

1. PURPOSE

The purpose of this guideline is to ensure that the testing reports, calibration certificates and sampling reports issued by laboratories accredited by NBE-New Business Education Foundation are prepared in accordance with ISO/IEC 17025 Standard, international accreditation rules and special conditions and thus inform the consumer comprehensively, enable comparison of testing reports, calibration certificates and sampling reports and ensure that they are recognized by the parties who signed the international mutual recognition arrangements.

2. SCOPE AND FIELD OF APPLICATION

This guideline comprises general and special conditions for the testing reports, calibration certificates and sampling reports to be prepared by laboratories accredited by NBE within the scopes they are accredited for.

3. ABBREVIATIONS

In this report, the following abbreviations refer to these;

NBE: New Business Education Foundation,

IEC: International Electrotechnical Commission,

ISO: International Organization for Standardization,

ILAC: International Laboratory Accreditation Cooperation.

MRA: Mutual Recognition Arrangement

4. RELEVANT DOCUMENTS

Conditions mentioned in this Guideline are included in the following documents and standards:

- ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories,
- Requirements for Using NBE Accreditation Symbol by the Accredited Bodies (G-1-06)
- Procedure for the Accreditation of Conformity Assessment Bodies (PR-7-01)
- Guideline Traceability of Measurements (G-1-12)
- ILAC P10 ILAC Policy on Traceability of Measurement Results
- ILAC P8 Mutual Recognition Arrangement (Arrangement): Supplementary Requirements and Guidelines for the Use of Accreditation Symbols and for Claims of Accreditation Status by Accredited Laboratories and Inspection Bodies

5. GENERAL CONDITIONS

1- Testing reports, calibration certificates or sampling reports prepared by an accredited laboratory relevant to its works in the accreditation scope shall include the following information as a minimum:

- a) The Title (Testing Report or Calibration Certificate),
- b) The name of the accreditation body,
- c) The name and address of the laboratory (As specified in the accreditation certificates and annexes),

- d) The location where the tests and/or calibrations are carried out, if different from the address of the laboratory, location where sampling activity is carried out.
- e) The NBE Mark assigned for the laboratory,
- f) Number of the testing report or calibration certificate (on all pages),
- g) Total number of pages of the testing report or calibration certificate and page numbers,
- h) The name and address of the customer,
- i) The date of receipt of the test or calibration item(s) (when significant),
- i) The date(s) (DD/MM/YY) of performance of the test, calibration or sampling and the date(s) (Day/ Month/ Year) of approval and release of the testing reports, calibration certificates and sampling reports,
- j) Identification of the methods used,
- k) A description of, the condition of, and unambiguous identification of the item(s) tested, calibrated or sampled (serial number, type etc.) and its condition where significant,
- l) The name(s), function(s) and signature(s) or equivalent identification of person(s) authorizing-signing the testing reports, calibration certificates and sampling reports (wet signature or electronic signature whose legal effect is the same as the signature placed by hand etc. methods may be used),
- m) The test or calibration results with the units of measurement
- n) Environmental conditions where testings/measurements are performed (if significant for the measurement results),
- o) A statement specifying that the testing reports, calibration certificates and sampling reports shall not be partially copied to be reproduced without written permission of laboratory,
- ö) A statement specifying that testing reports, calibration certificates and sampling reports are invalid without signature,
- p) When appropriate, a statement specifying that the results are only relevant for the test or calibration item(s), or sample
- r) Reference to the sampling procedures used by the laboratory or other organizations if relevant to the validity of the test results and performing of testing.
- s) Information provided by the customer; statement of renounce (when the information provided by customer affects the validity of the results)
- ş) A statement specifying that the results are valid for the sample received when the laboratory does not perform the sampling activity,

2- In addition to the requirements listed in first paragraph, calibration certificates shall include the following, where necessary for the interpretation of calibration results:

- a) The uncertainty of measurement and/or a statement of compliance with an identified metrological specification or clauses thereof,
- b) With the aim to enable the interpretation of calibration results, during the calculation of the stated measurement uncertainty, the coefficient used for expanding the standard uncertainty to be used within a certain confidence interval shall be specified on the certificate.

