**WORLD METEOROLOGICAL ORGANIZATION**

**WMO RA I WORKSHOP ON WIGOS**

 **(English-speaking countries)**

**Walvis Bay, Namibia, 2 - 4 November 2015**

**FINAL REPORT**

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**Executive Summary**

The WMO RA I Workshop on WIGOS (English-speaking countries) was held in Walvis Bay, Namibia, from 2 to 4 November 2015. Mr. F. Uirab, Permanent Representative of Namibia with WMO, opened the Workshop.

There were four main purposes of the Workshop: (a) to brief participants about the activities planned for the WIGOS Pre-operational Phase; (b) to advise them on WIGOS implementation at the regional and national levels; (c) to consider a way forward in the regional planning efforts for WIGOS; and (d) to develop recommendations for AMCOMET-4 in 2016, so that WIGOS receives also the political support that is absolutely vital for its success.

The Workshop Programme is reproduced in [Appendix II](#App_II) and presentations are available at the WIGOS web site: [www.wmo.int/pages/prog/www/WIGOS-WIS/meetings/RA-I\_WIGOS\_Namibia-Nov2015/RA-I\_WIGOS-Workshop-Programme.html](http://www.wmo.int/pages/prog/www/WIGOS-WIS/meetings/RA-I_WIGOS_Namibia-Nov2015/RA-I_WIGOS-Workshop-Programme.html).

 Based on the presentations delivered by invited speakers and follow-up discussions, the participants, in majority Permanent Representatives (PRs) of English speaking Countries with WMO of the Region I, formulated their recommendations that are summarized in [Appendix III](#App_III).

