Requests the Secretary-General to reflect these changes in Annex III to the General Regulations (2011 edition), to inform all concerned of this decision and to continue to support the work of the technical commissions as provided for in the General Regulations.

Annex 1 to Resolution 43 (Cg-XVI)

AMENDMENT TO THE GENERAL TERMS OF REFERENCE OF TECHNICAL COMMISSIONS

The general terms of reference of the technical commissions contained in Annex III to the General Regulations (2011 edition) are amended by adding a new paragraph after paragraph 6 as in the 2007 edition:

“Structure its work to address societal outcomes, in line with existing management processes by creating and maintaining an operating plan focusing on the areas identified within its specific terms of reference and addressing the WMO Strategic Plan;”

and by renumbering paragraph 7 as in the 2007 edition as paragraph 8.

Annex 2 to Resolution 43 (Cg-XVI)

TERMS OF REFERENCE OF THE TECHNICAL COMMISSIONS

TERMS OF REFERENCE OF THE JOINT WMO/IOC TECHNICAL COMMISSION FOR OCEANOGRAPHY AND MARINE METEOROLOGY

The Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM) shall:

(a) Coordinate, develop and recommend standards and procedures for the work of Members/Member States in the overall collection, exchange, access, understanding, application and delivery of marine meteorological and oceanographic data, information, forecasts and warnings upon which marine meteorological and oceanographic services and marine-related decision-making processes are based;

(b) Coordinate, develop and recommend standards and procedures for the work of Members/Member States in the overall collection, management, exchanges and archival of high-quality marine meteorological and oceanographic data, information and products, on which climate studies, predictions and services, as well as impact and adaptation strategies, are based;

(c) Promote and facilitate the international sharing of implementing experience, transfer of technology and research uptake, and support relevant education and training to meet the capacity development needs of national agencies and of other organizations that play a role in the provision of marine meteorological and oceanographic services.

In this regard, the Commission will give special attention to education and training, and technology transfer initiatives on marine meteorological and oceanographic data, products and services that respond to the needs of, and build capacity in, the developing countries with particular emphasis on the least developed countries and small island developing States. Additionally, the Commission will support cooperation among WMO, UNESCO/IOC and other United Nations agencies that are
members of UN-Oceans, the International Hydrographic Organization (IHO), the International Council for Science (ICSU) and other governmental and non-governmental organizations, the private sector as well as user organizations, on matters related to marine meteorology and oceanography.

Within its terms of responsibility as defined above, and consistent with the IOC Statutes, the Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology shall have responsibilities common to all WMO Technical Commissions as defined in Regulation 180 of the General Regulations (2011 edition), and shall structure its work to address societal outcomes as envisaged by the planning documents of the parent organizations, by creating an operating plan focusing on the areas identified within its specific terms of reference and addressing appropriate (or applicable) strategic thrusts and expected results.

TERMS OF REFERENCE OF THE COMMISSION FOR ATMOSPHERIC SCIENCES

The Commission for Atmospheric Sciences shall be responsible for promoting, coordinating and facilitating research and access to its results, technology transfer from research to operations, training and capacity-building activities in atmospheric sciences including weather and its forecasting, climate, water, atmospheric chemistry, and related environmental sciences.

The specific objectives of the Commission shall be:

(a) To identify the requirements of WMO Members, including those related to support of environmental and climate conventions, and to facilitate the transfer of knowledge, technologies and advice concerning atmospheric science issues;

(b) To support and facilitate research in atmospheric and related sciences to advance the understanding and prediction of atmospheric processes within the broader Earth system, with emphasis on the following:

(i) Weather, climate, water and related environmental analysis and prediction for timescales ranging from minutes to seasons to multi-decadal, embracing new developments in environmental prediction;

(ii) Refining the end-to-end prediction process so as to improve the forecasting of high impact events associated with serious consequences for populations and economies;

(iii) Atmospheric composition and air pollution, their interaction with weather and climate, studies of transport, transformation, deposition and impacts of air pollutants and related monitoring;

(iv) The physics and chemistry of clouds, greenhouse gases, ozone and aerosols;

(v) Weather modification science assessment with emphasis on the underlying physical and chemical processes and the development of rigorous evaluation procedures;

(vi) Processes in tropical and polar regions where the lack of understanding has large impacts on global predictive skill;

(c) To maintain and develop the Global Atmosphere Watch Programme using an integrated approach to observations and research, focusing on greenhouse gases, atmospheric
chemistry and air quality, contributing to scientific assessments in support of international environmental and climate conventions and policies;

(d) To maintain and develop the World Weather Research Programme, including the Observing System Research and Predictability Experiment (THORPEX), focusing on knowledge of high impact weather and partnerships in multidisciplinary research advancing the broader science of environmental prediction;

(e) In accordance with the WMO Strategic Plan, to coordinate the activities of the Commission with relevant WMO bodies and promote cooperation between WMO Members, international scientific organizations, environmental institutions and other scientific groups;

(f) To standardize functions, constants, terminology and bibliographic practices applicable to atmospheric sciences;

(g) To support and facilitate the effective transfer of advances made by atmospheric science research to reduce societal impact of weather, climate and pollution on societies, economies and ecosystems;

(h) To conduct scientific assessments in atmospheric science as required by Members or by the delivery of the science programmes of the Commission.

