

**REGIONAL ASSOCIATION III  
JOINT MEETING OF THE WORKING GROUPS  
(ASUNCIÓN, PARAGUAY, 4 – 6 OCTOBER 2017)**

**JOINT REPORT OF THE MEETING**

The second joint meeting of the Regional Association III (RA III) Working Groups on Hydrology (WG-HWR), Climate (WG-CL) and Infrastructure and Technological Development (WG-ITD) took place in Asunción, Paraguay. One of the joint meeting's main objectives was to identify priority cross-cutting issues among the different groups and make recommendations in order to draw up activities for reaching Region III's proposed objectives.

The joint meeting began on Wednesday, 4 October 2017 at 8.30 a.m. with a plenary session, in which Mr Julián Báez, Permanent Representative of Paraguay and president of RA III, opened the meeting, with words from Mr Luís Aguirre, president of the National Directorate of Civil Aviation (DINAC), and Mr Miguel Ángel Rabiolo, Director of the Regional Office for the Americas. After the opening, the work schedule for the coming days was presented in view of the meeting's objective. Next, the president of RA III gave a presentation on the Operational Plan and both priority and cross-cutting issues were presented, with contributions from the presidents of each working group (WG).

For the rest of Wednesday, 4 October, all of Thursday, 5 October, and the first half of Friday, 6 October, each WG carried out individual sessions in parallel, following an agenda that had been prepared before the meeting. During the first plenary session, it was decided that each WG would outline the issues that cut across WGs; this appears in annex to this joint report.

The final meeting took place in plenary on Friday, 6 October and began with each group's presentation of cross-cutting issues and recommendations. Afterwards, the president of RA III summarized the main points of the presentations, indicating among other things:

- General agreement among WGs regarding specific needs. For example, both WG-CL and WG-HWR mentioned the need for coordination in order to improve seasonal predictions. In addition, WG-ITD and WG-HWR highlighted the need for improved coordination for short-term forecasts, impact-based forecasts, early warnings and so forth. A specific case mentioned by both groups was the link between the WG-ITD Severe Weather Forecasting Demonstration Project (SWFDP) and the WG-HWR Flash Flood Guidance System (FFGS).
- The need to improve communication between WGs and members by making use of the resources available in the Regional Office; for example, through holding regular virtual conferences.
- The need for members designated by their respective Permanent Representatives in WGs to have continuity in their tasks.
- The need for training in other areas, such as project management; resource mobilization; verification of numerical models; and assimilation of Aircraft

Meteorological Data Relay (AMDAR) data and of height in the numerical models of each National Meteorological and Hydrological Service (NMHS).

- The need to ensure that WG activities are in line with priority issues such as the Global Framework for Climate Services (GFCS), WMO Integrated Global Observing System (WIGOS) and Disaster Risk Reduction Programme (DRR).
- The need to develop projects with concrete activities for the year: FFGS, WIGOS/CP (Cuenca del Plata)

Following general comments concerning the issues presented and questions from members of the different working groups, the Director of the Regional Office and the president of Regional Association III made closing remarks. The meeting ended at 4.00 p.m. on Friday, 6 October.

**Working Group – Climate  
Proposals for cross-cutting issues and conclusions**

**1. Data management:**

- Data rescue
- Centennial stations
- Automatic station quality control
- Recording and filing of extreme events

**2. Sub-seasonal and seasonal forecasting**

- Application to sectors: agriculture, energy and hydrology
- Promotion of virtual forums on agriculture, hydrology and climate

**3. Drought Information System**

- Joint development of hydrological drought indices
- Evaluation of drought impacts by subsector
- Promotion of drought management system governance
- Joint development of projects/activities for the use of soil moisture products/data

**4. Training**

- Management of databases and data rescue, including management of rescue hardware and software
- Applied statistical methods
- Education and training in quality control for automatic stations
- Development of user-oriented applications
- Geographical Information System (GIS) applications for the development of products and services
- Project management and approach

**Conclusions**

- In order to make use of the scientific and technical improvements in sub-seasonal and seasonal prediction, it is necessary to work together with the productive sectors identified in GFCS and develop joint applications conducive to an exhaustive use of climate information and an improvement in decision-making.
- The importance of the user interface is recognized and the establishment of dialogue mechanisms, technical and scientific co-production, and feedback is recommended, considering the different characteristics of the key players, decision-makers and populations.
- The shortage of climatology and agrometeorology professionals in NMHSs and the existence of different Regional Training Centres are noted. The need to continue with capacity-building efforts in the Region, with special attention to database management; sub-seasonal

and seasonal prediction; and agricultural meteorology, is recognized. The availability of online tools and the development of webinars are noted and it is suggested that they be applied to these activities.

