



WMO OMM

World Meteorological Organization
 Organisation météorologique mondiale
 Organización Meteorológica Mundial
 Всемирная метеорологическая организация
 المنظمة العالمية للأرصاد الجوية
 世界气象组织

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Our ref.: 12467/2018/OBS/IMO/Testbeds-Lead Centres

16 May 2018

Annexes: 3 (available in English only)

Subject: Submission of proposals for the nomination of CIMO Testbeds and Lead Centres

Action required: To submit proposals for potential CIMO Testbeds and/or Lead Centres, as soon as possible, **but not later than 2 July 2018**

Dear Sir/Madam,

I would like to inform you that the president of the Commission for Instruments and Methods of Observations (CIMO) will consider, in the lead-up to the forthcoming seventeenth session of CIMO (CIMO-17, 12-16 October 2018, Amsterdam, The Netherlands) the designation of additional Testbeds and Lead Centres.

The purpose of establishing CIMO Testbeds and Lead Centres is to promote collaboration between CIMO and relevant National Meteorological and Hydrological Services (NMHS) in testing, development and standardization of instruments and their performance for the benefit of all WMO Members. This collaboration is to 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, and of their significant contribution towards developing guidance for WMO Members on instruments and methods of observation.

- **Testbeds** are centres with experimental facilities to assess the capabilities of various surface-based measurement techniques and technologies, and to provide guidance on integration of measurements within the WMO Integrated Global Observing System (WIGOS) and on the development of standard procedures and advice related to instrument use and operation;
- **Lead Centres** are centres of excellence providing high-level expertise in testing of surface-based instrument performance, using laboratory facilities and/or instrument intercomparisons, resulting in standardization of instrument performance, instrument interoperability and compatibility within the WIGOS.

More information about existing CIMO Testbeds and Lead Centres is available at the following website:

<https://www.wmo.int/pages/prog/www/IMOP/Testbeds-and-LC.html>.

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

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 CIMO Testbeds (Annex I) and Lead Centres (Annex II), as well as a Designation process for the establishment of CIMO Testbeds and Lead Centres (Annex III). Testbeds and Lead Centres are required to make a long-term commitment and to report on their activities regularly. Their performance will be evaluated by a CIMO Management Group (CIMO MG) Task Team, on a regular basis, to ensure they are delivering the expected outcomes.

Should you have a special facility falling under either of those sets of Terms of Reference, I would like to invite you to consider submitting a nomination for its designation as either a CIMO Testbed or a CIMO Lead Centre, as appropriate, to be evaluated by the CIMO MG Task Team. A form for such nominations can be accessed at:

https://www.wmo.int/pages/prog/www/IMOP/TB_LC/TB&LC_Proposal-2018.docx.

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

It would be most appreciated if your proposal(s) could reach the WMO Secretariat before **2 July 2018** to allow for processing and timely distribution to relevant experts. All nominations will be evaluated by a CIMO MG Task Team and their recommendations will be considered by the president of CIMO in deciding on the designation of new CIMO Testbeds and Lead Centres. The CIMO-17 session will be informed on the outcome of the evaluation process and associated designations.

Yours faithfully,



(W. Zhang)
for the Secretary-General

TERMS OF REFERENCE**CIMO TESTBEDS FOR
GROUND BASED REMOTE-SENSING AND IN-SITU OBSERVATIONS**

Ref.: 12467/2018-1.3 OBS-WIGOS/OSD

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 every two years 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 a CIMO expert team specified by the CIMO Management Group. CIMO testbeds must provide a contact person responsible for communication between CIMO testbeds and the Commission.
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

Ref.: 12467/2018-1.3 OBS-WIGOS/OSD

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 every two years 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 a CIMO expert team specified by the CIMO Management Group. CIMO lead centres must provide a contact person responsible for communication between the lead centre and the Commission.
 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.
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**DESIGNATION PROCESS FOR ESTABLISHMENT OF
CIMO TESTBEDS AND LEAD CENTRES**

Ref.: 12467/2018-1.3 OBS-WIGOS/OSD

1. The president of CIMO will establish a Task Team composed of at least three senior experts to evaluate new proposals of CIMO Testbeds and Lead Centres.
 2. The Task Team will:
 - (a) Apply the criteria already approved by the Commission at its fifteenth session to the new proposals for the selection of CIMO Testbeds and Lead Centres;
 - (b) Submit results of the evaluation to the CIMO Management Group for consideration.
 3. The Management Group will make recommendations to the president of CIMO on the Testbeds and Lead Centres.
 4. The president of CIMO will designate CIMO Testbeds and Lead Centres on behalf of the Commission based on the recommendation of the Management Group.
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