Committee on Technical Barriers to Trade

ISO/IEC GUIDE 45

Addendum

At its meeting on 6-7 March 1986, the Committee agreed to circulate the attached ISO/IEC Guide 45 -1985, "Guidelines for the Presentation of Test Results" as part of the set of ISO/IEC Guides previously circulated in TBT/W/84 and Corr.1 and TBT/W/84/Add.1. It also agreed that the ISO/IEC Guide 36, contained on pages 7-8 of document TBT/W/84/Add.1, should be withdrawn from this set (TBT/M/21, paragraph 35).

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Guidelines for the presentation of test results

0 Introduction

Testing activities are vital parts of the production, marketing, selling, buying or usage of many materials and products. Time and effort are saved if the test reports in which test results are presented are made clear, complete and uniform. There is also less risk of misreading, misunderstanding, or of omitting relevant information.

It is recognized that the degree of relevance and applicability of some of the provisions in this Guide will differ from case to case, depending on the area of testing, the type of test and the intended use of the test results. The requirements of this Guide have been worded to take this into account as much as possible.

1 Scope and field of application

This Guide sets forth requirements for the presentation of test results and other information of relevance to the understanding of these results.

Its purpose is further to ensure that the test report in which these results are presented contains the essential information that would permit the test reported to be carried out again.

This Guide is intended to be used by testing laboratories, inspection bodies, certification and approval bodies, manufacturers, public and private purchasers or any other interested party. It may also be adopted by standardizing bodies, laboratory accrediting bodies, regulatory bodies and the like.

As used herein, a testing laboratory refers to that facility which is operated at or from a specifically designated location.

2 References

ISO Guide 2, General terms and their definitions concerning standardization, certification and testing laboratory accreditation.

ISO/IEC Guide 25, General requirements for the technical competence of testing laboratories.

ISO/IEC Guide 38, General requirements for the acceptance of testing laboratories.

3 Definitions

The following definitions from ISO Guide 2 are applicable:

3.1 testing laboratory: Laboratory which measures, examines, tests, calibrates or otherwise determines the characteristics or performance of materials or products.

3.2 test method: Defined technical procedure to determine one or more specified characteristics of a material or product.

3.3 test report: Document which presents the test results and other information relevant to the test.

3.4 laboratory accreditation: Formal recognition that a testing laboratory is competent to carry out specific tests or specific types of tests.

3.5 accrediting body: Governmental or non-governmental body which conducts and administers a laboratory accreditation system and grants accreditation.
In addition, for the purpose of this Guide, the following definition applies:

3.6 test item: Material, component, equipment, assembly, device, structure, machine, apparatus, construction or installation, or any substance or article (natural or manufactured) submitted to the test.

4 Information to be presented in a test report

4.1 Designation of the document

The document presenting test results should be designated as TEST REPORT (see note below). A reference to this Guide may be added if all its requirements are met.

NOTE — In some countries, different terms are used to designate a test report issued by a manufacturer and a test report issued by an independent testing laboratory.

2 Identification of the document

The test report shall have a unique identification repeated on every page. This identification could be a serial number, combined where appropriate with the date of issue. The report shall be paginated, and the total number of pages shall be indicated on each page.

4.3 Identification of the testing laboratory

The name and address of the testing laboratory shall be given. Further information on the testing laboratory may be added, such as its position within a larger organization of which it may be a part. If the testing laboratory is accredited for the specific tests reported, this should also be indicated in accordance with the rules set by the accrediting body.

4.4 Identification of the client

The name and address of the client ordering the tests shall be given.

4.5 Identification of the test item

The test item shall be uniquely identified. This may be made by description and by indication of the information (for example serial number) marked on it by the manufacturer or by the client or by the laboratory itself. If the test item itself cannot be marked — for items such as fluids and powders — the marking on its package shall be noted. Further information — such as date of manufacture or preparation of the test item and reference to enclosed photographs of the test item — may be added. The date of receipt of the test item shall be noted, as appropriate.

4.6 Description of the service ordered by the client

The service ordered by the client and undertaken by the testing laboratory shall be described. If the tests performed by the laboratory do not cover all the properties or characteristics included in the documents referred to by the client, this fact shall be made clear in the test report.

NOTE — If the testing laboratory is of the opinion that the tests ordered by the client may give irrelevant or inadequate results which may be misleading, the laboratory should consider refusing to undertake the tests.

4.7 Test methods

Test methods used shall be identified. If a non-standard test method is used, full documentation of that test method shall be available.

4.8 Testing procedure

The testing procedure shall, where appropriate, be described with all details of the test carried out that may affect the degree to which the method followed conforms to the method specified under 4.7, such as:

- storage of test item;
- preparation of test item;
- environmental conditions;
- order in which the various parts of the test have been carried out.
4.9 Test equipment

Where necessary for the repetition of the test reported, the test equipment used shall be uniquely identified. If equipment not under the normal control of the testing laboratory is used, this shall be noted.

4.10 Sampling procedure

The report shall, where appropriate, identify the sampling procedure and indicate by whom, where, how and when the item(s) tested was (were) obtained.

4.11 Use of subcontractors

If subcontractors have been employed to carry out part(s) of the test, they shall be identified.

4.12 Test results

Test results shall be presented accurately, clearly, completely and unambiguously in accordance with instructions that may be part of the test method documents. The date(s) of performance of test shall be given, as appropriate.

Quantitative results shall be given together with calculated or estimated uncertainty, where possible and useful.

Test results could be measured values, findings from the visual examination or practical use of the test item, derived results or any other type of observation from the testing activities. Test results could be supported by tables, photographs, or graphical information of any kind, appropriately identified.

The test report shall include a statement to the effect that the test results relate only to the item(s) tested and a statement that the test report shall not be reproduced except in full without the approval of the testing laboratory.

NOTES

1. A test report should not include any advice or recommendation arising from the test results.
2. Test results obtained on items which have been statistically selected from a larger lot, batch or production quantity are frequently used to infer the properties of the lot, batch or production quantity. Any extrapolation of the test results to the properties of the lot, batch or production quantity should be contained in a separate document.

4.13 Additional information

Additional information may be given on anything that is of relevance to the technical contents of the test report, to its further use or to the legal rights and obligations of the testing laboratory and the client associated with the test report. Such information may include conditions for the publication of the test report.

NOTE — In some countries legislation may limit the possibilities of the testing laboratory to restrict the future use of the test report.

4.14 Date of issue and signatures

The date of issue of the test report shall be given. The test report shall be signed or otherwise marked to indicate the person(s) accepting responsibility for it on behalf of the testing laboratory.

One signatory must have sufficient authority to be able to control all factors having an influence on the test results. One signatory must be able to communicate directly with the client on the technical details of the test report.

NOTE — These signatories may be one and the same person.

4.15 Corrections and additions

Except as indicated below, corrections and additions to a test report may be made only before it has been issued. These corrections — with the exception of misspellings and the like — shall be acknowledged by the persons initialling each correction.

Corrections and additions to a test report after issue shall be made only by a further document which must meet all relevant requirements in this Guide. Such a document may be designated as SUPPLEMENT TO ..., immediately followed by the unique identification of the test report in question, or it may be a new test report cancelling and superseding the previous one, or it may take the form of corrected and revised pages provided that these clearly indicate that they are replacement pages and bear the new current preparation date and the page number(s) and issue date of the pages being replaced. In all cases, adequate safeguards shall be provided against misunderstanding or misrepresentation.