

REPORT from the Commission for Instruments and Methods of Observation

(Submitted by Prof. B. Calpini, President of CIMO)

Summary and purpose of document

This document provides a brief report on behalf of the Commission for Instruments and Methods of Observation on key activities and issues of relevance to WIGOS Framework Implementation.

REPORT OF CIMO

WIGOS Implementation Within CIMO

1. CIMO XV (2010) anticipated a requirement for CIMO to focus its work for the coming intersessional period on Implementation of WIGOS, so structured its Open Programme Area Groups (OPAGs) and Expert Teams (ETs) accordingly, and explicitly targeted all included ET work plans to address, as a priority, what it anticipated would be the key WIGOS implementation activities for which CIMO could provide significant input.
2. In response to the approval of the WIP by EC-64, and in particular in response to WIP Actions 1.1.2, 6.1.1 and 8.1.1, the tenth session of the CIMO Management Group (CIMO MG-10, Brussels, Oct 2012) reviewed its OPAG/ET makeup and structure to identify any shortcomings with respect to WIGOS, as enunciated in the WIP, and to identify any additional activities that should be included to better contribute to WIGOS Framework Implementation.
3. CIMO MG concluded that the then current structure was virtually optimal, with no significant gaps identified, but requested all ETs to closely examine their current Terms of Reference and Work Plans, and where appropriate, to propose changes to better align them with those WIP activities for which they could contribute significantly.
4. At each ET meeting (either face-to-face or electronic) since then, a major focus has been to follow-up on this direction from CIMO MG. Three ETs have now completed this process (ET-Standardization, ET-New In-Situ Technologies, ET-New Technologies and Test Beds). Each of the others will do this when they next meet or by correspondence.
5. In each case, the ET has:
 - a. Closely examined its ToR to confirm optimal alignment with WIGOS implementation.
 - b. Reviewed each of the assigned tasks in its work plan, identified which WIGOS Actions each task directly contributes to, and redefined each task, where required, to more explicitly relate it to WIGOS implementation, or better align it with those relevant WIGOS activities.
 - c. Proposed new ET tasks to address relevant WIP actions not previously addressed by the ET.
6. The result of this process is that the Work Plan of each ET is now very well aligned with WIGOS Framework Implementation.
7. An observation made by all ETs is that their work already maps very closely with one or more aspects of WIGOS Implementation: i.e. many of the WIGOS activities (as applied to the GOS) are little different to preexisting CIMO activities, particularly in the areas of regulatory material, global standardization, observational metadata, and capacity development: CIMO by its nature is providing a leading contribution to WIGOS Implementation.

Specific CIMO Activities in Support of WIGOS

8. Numerous activities are underway in CIMO that demonstrates its engagement with the WIGOS Framework Implementation Plan. These are directly reflected in the respective ToRs of the different ETs. As an example, at the latest meeting of the CIMO Expert Team on New Technologies and Test Beds (ET-NTTB), held in Geneva from 4-7 March 2013, the Work Plan of the team was revised to better align it with WIGOS Framework Implementation.

The revised ET workplans are made available on the CIMO website as soon as available in the relevant meeting reports.

9. The direct engagement of the CIMO Guide Editorial Board and his chair Dr Volker Kurz in the Task Team on WIGOS Regulatory Material is a key WIGOS contribution by CIMO. In particular, in-depth review of the CIMO Guide to separate guidance from mandatory requirements will provide a significant contribution to the update of the WMO Technical Regulations (WMO No. 49, TR Volume 1).
10. Other specific CIMO activities that can be mentioned are related to standardization (and will provide a further contribution to TT-WMD), such as:

- a. ISO Collaboration: CIMO is collaborating with ISO in the development of:

- i. A standard on ground-based remote sensing by Doppler wind lidars: this work is performed by ISO with direct involvement of WMO CIMO experts.
- ii. Siting Classification for Surface Observing Stations on Land: this classification was developed in collaboration with other TCs. Following support by Cg-XV, the Siting Classification is being developed further as an ISO standard.
- iii. Sustained Performance Classification for Surface Observing Stations on Land: a similar approach is/will be used as for the Siting Classification.

Note that other TCs are invited to nominate a representative if interested in contributing to these WMO/ISO developments.

- b. Intercomparisons

- i. In each current CIMO intercomparison, CIMO MG selects an International Organizing Committee that includes broad representation to ensure that the results will address the concerns of all relevant end-users. For example in the Solid Precipitation Intercomparison Experiment (SPICE), experts from GCW and GCOS are also direct contributors in the IOC.

- c. Classification of Rain Intensity Measurement Instruments:

The CIMO expert leading this work is also active within CHy and will so ensure collaboration between both TCs on this work, as well as with other relevant organizations, like ISO and CEN (A related European Standard CEN 16469 on "Hydrometry - Measurement of the rainfall intensity (liquid precipitation): requirements, calibration methods and field measurements", was endorsed in January 2013.)

WIGOS Challenges for CIMO

11. Since the CIMO work programme is already aligned with WIGOS, spreading CIMO expertise across multiple ETs, TTs, etc, puts a strain on the available time of our experts, who are limited in number, and this risks their contributions becoming too broad and shallow.
12. Regarding CIMO's position on the engagement of TCs in the various ET/TTs concerned with WIGOS (eg. ICG-WIGOS TTs, CBS IPETs), CIMO expects ICG-WIGOS to lead the bigger items (RM, MD, IP), while specific issues should be targeted to respective (and existing) Task Teams and Technical Commissions as required (see below).
13. For more specific WIGOS items:
 - *Role of the Task Teams in WIGOS*: Issues of relevance to many (or most of) the Technical Commissions should be dealt with by specific **Task Teams under ICG-WIGOS**;

- *Role of TCs:* for items **relevant mainly to one TC** and non-controversial, these should be led by the corresponding TC instead of a TT. E.g. CBS looks after one topic on behalf of all TCs, CIMO does another, etc. The respective TC ensures all other TCs have the opportunity to contribute once the initial output has been drafted.

14. Based on the above considerations:

- CIMO would not consider the creation of a formal IPET within CIMO while it recognizes the critical role of ICG-WIGOS: CIMO would rather support the continuation of ICG-WIGOS (and needed TT) until all the WIGOS Implementation work is completed in full, thus most certainly until after Cg-XVI.
- CIMO welcomes contributions from other TCs to relevant activities that it is leading, like in particular the Siting and Sustained Performance Classifications, the Classification of Rain Intensity Measurement Instruments, etc.... In order to avoid unnecessarily loading the other TCs, it is felt this is best done on a case by case basis, where other TCs can designate representatives if they have a particular interest in them and/or appropriate expert(s) wanting/having time to collaborate. Participation of these experts in CIMO ET meetings can be organized by webex for the relevant agenda items, to avoid them having to take part in the whole meeting. CIMO would anyway pursue these activities and do its utmost to ensure their outcomes are relevant and useful to the wider WIGOS community.