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**General summary**

1. **OPENING THE WORKSHOP AND KEYNOTE SPEECH**
	1. The RA I WIGOS Workshop (English-speaking countries) was held in Walvis Bay, Namibia, from 2 to 4 November 2015. Mr. F. Uirab, Permanent Representative of Namibia with WMO, opened the Workshop. He welcomed the participants and representatives of WMO on behalf of Hon. Mr. Alfeus !Naruseb, MP, Minister of Works, Transport and Communication. In his opening speech, he underlined the need to consider cooperation as a matter of necessity rather than as something optional. He also stressed that sharing expertise and resources was often the best way of finding lasting solutions to common problems and challenges posed by weather and climate.
	2. He further mentioned that Namibia had been experiencing one of its worst droughts in history and that this called for collective actions. Integration of observing systems at the local and regional levels would improve access to, and availability of observations needed for decision-making and planning various economic activities. The successful implementation of the Global Framework for Climate Services also depends on the observations and products.
	3. Finally, he welcomed the participants to the Workshop, and extended his wishes for a successful meeting.
	4. Dr. Lars Peter Riishojgaard, Project Manager of WIGOS, welcomed the participants on behalf of M. Jarraud, Secretary-General of WMO and Dr. W. Zhang, Director of the Observing and Information System Department.
	5. In his opening speech, he mentioned the specific regional context of the Workshop. Region I is an area where meteorological services are of prime importance due very large populations being exposed to meteorological risks, both of a short-term nature in terms of violent and dangerous weather phenomena and longer-term issues potentially affecting food security and the choice of inhabitable areas. It is also an area where some of the WIGOS components tend to be quite weak, especially concerning the GOS component - a fact that affects not only the Region itself but all WMO Members, and we would like to use WIGOS as a vehicle to change this and generate a positive trend.
	6. He further listed the four primary purposes of the Workshop: (1) to brief participants about the current plans for the WIGOS Pre-operational Phase with the five priorities adopted by Cg-17, and the expected impact on national services; (2) to advise on how the tasks in these priority areas could and should be adjusted in order for WIGOS to best meet the needs of national services; (3) to consider a way forward for updating the Regional WIGOS Plan (R-WIP-I) to reflect the WIGOS Pre-operational Phase and what has been discussed here, and to make further progress toward making this an actionable plan; and (4) to develop a message to take forward to the strategic discussions regarding AMCOMET-4 in 2016 in order to ensure that WIGOS receives also the political support that is absolutely vital for its success.
	7. Finally Dr. Riishojgaard extended his gratitude to Mr. F. Uirab and his staff at NMS for hosting the meeting and for all their help with the logistics.
	8. Dr. A. Makarau, President of RA I, thanked Namibia for hosting this important event. In his opening remarks, he underlined that the commitment by Permanent Representatives (PRs) of Member Countries with WMO to WIGOS and WIS implementation is critical. He reminded all PRs present to nominate their National WIGOS Focal Points if not done yet.
	9. Subsequently Dr. Makarau delivered a keynote address on “Moving from the WIGOS Framework towards the Pre-operational Phase”. The participants were briefed on the implementation of the WIGOS Framework and its ten Key Activity Areas, as well as about the rationale behind the WIGOS Pre-operational Phase and detailed information about the five priority areas for WIGOS in the 2016-2019 financial period.
	10. At the end of his speech, Dr Makarau noted that WIGOS will: (a) enable WMO to assist and guide Members in context of all WMO priorities (DRR, GFCS, etc.); (b) equip regional associations to assist and evolve observing and service capacities within their Region; and (c) empower Members to: (i) design, evolve and sustain integrated observing systems that meet national needs, and (ii) to reinforce their national mandate and leadership, under the WIGOS, WIS and WMO banners.
	11. In the follow-up discussion, the participants focused their attention to two main subjects: 1) “Why is WIGOS important for us?”; 2) “What can we do to help ourselves?” The participants agreed that WIGOS can and will help the NMHSs and the Members at large meet user and society requirements.
2. **SESSION 1: REGIONAL WIGOS IMPLEMENTATION**
	1. Three presentations were delivered under this session: Dr. Makarau delivered the presentation on “Role of Regional Association in the WIGOS Pre-operational Phase”; Dr. Riishojgaard provided presentations on “Next Phase of WIGOS Implementation; Guidance from ICG-WIGOS and TT-PWPP-2”, and on “WIGOS Information Resource”.
	2. In his talk, Dr. Makarau highlighted the importance of capacity development (CD). In this regard, he requested the participants to be specific when formulating their CD their requirements. He further stressed that the planned Regional WIGOS Centres should be designed and established in a way that would allow all Members in the Region to benefit from them. He concluded his presentation with a reminder that clear and firm commitment to WIGOS from all Members was needed.
	3. In the discussion, the participants requested clarification on the subjects such as the WMO Technical Regulations and WIGOS station identifier. The participants agreed that there was a clear need to implement WIGOS because the observational basis for the provision of services to users and society needs to be improved. All of the expertise at the disposal of the Members should be used for the implementation of WIGOS; an approach similar to the one used for the implementation of QMS in RA I should be taken. In this respect, a clear communication of benefits was considered very important.
	4. Several participants indicated an urgent need for assistance and guidance from the Secretariat on how to start with the implementation of WIGOS at the national level, and on how to develop a National WIGOS Implementation Plan.
	5. Special emphasis was put on the Regional WIGOS Centres (RWC) to be established during the WIGOS Pre-operational Phase in all WMO Regions in order to support the national and regional implementation efforts of the respective Region.
	6. In this regard, the concern was raised that currently there are several types of WMO regional centres, many of which are functioning either only partly or not at all. Therefore, the concept of RWCs should be considered in a holistic way, so as to make a very careful and wise decision. The participants were of the opinion that certain functionalities of some of the already existing regional centres could be extended towards WIGOS.
	7. It was further noted that two other aspects should be considered carefully: The status of the implementation of WIGOS in the Region, and relevant legislation of the respective country. The PR of Tanzania suggested initiating this development with a specific pilot project on RWC.
	8. A strong request for more detailed information about the RWC concept, including the expected functionality and technical infrastructure and the required resources (both in terms of expertise and financial resources) was made by several participants.
	9. General guidance and dedicated regional workshops on two specific subjects were requested by the participants numerous times during the discussions: (a) AWS networks; (b) working with partners and stakeholders.
3. **SESSION 2: REGIONAL WIGOS PARTNERSHIP**
	1. Under this session, the presentation on “Role of AMCOMET and Regional Economic Communities in the implementation of WIGOS” was delivered by E. Afiesimama, DRA of the WMO Secretariat.
	2. The critical importance of observations for the both, service delivery and decision making was underlined. Dr. Makarau raised the issue of the Minamata Convention on Mercury and the role AMCOMET should play in eliminating negative impacts on Members in RA I.
4. **SESSION 3: NATIONAL WIGOS IMPLEMENTATION IN SUPPORT OF WEATHER, CLIMATE, WATER AND ENVIRONMENTAL SERVICES**
	1. A series of presentations was delivered during this all-day session, starting with the “Role of NMHSs in the WIGOS implementation” by F. Uirab; followed by the “WIGOS relevant national partnership opportunities and arrangements; Nigeria as an example” by Dr. A.C. Anuforom; two detailed examples of national WIGOS implementation delivered by: (a) Tanzania (“WIGOS essential role in the implementation of GFCS and other WMO key priorities”) and (b) Zimbabwe (“WIGOS and its Implementation at National Level”), supported by several short contributions by other participants.
	2. During the following discussion the participants shared their experiences and lessons learned how to respond to challenges they had been facing. The general view was that focusing on services that are directly relevant to economic needs and to the society would be critical to the success and continued viability of the NMHSs, and that these should do their best to stay relevant to national policies and programmes.
	3. The importance of partnership and appropriate mechanisms; national meteorological policy; sustainability of observing systems and maintenance, mainly of AWS networks; and sharing data with partners, were the subjects discussed mostly. A dedicated workshop on partnerships, data sharing, compliance with WMO Technical Regulations, was requested.
	4. The PR of Namibia provided information on establishing of a certified calibration laboratory (CL) in accordance with ISO/IEC 17025:2005 with an offer that the CL can be used by all Members of the Region to calibrate their instruments as needed.
5. **SESSION 4: REGIONAL WIGOS IMPLEMENTATION PLAN**
	1. The Secretariat delivered the presentations on the Regional WIGOS Implementation Plan (R-WIP-I) adopted by XVI-RA-I session, February 2016; and on the Plan for the WIGOS Pre-operational Phase (2016-2019). In the follow-up discussion, a way forward was considered (see [Appendix III](#App_III)).
	2. During the discussion, the participants formulated their recommendations for AMCOMET-4 to help foster the implementation of WIGOS in the Region. They are listed in [Appendix III](#App_III) together with the Way forward.
6. **CLOSURE OF THE WORKSHOP**
	1. The workshop closed on Wednesday, 4 November 2015, at 13:30 hours.

