

## Enhancing the socioeconomic value of weather, climate, hydrological and related environmental services

The new governance structure is aligned to the strategic plan. Under the approved reforms, WMO different technical commissions will be replaced by two more coordinated commissions to streamline work and maximize impact.

The Commission for Observation, Infrastructure and Information Systems (Infrastructure Commission) will contribute to the development and implementation of globally coordinated systems for acquiring, processing, transmitting and disseminating Earth system observations, and related standards; coordination of the production and use of standardized analysis and model forecast fields; and development and implementation of sound data and information management practices for all WMO Programmes and their associated application and services areas. Michel Jean of Canada was elected president of the commission.



Incorporate JCOMM functions and activities in existing and new WMO technical commissions and existing IOC bodies and co-sponsored entities such as the Global Ocean Observing System (GOOS)  
Encompass the full spectrum of WMO-IOC collaborative activities in observation, data management, research and services  
Establish the Joint WMO-IOC Collaborative Board, as a high-

WMO Application Areas, through the variables listed in the Annex to this Resolution, including from EEZs, to the provision of services in support of safety of navigation and the protection of life and property in coastal and offshore areas. The Resolution also recognized that there is no regulation in place for the collection of marine meteorological and oceanographic measurements within EEZs in support of operational applications of WMO, while the IOC Guidelines for the Implementation of Resolution XX-6 of the IOC Assembly Regarding the Deployment of Profiling Floats in the High Seas within the Framework of the Argo Programme (IOC Resolution EC-XLI.4) are operated effectively and fully consistently with UNCLOS; For data to have full benefit (e.g. for hazards, cyclones etc.), the Workshop recommended to have broader use and exchange of ocean data;

The workshop promoted partnership with the private sector to integrate data from them for delivery of Earth system approaches/climate services, and proposed initiating a pilot project with the World Ocean Council (WOC);

The workshop agreed on a way forward for future collaboration between WMO and IOC regarding facilitating the making of oceanographic

(Geneva, 3-14 June 2019), organized an “Ocean Dialogue” on ocean information to deliver weather, marine and climate services for a resilient and sustainable blue economy. The Congress adopted two resolutions.

Resolution 65 (ex 7.3(1)/1) - WMO and the Ocean takes stock of the variety of WMO ocean-related resolutions and decisions, strategies, programmes and activities in observation, data processing and management, science and services and recognizes the critical contributions of WMO technical commissions, programmes, co-sponsored entities and centres to the understanding of the ocean and its role in the weather and climate systems, the protection of life and property at sea and in coastal and offshore areas, the generation of socioeconomic benefits and ocean sustainability.

The variety and complexity of these ocean-related instruments and activities requires ensuring coherence and coordination for maximizing benefits to Members, optimizing resources and enhancing engagements with partner organizations. In light of the opportunities offered by the reform of constituent bodies for crosscutting theme such as the ocean and the new strategic approach to the collaboration with IOC embodied in the Joint WMO-IOC Collaborative Board, the Congress adopted a collaborative framework on the ocean as a planning tool to:

- Facilitate aggregation and enhanced impact of WMO ocean-related activities,
- Support interagency coordination and cooperation on ocean matters, including through UN-Oceans and other mechanisms,
- Contribute to the United Nations Decade of Ocean Science for Sustainable Development 2021-2030 within existing structures and available resources;

The resolution requests WMO technical commissions, the Research Board and regional associations to integrate the ocean in the continuous research-to-operations-to-services value chain, underpinned by science, with the contribution of the Joint WMO-IOC Collaborative Board.

Resolution 66 (ex 7.3(1)/2) -

