



**AGENDA ITEM 7: EARTH SYSTEM RESEARCH**

**AGENDA ITEM 7.3: Science for policy**

**DRAFT RESOLUTION**

**Draft Resolution 7.3(2) (Cg-18)**

**WMO SCIENTIFIC AND TECHNOLOGICAL SUPPORT TO IPCC AND CLIMATE POLICY**

THE WORLD METEOROLOGICAL CONGRESS,

**Recalling:**

- (1) Resolution 15 (Cg-17) - *World Climate Programme* and Resolution 56 (Cg-17) – *Intergovernmental Panel on Climate Change,*
- (2) Decision 17 (EC-68) – *WMO support to the implementation of activities of the Intergovernmental Panel on Climate Change (IPCC),*
- (3) Decision 7 (EC-69) – *WMO support to implementation of the Paris Agreement,*
- (4) *Decision 9 (EC-69) – Strengthening the WMO Statement on the State of the Global Climate,*
- (5) Decision 50 (EC-69) – *An Integrated Research and Development Approach,*
- (6) Resolution 2 (EC-70) - *WMO integrated approach to high-level climate-science-related policy processes,*
- (7) Decision 6 (EC-70) - *Implementation of Intergovernmental Panel on Climate Change activities,*
- (8) Decision 9 (EC-70) - *Promoting the use and interpretation of climate change projections on regional and national scales,*
- (9) Resolution 30 (EC-70) – *The 2018 review of the World Climate Research Programme,*
- (10) Resolution 5.2(1)/1 (Cg-18) – *WMO contributions to the provision of climate information and services in support of policy and decision-making,*
- (11) Resolution 7.1/1 (Cg-18) – *Future WMO research and supporting activities,*

**Recalling further:**

- (1) The support of WMO, together with the United Nations Environment Programme (UNEP), as parent organizations of the IPCC dedicated to providing governments at all levels with scientific information that they can use to develop climate policies, the hosting of the

IPCC Secretariat at WMO and provision of administrative, language and conference services,

- (2) The support of WMO, together with IOC-UNESCO and the International Science Council (ISC), as co-sponsors of WCRP, dedicated to facilitating the analysis and prediction of Earth system variability and change for use in an increasing range of practical applications of direct relevance, benefit and value to society,

**Noting:**

- (1) The report of the Chair of IPCC [INF. 7.3(2)],
- (2) The critical role of WMO in supporting IPCC activities and key reports, such as the IPCC Special Report on Global Warming of 1.5°C ~~requested- invited~~ [Luxembourg] by the UNFCCC Conference of Parties (COP21), and which provided one of the scientific underpinnings [USA, Germany and Luxembourg] for the Talanoa Dialogue at COP24 last year,
- (3) The relevance of the IPCC's Sixth Assessment cycle in supporting the climate science-policy interface [USA],
- (4) The annual WMO assessments on climate related topics: the Statement on the State of the Global Climate, the annual WMO Greenhouse Gas Bulletin, the WMO Aerosol Bulletin as well as other relevant Bulletins under the Global Atmosphere Watch (GAW) Programme,
- (5) The role of WCRP to convene the international climate modelling community, to coordinate the development and improvement of climate and Earth system models, and to deliver climate predictions and longer-term climate change projections, including at regional scale,
- (6) That the WCRP Coupled Model Intercomparison Project (CMIP), now in its 6th phase, ~~[Spain]~~ serves as both an organizer and coordinator of international climate research through the definition of experimental protocols and provider of supporting infrastructure that allow for coordinated multi-model global ~~[Spain]~~ climate simulations, and that the WCRP Coordinated Regional Climate Downscaling Experiment (CORDEX), now in its 2nd phase, is an initiative to provide global coordination of regional climate downscaling for improved regional climate change adaptation and impact assessment. ~~[Spain]~~

**Noting further** that CMIP ~~provides-contributes to one of the~~ [Luxembourg] ~~the~~ foundational [USA] elements for the Intergovernmental Panel on Climate Change (IPCC) assessments, the United Nations Framework Convention on Climate Change (UNFCCC) policy deliberations, and climate services and products disseminated world-wide,

