



World Meteorological Organization
Regional Association III (South America)

**Operating Plan (2016-2019) for the improvement of National
Meteorological and Hydrological Services in WMO Region III**

The Operating Plan (OP) of the WMO Regional Association III (RA III), for the period 2016-2019, is based on the following reference documents:

- WMO Strategic Plan 2016-2019;
- RA III Implementation Plan of the WMO Information System (WIS);
- RA III Implementation Plan of the WMO Integrated Global Observing System (WIGOS);
- Final report and documents of the sixteenth session of the Regional Association III (Asuncion, Paraguay 15-20 September 2014).

This OP is intended to guide the actions of RA III through its working groups, to contribute to the implementation of the key priorities of the WMO Strategic Plan in the Region.

Therefore, among the seven High Priorities of the WMO Strategic Plan 2016-2019, the following are considered fundamental for RA III:

- (1) WMO Integrated Global Observing System (WIGOS) and the WMO Information System (WIS);
- (2) Disaster Risk Reduction (DRR) Impact-based Forecasts and multi-hazard Early Warnings;
- (3) Capacity Development of NMHSs;
- (4) Global Framework for Climate Services (GFCS).

In this context, it is planned to strengthen the existing Regional Climate Centres (RCCs) for the western-South America (CRC-OSA) and for the southern-South America (CRC-SSA), and also create a third Regional Climate Centre for the Northeastern-South America (CRC-NSA). This OP seeks to achieve the RCCs have the ability to provide climate services that meet the requirements and needs of users and, at the same time, supply to decision makers sensitive information about climatic events of high societal and economic costs.

To that end, conventional and automatic observation networks, as well as communication systems existing in RA III, will be the subject of a detailed study and follow-up. The potential evolution of specialized personnel in each NMHS in the region will be assessed and evaluated.

The meteorological services for aviation will also be reviewed during this period, taking into account the current requirements of knowledge, qualifications and certifications, in addition to the quality certifications required by ICAO. These requirements might apply to marine meteorological services in the future.

The Operating Plan of RA III was made on the basis of the results of the Conferences of working groups (WGs) conducted simultaneously and in parallel, from 5 to 9 October 2015 in Asuncion, Paraguay. The activities defined by each WG are reflected in the OP.

The activities to be developed by the Regional Association III, under the WMO Strategic Plan relevant key activities and its corresponding Expected Results, are described in the Table below.

Table
Activities of the RA III Operating Plan

Abbreviations:	
ER =	Expected Result
KPI=	Key Performance Indicators
RA III WG-ITD =	Regional Association III Working Group on Infrastructure and Technological Development
RA III WG-HWR =	Regional Association III Working Group on Hydrology and Water Resources.
RA III WG-CI =	Regional Association III Working Group on Climatology.
RA III MG =	Management Group of Regional Association III

WMO ER 1: Improved service quality and service delivery: Enhanced capabilities of Members to deliver and improve access to high-quality weather, climate, hydrological and related environmental predictions, information, warnings and services in response to users' needs and to enable their use in decision making by relevant societal sectors.

RA III ER 1: Strengthened capacity to transform basic and processed data, as well as to provide integrated products and related services, to meet the needs of RA III Members to cope with extreme meteorological and hydrological events.

Activities	Working Group responsible	Progress			
		2016	2017	2018	2019
ITD 1. WIGOS Implementation Plan.	WG-ITD				
ITD 2. WIS Implementation Plan.	WG-ITD				
ITD 4. Public services delivery.	WG-ITD				
HWR 1. Implementation of the WMO Hydrological Observing System (WHOS)/ WaterML in the WIGOS- SAS (Southern South America) /CP(Cuenca del Plata).	WG-HWR				
CI 1.2. Harmonization of data quality procedures and processing. Improvement of the efficiency of Regional Climate Centres (RCCs) operations	WG-CI				
CI 2.1. Enhancement of regional capacity in seasonal and sub-seasonal forecasting.	WG-CI				
CI 3.1. Promotion of National Climate Outlook Forums (NCOFs). Preparation of a Guide of mandatory practices for the development of NCOFs.	WG-CI				

WMO ER 2: Reduced disaster risk: Enhanced capabilities of Members to reduce risks and potential impacts of hazards caused by weather, climate, water and related environmental elements.

RA III ER 2: Improved capabilities of RA III Members to provide forecasts based on impacts, and reduce risks caused by weather, climate and water related events.