TERMS OF REFERENCE OF THE COMMISSION FOR AERONAUTICAL METEOROLOGY

The terms of reference of the Commission for Aeronautical Meteorology shall be:

(a) To assist Members in improving delivery of aeronautical meteorological observations and forecast services, and in applying quality standards in line with the requirements of aviation users;

(b) To coordinate development and implementation of aeronautical meteorological services in support of safe and efficient Air Traffic Management, in collaboration with the International Civil Aviation Organization (ICAO);

(c) To assist Members in developing and promoting aeronautical meteorological related climate services in collaboration with the other WMO constituent bodies;

(d) To enhance the capabilities of Members in the provision of aeronautical meteorological warning services to reduce the impacts of hazardous weather on aviation users;

(e) To provide the best available guidance, resource material and coordination for aeronautical meteorological education and training to Members in cooperation with the regional associations, ICAO regional groups and the Education and Training Office of the WMO Secretariat, particularly for developing and least developed countries;

(f) To develop and implement, in coordination with regional associations, pilot projects to demonstrate and share best practices for capacity building of Members in the provision of aeronautical meteorological services and to promote regional cooperation for technology transfer to developing and least developed countries;

(g) To develop guidance material for Members to enhance their management of aviation weather service provision in cooperation with regional associations;
(h) To review existing and emerging user requirements, in cooperation with regional associations, and to develop and update associated regulatory documentation and effective cost recovery mechanisms related to the provision of aeronautical meteorological services in collaboration with the International Civil Aviation Organization.

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TERMS OF REFERENCE OF THE COMMISSION FOR CLIMATOLOGY

The terms of reference of the Commission for Climatology shall be:

(a) To advise and guide WMO climate activities relevant to the implementation of the Global Framework for Climate Services;

(b) To assist Members in the gathering, management and sharing of climate data;

(c) To promote the analysis, monitoring, assessment and reporting of the climate system;

(d) To promote the development of climate products and services and, in conjunction with the Commission for Basic Systems, their delivery mechanisms;

(e) To promote the development of climate products, services and information to inform on adaptation and climate risk management, in collaboration with relevant institutions, and demonstrate the social and environmental benefits of such services;

(f) To assist Members, especially those from developing and least developed countries, to build their climate-related capacity to meet the needs of their stakeholders;

(g) To play an active role in WMO’s interactions with other United Nations and international agencies on climate-related matters.

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TERMS OF REFERENCE OF THE COMMISSION FOR AGRICULTURAL METEOROLOGY

The terms of reference of the Commission for Agricultural Meteorology shall be:

(a) Support applications of meteorology to the management of agriculture, livestock, forestry, rangelands and fisheries sectors (herein after referred to as agricultural subsectors), taking into account developments in both the scientific and operational fields;

(b) Assist the Member countries in developing and establishing their agrometeorological services (and, where necessary, encourage and assist National Meteorological and Hydrological Services in realigning/restructuring their services to provide effective agrometeorological services) through transfer of knowledge, methodologies and techniques, and by providing advice, particularly on:

(i) The most operational use of knowledge concerning weather and climate for sustainable agricultural management through conservation and better use of natural resources;
(ii) The use of weather and agrometeorological observations, forecasts and warnings for operational purposes;

(iii) The use of climate observations and predictions;

(iv) Adaptation to climate variability and change, in particular in developing countries;

(v) Combating unfavourable influences of weather and climate on agricultural subsectors, including weather-related pests and diseases;

(vi) The protection of agricultural produce in storage or in transit against damage or deterioration due to direct and indirect influences of weather and climate;

(vii) Effective means of communication and fostering coordination and collaboration activities between weather and climate service providers and users in subsectors;

(c) Improve coordination and collaboration mechanisms through which users of weather and climate information in agricultural subsectors can liaise actively with weather and climate service providers and vice versa;

(d) Formulate data and information requirements for agricultural purposes;

(e) Foster the development and use of effective communication methods and channels for acquiring and disseminating agrometeorological information, advice and warnings to agricultural subsectors and obtaining feedback;

(f) Promote a better understanding of the interactions and impacts of weather and climate in regards to drought and desertification.

