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| **INTER-COMMISSION COORDINATION GROUP ON WIGOS (ICG-WIGOS-4)** |  | Submitted by: | Rep. RA IV |
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**Wigos implementation IN REGIONS**

**Status of Regional WIGOS Implementation Plans and Challenges of the WIGOS Implementation in Regions and Member Countries**

(Presented by Tyrone W. Sutherland, EC Focal Point and Rep. RA IV)

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| **Summary and purpose of document**The document presents a short summary of activities underway or planned concerning the RA IV WIGOS Implementation Plan.  |

**Action proposed**

The session is requested to note the information and comments provided

**Reference:**[RA IV WIGOS Implementation Plan](http://www.wmo.int/pages/prog/www/wigos/documents.html)

**RA Iv WIGOS BACKGROUND INFORMATION**

1. The RA IV WIGOS Regional Implementation Plan had been approved by the 16th session of the Regional Association IV (Curaçao, April 2013).
2. The Association recognized the close link between the implementation of WIGOS and the *WMO Information System* (WIS) at global, regional and national levels. It also recognized that it was imperative for the R-WIP to receive continuous guidance from CBS and CIMO. As a result, WIGOS implementation in RA IV was being led by a joint*Task Team on WIGOS/WIS* under the guidance of the RA IV Management Group. The Task Team comprises nine regional experts, co‑chaired by the *British Caribbean Territories* (BCT) and the *USA*. The Regional Association and the Management Group recognized that there will be a need to continually review the R-WIP, continuously monitor regional requirements, identify regional gaps, and identify capacity development projects within the Region to address those gaps. In this regard, the Co-Chairs of the *RA IVTask Team on WIGOS/WIS* would report on progress to the Management Group at least on an annual basis.
3. The RA IV Task Team developed its *Operational Implementation Plan* for the period 2013-2019 based on the full **R-WIP-IV** referenced above. The Task Team’s *Operational Implementation Plan* is provided as an **ANNEX** to this document. It has been divided into two sections. Section 1 is the Plan for **2013-2015** and Section 2 is **2016-2019**. It also includes some of the RA IV Challenges to WIGOS implementation. This Report focuses on the current activities undertaken by the RA IV Task Team on WIS/WIGOS Implementation and planned 2015 activities, as presented to the RA IV Management Group Meeting in January 2015.

**ELEMENTS OF THE RA IV WIGOS IMPLEMENTATION PLAN ACTIVITIES IN 2014-2015**

**Focal Point and Meteorological Inventory**

4. Correspondence had been disseminated by the President of RA IV requesting that Permanent Representatives designate a Focal Point for WIS/WIGOS activities and provide an inventory of their national observing system. The PRs were given a deadline of 30 May 2014 for the designation of the Focal Point and 30 July 2014 for the inventory. Several RA IV Member States have designated Focal Points, but this number is still quite low. As at 30 January 2015, only seven RA IV Member States provided the inventory of their national observing system, comprising of both conventional and automated meteorological stations. Reminders have been circulated.

5. Communication has been initiated with the WMO Secretariat as to ascertain whether the *Observing Systems Capabilities Analysis and Review* tool (OSCAR**)** could be used to store the meteorological inventory of Member States. However, it is understood that OSCAR is not sufficiently developed at this time for this purpose.

**BUFR Migration**

6. The Task Team assisted countries in their migration to BUFR for the encoding of synoptic observations. The assistance was in the form of providing BUFR software from ECMWF, which was debugged and problems associated with installation rectified. A graphical user interface was created which allows for the use of the software without the operator knowing the commands.

7. Member States of RA IV were aware of the November 2014 deadline for the migration to the BUFR code for SYNOP observations. By that deadline, some RA IV Members were software-ready but most had not completed the formal process with RTH Washington. A workshop was held in December in Mexico with attendance from all RA IV Spanish-speaking Member countries to enable them to migrate to BUFR. The workshop was very successful since every country was able to install the software and make test transmissions to Washington. Since that time, a few more NMHSs in RA IV have become BUFR-ready, but as at 30 January 2015, it is unclear how many NMHSs were actually transmitting SYNOP in BUFR.

**Metadata Workshop**

8. Preliminary activities have been started in order to organize a workshop, likely in April 2015, on the creation and the archiving of station metadata for each meteorological station. Tentatively, a country has been identified as the host, while the workshop agenda was being prepared and logistics enabled. While the pace of the compilation of station metadata is still slow, it is hoped that the planned workshop will change that.

**Radar Data Sharing**

9. Radar data from Members of the Caribbean Meteorological Organization (CMO) (in RA IV and one in RA III) has been shared on the GTS since 2010. A mosaic using the data from CMO radar sites and the radar sites owned and managed by Météo-France is being transmitted by Martinique and Barbados to the GIFS sever in Washington. It is expected that some more radars sites would be broadcasting data to the GIFS server before the start of the 2015 Atlantic Hurricane Season in the month of June.

**Planned Activities for 2015**

10. During 2015, the following are expected to be the focus:

(i) Continue to assist counties to complete BUFR migration;

(ii) Continue to receive country's meteorological systems inventories and to work with the Secretariat to have the data entered into OSCAR;

(iii) Carry out the workshop on creating and uploading station metadata to the RA IV GISC in April (tentative) 2015.

