

WORLD METEOROLOGICAL ORGANIZATION

**COMMISSION FOR INSTRUMENTS AND
METHODS OF OBSERVATION**

**CIMO EXPERT TEAM ON STANDARDIZATION
First Session**

Geneva, Switzerland
26 – 29 November 2012

CIMO/ET-Stand-1/Doc. 4.1
(19.XI.2012)

ITEM: 4.1

Original: ENGLISH

SITING CLASSIFICATION

Status on collaboration with ISO

(Submitted by the Secretariat)

Summary and purpose of document

This document provides information on the status of collaboration with ISO on the development of common ISO/WMO Standards.

ACTION PROPOSED

The Meeting is invited to note the information provided in this document and to take into consideration for its further deliberations.

Appendix: Agreement on the working arrangements between the World Meteorological Organization and the International Organization for Standardization

SITING CLASSIFICATION

Status on collaboration with ISO

Contacts with the ISO Central Secretariat

1. A copy of the Agreement on the working arrangements between the World Meteorological Organization and the International Organization for Standardization is provided in the Appendix for information.

2. In September 2012, the Secretary-General of WMO approached the Secretary-General of ISO to propose specific projects for collaboration. The WMO Secretary-General noted the following:

- Firstly, the WMO Commission for Instruments and Methods of Observations (CIMO) developed and endorsed a classification scheme for observing stations on land. This classification provides a means for improving and assessing the quality of observations, in particular for climate purposes, as the quality of observations cannot be ensured only by the use of high-quality instrumentation, but relies at least as much on the proper siting of the instruments. This classification was published in the WMO Guide to Instruments and Methods of Observation (WMO-No. 8, Part I, Chapter 1, Annex 1D)¹.

Furthermore, at its fifteenth session (CIMO-XV, September 2010, Helsinki, Finland), CIMO agreed to further develop this classification as a common WMO-ISO standard. CIMO-XV was informed that ISO Technical Committee 146 (TC146), Air Quality, Sub-Committee 5 (SC5), Meteorology, had agreed to undertake the work leading to the approval of the classification guidelines as ISO standards and, recommended that the WMO CIMO Secretariat submit the guidelines to ISO, for approval as an ISO standard, in conjunction with SC5.

The WMO Executive Council, at its sixty-fourth session (EC-LXIV, 25 June – 3 July 2012) noted that the standard should be carefully developed, taking into account the situation of, and the possible impact on, National Meteorological and Hydrological Services (NMHSs).

- Secondly, EC-LXIV also noted that ISO is in the process of developing a standard on Ground-based Remote Sensing by Doppler Wind Lidars (ISO/WD 28902-2), that enable the measurement of profiles of winds over a range of a few kilometres and that have essential applications, for example in the field of aeronautical meteorology and airport safety operation. The Council was pleased that CIMO, through experts, had been taking part in this development since its beginning, to represent the interests of the meteorological community. In view of the relevance of this standard to the priorities of WMO and of the active involvement of WMO experts in this development, the Council noted that ISO would be approached by the Secretariat to develop this standard as a common WMO/ISO standard. This would ensure that the standard properly addresses the requirements of the meteorological community, wider acceptance of this standard throughout the meteorological community, and that WMO would remain strongly involved in the further development and maintenance of this standard to meet evolving requirements of its Members in the future.

3. The WMO Secretary-General sought ISO's concurrence to further develop both of these standards as common ISO-WMO standards. At present a positive reply was received for the further development of wind lidar standard, but no formal reply was received yet concerning the siting classification. However, during TECO-2012, ISO TC146 representative, clearly indicated interest in this collaboration.

Outcomes of TECO-2012 and CIMO Management Group

4. A discussion session on the siting classification (SC) and the experience made by the NMHSs which have implemented it, or are in the process of implementing it was organized during the 2012 WMO Technical Conference on Meteorological and Environmental Instruments and

¹ <http://www.wmo.int/pages/prog/www/IMOP/CIMO-Guide.html>

Methods of Observation (Brussels, Belgium, 16-18 October 2012). This discussion was very well attended and showed a great support to the SC.