**Additional notes**

- The WG concern regarding the changes that are proposed for the WMO regional associations and technical commissions has shifted and the president of RA III is called upon to keep WG-CL informed of the specific proposals being made for the purpose of further discussion and technical feedback.
- The development of joint working group sessions is welcomed and the development of cooperation mechanisms between WGs and technical commissions, among other measures to improve internal WMO communication, is encouraged.

**Working Group – Hydrology and Water Resources**

**Conclusions and cross-cutting recommendations – WG-HWR**

- It should be ensured that the follow-up actions to the drought workshop in Buenos Aires in August 2017 benefit from the active and joint participation of the members of WG-CL and WG-HWR.
- WG-ITD and WG-HWR appreciate the offer of support from USAID-OFDA to finalize the implementation of WIGOS-SAS (Southern South America)-Cuenca del Plata and agree to submit to the WMO Secretariat the annexed proposal of actions to be taken, with their estimated costs, to ensure that the hydrological data exchange system be put into operation by the end of 2019.
- In addition, WG-HWR and WG-ITD appreciate the offer of USAID-OFDA to support the establishment of a hydrometeorological forecasting and warning system in the La Plata Basin through products generated by FFGS and offer to prepare a preliminary concept paper before December 2017, to be discussed in a meeting between hydrological and meteorological forecasters from the Basin countries and representatives of the Hydrologic Research Center (HRC), WMO and USAID-OFDA either virtually or in person, depending on the convenience of the parties involved. This meeting will serve to clarify concepts and establish details of an implementation plan for the initiative that will be presented to the Permanent Representatives of the countries concerned with strong recommendations for their approval.
- As a follow-up to the recommendations from the flash flood workshop in Lima in August 2016, which were supported by the Region's Permanent Representatives, it was decided to preliminarily designate F. Bernal, F. Garcia and H. Vera as focal points for Colombia, Ecuador and Peru respectively, to coordinate, together with the heads of meteorological forecasting, the gathering of the information necessary to prepare the concept notes for phases I and II of the PECFFGS (Reviser's note: first part of the acronym unknown) project.
- It is recommended that WG-HWR and WG-CL work together to translate climate outlooks into hydrological outlooks using WMO guidelines, particularly those of the Commission for Climatology (CCI) and the Commission for Hydrology (CHy). In particular, it is suggested that one of the Regional Climate Outlook Forums (RCOFs) before the next RA III session be hydroclimatic.
- It is requested that the new version of the WMO restructuring proposal be sent to WG members. Experts will deliver their comments to the presidents of the groups so that they can consolidate the comments and transmit them to the president of RA III.

## Item 9

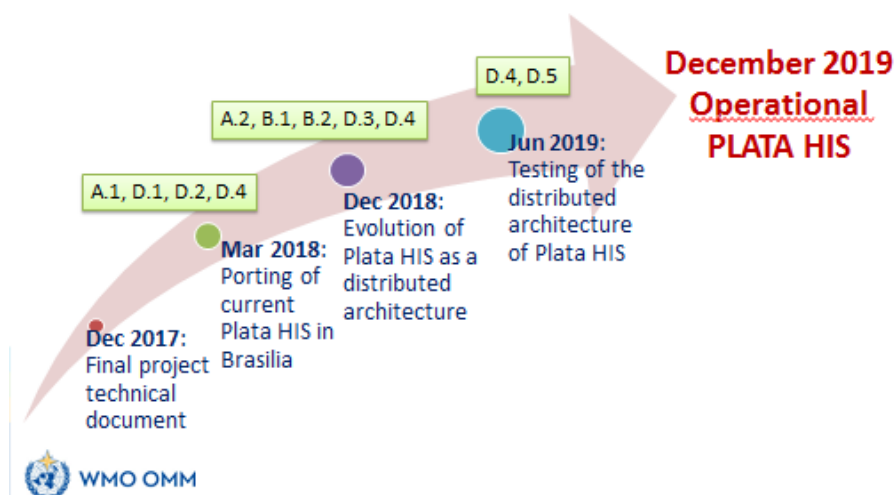
- It is recommended to continue with RA III WG-HWR.
- The current structure of WGs in RA III allows cross-cutting issues to be addressed and should be retained, perhaps with reinforcement of the weather forecast component of WG-ITD.
- In order to increase the chance of success for WG activities, particularly cross-cutting ones, the stability of the WG members is considered to be essential. It is suggested that a brief informative note on this matter be prepared that would be sent to the Permanent Representatives automatically when they take up their posts for the first time.
- The activities for 2020–2023 should involve consolidating and extending those of the current period, with possible new areas to consider, such as groundwater monitoring, snow research, sedimentology, special hydrometry (virtual stations) and distance learning courses.
- The final recommendation to RA III will be established in October 2018 through an in-person or virtual meeting, as applicable.

