



World Meteorological Organization
Organisation météorologique mondiale

Secrétariat

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Our ref.: OBS/IMO/Testbeds-Lead Centres

GENEVA, 12 May 2014

Annexes: 2 (available in English only)

Subject: Submission of proposals for the Establishment of Testbeds and Lead Centres, to be nominated by the Commission for Instruments and Methods of Observation (CIMO)

Action required: To submit proposals for potential CIMO Testbeds and/or Lead Centres, as soon as possible, but preferably before **31 May 2014**

Dear Sir/Madam,

I would like to inform you that the Commission for Instruments and Methods of Observations (CIMO) will consider, at its forthcoming sixteenth session (CIMO-16, 10-16 July 2014, St. Petersburg, Russian Federation), the nomination of additional Testbeds and Lead Centres.

The purpose of establishing CIMO Testbeds and Lead Centres is to promote collaboration between CIMO and relevant NMHSs in testing, development and standardization of meteorological instruments and their performance for the benefit of all WMO Members. This collaboration would utilize and build on both existing state-of-the-art facilities and specific expertise currently available at NMHSs for the provision of guidance to all WMO Members. At the same time, it represents recognition by CIMO of existing state-of-the-art facilities and expertise available in the designated Testbeds and Lead Centres, as well as of their significant contribution towards developing guidance for WMO Members; and their impact on the WMO observing systems:

- **Testbeds** are centres with experimental facilities to assess the capabilities of various ground-based remote-sensing and in situ observations technologies and to provide guidance on testing from a variety of observing systems, like guidance concerning the optimal distribution of the deployment of new observing systems and the best mix of instruments and providing an international platform for integration of observations within the WMO Integrated Global Observing System;
- **Lead Centres** are centres of excellence providing high-level expertise in testing of instruments' performance including in laboratory facilities, and instrument intercomparisons, resulting in standardization of instruments' performance, instrument interoperability and compatibility within the WMO Integrated Global Observing System (WIGOS).

To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO (PR-6770)

cc: Hydrological Advisers to Permanent Representatives

The fifteenth session of the Commission for Instruments and Methods of Observation (CIMO-XV, 2-8 September 2010, Helsinki, Finland), approved generic Terms of Reference for Testbeds and Lead Centres. These are detailed in Annexes I and II respectively. Testbeds and Lead Centres will have to produce regular reports, to make a long-term commitment, and will be evaluated by the CIMO Management Group prior to each session of the Commission to ensure they are delivering the expected outcomes.

Should your Meteorological Service have special facilities falling under those terms of reference, I would like to invite you to consider submitting a proposal for their eventual nomination, upon evaluation and decision by CIMO-16. A form for such proposals can be accessed at the following link:

http://www.wmo.int/pages/prog/www/IMOP/TB_LC/TB&LC_Proposal.doc

It is expected that nominated Testbeds and Lead Centres will regularly produce Instruments and Methods of Observation (IOM) Reports that will in turn be used in developing guidance to be incorporated in the *Guide to Meteorological Instruments and Methods of Observations* (WMO-No. 8). It is also proposed that a webpage will be established for each site and that this will contain information on the details and status of the site and copies of its biennial reports to CIMO.

It is intended that proposals will be submitted as information documents to CIMO-16, and it would therefore be most appreciated if your proposal(s) could reach the WMO Secretariat before **31 May 2014** to allow for processing and timely distribution to Members. The proposals will be evaluated and the results will presented and submitted to CIMO-16 for its consideration.

Yours faithfully,



(J. Lengoasa)
for the Secretary-General

TERMS OF REFERENCE

**CIMO TESTBEDS FOR GROUND BASED REMOTE-SENSING
AND IN-SITU OBSERVATIONS (TB-REM)**

1. The purpose of a CIMO testbed for ground-based remote-sensing and in situ observations is to capture the results and information that are available at specific National Meteorological and Hydrological Services in testing of ground-based remote-sensing and in situ instruments and providing an international platform for integration of observations within the WMO Integrated Global Observing System.
2. CIMO testbeds will be established by the Commission based on proposals from Members, on the basis that it is confident that through the proposal and any supplementary information the proposed testbed has the necessary capability, capacity and expertise and has made a long-term commitment.
3. CIMO testbeds will be responsible for providing guidance in integration of ground-based remote-sensing and in situ observations, as well as in the development of standard procedures and advice related to instrument use and operation. CIMO testbeds will be expected to collaborate with relevant CIMO expert teams in developing guidance material.
4. CIMO testbeds should include "centres of excellence" where latest technologies are explored and also "centres of excellence" where new technologies are applied that result in cost-effective instrument technology and systems. CIMO testbeds should collaborate with other scientific and development institutions and agencies, including instrument manufacturers.
5. CIMO testbeds should be instrumental in the CIMO effort to bridge gaps between countries by assisting the Commission in conducting training and capacity-building activities. This would not be restricted to participating in CIMO training events, but could also be by developing a special relationship with a companion station/site from a developing country.
6. CIMO testbeds will provide at least one report each year to the CIMO Management Group, publish Instruments and Observing Methods reports and where relevant provide contributions to Technical Conferences on Meteorological and Environmental Instruments and Methods of Observation. CIMO testbed activity will be evaluated by the CIMO Management Group prior to each session of the Commission to ensure they are delivering the expected outcomes.
7. The CIMO testbeds will liaise with the Commission via the CIMO Expert Team on New Remote-Sensing Technologies and Test Beds (ET-NTTB). CIMO testbeds must provide a contact person responsible for communication between CIMO testbeds and the ET-NTTB.
8. CIMO testbeds are requested to inform WMO if they no longer have the capabilities to provide the expected service, for example, for human resource reasons

TERMS OF REFERENCE

CIMO LEAD CENTRES

1. The purpose of CIMO lead centres is to provide high-level expertise in testing of instruments' performance including in laboratory facilities, and instrument intercomparisons, resulting in standardization of instruments' performance, instrument interoperability and compatibility within the WMO Integrated Global Observing System (WIGOS).
2. CIMO lead centres will provide reports on all significant tests to the CIMO community, and in support of services of WIGOS and the Global Framework for Climate Services, through publication of Instruments and Observing Methods reports and publications in scientific journals, as appropriate.
3. CIMO lead centres will be established by the Commission based on proposals from Members, on the basis that the Commission is confident that through the proposal and any supplementary information the proposed lead centre has the necessary capability, capacity and expertise and has made a long-term commitment.
4. CIMO lead centres will contribute to the development of standard procedures for all aspects of instrument use and operation with a view to promote worldwide instrument compatibility and interoperability. They should provide advice related to instrument use, operation and calibration. CIMO lead centres will be expected to collaborate with relevant CIMO expert teams in developing guidance material and with Regional Instrument Centres and Regional Radiation Centres, as relevant.
5. CIMO lead centres should be instrumental in CIMO efforts to bridge gaps between countries by assisting the Commission in conducting training and capacity-building activities.
6. CIMO lead centres will provide at least one report each year to the CIMO Management Group, publish IOM reports and where relevant provide contributions to Technical Conferences on Meteorological and Environmental Instruments and Methods of Observation. CIMO lead centre activity will be evaluated by the CIMO Management Group prior to each session of the Commission to ensure centres are delivering the expected outcomes.
7. CIMO lead centres will liaise with the Commission via the CIMO Expert Team on Standardization (ET-Stds). CIMO lead centres must provide a contact person responsible for communication between the lead centre and ET-Stds.
8. CIMO lead centres are requested to inform WMO if they no longer have the capabilities to provide the expected service, for example, for human resource reasons.