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ANNEX

**RA IV WIGOS TASK TEAMIMPLEMENTATION PLAN 2013-2015**

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| **Activity** | **Expected Results** | **Cost Analysis** | **Resources** | **Amount Requested** |
| RA IV Members to appoint National Focal Points and submit reports on progress of implementation of national plans | 1. A list of national Focal Point;
2. Updated National Plans
 | No Cost associated with this activity to the Region. | Indirect cost to Members  |  |
| Compile information from Members, other relevant partners and WMO sources as input to existing national observing systems in RA-IV. | A report detailing all the current observing systems in the region, including the composition of networks, data outputs and who are the owners/operators. | * No Cost associated with this activity to the Region.
* Members will have to assign staff to compile the necessary information.
 | Indirect cost to Members  |  |
| Task Team to assess the EGOS-IP and other WMO observing system implementation plans, to identify actions relevant to RA IV Members; assign priorities to these actions. | Prioritized list of actions for RA-IV Members arising from the EGOS-IP and other IPs. | No Cost associated with this activity to the Region. | Indirect cost to Members  |  |
| Strengthened the collaboration with TCs and develop a feedback mechanism | To ensure that meteorological observing systems are compliant with the range of quality standards. | No Cost associated with this activity to the Region. | Indirect cost to Members  |  |
|  |  |  |  |  |
| Create an inventory of the existing Regional Networks, including a process for its ongoing maintenance | Inventory and a plan for its periodic update | No Cost associated with this activity to the Region. | Indirect cost to Members  |  |
| Improving availability and utilization of AWS data not already commonly shared, both existing and silent; | Having more data from AWS transmitted on the GTS. | No Cost associated with this activity to the Region. | Indirect cost to Members  |  |
| Implementation of the Regional Radar Mosaic Project | Having the radar imagery in digital format on the GIFS server or available for “data pull.” | No Cost associated with this activity to the Region. | Members using the “data pull” will have to maintain a server. Hence there would be cost associated with the purchase and maintenance of the server(s). |  |

**RA IV WIGOS TASK TEAM**

**IMPLEMENTATION PLAN 2016-2019**

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| --- | --- | --- | --- | --- |
| **Activity** | **Expected Results** | **Cost Analysis** | **Resources** | **Amount Requested** |
| Compile the regional observational requirements including from:1. The Hurricane Committee’s Technical Plan;
2. Marine Programmes including buoys and offshore platforms;
3. Expanded space based observations including NESDIS activities;
4. Expanded agro-met observations including USDA activities;
5. Strategy for the architecture for climate monitoring from space.
 | Consolidated list of regional observations requirements | Task Team and Focal points will have to compile National and Regional requirements.  | Indirect cost to Members |  |
| Design and plan observing systems in the Region, following:1. The technical guidance of the TCs as represented in the EGOS-IP and other observation system implementation plans;
2. The Regional priorities adopted by MG
3. Relevant actions identified in the Technical Plan of the Hurricane Committee;
4. The information on silent stations and need for “gap filling” including the restoration of relevant silent stations following the RRR process; and
5. (v) Cross-regional coordination opportunities
 | Improved WMO observing system design in Region IV. | Time will be necessary to compile the requirements of:* Climate
* The Hurricane Committee
* Management Group.

Then to design the optimum observing system. | Coordination by TT-WIGOS. and the Management Group |  |
| Develop real-time monitoring and reporting capability, to support operations | A plan be developed for real-time monitoring and reporting implemented | Cost are associated with:* Human resources
* Reporting format
 | Direct and indirect cost to Members associated with developing and reporting. |  |
| Collect and share best practices from RA IV Members with other Regions | Shared best practices on the integration of observational systems | Cost are associated with:* Human resources
* Sharing format
 | Direct and indirect cost to Members |  |
| Develop a process to monitor and report on the level of regional compliance with WIGOS standards. | A process is developed to monitor and report on the level of regional compliance with WIGOS standards. | Cost are associated with:* Human resources
* Reporting format
 | Direct and indirect cost to Members |  |
| Survey and share status on QC/QA procedures and site management for the network of RBCN and RBSN stations, changes to the site after installation needs to be documented. | Reports on status on QC/QA procedures and site management in RA IV | Cost are associated with developing the survey | Direct and indirect cost to Members and the Region. |  |
| Develop a Regional Information Portal to share:* EGOS national reports;
* Regional standards and best practices;
* StatusQC/QA procedures and site management for the network of RBCN and RBSN stations;
* share status on maintenance and the instruments calibration for surface-based observations
 | Information in the Regional Information Portal.  | Cost are associated with:* Hosting
* Portal development
* Data Storage
 | Direct and indirect cost to Members and the Region. |  |
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***Challenges of the WIGOS Implementation***

1. To get the PRs to understand the importance of WIGOS to their Services and have them name their focal points;
2. The development of human capacity to implement WIGOS;
3. The compilation of Nation Observing Systems since it has been observed that many national organizations do not communicate with each other;
4. At the Regional level the following has to be decided:
	1. Where to store the data on National Observing Systems;
	2. Cost of the database management, website development
	3. How to get data from AWS onto the GTS i.e. Station numbers, data format, frequency of observations, etc.
	4. Implementation of web-based Open Archives by National Services for the harvesting of metadata by the GISC.

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