



# IECEE OPERATIONAL DOCUMENT



IEC System of Conformity Assessment Schemes for Electrotechnical  
Equipment and Components (IECEE System)



International Laboratory Accreditation Cooperation

Common Understanding of ISO/IEC 17025



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Equipment and Components (IECEE System)**



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**Common Understanding of ISO/IEC 17025**

INTERNATIONAL  
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COMMISSION

PRICE CODE

**ZZ**

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## FOREWORD

### Document Owner

PAC

### History of changes

Date	Brief summary of changes
2016-06-01	JWG Common understanding 4.1 & 4.5.1 JWG-CU2 updated due to change from ACTL to SPTL.

Effective date	Target revision date
2016-06-01	2019-06-01

### Scope

Under the auspices of the IEC Conformity Assessment Board (CAB ) and the International Laboratory Accreditation Conference (ILAC) the JWG task is to collaborate in order to achieve a uniform and common understanding of key elements of ISO/IEC 17025.

### Original parties involved in the creation of this document

Participant	Representing	Affiliation
Pierre de Ruvo	Head of CAB delegation	Executive Secretary IECEE
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Chris Agius	CAB delegation	Secretary IECEX and IECQ
Joe Gryn	CAB delegation	IECEE CTL Chairman, Vice Chairman IECEX
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**CAB/ILAC JOINT WORKING GROUP “COMMON UNDERSTANDING OF  
ISO/IEC 17025”**

Extracted from ISO/IEC 17025	JWG Common Understanding
<p><b>5.4.6.2</b> Testing laboratories shall have and shall apply procedures for estimating uncertainty of measurement. In certain cases the nature of the test method may preclude rigorous, metrologically and statistically valid, calculation of uncertainty of measurement. In these cases the laboratory shall at least attempt to identify all the components of uncertainty and make a reasonable estimation, and shall ensure that the form of reporting of the result does not give a wrong impression of the uncertainty. Reasonable estimation shall be based on knowledge of the performance of the method and on the measurement scope and shall make use of, for example, previous experience and validation data.</p> <p>NOTE 1 The degree of rigor needed in an estimation of uncertainty of measurement depends on factors such as: the requirements of the test method; the requirements of the client; the existence of narrow limits on which decisions on conformance to a specification are based.</p> <p>NOTE 2 In those cases where a well-recognized test method specifies limits to the values of the major sources of uncertainty of measurement and specifies the form of presentation of calculated results, the laboratory is considered to have satisfied this clause by following the test method and reporting instructions (see 5.10).</p>	<p><b>5.4.6.2 JWG-CU 1</b> test laboratories must have a documented policy on the application of measurement uncertainties, and must be capable of estimating them.</p> <p><b>5.4.6.2 JWG-CU 2</b> test laboratories (designated laboratory staff) shall be able to demonstrate this capability of calculating measurement of uncertainty by providing examples of typical measurements carried out in that laboratory.</p> <p><b>5.4.6.2 JWG-CU 3</b> For purely qualitative tests estimation of measurement uncertainty is not required. E.g. breaking capacity test on Circuit Breakers.</p> <p><b>5.4.6.2 JWG-CU 4</b> Test laboratories are not required to recalculate uncertainties for each and every test carried out.</p>
<p><b>Test reports</b></p> <p><b>5.10.3.1</b> In addition to the requirements listed in 5.10.2, test reports shall, where necessary for the interpretation of the test results, include the following:</p> <p><b>f)</b> deviations from, additions to, or exclusions from the test method, and information on specific test conditions, such as environmental conditions;</p> <p><b>g)</b> where relevant, a statement of compliance/non-compliance with requirements and/or specifications;</p> <p><b>h)</b> where applicable, a statement on the estimated uncertainty of measurement; information on uncertainty is needed in test reports when it is relevant to the validity or application of the test results, when a client's instruction so requires, or when the uncertainty affects compliance to a specification limit;</p> <p><b>i)</b> where appropriate and needed,</p>	<p><b>5.10.3.1 JWG-CU 5</b> It is agreed that the wording “where necessary” in relation of measurement uncertainty is only related to the examples provided in requirement under c)</p> <p><b>5.10.3.1 JWG-CU 6</b> It is agreed that the wording under c) “or when the uncertainty affects compliance to a specification limit” is meant that an *estimate of measurement uncertainty shall be stated and reported in the Test Report.</p> <p>*This estimated value may be a typical value for that test.</p>

