

**WILLEMSTAD DECLARATION
FOURTEENTH MEETING OF THE CONFERENCE OF DIRECTORS
OF THE IBERO-AMERICAN METEOROLOGICAL AND HYDROLOGICAL SERVICES**

The Directors of the Ibero-American Meteorological and Hydrological Services, meeting in Willemstad (Curaçao) from 7 to 9 March 2018,

1. Recognize the achievements of the Ibero-American Meteorological Cooperation Programme and consider the continuation of the Programme to be of great importance for the development of Ibero-American National Meteorological and Hydrological Services (NMHSs) in order for them to adequately meet the demands of their societies.
2. Agree to set up an action plan for the 2018-2020 period covering three strategic areas: institutional strengthening and resource mobilization; weather, climate and water services; and education and training.
3. Thank the WMO Secretary-General for taking part in the meeting and especially for his presentation on the WMO constituent body reform.
4. Set out their position on the WMO reform in the Annex to this Declaration.
5. Reiterate their concern at the decline in the use of Spanish in WMO's work, stress the importance that Spanish should have and insist on the use of Spanish in WMO documents, publications, meetings and bodies.
6. Express their satisfaction with the second blended training course for meteorologists to meet the WMO requirements as specified in the Basic Instruction Package for Meteorologists (BIP-M), delivered by the State Meteorological Agency (AEMET) of Spain. They ask WMO to continue its support by providing training fellowships to fund students' participation in the classroom phase. They agree that fellowships should be granted based on the academic results achieved by students during the distance-learning phase. Finally, they call on AEMET to deliver a third course during the 2019-2020 period and on WMO to continue providing financial support for the course's classroom phase.
7. Consider the WMO training fellowships to be an essential element in NMHS development and ask for investment in this programme to be increased.
8. Undertake, in light of the growing demand for training and education, to co-finance, as far as possible, their candidates' participation in the various activities of the Conference of Directors of Ibero-American NMHSs (CIMHET).
9. Will submit to the WMO Secretariat the list of courses that CIMHET considers strategic and that are included in the 2018-2020 action plan, to ensure that they are given priority, that they are known to WMO's various departments and that funding for them is considered.
10. Express their satisfaction with the approval by the Spanish Agency for International Development Cooperation (AECID) of the training courses proposed by AEMET within the Interconecta programme for the 2018-2019 period, recognizing its usefulness for the development of Ibero-American NMHSs.

11. Thank the NMS of Argentina for the survey it conducted on training needs in the region and encourage NMHSs to complete the survey, coordinated by the Permanent Representatives (PRs) before June 2018. They consider that analysis of the results will be an important resource for managing NMHSs and agree to use the results keeping the source confidential.
12. Recognize the need to develop a strategic training and education plan for the region, using the capabilities of the Regional Training Centres (RTCs) and other entities with training experience in this area, based on an analysis of the results of the survey on training needs.
13. With a view to developing a coherent regional training strategy that incorporates WMO priorities into study programmes in a cross-cutting manner, suggest that a meeting be held between coordinators of RTCs and their components, on the one hand, and the PRs of Ibero-American countries in which the RTCs are based, on the other, and call on the WMO Secretariat to actively support the implementation of this initiative in coordination with CIMHET.
14. Express their interest in the development of the WMO Global Campus, considering that it should: involve RTCs in its development; further promote horizontal cooperation among Members; and meet needs in all official WMO languages, particularly Spanish.
15. Express their satisfaction with the progress made within WMO in recognizing the Regional Training Centre in Spain and trust that it will be approved at the seventieth session of the WMO Executive Council.
16. Consider that it would be extremely useful to conduct management training for managers of NMHSs.
17. Reiterate the importance of horizontal cooperation in solving most of the problems associated with training and operational improvements in NMHSs.
18. Recognize the importance of taking gender equality into account when planning different activities.
19. The directors of RA III approve the conclusions and recommendations of the Technical-Planning Workshop for the Development of the Severe Weather Forecasting Demonstration Project (SWFDP) in South America, which was held in Asunción on 2 and 3 October 2017. In particular, they agree that, before 23 March, they will appoint the representative of their respective countries to the working group that will develop the project and call on the president of RA III to send a communication to the WMO Secretary-General requesting that he take the necessary steps to mobilize the resources needed to complete the actions set out in the report.
20. The directors of RA IV reiterate their interest in conducting a clarification meeting via videoconference on the SWFDP, in order to decide whether to inform the WMO Secretary-General of their interest in initiating the process to implement the project in Central America and the Western Caribbean.
21. Consider it essential to develop the WMO Integrated Global Observing System (WIGOS) in the region and stress the importance of supporting the programme's implementation at the regional and national levels. They support the OSCAR/Surface training course scheduled to be held in Cuba in May 2018.