## Proposal

### **DEVELOPMENT OF AN OPERATIONAL SYSTEM ACTIVITIES FOR THE OPERATIONAL PLATA-HIS**

- A. Upstream activities
  1. Porting the current PLATA-HIS prototype to GISC Brasilia
  2. Porting and evolution of data systems in each country
- B. Midstream activities
  1. Optimization of the distributed architecture (Global Information System Centre (GISC) and National Hydrological Services (NHSs))
  2. Ontology extension
- C. Downstream activities
  1. Development of a PLATA web portal as the PLATA-HIS interface
- D. Training and documentation
  1. Training on the broker and mediator installed in Brasilia (Gi-Suite)
  2. Training on the current data systems (HydroServers in Brasilia) and web and desktop clients (HydroDesktop)
  3. Training on new data systems (defined by countries)
  4. Training on the PLATA web portal
  5. Production of manuals and user guides

## ROADMAP of THE OPERATIONAL PLATA HIS



### Estimate

|  | <b>Estimate (dollars)</b> |
|--|---------------------------|
| 1. Transfer of the current PLATA-HIS prototype to GISC Brasilia  | 30,000                    |
| 2. Regional workshop with the participation of the five countries for training technicians in WIGOS/WIS/WHOS   | 15,000                    |
| 3. National meetings in each of the five countries, inviting potential partners, led by the technicians from each country that were trained at the regional workshop       | 50,000                    |
| 4. Technical assistance through visiting each of the five countries to install the web services in each country and adapt their databases.<br>System maintenance training. | 75,000                    |
| 5. Necessary extra equipment   | 40,000                    |
| <b>TOTAL</b>   | <b>210,000</b>            |

## **Working Group – Infrastructure and Technological Development Cross-cutting issues**

### **1. Migration to the Regional Basic Observing Network**

Establish a regional task team with the participation of experts from all of the RA III working groups (climate and hydrology) in order to:

- Produce a work plan for the next RA III meeting
- Identify the different application areas of immediate interest in the Region
- Produce a detailed proposal of the new Regional Basic Observing Network (RBON), considering station selection criteria

### **2. Regional WIGOS Centres**

The meeting decided to create a work team comprising the president, the vice president and WG-ITD members Martina and Chira, from Argentina and Peru, to develop the RA III Regional WIGOS Centre (RWC) proposal as seen in the final report of the Working Group on Infrastructure and Technological Development (WG-ITD). The WIGOS data quality monitoring system will be considered by the task team created to develop the RWC project.

### **3. Use of the OSCAR/Surface system**

Countries should update the metadata in OSCAR/Surface as a top priority, as it is the official WMO system.

Countries should use the new identification system for the stations.

### **4. WIGOS-SAS/CP project**

The system is in an advanced implementation stage and the infrastructure and hydrology groups are working on a proposal for operational implementation in the countries concerned.

### **5. Regional models**

In the process of updating the numerical forecast requirements, particularly for hydrological applications.

### **6. Reporting on WIGOS incident management and quality monitoring**

### **7. Exchange of data from automatic stations**

A national work plan should be drawn up for implementing the regional exchange of data in BUFR format from Automatic Weather Stations (AWS) in the short term.

### **8. New WG-ITD structure**

A group of only five or six members will be proposed and task teams will be created with defined mandates and durations for the implementation of specific tasks.



**General comments**

1. Irrespective of the changes that might occur due to the new structure of WMO or the Association, working group meetings should continue in a joint manner.
2. Information and communication technology should be used to improve interaction between working group members.
3. There should be continuity in the activities of focal points and working group members in order to achieve better results.

JOINT MEETING OF THE WORKING GROUPS  
(Asunción, Paraguay, 4–6 October 2017)

**PROVISIONAL AGENDA (plenary sessions)**

Wednesday, 4 October – Morning

**08:30 a.m. – 10:30 a.m. – Plenary**

1. Opening of the meeting
  - a. Words of welcome – RA III president
  - b. Organization of work (plenary and group sessions) – D/DRA
  - c. Expected outcomes of the meeting (working guidelines) – D/DRA
  
2. Areas of interest – RA III president, with targeted interventions by area
  - a. General
    - i. Regional WIGOS Centres – WG-ITD
    - ii. WMO regional and global multi-hazard alert system – GMAS – WG-ITD
    - iii. Severe weather demonstration project – WMO SWFDP
    - iv. Proposals for changes in the structure of the WMO constituent bodies. General aspects and impacts on WGs, technical commissions and RA III – RA III president
  
  - b. Cross-cutting issues
    - i. WIGOS-SAS/CP project – WG-ITD
    - ii. Drought information systems – SIS – WG-CL
    - iii. Flash Flood Guidance System – WMO FFGS
    - iv. Proposals for objectives and working structures for RA III – D/DRA

Friday, 6 October – Afternoon

**2.00 p.m. – 6.00 p.m. – Collaborative work**

1. Final discussions – presentation of common aspects from each WG
  
  2. Conclusions and recommendations
-