In this case, when there is no other request from the customer, the expression "Stated expanded measurement uncertainty, as a result of standard uncertainty being multiplied by the expansion coefficient of $k=2$, provides a confidence level of 95%" must be included in the part of the certificate which comprises the calibration results.

- c) Evidence shall be provided stating that the measurements are traceable.
- d) A calibration certificate (or calibration label) shall not contain any recommendation on the calibration interval except where this has been agreed with the customer. This requirement may be superseded by legal regulations,
- e) When an instrument for calibration has been adjusted or repaired, the calibration results before and after adjustment or repair, if available, shall be reported,
- f) Where necessary, statement of conformity/nonconformity with the specifications of the results obtained,
- g) A clear definition of the decision rule when applicable.

If the accredited calibration laboratory is also responsible for sampling activity, the calibration laboratory shall meet the requirements of the fourth clause below.

Examples for the calibration certificates are provided in Annex 1 for the first page and Annex 2 for the second page.

3- In addition to the requirements listed in second paragraph test reports shall, where necessary for the interpretation of the test results, include the following:

- a) If any, deviations from, additions to, or exclusions from the test method, ,
- b) Information on specific test conditions, such as environmental conditions,
- c) Statement on the measurement uncertainty in the internal calibrations performed by the laboratory and when applicable, projected measurement uncertainty about measurement results,
- d) Where relevant, a statement of conformity/nonconformity with requirements and/or specifications,
- e) A clear definition of the decision rule where applicable.

If the accredited testing laboratory is also responsible for sampling activity, the testing laboratory shall meet the requirements of the fourth clause below.

Examples for the testing reports are provided in Annex 3 for the first page and Annex 4 for the second page.

Testing reports must be prepared in a manner to meet the requirements of the ISO/IEC 17025 standard and submitted to NBE's approval before use.

4- If the sampling activity is performed by the laboratory, test reports and calibration certificates shall include the following, where necessary for the interpretation of test results in addition to the requirements listed in first and second paragraph:

- a) Date of sampling,
- b) Unambiguous identification of the substance, material or product sampled, Location of sampling including any diagrams, sketches or photographs
- c) Reference to the sampling plan or method used and if any, deviations, additions to or exclusions from the specification concerned,

- d) Details of any environmental conditions during sampling that may affect the interpretation of the test results,
- e) Required information for the evaluation of measurement uncertainty of subsequent testing and calibration activity.

The laboratories accredited only for sampling activity, can use the examples related to test reports/calibration certificates suitable for subsequent testing and calibration activity,

5- In the testing reports which do not include any accredited results and the calibration certificates where majority of these results are not within the scope of the accreditation, NBE Accreditation Mark cannot be used and no reference can be made to NBE accreditation or mutual recognition arrangements signed by NBE. When the testing/sampling report, or calibration certificate examples/templates prepared for the results within the accreditation scope are used for testing reports which do not include any accredited results or the calibration certificates where most of the results are not within the scope of the accreditation, NBE Accreditation Mark as well as references made to NBE, NBE Accreditation and mutual recognition arrangements signed by NBE shall be removed from these documents.

6- In cases when the NBE Accreditation Mark is used for testing/sampling reports or calibration certificates which also include non-accredited results, accredited bodies shall include a warning note on the page of the report they prepared which makes it possible to distinguish testing/calibration/sampling methods within the accreditation scope from the methods not included in the accreditation scope. For instance, there could be an expression in this note such as " '*' marked testings are not included within the accreditation scope". Warning note must be easily readable. Accordingly, there must be marking on the inner pages of the testing/sampling report or calibration certificate which makes it possible to distinguish clearly between the results within the accreditation scope and the results not included within the accreditation scope.