22. Express their satisfaction with the recent increase in the use of the Meteorological, Climatological and Hydrological Database Management System (MCH) at a global level and support the WMO Secretariat's initiative to ask MeteoSwiss to implement the pilot project for OSCAR's machine-to-machine communication with the MCH system.
23. Welcome the offer from the Brazilian National Institute of Meteorology (INMET) to provide NMHS technicians with training on the WMO Information System (WIS).
24. Point out that any proposal to incorporate new observational stations into the WIGOS Programme must be reviewed first by the corresponding PR before being sent to the WMO Secretariat.
25. Stress the importance of using standardized formats to integrate data submitted by the various networks of existing radars in the region. They call for support from the WIGOS programme in their development.
26. Welcome the presentation made by the Organization of American States (OAS) on the Inter-American Program for Sustainable Development and express interest in the possibility of this programme, promoted by the OAS Member States, complementing the efforts made by NMHSs for the benefit of society and productive sectors, and take note of the interest expressed by the OAS in cooperating with WMO, CIMHET and the NMHSs through various initiatives.
27. Express the need to make the political authorities aware of the socioeconomic benefits that can be obtained from NMHSs that have adequate resources. In this regard, they express great interest in the offer made by the OAS representative to hold a meeting in Washington with the various heads within OAS in the second half of 2018. They recommend that the presidents of RA III and RA IV be part of the contact group, together with representatives from the respective WMO regional offices and the CIMHET Secretariat.
28. Consider the climate governance component of the EUROCLIMA+ programme to be extremely useful for conducting various projects of interest to NMHSs.
29. Reiterate their support for the climate and hydrology forums of Mesoamerica and the Hispanic Caribbean, and South America.
30. Recognize the great potential of the Ibero-American region for conducting intersectoral activities related to weather, climate, water, water management and climate change through its three related networks: CIMHET, the Ibero-American Water Directors Conference (CODIA) and the Ibero-American Network of Climate Change Offices (RIOCC). They recommend that the secretariats of the three networks continue to coordinate in order to develop joint projects.
31. Express their satisfaction with the outcome of the joint CODIA–RIOCC intersectoral workshop on the prevention and management of extreme hydrometeorological events and measures to adapt to climate change in Mexico, Central America and the Hispanic Caribbean region, and support a similar event being held for South America in 2018.
32. Express their satisfaction with CIMHET's participation in the Regional Platform for the Americas and the Global Platform for Disaster Risk Reduction in 2017, and recommend that participation in these forums continue.