5. The main points of discussion were summarized as follow by Mike Molyneux, the CIMO ET-Standardization vice-chair:

- a. The SC was supported in principle by all speakers
- b. Goals – the goals of the SC should be clarified. There is concern that 3rd parties may not understand that the goal is to clarify and help improve practices
- c. Evidence of impact – work is emerging to clarify the levels of impact. These should be considered and the guidance changed as required – however, this could be considerable work and more tests continue
- d. Choice of classes as 1-5 – Could a “words” based SC help – for example “Fully compliant”, “compliant”, “not compliant”. Alternatively a “colours” scheme might be adopted – for example, purple, blue, yellow, pink.
- e. Practicalities – what guidance, software tools or measuring instruments are available and found to be useful to make a cost effective survey
- f. Should some parameters be combined where there are implications, for example, the wind obstacles can impact heavily on the temperature
- g. Some feedback was that a full survey was a lot of work, and some feedback suggested a local CFD model be applied - implying much more work was needed per site

Other points:

- Height of temperature measurement over snow surface is not well captured (very large changes possible)
- The goal is to help improve measurement
- The SC is a shorthand or summary for the detailed meta-data. It does not replace the metadata. Little is new.
- From our Antarctic users: For class 1 and 2 sites it says "Ground covered with natural and low vegetation (<10cm) representative of the region", the problem is that there is none or very little in the polar regions and also some desert and mountain regions. If it stated something like "Ground should be representative of the local area and if vegetation is present then this should be less than 10cm high"

Guidance from the CIMO Management Group

6. The CIMO Management Group, at its tenth session (Brussels, Belgium, 19-20 October 2012) agreed on the following:

- Focus should be placed at first on the "socialization" of the siting classification: clarifying the use and the purpose of the classification by adding a preamble and footnotes.
 - The actual values/classes should not be changed right now. (However this may have to be reconsidered once we will have a clear reply from ISO on the process to follow for a common standard.)
-

AGREEMENT ON WORKING ARRANGEMENTS
BETWEEN
THE WORLD METEOROLOGICAL
ORGANIZATION
AND
THE INTERNATIONAL ORGANIZATION FOR
STANDARDIZATION



WORLD METEOROLOGICAL
ORGANIZATION



INTERNATIONAL ORGANIZATION FOR
STANDARDIZATION

AGREEMENT ON WORKING ARRANGEMENTS
BETWEEN
THE WORLD METEOROLOGICAL ORGANIZATION
AND
THE INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

INTRODUCTION

The working arrangements concluded with the International Organization for Standardization (ISO) were approved on behalf of the World Meteorological Organization by the Executive Council at its sixtieth session in June 2008 and on behalf of the International Organization for Standardization by its Secretary General on the basis of ISO Council Resolution 43/2007 approved in December 2007.

WORKING ARRANGEMENTS

1. Background

The International Organization for Standardization (ISO) and the World Meteorological Organization (WMO) have been working in close cooperation since the granting of consultative status to ISO by the WMO Executive Council at its fifth session in 1954.

ISO has recognized WMO as an international standardization body through ISO Council Resolution 43/2007.

These working arrangements between the WMO and ISO aim to strengthen the development of International Standards and to avoid duplication of work on standards related to meteorological, climatological, hydrological, marine and related environmental data, products and services.

In the text of these working arrangements the word "standard" is used with the meaning given in ISO/IEC Guide 2:2004, Standardization and related activities – General vocabulary. The resulting standards developed under these working arrangements are hereafter called "common standards".*

2. Generalities

The Secretary-General of WMO and the Secretary-General of ISO, with the aim of effectively attaining the objectives set forth in their respective constituent instruments, will act in close cooperation with each other and will consult each other regularly in regard to matters of common interest.

Both organizations agree to keep each other informed on current and planned activities in which there may be mutual interest.

WMO and ISO agree to exchange publications concerning these and related fields.

Suitable arrangements will be made for the participation of each Party to the working arrangements as an observer in those sessions and meetings of the other Party at which matters of common interest are discussed.

3. Scope of application

Subject to their respective rules and procedures, and within the limits of their responsibility and available resources, WMO and ISO will share with each other relevant information regarding their respective work programmes and facilitate active participation and substantive contribution to each other's relevant meetings, appropriate workshops, seminars, working party or expert group meetings addressing standards issues associated with meteorological, climatological, hydrological, marine and related environmental data, products and services.