**Recognizing:**

- (1) That CMIP and CORDEX have ~~[Spain]~~ been extraordinarily successful, and leverage a large investment from individual countries, research centres, agencies and individual scientists who contribute to the underlying essential infrastructure,
- (2) The growing dependency on CMIP and CORDEX ~~[Spain]~~ products by a broad research community, by national and international climate assessments, by climate services and policy making,
- (3) That basic CMIP and CORDEX ~~[Spain]~~ activities, such as the creation and regular update of forcing datasets, the provision, archiving and quality check of CMIP and CORDEX ~~[Spain]~~ products, model development, and international coordination are currently at

significant risk if not institutionalized in some way, as they still rely largely on volunteer work and research funding,

**Decides** to enhance WMO scientific support to climate policy through:

- (1) ~~Coordination of annual WMO assessments on the State of the Global Climate, Greenhouse Gas concentrations and other relevant atmospheric constituents, and climate observations and associated data with IPCC assessments and other complementary reports regularly released by other entities using the mechanism established through Resolution 5.2(1)/1 (Cg-18)~~ Organizing and coordinating with IPCC assessments and other complementary reports regularly released by other entities in a seamless way on-going annual WMO assessments on the State of the Global Climate, Greenhouse Gas concentrations and other relevant atmospheric constituencies and climate observations and associated data; as well as planned WMO annual assessments on the state of climate science, climate services and adaptation actions and global water using the mechanism established through the Resolution 5.2(1)/1 (Cg-18) [USA];
- (2) Coordination through the WCRP international research on predictions, ~~and~~ longer-term climate change projections and robust attribution, as well as on associated big data analytics and artificial intelligence techniques [India], including at regional scale, through its new strategic and implementation plans, ensuring key contributions to the Sixth Assessment Report (AR6);
- (3) Using the research and innovation framework of the Seamless Data-processing and Forecasting System (GDPFS, Resolution 6.3(1)/1 Cg-18), towards continuous development of CMIP models and tools within a research-to-operation context;
- (4) Ensuring institutionalization and operationalization of the CMIP and CORDEX ~~[Spain]~~ delivery for the preparation of AR6, including timely preparation and quality control of data for producing the appropriate IPCC-scenarios and projections supporting the IPCC assessments [Germany] and guidance for robust sectoral impacts supporting climate services [India], as well as the application of development of protocols for standardization ~~of developed in [Germany]~~ the CMIP modelling framework;

**Urges** Members:

- (1) To enhance financial support to the IPCC through the IPCC Trust Fund or in-kind contributions [Luxembourg];
- (2) To coordinate, via IPCC national focal points, [Russian Federation] among different ministries, agencies and academic networks, including social sciences, to foster, as appropriate, [Russian Federation]-the establishment of National Panels or other institutional arrangements [USA] for the IPCC that can bring together all the relevant expertise;
- (3) To contribute institutional, technical and financial resources as necessary to ensure sustainable and robust CMIP and CORDEX ~~[Spain]~~ scenario climate change projections [Luxembourg] delivery to IPCC;
- (4) To adhere to existing standards in order to facilitate data exchange between institutions and to co-develop future adaptations in collaboration with the climate research community; [Germany]

**Requests** the Secretary General:

- (1) To set up a dedicated ad-hoc [Curaçao and Sint Maarten] Task Force with representation of WCRP, ~~[Luxembourg]~~ UNFCCC and the Infrastructure Commission (in relation to the

GDPFS) to prepare recommendations for the Executive Council regarding the implementation of the CMIP and CORDEX ~~[Spain]~~ delivery to IPCC, and the related organizational and financial aspects. Members of the IPCC (Bureau/Executive Committee) can be invited by the Task Group to present the products of the IPCC ~~[Luxembourg]~~;

- (2) To consider ways to enhance the coherence and consistency of climate products among WMO climate activities and ~~the [Luxembourg]~~ IPCC;
  - (3) To continue the support of the IPCC ~~S~~secretariat ~~[Luxembourg]~~ and to pursue more efficient delivery and closer cooperation on climate assessments ~~[Spain]~~.
  - (4) To strengthen the national human and technical capacities to develop climate models involved in CMIP, in particular in those countries not doing so yet [Uruguay], and to pay particular attention to young scientists from Small Islands and Developing States [Cook Islands].
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