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**Appendix I**

**List of Participants**

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| **Country**  | **Name**  | **Position**  | **Email**  |
| Angola | Mr. Joao Estanislau  | Chief, Meteorological Station  | estanislau.joao@inamet.gov.ao  |
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**Appendix II**

** **

**WMO RA I Workshop on WIGOS**

 **(English-speaking countries)**

**(Walvis Bay, Namibia, 2–4 November 2015)**

**FINAL PROGRAMME [[1]](#footnote-1)**

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| **Monday, 2 November** |
| *08:00-09:00* | *Registration* |
| 09:00-09:45 | **OPENING**1. Mr. L.P. Riishojgaard, Representative of M. Jarraud, Secretary General of WMO and Dr. W. Zhang, Director of the OBS Department
2. Dr. A. Makarau, President of Regional Association of Africa (RA I)
3. Mr. F. Uirab, Permanent Representative of Namibia with WMO and Master of Ceremony, on behalf of Mr. E. M. Nengola, Deputy PS WOT; Ministry of Works and Transport, Namibia
 |
| 09:45-10:15 | **KEYNOTE SPEECH:** Moving from the WIGOS Framework towards the Pre-operational Phase | A. Makarau, President of RA I |
| 10:15-11:00 | ***COFFEE & TEA BREAK*** |
| **SESSION 1: Regional WIGOS implementation***(Co-chaired by Dr A. Makarau and Mr F. Uirab)* |
| 11:00-11:30 | Role of RA I in the WIGOS Pre-operational Phase | A. Makarau |
| 11:30-12:00 | Next Phase of WIGOS Implementation; Guidance from ICG-WIGOS and TT-PWPP-2 | L.P. Riishojgaard |
| 12:00-12:30 | WIGOS Information Resource | L.P. Riishojgaard |
| 12:30-14:00 | ***LUNCH BREAK*** |
| 14:00-14:30 | WIGOS Data Quality Monitoring System | I. Zahumensky |
| 14:30-15:00 | WIS Centres supporting WIGOS | F. Mosetlho |
| 15:00-15:30 | Regional WIGOS Centres concept | A. Makarau  |
| 15:30-16:00 | ***COFFEE & TEA BREAK*** |
| **SESSION 2: Regional WIGOS partnership***(Co-chaired by Dr A. L. Kijazi and Mr F. Mosetlho)* |
| 16:00-16:30 | Role of AMCOMET and Regional Economic Communities in the implementation of WIGOS | E. Afiesimama |
| 17:00-17:30 | Round table discussion  |  |

