



WMO OMM

World Meteorological Organization
Organisation météorologique mondiale
Organización Meteorológica Mundial
Всемирная метеорологическая организация
المنظمة العالمية للأرصاد الجوية
世界气象组织

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Our ref.: 20630/2019/CER/New-Technical-Commissions

8 August 2019

Annex: 1

Subject: Membership of New Technical Commissions

Action required: Notify the Secretary-General of Membership in Technical Commissions
by 9 September 2019

Dear Sir/Madam,

I have the honour to advise you that the recently concluded Eighteenth World Meteorological Congress adopted Resolution 7(Cg-18) on the Establishment of WMO technical commissions for the eighteenth financial period. These have been agreed as:

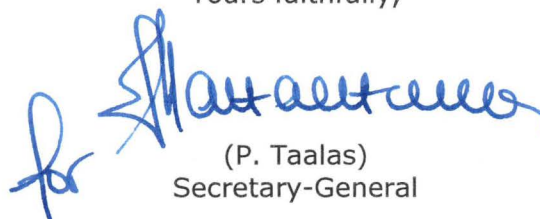
- (1) Commission for Observation, Infrastructure and Information Systems (Infrastructure Commission), with terms of reference provided in the Annex under heading A; and
- (2) Commission for Weather, Climate, Water and Related Environmental Services and Applications (Services Commission), with terms of reference provided in the Annex under heading B.

Further to this, Congress adopted Resolution 75 (Cg-18) regarding the Amendments to the General Regulations of the World Meteorological Organization, in which the provisions of new Regulation 180 (b) indicate that the Members shall normally notify the Secretary-General on which commissions they intend to be represented. Such notification should normally be sent within 90 days after closure of the session of Congress and not later than 60 days before the ordinary session of the commission concerned.

In this respect, I wish to invite you to indicate by **9 September 2019** the Technical Commission(s) on which your Government intends to be represented. Opportunity will be provided to your Government to make nominations of qualified technical experts to contribute to the work of each of the commissions at a later time.

A copy of this letter is being sent to the Permanent Representative of your country with the World Meteorological Organization as well as Permanent Missions of your country in Geneva.

Yours faithfully,


(P. Taalas)
Secretary-General

To: Ministers of Foreign Affairs of Member States of the World Meteorological Organization

TERMS OF REFERENCE OF TECHNICAL COMMISSIONS

A. Commission for Observation, Infrastructure and Information Systems

General mandate

The overall scope and specific terms of reference for the Commission for Observation, Infrastructure and Information Systems (Infrastructure Commission) shall be in accordance with the purposes of the Organization defined in Article 2 of the Convention, in particular, items (a) through (c) and (e), and Regulations 180 to 196 of the General Regulations.

The Commission shall contribute to: the development and implementation of globally coordinated systems for acquiring, processing, transmitting and disseminating Earth system observations, and related standards; the coordination of the production and use of standardized analysis and model forecast fields; and the development and implementation of sound data and information management practices for all WMO Programmes and their associated application and services areas.

The work of the Commission shall encompass all approved WMO application areas, as listed in the Rolling Review of Requirements, as well as updated and emerging observing, information and infrastructure requirements.

The Commission shall promote the development of integrated systems to cover all application areas wherever possible, and shall ensure that these systems:

- (a) Are user-driven and provide Earth system observations, processed data and relevant services, products and information to Members;
- (b) Are applicable, accessible and with life-cycle management across the full range of WMO Members;
- (c) Are built on a modular and scalable principle to the extent possible;
- (d) Make full use of existing WMO and other relevant standards and regulations;
- (e) Make use of and promote public-private engagement where advantageous;
- (f) Incorporate state-of-the-art optimal and fit-for-purpose technology;
- (g) Are based on user requirements developed in coordination with the Services Commission and the Research Board;
- (h) Are building upon existing partnerships and networks among communities of practice within the service areas, which are beneficial for WMO Members.

The activities of the Commission shall be guided by the WMO Strategic Plan.

Specific terms of reference

- (a) Development and maintenance of WMO normative material related to integrated observing systems, data transmission and dissemination systems, data management systems, and data processing and forecast systems as specified in WMO Technical Regulations – the Commission shall:
- (i) Coordinate the development of new systems and infrastructure-related regulatory material in all application areas of its scope;
 - (ii) Promote and pursue the integration of existing regulatory material;
 - (iii) Keep regulatory material up-to-date through regular amendments, as necessary;
 - (iv) Ensure the consistency of new and amended regulatory material across the application areas;
 - (v) Consider relevant scientific and technological developments to ensure the currency of the regulatory material;
 - (vi) Together with the Services Commission and the Research Board, coordinate linking science, infrastructure and services interactively;
 - (vii) Accompany each recommendation for new and amended regulatory material with its own impact, cost-benefit, and risk analysis;
- (b) Common infrastructure and systems attributes – the Commission shall:
- (i) Promote a culture of compliance with standards and relevant regulatory material among all Members;
 - (ii) Further develop and promote the use of the Rolling Review of Requirements (RRR) for the assessment of user requirements, the assessment of available capabilities, and the development of gap mitigation strategies in order to further improve the overall systems capabilities of WMO;
 - (iii) Develop and promote a unified approach to data management across all disciplines and WMO application areas;
 - (iv) Develop common methodologies for quality assurance of observations and other data products across all application areas;
 - (v) Actively seek engagement from Earth system observational data providers from all relevant government entities, international organizations, the private sector, and academia.
- (c) Assistance to Members to enhance systems capabilities and enable effective implementation and compliance – the Commission shall:
- (i) Consult with regional associations and Members to identify need for improvement in observing, data transmission and data management capabilities services and develop the required implementation strategies;
 - (ii) Consult with regional associations to identify experts who can participate in technical commission teams, to facilitate the implementation and uptake of evolving technical systems, standards and regulations at national and regional levels;
 - (iii) Facilitate the regional and national implementation of systems under its remit by developing guidance material aligned with new and amended regulatory material;