Activities	Working Group responsible	Progress			
		2016	2017	2018	2019
ITD 3. Weather, Climate and water-related forecasts and alerts on natural disasters??.	WG-ITD				
HWR 2. Coordination with the Commission for Hydrology (CHy) of WMO, with respect to activities related to flash floods including ?? Zarumilla project.	WG-HWR				
HWR 3. Promotion of joint initiatives on Hydro-climatic forecasting with Regional Climate Centres (RCCs), the Commission for Hydrology (CHy) of WMO and the Intergovernmental Committee for the la Plata river basin (CIC).	WG-HWR				
HWR 5. Promotion of Integrated Flood Management activities.	WG-HWR				
HWR 6. Promotion of Early Warning System activities.	WG-HWR				
CI 4.1. Development of a Regional System for Drought Monitoring, applicable to the needs of each country in RA III.	WG-CI				
CI 4.2. Comprehensive assessment of climate change impact in agriculture, based on climate, crops and economic models in RA III.	WG-CI				

WMO ER 3: Improved data-processing, modelling and forecasting: Enhanced capabilities of Members to produce better weather, climate, water and related environmental information, predictions and warnings to support, in particular, reduced disaster risk and climate impact and adaptation strategies.

RA III ER 3: Improved data-processing and dissemination through the enhancement of current means and the exploration of alternative mechanisms, in order to ensure the integrity of relevant observation networks, including climate data and hydrological products, timely and respecting the international principles established by WMO Resolution 40 (Cg-XII/1995) and Resolution 25 (Cg-XIII/1999) on free and unrestricted exchange of meteorological and hydrological data and products between Members.

Activities	Working Group responsible	Progress			
		2016	2017	2018	2019
CI Pr 2. Strengthen scientific research aimed at improving climate services.	WG-CI				
HWR 7. Development of work programs in new areas of interest: hydrological hazards monitoring, prediction and evaluation of sludge flows.	WG-HWR				
(ITD 3. Sub activity : numerical modelling,	WG-ITD				

assembly, new assimilation techniques)					
WMO ER 4: Improved observations and data exchange: Enhanced capabilities of Members to access, develop, implement and use integrated and interoperable Earth- and space-based observation systems for weather, climate and hydrological observations, as well as related environmental and space weather observations, based on world standards set by WMO.					
RA III ER 4: Guaranteed availability of data relating to products and information required in real and deferred time, facilitating their access through the WIS, according to the needs identified.					
Activities	Working Group responsible	Progress			
		2016	2017	2018	2019
CI 1.1 Historical data rescue.	WG-CI				
(WIGOS/WIS/WHOS implementation, as indicated in RA III ER 1)	WG-ITD				
WMO ER 5: Advance targeted research: Enhanced capabilities of Members to contribute to and draw benefits from the global research capability for weather, climate, water and related environmental science and technology development.					
RA III ER 5: Improved scientific knowledge in RA III, to raise the level of weather, climate and water services.					
Activities	Working Group responsible	Progress			
		2016	2017	2018	2019
Various activities, such as ITD 3, HWR 2, 7, CI 2.3	WG-ITD WG-HWR WG-CI				
WMO ER 6: Strengthened capacity development: Enhanced capabilities of Members' NMHSs, in particular in developing and least developed countries and small island developing States, to fulfil their mandates.					
RA III ER 6: Strengthened capacity of NMHSs in RA III, allowing them to work effectively with WMO, global and regional institutions, national governments and local authorities, to fulfill their mandates and achieve the common objectives of RA III.					
Activities	Working Group responsible	Progress			
		2016	2017	2018	2019
CI 5 Design of a training plan that will be implemented through the Regional Training Centres (RTCs) and Regional Climate Centres (RCCs) with materials on data management, forecasting, climate services and agrometeorology.	WG-CI				
ITD 5. Capacity development at regional level.	WG-ITD				
HWR 5. Promotion of Integrated Flood Management (IFM) (sub activity: workshops	WG-HWR				

on IFM).					
WMO ER 7: Strengthened partnerships: New and strengthened partnerships and cooperation activities to improve NMHSs' performance in delivering services and to demonstrate the value of WMO contributions within the United Nations system, relevant regional organizations, international conventions and national strategies.					
RA III ER 7: Awareness of regional or sub-regional institutions on the role and mission of NMHSs and strengthening linkages between NMHSs and relevant organizations in each case.					
Activities	Working Group responsible	Progress			
		2016	2017	2018	2019
Implementation of the Regional Climate Centres (RCCs) mentioned above. Consider also the regional cooperation initiatives and other outreach activities with regional institutions.	WG-CI RA III MG				
WMO ER 8: Improved efficiency and effectiveness: Ensured effective functioning of policymaking and constituent bodies and oversight of the Organization.					
RA III ER 8: Improved coordination in the process of decision making of RA III, through working groups and the Management Group.					
Activities	Working Group responsible	Progress			
		2016	2017	2018	2019
CI 6. Interaction among WGs of RA III <i>(ER 8 activities are under the main responsibility of the Management Group of RA III).</i>	WG-CI RA III MG				
HWR 8. Improve and optimize the WG-website to facilitate internal communication and present the results of the work. <i>(ER 8 activities are under the main responsibility of the Management Group of RA III).</i>	WG-HWR RA III MG				