33. Express their satisfaction with the proposal on data recovery and the generation of regionalized climate change scenarios for Central America as part of the climate component of the EUROCLIMA+ programme. They express interest in conducting similar projects in other areas within the region.
34. Recognize the usefulness of the criteria for drawing up the Strategic Plan of the National Institute of Meteorology and Hydrology of Ecuador (INAMHI).
35. Take note that the Ibero-American network for the monitoring and forecast of hydrometeorological phenomena (PROHIMET) intends to hold its next technical days in the second half of 2019 and reiterate their support for this network.
36. Reiterate their interest in carrying out gauging courses using hydroacoustic technology and take note of the WMO Secretariat's commitment to hold the course in Peru as soon as possible after it was postponed several times and to subsequently hold a similar course in Guatemala in 2019, with interested neighbouring countries taking part in both cases.
37. Consider the WMO Global Conference on Prosperity through Hydrological Services, which will be held from 7 to 9 May 2018 in Geneva, to be of great importance and express their intention that the Ibero-American countries be suitably represented in terms of numbers and professional qualification.
38. Express their satisfaction with the progress made in implementing the Central American regional lightning detection network funded by the European Union's Latin America Investment Facility(LAIF) programme.
39. Call on WMO to take the necessary steps to mobilize the resources needed to ensure financial support so that the work of the Regional Climate Centres (RCCs) in the region can continue.
40. Reiterate their interest and support for the areas of activity developed by the Regional Water Resources Committee of the Central America Integration System (CRRH-SICA) and their contribution to the NMHSs.
41. Express their satisfaction with the activities conducted by the western South America RCC, which help to strengthen the NMHSs.
42. Urge NMHSs to take part in the Fourth International Conference on El Niño, which is jointly organized by the International Research Centre on El Niño (CIIFEN) and will be held in Guayaquil in October 2018.
43. Express their satisfaction with the progress made by the southern South America RCC and support the development of an implementation plan for a drought information system for South America.
44. Express their satisfaction with the progress made by the Centre for Climate Services for Mesoamerica and the Caribbean (CSCMC).
45. Take note of the products available in the Copernicus programme relating to atmospheric monitoring and climate change.

46. Reiterate the importance of strengthening activities and education in marine meteorology.
47. Express their satisfaction with the progress made by the ALERT-AS platform in Brazil as an in-house tool for NMHSs and consider that it would be useful to implement this tool in other areas and countries, as it is being developed in Ecuador.
48. Consider the project to develop a hydrological observation and early warning system in Ecuador to be of great interest.
49. Agree to carry out the activities under the action plan for the 2018-2020 period, included in the Annex to this Declaration.
50. Thank the WMO Hydrology and Water Resources Programme for its offer to support CIMHET in the delivery of the courses scheduled in the 2018-2020 action plan.
51. Fully support the candidature of the PR of Argentina, Celeste Saulo, to the position of WMO Second Vice-President, which will, among other things, ensure that the region is properly represented within the Organization's governing bodies.
52. Congratulate the PR of Chile, Guillermo Navarro, for his election by consensus as president of RA III.
53. Thank the representatives of OAS, the International and Ibero-American Foundation for Administration and Public Policies (FIIAPP), CRRH-SICA, CIIFEN and the European Centre for Medium-Range Weather Forecasts (ECMWF) for their presentations and take note of these presentations.
54. Thank Miguel Rabiólo, outgoing Director of WMO Regional Office for the Americas and the Caribbean, for his tireless efforts to develop NMHSs, bearing in mind the important legacy he has left in the region.
55. Thank the Curaçao Weather Service, and especially its Director Albert Martis, for their warm welcome and support throughout this meeting. They also thank the Minister of Traffic, Transport and Urban Planning, H.E. Ms Zita Jesus-Leito, for her support for and interest in the activities of CIMHET. Finally, they thank the WMO Secretariat and AEMET for their support in organizing this event.

Agree to hold the next meeting in Montevideo in the first quarter of 2019.

Willemstad, 9 March 2018

Signed:

Andrea Celeste Saulo, Servicio Meteorológico Nacional de Argentina (National Meteorological Service of Argentina)

Francisco de Assis Diniz, Instituto Meteorológico de Brasil (Meteorological Institute of Brazil)

Guillermo Navarro Schlotterbeck, Dirección Meteorológica de Chile (Meteorological Service of Chile)

Juan Carlos Fallas Sojo, Instituto Meteorológico Nacional de Costa Rica (National Meteorological Institute of Costa Rica)

Celso Pazos Alberdi, Instituto de Meteorología de Cuba (Meteorological Institute of Cuba)

Luís García Guirola, Servicio Meteorológico de El Salvador (Meteorological Service of El Salvador), DOA-MARN

José Olmedo, Instituto Nacional de Meteorología e Hidrología de Ecuador (Ecuadorian National Meteorological and Hydrological Institute)

Carmen Rus González, Agencia Estatal de Meteorología de España (Spanish State Meteorology Agency)