7- Testing and calibration laboratories can state opinions or comments on the reports they published with NBE Accreditation Mark. In cases when these situations are not included in the accreditation scope, there must be a warning note near the NBE Accreditation Mark or the stated opinion such as "The results about which the opinions/interpretations stated are not related to the accredited scope.". The opinions and interpretations expressed in testing reports/calibration certificates shall be based on the results obtained from the tested or calibrated item and this situation shall be clearly stated in the report.

8- While using the NBE Accreditation Mark, "G-1-06 Conditions for the Use of NBE Accreditation Mark by the Bodies Accredited by NBE" shall be complied with.

6. SPECIAL CONDITIONS

6.1 NBE Mark

Testing/sampling report or calibration certificates related to the accredited scope shall be marked as demonstrated in Figure 1.

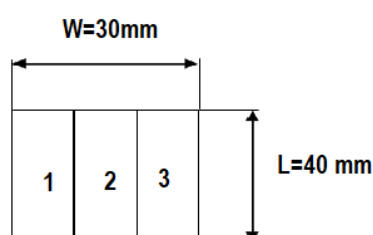


Figure 1: NBE MARK

- 1: Accreditation number assigned for the laboratory accredited by NBE (NBE-CL-000 or TL; CL-for: calibration laboratories TL: for testing laboratories).
- 2: Number provided by the laboratory for each testing/sampling report or calibration certificate.
- 3: Date of issue of test/sampling report; calibration certificate. (Last two digits of the month and year
Example: June 2017=06-17)

Beginning from the second page of the Testing Report, information of the accreditation number, testing report number and date of the performance of testing included on the NBE Mark can be given in free format.

6.2 NBE LABEL used on calibrated devices

NBE Label shall be put on all calibrated devices. Dimensions of the NBE Label are given in Figure 2.

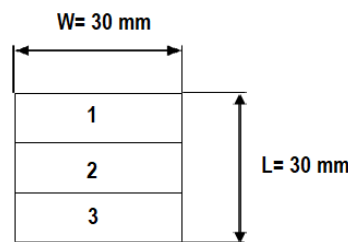


Figure 2: NBE LABEL

- 1: Accreditation number assigned for the laboratories accredited by NBE (NBE-CL-000).
- 2: Number provided by the laboratory for each calibration certificate.
- 3: Date of calibration. (Last two digits of the month and year when the calibration is performed.
Example: June 2017= 06-17)

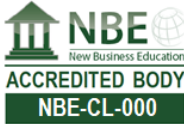
When required to be used on small devices, it can be used as W = 20 mm, L = 20 mm.

Color and font: Black letters on white ground with a clear font and readable font size.

Quality: NBE Label shall be made of proper material which meets the following qualifications:

- a) Label must not come off by itself from the surface it is attached to,
- b) Writing must not drip off, be erased or in any way become illegible,
- c) Label must not functionally limit the performance of the devices it is attached to.

Appendix 1: First Page of NBE Marked Calibration Certificate (Example)

<p>Laboratory logo (Shall not be smaller than NBE Logo see G-1-06)</p>	<p><i>The Name and Address of Accredited Laboratory</i></p> <p>CALIBRATION CERTIFICATE</p>	 <table border="1" style="margin-top: 10px; width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">NBE-CL-000</td> </tr> <tr> <td style="text-align: center;">000</td> </tr> <tr> <td style="text-align: center;">00-00</td> </tr> </table>	NBE-CL-000	000	00-00
NBE-CL-000					
000					
00-00					
<p><i>Customer / address</i></p> <p><i>Order No.</i></p> <p><i>Instrument/Device</i></p> <p><i>Manufacturer</i></p> <p><i>Type</i></p> <p><i>Serial Number</i></p> <p><i>Date of Calibration</i></p> <p><i>Number of pages of the Certificate</i></p> <p><i>This calibration certificate documents the traceability to national standards, which realize the unit of measurement according to the International System of Units (SI).</i></p> <p>[Name of Lab.] accredited by NBE under registration number [accreditation file no] for [Standard name and no] as Calibration Laboratory"</p> <p><i>The measurements, the uncertainties with confidence probability and calibration methods are given on the following pages which are part of this certificate.</i></p>					
<p><i>Seal</i></p>	<p><i>Date</i> <i>(Day/ Month/ Year)</i></p>	<p><i>Calibrated by</i></p>			
<p><i>Approval</i> <i>(Day/ Month/ Year)</i></p>					