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TERMS OF REFERENCE OF THE COMMISSION FOR INSTRUMENTS AND METHODS OF OBSERVATION

The Commission shall be responsible for matters relating to international standardization, compatibility and sustainability of instruments and methods of observation of meteorological, climatological, hydrological, marine, and related geophysical and environmental variables.

This responsibility underpins all observations within WIGOS, and will be carried out in close consultation with relevant WMO partner organizations that co-sponsor, own and/or operate some of the observing systems. This responsibility also extends to supporting the requirements of WMO cross-cutting activities such as the Global Framework for Climate Services, Disaster Risk Reduction and Capacity Building.

This shall include in particular:

(a) Respond to the requirements for standardized and compatible observations, including data content, quality, metadata and observational product generation;

(b) Provide advice, and recommendations, and promote studies concerning effective and sustainable use of instruments and methods of observation, including quality management procedures such as methods for testing, preventive maintenance, calibration and quality assurance;
c) Conduct and/or coordinate global and regional instrument intercomparisons and performance testing of instruments and methods of observation;

d) In collaboration with the other international organizations, such as BIPM and ISO, promote the development of measurement traceability to recognized international standards (SI), including reference instruments within a hierarchy of world, regional, national and lead centres for instrument calibration, development and testing;

e) Promote compatibility, intercomparison, integration and inter-operability within and between, space-based and surface-based (in situ and remote-sensing) observations, including conducting testbed observing experiments;

f) Encourage research and development of new approaches in the field of instruments and methods of observation of meteorological, climatological, hydrological, marine, and related geophysical and environmental variables;

g) Promote the appropriate and economical production of instruments and methods of observation with particular attention to the needs of developing countries;

h) Support training and capacity-building activities in the area of instruments and methods of observation;

i) Liaise with the scientific research community and instrument manufacturers to evaluate and to introduce new observing systems into operations.

TERMS OF REFERENCE OF THE COMMISSION FOR BASIC SYSTEMS

The Commission shall be responsible for matters relating to:

(a) Cooperation with Members, other technical commissions, regional associations and relevant bodies in the development and operation of integrated systems for observing, data processing, forecasting, telecommunications, and data management. These activities shall be in response to requirements and in support of all WMO Programmes, particularly contributing to disaster risk reduction, and taking advantage of opportunities provided by technological developments;

(b) The assessment of opportunities for, and the provision of, a common infrastructure to meet the requirements defined by technical commissions and regional associations, as well as by organizations with whom WMO has relations, taking into account new applications of meteorology, hydrology, oceanography, and related environmental sciences;

(c) Continued development of the World Weather Watch (WWW) as a priority;

(d) Further development and implementation of the Public Weather Services Programme, with particular attention to end-to-end service delivery;

(e) Further development and implementation of the WMO Space Programme;

(f) Contribution to the development and implementation of the Global Framework for Climate Services;
(g) The processing, storage and retrieval of basic data for meteorological and related purposes including, in particular, the organization of the Global Data-processing and Forecasting System of the WWW;

(h) The development and application of systems and techniques to meet user requirements including those of operational weather analysis and forecasting and of services for environmental emergency authorities;

(i) Observational systems, facilities and networks (land, sea, air, and space) as decided by Members including, in particular, all technical aspects of the WMO Integrated Global Observing System, particularly the global observing systems;

(j) Telecommunication networks, radio-frequency allocation and facilities for operational, research and applications purposes including, in particular, the organization of the WMO Information System, including the Global Telecommunication System of the World Weather Watch;

(k) The development and application of operational procedures, schedules, and arrangements for the exchange of and access to weather, climate and water information (data and, products), including warnings, required by all WMO Programmes, in particular, through the WMO Information System;

(l) The development and application of data management principles and procedures including monitoring and evaluation of the common infrastructure, in particular, of the World Weather Watch.

Resolution 44 (Cg-XVI)

AMENDMENTS TO THE GENERAL REGULATIONS OF THE WORLD METEOROLOGICAL ORGANIZATION – DISTRIBUTION OF SEATS IN THE EXECUTIVE COUNCIL

THE CONGRESS,

Noting:

(1) Article 13 of the Convention of the World Meteorological Organization,

(2) Resolution 39 (Cg-XIV) – Amendments to Article 13 (c) of the Convention,

(3) The General Regulations of WMO,

Considering that the distribution of seats in the Executive Council should, as a priority, reflect the number of Members in each Region,

Also considering that the number of Members in each Region has changed little since the Fourteenth World Meteorological Congress and that, in the event of major changes, Congress could reconsider the total number of seats in the Executive Council,