This cooperation includes and encourages the active participation of WMO as a liaison organization in relevant ISO technical committees (TC) or subcommittees (SC) as well as reciprocal participation by ISO in relevant WMO meetings. It more specifically addresses working arrangements between ISO and WMO in the development of standards and their subsequent publication.

These working arrangements shall apply to the following work items:

- (1) Publications proposed by WMO that is determined by ISO not to fall within the scope of an existing ISO committee. Such proposed WMO publications shall be submitted to the ISO Central Secretariat for consideration by the full ISO membership as indicated below.*
- (2) Publications proposed by WMO falling within the scope of ISO/TC 146 (Air quality), ISO/TC 147 (Water quality), ISO/TC 113 (Hydrometry), ISO/TC 180/SC 1 (Solar energy, Climate – Measurement and data) or ISO/TC 211 (Geographic information/Geomatics). Such proposed WMO publication shall*

** IEC is the International Electrotechnical Commission.*

be treated within the work programme of the corresponding ISO technical committee or subcommittee and as indicated in Clause 4.

- (3) Work proposed by ISO or WMO within the scope of the ISO/TCs referred above, when it has been determined that a new International Standard or other deliverable is required and for which ISO and WMO concur that significant contribution in the development of the standard would be provided by ISO and WMO.

Where it has been determined that a new International Standard or other deliverable is required, and when a WMO publication exists and there is no equivalent or similar ISO standard, the WMO publication shall be taken as the basis for joint work.

4. Standards development and standards adoption modalities

The text of any common standard shall be approved by both Organizations independently.

For the approval of any proposal, there are 2 possibilities:

- (A) Existing WMO publication proposed for approval 'as it is' by ISO:

(A.1) Publication not falling within the scope of an existing ISO committee

WMO being a recognized international standardizing body as per ISO Council resolution 43/2007, may propose that a WMO publication (technical regulation, manual, guide or other relevant WMO normative publication) be submitted for vote as a five-month final draft International Standard within ISO (as covered by the ISO/IEC Directives, Annex F, subclause F.2.1.2).

The conditions for approval shall be that not more than one-quarter of the total number of votes cast be negative.

If the conditions of approval are met, the document shall progress to the publication stage. If not, the proposal has failed and any further action shall be decided upon by discussion between the WMO Secretariat and the ISO Central Secretariat.

(A.2) Publication falling within the scope of an existing ISO committee

WMO may propose that a WMO publication (technical regulation, manual, guide or other relevant WMO normative publication) be submitted for vote as a five-month enquiry draft within ISO (as covered by the ISO/IEC Directives, Annex F, subclause F.2.1.1).

The conditions for approval shall be as specified in 2.6 of the ISO/IEC Directives for an enquiry draft (a two thirds majority of the votes cast by the P-members of the ISO committee are in favour, and not more than one-quarter of the total number of votes cast are negative).

If the conditions of approval are met, the document shall progress to the approval stage (2.7 of the ISO/IEC Directives), i.e. be submitted for vote as a two-month final draft International Standard within ISO. If not, the proposal has failed and any further action shall be decided upon by discussion between the relevant WMO body, the WMO Secretariat, the ISO committee to which the proposed publication was attributed, and the ISO Central Secretariat.

- (B) Joint development of a standard by WMO and an ISO technical committee or subcommittee

WMO may propose, in agreement with the appropriate ISO technical committee or subcommittee, that a draft WMO publication be submitted for vote as a five-month enquiry draft within that ISO committee, in parallel with the approbation of the responsible WMO technical commission.

The conditions for approval shall be as specified in 2.6 of the ISO/IEC Directives for an enquiry draft (a two-thirds majority of the votes cast by the P-members of the ISO committee are in favour, and not more than one-quarter of the total number of votes cast are negative). Comments and negative votes shall be referred to WMO who will take them into consideration in collaboration with the relevant ISO committee.

If the conditions of approval are met, the draft standard shall progress to the approval stage (2.7 of the ISO/IEC Directives), i.e. be submitted for vote as a two-month final draft International Standard within ISO and be submitted, in parallel, for approval to the relevant WMO constituent body. If not, the proposal has failed and any further action shall be decided upon by the ISO committee to which the document was attributed with discussion with the WMO Secretariat and the ISO Central Secretariat.