*This certificate shall not be reproduced other than in full except with the permission of the laboratory.
Calibration certificates without signature are not valid.*

Appendix 2: Second Page of NBE Marked Calibration Certificate (Example)

(The Name of Accredited Laboratory)

Page 2 of total

(Entity of second and ongoing pages of NBE calibration certificate)

NBE-CL-000
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00-00

- *Instrument/Device*
- **Place*
- ***Date of receipt of Device*
- *Procedures*
- ****Sampling methods*
- *Measurement Conditions*
- *Environmental Conditions*
- *Measurement Results*
- *Measurement Uncertainty*
- ****Opinions and interpretations*

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

References and devices used during calibration:

*** Conformity with requirements or specifications:

*** Disclaimer:

*** Definition of Decision Rule:

*** Statement that the results are valid for the sample received:

Results obtained from the external supplier laboratory should be clearly marked.

Each page of the certificate must contain the NBE mark.

(*This part has to be add when calibration has been done on-site)

(** This part has to be add by calibration laboratories which gives service on established facilities.) (***) (***If applicable/when required)

Appendix 3: First Page of NBE Marked Test Report (Example)

<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Laboratory Logo</p> <p>(Shall not be smaller than NBE Logo see G-1-06)</p> </div>	<p style="text-align: center;"><i>The Name and Address of Accredited Laboratory</i></p> <p style="text-align: center;">TEST REPORT</p>	 <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">ACCREDITED BODY</td> </tr> <tr> <td style="text-align: center;">NBE-TL-000</td> </tr> <tr> <td style="text-align: center;">NBE-TL-000</td> </tr> <tr> <td style="text-align: center;">000</td> </tr> <tr> <td style="text-align: center;">00-00</td> </tr> </table>	ACCREDITED BODY	NBE-TL-000	NBE-TL-000	000	00-00
ACCREDITED BODY							
NBE-TL-000							
NBE-TL-000							
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<p><i>Customer name/address</i></p> <p><i>Order No.</i></p> <p><i>Name, identity and *condition of test item</i></p> <p><i>The date of receipt of test item</i></p> <p><i>Remarks</i></p> <p><i>Date of Test</i></p> <p><i>Number of pages of the Report</i></p> <p>[Name of Lab.] accredited by NBE under registration number [accreditation file no] for [Standard name and no] as test laboratory"</p> <p><i>The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.</i></p>							
Seal	Date (Day/ Month/ Year)	Person in charge of test Approval Date (Day/ Month/ Year)					
<p><i>This report shall not be reproduced other than in full except with the permission of the laboratory</i></p> <p><i>Testing reports without signature are not valid</i></p> <p>(*If applicable/when required)</p>							

Appendix 4: Second and Other Pages of NBE Marked Test Report (Example)

(The Name of Accredited Laboratory)

Page 2 of total

NBE-TL-000

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- Test method
- *Sampling methods
- Test results
- **Environmental conditions*
- **Measurement uncertainty*
- *Opinions and interpretations*

* Conformity with requirements or specifications:

* Disclaimer:

* Definition of Decision Rule:

* Statement that the results are valid for the sample received:

* additions to, deviations, or exclusions from the test method:

Results obtained from the external supplier laboratory should be clearly marked.

(*If applicable/when required)