



Our ref.: 19127/2018/OBS/OSD/IMO/CIMO Guide

30 July 2018

Annexes: 2 (available in English only)

Subject: Preliminary 2018 edition of the *Guide to Meteorological Instruments and Methods of Observation* (WMO-No. 8, the CIMO Guide)

Action required: To review the Preliminary 2018 edition of the CIMO Guide and send your comments to the WMO Secretariat by **31 August 2018**

Dear Sir/Madam,

I wish to refer to the upcoming seventeenth session of the Commission for Instruments and Methods of Observations (CIMO-17), to be held in Amsterdam, the Netherlands, from 12 to 16 October 2018. On this occasion, the Commission will receive and review a report on the status of the *Guide to Meteorological Instruments and Methods of Observation* (WMO-No. 8, the CIMO Guide) and plans for its update, and will be invited to approve the Provisional 2018 edition of the CIMO Guide.

The Sixteenth Congress of the World Meteorological Organization recognized that the CIMO Guide (WMO-No. 8) was the main source of information used by Members to standardize instrument performance and guarantee the quality of observations, and requested CIMO to put a high priority on the development of standards under the WMO Integrated Global Observing System (WIGOS) framework and on the regular update of the CIMO Guide.

Since the sixteenth session of the Commission for Instruments and Methods of Observations (CIMO-16), a number of updates were prepared and reviewed by the CIMO Expert Teams, with the support of experts from other WMO technical commissions and Programmes. In particular, the Global Cryosphere Watch community has provided two new chapters: a general chapter on measurement of cryospheric variables and a chapter on snow measurements. All these proposals were reviewed in detail by the CIMO Editorial Board and compiled into the Preliminary 2018 Edition, whose parts should become volumes, thus enabling faster updating and publishing in the future.

It should be noted that the Guide was first published in 1950, when WMO was responsible only for meteorological matters, as reflected in the Guide's title. Since then, WMO has seen its mandate broaden and the content of the Guide has evolved accordingly. The CIMO Management Group (MG) recognized that the current title of the Guide was no longer properly describing its content as it includes, for example, guidance on atmospheric composition,

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

cc: Hydrological Advisers to Permanent Representatives
Presidents and vice-presidents of regional associations
Presidents and vice-presidents of CIMO, the Commission for Atmospheric Sciences (CAS) and the Commission for Basic Systems (CBS), and co-presidents of the Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM)
Chair and Vice-Chair of the Global Cryosphere Watch Steering Group
Chairs of CIMO OPAGs and of CIMO Expert Teams
Executive Secretary, Association of Hydro-Meteorological Equipment Industry
Members of the CIMO Guide Editorial Board

marine meteorology and cryospheric measurements, and proposed to rename it the *Guide to Instruments and Methods of Observation*. Moreover, CIMO MG supported the idea of reorganizing the Guide into volumes, instead of the current parts, such that each new volume corresponds to a relevant existing part. It is envisaged that this new structure will ensure an independent update of each volume, whenever needed, which will hopefully be faster and easier than it is now.

The Preliminary 2018 Edition of the CIMO Guide is now available for consideration by Members. It has been posted on the Instruments and Methods of Observation website, under the heading "CIMO Guide – Preliminary 2018 Edition", at <http://www.wmo.int/pages/prog/www/IMOP/IMOP-home.html>. An overview of the proposed updates is provided in [Annex I](#) to this letter.

I would like to invite you to download a copy, examine the text and send your detailed comments or suggestions, using the template provided in [Annex II](#), to the WMO Secretariat, as soon as possible and no later than **31 August 2018**, in order to allow sufficient time to produce a Provisional 2018 Edition to be submitted to CIMO-17 for approval. Should you have any concerns with specific chapters, please nominate an appropriate contact person(s) with whom these could be discussed between now and CIMO-17.

I take this opportunity to convey to you and your meteorological service my appreciation for your continued contribution to the activities of the Instruments and Methods of Observation Programme.

Yours faithfully,


for (P. Taalas)
Secretary-General

**TABLE OF DRAFT CHANGES TO THE CIMO GUIDE
(2018 EDITION VS 2014 EDITION)**

CHAPTER	TITLE	SIZE OF THE UPDATE *
PART I	MEASUREMENT OF METEOROLOGICAL VARIABLES	
1	General	Major
2	Measurement of temperature	Major
3	Measurement of atmospheric pressure	Major
4	Measurement of humidity	Major
5	Measurement of surface wind	Minor
6	Measurement of precipitation	Partial
7	Measurement of radiation	Minor
9	Measurement of visibility	Partial
12	Measurement of upper-air pressure, temperature, humidity	Minor
14	Observation of present and past weather; state of the ground	Minor
15	Observation of clouds	Partial
16	Measurement of atmospheric composition	Partial
PART II	OBSERVING SYSTEMS	
1	Measurements at automatic weather stations	Major
3	Aircraft-based observations	Minor
4	Marine observations	Partial
5	Special profiling techniques for the boundary layer and the troposphere	Partial
PART III	SPACE-BASED OBSERVATIONS	
3	Remote-sensing instruments	Minor
PART IV	QUALITY ASSURANCE AND MANAGEMENT OF OBSERVING SYSTEMS	
4	Testing, calibration and intercomparison	Partial
5	Training of instrument specialists	Partial
NEW PART	MEASUREMENT OF CRYOSPHERIC VARIABLES	
1	General	New
2	Measurement of snow	New

* Note: **Minor** indicates that only small changes were made to the chapter; **Partial** indicates that substantial changes were made to some sections of the chapter; **Major** indicates that substantial changes were made to the entire chapter; **New** indicates that an entirely new chapter has been added.