Eddy H. Sánchez Benett, Instituto Nacional de Sismología, Vulcanología, Meteorología e Hidrología de Guatemala (Guatemalan National Institute of Seismology, Vulcanology, Meteorology and Hidrology), INSIVUMEH

Martin Quan, Comisión Permanente de Contingencias de Honduras (Permanent Contingency Commission of Honduras)

Alberto Hernández Unzón, Servicio Meteorológico Nacional de México (Mexican National Meteorological Service)

Diego González, Gerencia de Hidrometeorología, Empresa de Transmisión Eléctrica S.A., (Reviser's note: Department of Hydrometeorology??) Panama

Raúl Rodas, Dirección de Meteorología e Hidrología de la DINAC de Paraguay (Department of Meteorology and Hydrometeorology, DINAC, Paraguay)

Ken Takahashi, Servicio Nacional de Meteorología e Hidrología del Perú (Peruvian National Meteorological and Hydrological Service)

José M. Alberto de Miranda, Instituto Português do Mar e Atmosfera (Portuguese Marine and Atmospheric Institute, IPMA)

Andrés Campusano, Oficina Nacional de Meteorología de la República Dominicana (National Meteorological Office of the Dominican Republic)

Madeleine Renom, Instituto Uruguayo de Meteorología (Meteorological Institute of Uruguay)

René Ortega, Instituto Nacional de Meteorología e Hidrología de Venezuela (Venezuelan National Institute of Meteorology and Hydrology)

Fourteenth meeting of CIMHET
Willemstad (Curaçao), 7–9 March 2018

2018-2020 ACTION PLAN

Institutional strengthening and resource mobilization

- Include on the CIMHET website a catalogue of the range of training courses available in the NMHSs and related organizations and the criteria for taking part in these courses.
- Complete the survey on education and training needs in the region.
- Analyse the results of the survey on education and training needs at a meeting between RTCs and other institutions with experience of training in the region, leading to the drafting of a strategic education and training plan to be submitted to CIMHET.
- Hold a meeting with OAS representatives to inform them of the activities of NMHSs and establish common strategies to demonstrate the benefits that NMHSs can bring.
- Create working groups to develop a project to revise and add to the meteorological terms in the Spanish dictionary.

Provision of meteorological, climate and hydrological services

- Develop a project for the generation of regionalized climate change scenarios for Central America, including a data recovery component.
- Design and submit to funding mechanisms regional climate data recovery projects, taking into account the initiatives already carried out in the region.
- Continue the implementation of the Central American virtual centre for the prevention of severe hydrometeorological events.

Training

- Prepare the third blended BIP-M course, between April 2019 and October 2020.
- Deliver a distance-learning or blended management course aimed at NMHS managers.
- Hold the following courses, approved by the AECID Interconecta programme:

2018

- Generation of regionalized climate change scenarios
- Satellite meteorology. Applications for the forecasting and monitoring of tropical phenomena
- Observation and forecasting of air quality
- Marine meteorology

2019

- Monitoring and forecasting of droughts
 - Hydrometeorological applications of meteorological radars
 - Satellite meteorology: applications to mid-latitude meteorology
 - Applications of the ECMWF model to tropical meteorology
- Hold, where possible, the following courses:
- Aeronautical meteorology
 - Communication techniques
 - AMDAR data assimilation
 - Agrometeorology
 - Operational implementation of ALERT-AS
 - Use and maintenance of automatic hydrometeorological stations
 - Integrated flood management
 - Stream gauging

WMO REFORM: PROPOSAL BY THE FOURTEENTH MEETING OF CIMHET

Willemstad (Curaçao), 7–9 March 2018

GENERAL REMARKS

- > WMO was essentially created to meet the need to achieve sustainable development, to reduce the loss of life and property caused by natural disasters and other catastrophic events related to **weather, climate and water**, and to safeguard the environment and the global climate for present and future generations;
- > WMO's organizational structure must ensure implementation of the Convention, in particular the provisions of:
 - Article 2 (purposes)
 - Article 4: The Organization shall comprise the Congress, the Executive Council, regional associations, technical commissions and the Secretariat
 - Article 19:
 - (a) Commissions consisting of technical experts may be established by Congress to study and make recommendations to Congress and the Executive Council on any subject within the purpose of the Organization;
 - (b) Members of the Organization have the right to be represented on the technical commissions.