- (iv) In consultation with the regional associations, identify Members' needs for assistance in improving their capabilities and providing relevant guidance and capacity building, including training;
 - (v) Propose pilot and demonstration projects as necessary;
 - (vi) Facilitate the transfer of knowledge by supporting relevant events and through communication and outreach activities;
 - (vii) Provide standards and regulations for the basic measurement of variables characterizing water quantity, quality and sediments;
 - (viii) Support the technical aspects of the Hydrological Status and Outlook System and the state of the water report;
- (d) Cooperation and partnership – the Commission shall:
- (i) Establish a close coordination and efficient working mechanisms with the Commission for Weather, Climate, Water and Related Environmental Services and Applications (Services Commission), relevant international organizations in the area of meteorological, hydrological, climatological and other environmental observations, information and infrastructure;
 - (ii) Establish and maintain close collaboration and coordination with WMO co-sponsored systems and programmes, and other major international observing programmes and initiatives;
 - (iii) Establish in collaboration with the Research Board consultative mechanisms with relevant scientific and operational user organizations to receive feedback and advice on systems capabilities;
 - (iv) Seek opportunities for leveraging resources through the establishment of joint, including inter-agency, bodies and projects addressing common areas of system development.

Composition

The composition of the Commission shall be in accordance with General Regulation 183.

Participation of leading technical experts in Earth system observations, information management and prediction in the fields of meteorology, hydrology, climatology, oceanography, atmospheric environment and other fields covered by the terms of reference shall be ensured by Members.

UN, international organization partners, and private partners of WMO may be invited to nominate technical experts in their areas of expertise to participate in the work of the Commission in accordance with General Regulation 183 (as amended by Resolution 75 (Cg-18)).

Working procedures

The Commission shall elect a president and up to three co-vice-presidents among the experts on the Commission and determine which of the co-vice-presidents should serve as Acting President in accordance with General Regulation 12.

The Commission shall establish effective and efficient working mechanisms and related necessary time-limited subsidiary bodies:

- (a) Establish effective and efficient working mechanisms through an adequate number of subsidiary bodies;

- (b) Make an effective use of a broad community of practice encompassing Members' collective expertise, including the private and academia sectors;
- (c) Establish a work programme with concrete deliverables and timelines, aligned with the Organization-wide Strategic and Operating Plan and monitor progress regularly using appropriate performance indicators and targets for reporting to the Executive Council and Congress;
- (d) Use electronic forms of coordination and collaboration effectively;
- (e) Establish effective coordination with other technical commissions, the Research Board, the Joint WMO-IOC Collaborative Board and other relevant bodies in particular through the Executive Council's Technical Coordination Committee (TCC), as appropriate;
- (f) Organize effective communication and outreach to inform the WMO community of ongoing work, achievements and opportunities;
- (g) Apply a system for the recognition of achievements, promotion of innovation and the participation of young professionals;
- (h) Ensure regional and gender balance and inclusiveness in all its structures and work plans;
- (i) Ensure adequate representation and consultation with communities of practice among the service areas.

B. Commission for Weather, Climate, Water and Related Environmental Services and Applications

General mandate

The overall scope and specific terms of reference of the Commission for Weather, Climate, Water and Related Environmental Services and Applications (Services Commission) shall be in accordance with the purposes of the Organization defined in Article 2 of the Convention, in particular, items (d) and (e); Regulations 180 to 196 of the General Regulations.

The Commission shall contribute to the development and implementation of globally harmonized weather-, climate-, water-, ocean- and environment-related services and applications to enable informed decision-making and the realization of socioeconomic benefits by all user communities and society as a whole.

The Commission shall encompass application areas with substructures as needed to implement the WMO Strategic Plan including, but not limited to:

- (a) Regulated and existing meteorological services (covered by WMO *Technical Regulations* (WMO-No. 49), in accordance with General Terms of Reference 2):
 - (i) aeronautical meteorological services;
 - (ii) marine and oceanographic meteorological services;
 - (iii) agrometeorological services;
 - (iv) public weather services;
 - (v) climatological services;
 - (vi) hydrological services;

- (b) Emerging services under development (currently the subject of studies and evaluation for possible inclusion in regulated services, in accordance with General Terms of Reference 1):
 - (i) urban services;
 - (ii) environmental services;
 - (iii) multi-hazard early warning services;
 - (iv) polar and high mountain area services;
 - (v) health;
 - (vi) energy;
 - (vii) food security
 - (viii) water management;
 - (ix) land transportation;
 - (x) others, as may become necessary.
- (c) Potential category for hydrological services.