Extracted from ISO/IEC 17025	JWG Common Understanding
<p>opinions and interpretations (see 5.10.5);</p> <p><b>j)</b> additional information which may be required by specific methods, clients or groups of clients.</p>	
<p><b>Subcontracting of tests and calibrations</b></p> <p><b>4.5.1</b> When a laboratory subcontracts work whether because of unforeseen reasons (e.g. workload, need for further expertise or temporary incapacity) or on a continuing basis (e.g. through permanent subcontracting, agency or franchising arrangements), this work shall be placed with a competent subcontractor. A competent subcontractor is one that, for example, complies with this International Standard for the work in question.</p> <p><b>4.5.2</b> The laboratory shall advise the client of the arrangement in writing and, when appropriate, gain the approval of the client, preferably in writing.</p> <p><b>4.5.3</b> The laboratory is responsible to the client for the subcontractor's work, except in the case where the client or a regulatory authority specifies which subcontractor is to be used.</p> <p><b>4.5.4</b> The laboratory shall maintain a register of all subcontractors that it uses for tests and/or calibrations and a record of the evidence of compliance with this International Standard for the work in question.</p>	<p><b>4.5.1 JWG-CU 1</b></p> <p>It is noted that while ABs can provide accreditations for individual tests of a product standard and/or a test method, the IEC Schemes are assessing and Recognizing a Testing Laboratory only if the latter can demonstrate competence and possess all required testing and measuring equipment for that particular standard in full.</p> <p>For the operation of the IEC Schemes certain tests which are rarely performed, under certain conditions, may be subcontracted on a permanent basis according to the Rules of the IEC Schemes.</p> <p>For ABs assessments any test that is not included in the accreditation schedule is listed as being excluded from the accreditation scope.</p> <p><b>4.1 and 4.5.1 JWG-CU 2</b></p> <p>For ABs assessments laboratories that comprising for instance a <u>laboratory</u>, with facilities that are located (far) away from each other, accreditation can be provided as a single Laboratory's entity if:</p> <ul style="list-style-type: none"> <li>a) these facilities form one legal entity,</li> <li>b) the accreditation is for the total organisation,</li> <li>c) there is one management system covering the total organisation,</li> <li>d) one person takes technical responsibility for the final test report issued,</li> <li>e) there is adequate procedures in place to protect the integrity of the equipment under test,</li> <li>f) the sequence of testing detailed in the product test standard is not compromised.</li> </ul>

Extracted from ISO/IEC 17025	JWG Common Understanding
<p><b>4.12.2 Technical records</b></p> <p><b>4.12.2.1</b> The laboratory shall retain records of original observations, derived data and sufficient information to establish an audit trail, calibration records, staff records and a copy of each test report or calibration certificate issued, for a defined period. The records for each test or calibration shall contain sufficient information to facilitate, if possible, identification of factors affecting the uncertainty and to enable the test or calibration to be repeated under conditions as close as possible to the original. The records shall include the identity of personnel responsible for the sampling, performance of each test and/or calibration and checking of results.</p> <p>NOTE 1 In certain fields it may be impossible or impractical to retain records of all original observations.</p> <p>NOTE 2 Technical records are accumulations of data (see 5.4.7) and information which result from carrying out tests and/or calibrations and which indicate whether specified quality or process parameters are achieved. They may include forms, contracts, work sheets, work books, check sheets, work notes, control graphs, external and internal test reports and calibration certificates, clients' notes, papers and feedback.</p> <p><b>4.12.2.2</b> Observations, data and calculations shall be recorded at the time they are made and shall be identifiable to the specific task.</p>	<p><b>4.12.2.1 JWG-CU 1</b></p> <p>It was noted that while ABs do require retention of records in line with the Laboratory's procedure the IEC Schemes requires retention of records following the period of validity of the relevant certificate.</p>
<p><b>4.12.2.3</b></p> <p>When mistakes occur in records, each mistake shall be crossed out, not erased, made illegible or deleted, and the correct value entered alongside.</p> <p>All such alterations to records shall be signed or initialled by the person making the correction.</p> <p>In the case of records stored electronically, equivalent measures shall be taken to avoid loss or change of original data.</p>	<p>Note: The requirement is self explanatory however it was agreed to re-discuss its content at the next meeting</p>

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