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| **Tuesday, 3 November** |
| **SESSION 3: National WIGOS implementation in support of weather, climate, water and environmental services***(Co-chaired by Mr. J. Kongoti and Dr A. C. Anuforom)* |
| 09:00-09:20 | Role of NMHSs in the WIGOS Implementation  | F. Uirab |
| 09:20-09:40 | WIGOS relevant national partnership opportunities and arrangements; Nigeria as an example | A.C. Anuforom |
| 09:40-10:10 | WIGOS relevant national partnership opportunities and arrangements - examples  | *Round table discussion*  |
| 10:10-10:30 | WIGOS essential role in the implementation of GFCS and other WMO key priorities | *A. L. Kijazi* |
| 10:30-11:00 | ***COFFEE & TEA BREAK*** |
| 11:00-11:30 | National Observing Strategy and National WIGOS Implementation Plan; Zimbabwe as an example | A. Makarau  |
| 11:30-12:30 | National Observing Strategy and National WIGOS Implementation Plan - examples | *Round table discussion* |
| 12:30-14:00 | ***LUNCH BREAK*** |
| 14:00-15:30 | Examples of WIGOS principles applied by NMHSs of RA I | *Round table discussion*  |
| 15:30-16:00 | ***COFFEE & TEA BREAK*** |
| 16:00-17:30 | Examples of WIGOS principles applied by NMHSs of RA I | *Round table discussion* |
| **Wednesday, 4 November** |
| **SESSION 4: Regional WIGOS Implementation Plan***(Co-chaired by Dr. J. Nkomoki & Ms. E. de Brito)* |
| 09:00-09:15 | Introduction to the Regional WIP for RA I (R-WIP-I) | I. Zahumensky |
| 09:15-09:30 | Plan for the WIGOS Pre-operational Phase | L.P. Riishojgaard |
| 09:30-10:30 | Identifying the key issues for the update of R-WIP-I (General discussion) | A. Makarau |
| 10:30-11:00 | ***COFFEE & TEA BREAK*** |
| 11:00-12:00 | Way Forward (Task Team on WIGOS) | A. Makarau |
| 12:00-12:30 | Recommendations for AMCOMET-4(General discussion) | E. Afiesimama |
| 12:30-13:00 | Round Table |  |
| 13:00-13:30 | Closing remarks, closure |  |

**Appendix III**

**Recommendations for AMCOMET- 4 (2016)**

* To incorporate WIGOS/WIS into an annual operational plan with proposed budget;
* To assist Members in eliminating negative impacts on Members in RA I;
* To assist Members with MOUs with partners;
* To assist Members with establishment of WIGOS relevant governance at a national level
* To assist Members with MOA with AWS suppliers on data collection and sharing;
* To assist Members with contracts with AWS suppliers on maintenance;
* To share experiences and lessons learned regarding credibility of suppliers of meteorological equipment, including AWSs;
* To assist Members with empowering staff to install instruments and corresponding equipment

**Way forward – actions to be undertaken**

The participants agreed on the way forward for the implementation of WIGOS in the Region. The most critical actions are as follows:

* All PRs participating at the workshop were requested to nominate their national WIGOS and WIS focal points, respectively, if not done yet; the Self-assessment Check-list should be provided by WIGOS focal points; Deadline: immediate action;
* Dr Makarau (as president of RA I) will make a request to the Secretary General that technical workshops on AWS networks in Region I be held in 2016;
* RA I/TT-WIGOS with assistance by WIGOS-PO will consider two national WIGOS pilot projects on RWC: one for an English speaking country (South Sudan is proposed), and one for a French speaking country (to be identified during the RA I WIGOS workshop for French Speaking Countries in 2016);
* TT-WIGOS with support by CIMO experts will investigate the functionality of the RICs in the Region and based on the findings it will draft the proposal on how to improve a current situation;
* The PRs will inform RA-I/MG about existing calibration facilities that could be used by other Members;
* TT-WIGOS will draft the project on establishing a common platform for sharing observation related best practices and procedures;
* WIGOS-PO will provide more detailed information on a concept of Regional WIGOS Centres.

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1. All presentations are available at: [www.wmo.int/pages/prog/www/WIGOS-WIS/meetings/RA-I\_WIGOS\_Namibia-Nov2015/RA-I\_WIGOS-Workshop-Programme.html](http://www.wmo.int/pages/prog/www/WIGOS-WIS/meetings/RA-I_WIGOS_Namibia-Nov2015/RA-I_WIGOS-Workshop-Programme.html) [↑](#footnote-ref-1)