If, for the final draft International Standard, the conditions of approval are met, the document shall progress to the publication stage. If not, the proposal has failed and any further action shall be decided upon by the ISO committee to which the document was attributed with discussion with the relevant WMO body, the WMO Secretariat and the ISO Central Secretariat.

For the above possibilities, the proposal shall be received by ISO Central Secretariat, who shall take the following actions:

- Assess in consultation with WMO if an ISO technical committee/subcommittee is competent for the subject covered by the proposed document;
- Ascertain that there is no evident contradiction with other International Standards;

- Distribute the proposed document as an enquiry draft (cases A.2 and B) in accordance with the ISO/IEC Directives subclause 2.6.1, or as a final draft International Standard (case A.1) in accordance with F.2.1.2 and F.2.3, indicating (if relevant) the ISO technical committee/subcommittee to the domain of which the proposed document belongs.

The establishment of a new work item aiming at the publication of a common standard, shall result from a decision approved both by WMO and by ISO in accordance with their own procedures. A new work item may be proposed by any of the two organizations and may include a new subject or the revision of existing WMO publications and ISO standards. Once such a decision has been approved, all existing work on similar active projects, within either Organization, should be merged to the harmonized effort. If in the course of its own consultation either WMO or ISO do not approve the new work item proposal, or later any draft being progressed, the other Organization reserves the right to continue to work separately under its normal procedures.

5. Publication

Common standards shall not be published until WMO and ISO have both provided their approval.

The resulting common standards will be published by ISO as ISO deliverables subject to ISO policies and directives and by WMO as WMO publications. Unless otherwise agreed, ISO and WMO will publish 2 separate documents with identical content.

WMO and ISO agree to identify their respective involvement in the development of a particular common standard and to quote the corresponding standard from the other Organization through such indications in appropriate sections of their respective publication.

6. Copyright

Copyright ownership of publications resulting from the application of these working arrangements will be held by ISO and WMO without payment of royalties to each other. ISO can transfer usual exploitation rights to the ISO member bodies without payment of any royalties to WMO.

7. Maintenance procedure

Revisions to common standards may be proposed at any time by ISO or WMO. Systematic review of common standards shall occur on a period agreed-upon between ISO and WMO, which lasts no longer than 3 years, and after the first review, no longer than every 5 years.

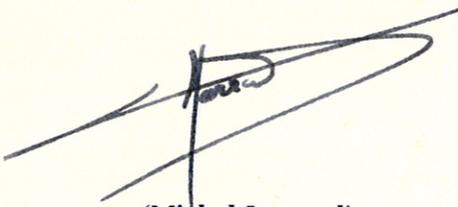
If no ISO committee was involved during the development of the common standard, the approval procedure set out above shall be repeated if WMO decides that changes to the common standard are required. If an ISO committee was involved during the development of the common standard, its maintenance shall be handled by WMO in consultation with the ISO committee to which the document was attributed.

Common standards shall not be revised without the approval process as described above. The revision of these common standards shall be undertaken only if a parallel investigation conducted within each Organization, according to its own internal procedures, sufficiently demonstrates that problems exist that need to be resolved. In case both Organizations do not reach the same conclusion on the need to revise a common standard, each Organization may decide to revise the common standard unilaterally. In this case the resultant standard shall not be considered as a common standard.

8. Termination

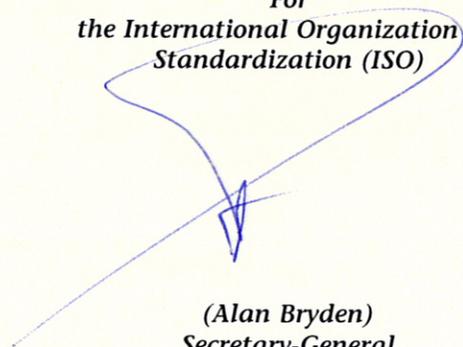
These working arrangements shall enter into force on their approval by both Organization and shall remain in force unless terminated earlier by either party upon three month written notice. These working arrangements shall be reviewed on a four year basis and modified as necessary to enhance the cooperative relationship between the two organizations.

For
the World Meteorological Organization
(WMO)



(Michel Jarraud)
Secretary-General

For
the International Organization for
Standardization (ISO)



(Alan Bryden)
Secretary-General

Date & Place:

16 September 2008
Geneva

Date & Place:

Geneva 2008-09-16