CRITERIA FORMING THE BASIS OF THE REFORM

1. WMO needs to respond to new scientific, technological and social challenges.
2. The new structure must increase visibility of WMO's areas of expertise.
3. The support that WMO provides to NMHSs should be increase.
4. The structure must ensure coordination among commissions, regional associations and working groups.
5. The benefits of the reform for Members and society must be substantiated.
6. Duplication among the functions carried out by existing structures should be avoided and the support provided to the Organization maintained.
7. The need to integrate the study of the various components of the Earth's system should be taken into account.

MAIN COMMENTS ON THE PROPOSED REFORM PRESENTED BY THE SECRETARY-GENERAL

To summarize, the proposed reform establishes:

- > 2 technical commissions (TCs): observation, infrastructure and information management, and applications and services.
- > The TCs are supported by **permanent committees** that are sector-based and not intergovernmental.
- > A non-intergovernmental scientific advisory committee and a research implementation group.
- > A policy advisory committee.
- > A technical advisory committee.

Areas of agreement:

- > Reduction in the number of TCs to avoid duplication of tasks.
- > Consensus on the need for a TC on infrastructure as a cross-disciplinary commission.
- > Convert the Commission for Atmospheric Sciences (CAS) into a cross-disciplinary, advisory research group.

Areas of disagreement:

- > If the work of 8 TCs is to be done by 2 TCs, this will require the creation of a number of sub-commissions in order to meet all of the strategic functions of the Organization. This would introduce an additional level of governance.
- > It is not possible for the Ibero-American community to send delegations with sufficient expertise to cover the diverse range of topics covered by the TC on Applications and Services; this would further increase the gap between countries at different levels of development.
- > The two proposed TCs do not offer any clear visibility regarding WMO's priority areas.
- > The proposal presented by the Secretary-General includes non-intergovernmental structures (Forum, Conference, Assemblies and Groups) for **areas that are strategic** for the Organization. If these structures are not intergovernmental, it cannot be guaranteed that all Member States will be involved in implementing standards approved by Congress.
- > The proposed structure resembles the structure of European meteorological operational entities. In this regard, it should be taken into account that WMO is not an operational agency and must maintain its **regulatory** character.

PROPOSAL

In light of the above and the proposals presented in various forums, the fourteenth meeting of CIMHET submits the following proposal for the restructuring of the Technical Commissions:

- > Weather
- > Climate
- > Water
- > Infrastructure and information management (cross-disciplinary commission)

Furthermore, it agrees to the creation of a cross-disciplinary, cross-cutting, advisory Research Group to replace the CAS.

With this structure, the TCs clearly reflect WMO's strategic areas:

- > The main responsibility of NMHSs is to protect lives and property by issuing warnings for severe weather phenomena, including the application of meteorology to aviation and maritime navigation, which would be represented by the Technical Commission for Weather.
- > The Technical Commission for Climate would group together the activities of the current Commission for Climatology and those of the Intergovernmental Board on Climate Services, with the Global Framework for Climate Services and its applications, including agriculture and other human activities.
- > The Technical Commission for Water would incorporate Hydrology and the Cryosphere.
- > The Commission for Infrastructure and Information Management would incorporate the tasks of the Commission for Instruments and Methods of Observation and a large portion of the tasks of the Commission for Basic Systems, including the support infrastructure for hydrology and other areas, making it a cross-disciplinary commission.

This proposal is better adapted to the organizational structure of NMHSs and the areas of knowledge of experts that may represent Members on the TCs.

We consider that the proposed reduction in the number of commissions would enhance coordination between WMO's strategic areas and minimize governance-related risks.

In addition to the above, it would be necessary to hold periodic forums on WMO's strategic areas (weather, climate and water) to provide opportunities for distribution, interface and the participation of the public and private sector, academics and other interest groups.
