



**DRAFT WMO STATEMENT AT SBSTA 43
PARIS, FRANCE
30 November-11 December 2015**

Updates on the contribution of WMO including Global Framework for Climate Services (GFCS) and other co-sponsored programmes, Global Climate Observing System (GCOS) and World Climate Research Programme (WCRP) to the Convention

**Chairperson,
Ladies and Gentlemen,**

Last year, the 41th Session of SBSTA invited WMO and its co-sponsored programme, to report on the outcome of the GFCS, GCOS and WCRP activities. The Global Framework for Climate Services (GFCS) is a UN-system initiative to provide reliable and accessible climate services to users all over the world, with an initial focus on agriculture and food security, water, health, disaster risk reduction and energy. The Framework is organized around 5 pillars, among which Observations and Monitoring, Research, Modelling and Prediction; and Climate Services Information systems are directly relevant to SBSTA. The seventeenth World Congress (Cg-17), in June of this year, adopted "Energy" as an additional priority area of the GFCS in anticipation of an increased demand for climate services by the energy sector in pursuing renewable energy sources such as wind, solar power and hydropower in achieving low carbon development. The GFCS thus contributes to both mitigation and adaptation.

WMO and GFCS, in collaboration with the UNFCCC Secretariat, have developed a Supplement to the Technical Guidelines of the National Adaptation Plan (NAP), providing scientific and technical information, on the role of data analysis, climate monitoring and prediction for adaptation planning and practices. The Supplement provides a list of selected publications and guidance materials concerning the role of National Meteorological and Hydrological Services (NMHSs) in the above-mentioned areas.

The Congress (Cg-17) adopted a WMO policy for the international exchange of climate data and products to support implementation of the GFCS. Through this resolution WMO Members are urged to provide additional relevant data and products that are required to support and sustain operational climate services at the global, regional and national levels. They are also encouraged

to strengthen their commitment to the free and unrestricted exchange of GFCS relevant data and products.

With respect to systematic observation, the Global Climate Observing System (GCOS) and UNFCCC held a workshop entitled “Enhancing observations to support preparedness and adaptation in a changing climate – Learning from the IPCC 5th Assessment Report” in February 2015. The workshop found that adaptation planning and assessment requires a combination of baseline climate data and information, coupled with sector-specific and other economic and demographic data at regional, national and local scales. Furthermore, it recognized the need to enhance climate observations systems with a special emphasis on land and oceans as well as the intersection of the two.

The World Meteorological Congress recognized the importance of efficient coordination and interoperability across the various component observing systems of GCOS and effective integration of in situ and space-based observations in meeting user needs. Congress further recognized the unique opportunities for coordinated national and international reliable physical, chemical and biological observation of Essential Climate Variables across the atmospheric, oceanic and terrestrial domains, including hydrological and carbon cycles and the cryosphere. It further urged, to the extent possible, the long-term continuity of the critical space-based components of GCOS, including the generation and dissemination of the satellite-based climate data and products.

Concerning the Warsaw International Mechanism for Loss and Damage, the Congress approved a Resolution for Cataloguing Extreme Weather, Water and Climate Events. Congress noted that more consistent event characterization in terms of type of event, location, duration, magnitude and timing would allow for better evaluation of the types of losses and damages associated with different types of events, and the most damaging events and thresholds, and trends. The decision will lead to standardization of how extreme events are characterized and assigned unique identifiers. This will provide an unambiguous reference for cataloguing associated losses and damages.

In the research domain, the World Climate Research Programme (WCRP) contributes to improvements in understanding climate variability and changes - including predictive experiments for the future state of climate system to project how it will evolve under different emission scenarios. WCRP coordinates the Coupled Model Intercomparison Project (CMIP) that serves as the fundamental community tool to better understand present and future climate evolutions. The WCRP community is now designing and organizing CMIP6 to address three broad scientific questions in support of the WCRP Grand Scientific Challenges on a) how the full integrated climate system responds to greenhouse gas forcing; b) the origins and consequences of systematic model biases; and c) how natural climate variability and uncertainties in scenarios impact predictability.

WMO has embarked on the development of an Integrated Global Greenhouse Gas Information System (IG3IS). In the Northern hemisphere CO₂ concentrations crossed the symbolically significant 400 ppm level in 2014 spring, when CO₂ is most abundant. In spring 2015, the global average concentration of CO₂ crossed the 400 ppm barrier. For effective policy support, it is extremely important that WMO together with the partners build a system allowing for the verification and attribution of the greenhouse gas sources and sinks.

The IG3IS effort is aimed at improving the granularity of observations and analyses in order to support the planning and management of Parties' Intended Nationally Determined Contributions (INDC) to mitigation efforts.