The Commission shall promote a holistic approach to services and service delivery and assist Members to apply:

- (a) Risk-based decision-making in support of disaster risk preparedness and reduction;
- (b) A service-oriented culture;
- (c) A strong user focus with 'fit-for-purpose' services;
- (d) Quality management in service delivery;
- (e) Standards for competence and qualification of personnel;
- (f) Mutually-beneficial public-private engagement providing optimized service delivery and added value to society;
- (g) Accelerated uptake of advanced technology for service delivery;
- (h) Systematic evaluation of socioeconomic benefits and other relevant market-oriented evaluations of products and services.

The activities of the Commission shall be guided by the WMO Strategic Plan and the WMO Strategy for Service Delivery.

Specific terms of reference

- (a) Development and maintenance of WMO normative material related to service delivery, as specified in WMO Technical Regulations, the Commission shall:
 - (i) Coordinate the development of new service-oriented regulatory material in all application areas of its scope based on identified needs of Members;

- (ii) Keep the regulatory material up-to-date through regular amendments, as necessary;
 - (iii) Ensure the consistency of new and amended regulatory material across the application areas;
 - (iv) Enhance capacity for prediction and service delivery;
 - (v) Consider relevant scientific and technological developments to ensure the currency of the regulatory material;
 - (vi) Together with the Infrastructure Commission and the Research Board, coordinate linking science, infrastructure and services interactively;
 - (vii) Accompany each recommendation for new and amended regulatory material with its own impact, cost-benefit, and risk analysis.
- (b) Common service delivery attributes – the Commission shall:
- (i) Promote a service-oriented culture in all relevant application areas including customer focus, quality management, as well as an understanding of the value and socioeconomic benefits;
 - (ii) Share best practices and develop harmonized methodologies for user engagement including the identification of requirements and the establishment of feedback mechanisms with users necessary for the continuous improvement of services;
 - (iii) Develop methodologies for impact-based products and services in all application areas, innovative service delivery methods and integrated platforms;
 - (iv) Ensure the harmonization of requirements for the competencies and qualifications of personnel involved in service delivery;
 - (v) Develop a common methodology for the verification and validation of information and service delivery as part of quality management;
 - (vi) Build, through appropriate studies and projects, a better understanding of the economics of service delivery, cost-recovery mechanisms, commercial and market elements, and develop respective guidance for Members;
 - (vii) Seek the engagement of service providers from the private sector and academia;
 - (viii) Promote global and regional partnerships, including building upon existing partnerships and networks among communities of practice among the service areas, which are beneficial for WMO Members.
- (c) Assistance to Members to enhance service delivery capabilities and enable effective implementation and compliance – the Commission shall:
- (i) Consult with regional associations and Members to identify needs for new and improved services and analyse related capabilities, and best practices;
 - (ii) Consult with regional associations to identify experts who can participate in technical commission teams, to facilitate the implementation and uptake of evolving services and applications, standards and regulations at national and regional levels;
 - (iii) Facilitate implementation by developing guidance material aligned with the promulgation of new and amended regulatory material;

- (iv) In consultation with the regional associations, identify Members' needs for assistance in improving their capabilities and providing relevant guidance and capacity-development activities, including training;
 - (v) Propose pilot and demonstration projects as necessary;
 - (vi) Facilitate the transfer of knowledge and best practices by supporting relevant events and through communication and outreach activities.
- (d) Cooperation and partnership – the Commission shall:
- (i) Establish close coordination and efficient working mechanisms with relevant international organizations such as ICAO, IMO and FAO, in the area of service delivery;
 - (ii) Establish consultative mechanisms with user organizations to receive feedback and advice on services;
 - (iii) Consider opportunities for leveraging resources through the establishment of joint, including inter-agency, bodies and/or projects addressing common areas of service delivery.

Composition

The composition of the Commission shall be in accordance with General Regulation 183.

Participation of leading technical experts in services and applications in the field of meteorology, climatology, hydrology, ocean and the other fields covered by these terms of reference shall be ensured by Members.

UN, international organizations and private sector partners of WMO may be invited to nominate technical experts in their areas of expertise to participate in the work of the Commission in accordance with General Regulation 183 (as amended by Resolution 75 (Cg-18)).

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 - (f) Organize effective communication and outreach to inform the WMO community of ongoing work, achievements and opportunities;
 - (g) Apply a system for the recognition of achievements, promotion of innovation and the participation of young professionals;
 - (h) Ensure regional and gender balance and inclusiveness in all its structures and work plans;
 - (i) Ensure adequate representation and consultation with communities of practice among the service areas.
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