

MEMBER/STAKEHOLDER FEEDBACK ON DRAFT DOCUMENTS AND NATA REVIEW



Document name:	Specific Accreditation Criteria: ISO/IEC 17025 Application Document, Calibration - Appendix
-----------------------	---

Reference to document page number, paragraph, line	Comment (justification for change)	Proposed change	Review (NATA USE ONLY)
Section 7.7.2 Selecting PT programs and reporting results Page 11	In the first paragraph under this heading, "The facility's best capability as described in its scope of accreditation (CMC) or proposed scope is to be tested." Then further down in the terms of the equation " U_{LAB} is the participating facility's best uncertainty". Do these two "best" descriptors mean the same thing? Labs that inflate their uncertainty to their CMC level may hide systemic faults.	To encourage labs to get the greatest value from their PT, change the U_{LAB} term. Proposal: " U_{LAB} is the participating facility's evaluated uncertainty (may be less than the accredited (CMC))". Alternatively (to ensure that labs are assessed equivalently), if the intent is to simply test at the proposed CMC: " U_{LAB} is the participating facility's best uncertainty (as per the existing or proposed CMC)".	Proposed change accepted. The document has been amended accordingly.
Section 7.7.2 Final note Page 11	From the statistical definition of E_n , the critical issue is that the reference uncertainty (U_{REF}) should be sufficiently small compared with the participants' uncertainties (U_{LAB}) to provide discriminatory power. If U_{REF} is large, E_n values tend to fall below unity regardless of true performance, reducing the sensitivity of the PT exercise. However, it is not strictly necessary that $U_{REF} \leq U_{LAB}$ for all participants in every case. In multi-laboratory comparisons, which is generally the case for us, the reference value	For E_n ratios to be useful as a PT activity, it is necessary that $U_{REF} \leq U_{LAB}$ if only two laboratories are being compared.	Thank you for the feedback. This will be tabled at the next AAC meeting for consideration. No change has been made to the document at this stage.

MEMBER/STAKEHOLDER FEEDBACK ON DRAFT DOCUMENTS AND NATA REVIEW



	<p>may be derived from consensus data with small uncertainty, and some participants may legitimately report uncertainties smaller than the reference.</p> <p>In such situations, E_n ratios remain meaningful as long as the reference uncertainty does not dominate the denominator.</p> <p>Our reporting includes a visual representation of laboratory results that clearly flags outliers in multi-laboratory PT rounds (4+ laboratories).</p>		
<p>Section 7.8.4.1</p> <p>Page 12</p>	<p>“For transducer calibration (pressure, force, acceleration, etc.), when reporting results in terms of electrical quantities, the uncertainty evaluation shall include contributions attributed to the reference electrical meter and any reported curve fitting algorithm. To assist the end user, the reported uncertainty may be stated in both the accredited measurand, e.g. pressure, dimension and the electrical value.”</p> <p>This paragraph informs that in the case of a transducer, both “the accredited measurand, e.g., pressure, dimension” and “electrical value” may be used to state the uncertainty. It is ambiguous as to whether the uncertainty must be reported in the units of the accredited measurand, with the option of additionally reporting an equivalent electrical unit uncertainty, OR either; accredited measurand, or equivalent electrical unit could be reported without the other.</p>	<p>Option 1.</p> <p>For transducer calibration (pressure, force, acceleration, etc.), when reporting results in terms of electrical quantities, the uncertainty evaluation shall include contributions attributed to the reference electrical meter and any reported curve fitting algorithm. The uncertainty must be stated in the accredited measurand. To assist the end user, the reported uncertainty may additionally be stated in an equivalent electrical value.</p> <p>Option 2.</p> <p>For transducer calibration (pressure, force, acceleration, etc.), when reporting results in terms of electrical quantities, the uncertainty evaluation shall include contributions attributed to the reference electrical meter and any reported curve fitting algorithm. To assist the end user, the reported uncertainty may be</p>	<p>Thank you for the feedback.</p> <p>As this section was not changed from the previous version of the document, this will be tabled at the next AAC meeting for consideration. No change has been made to the document at this stage.</p>

MEMBER/STAKEHOLDER FEEDBACK ON DRAFT DOCUMENTS AND NATA REVIEW



		<p>stated in either or both the accredited measurand, e.g. pressure, dimension and the electrical value.</p> <p>My preference is option 1.</p>	
<p>Section 7.8.4.1</p> <p>Page 12</p>	<p>“To aid in clarity of expression of uncertainty in calibration certificates when percentage is applied, it should be expressed as % of full scale or % of reading or % of property.”</p> <p>I have encountered a lack of clarity with some vacuum gauge calibration certificates where the term “% of reading” has been used. Laboratories may label the tabulated results column as “Instrument Reading” or the like. When a tolerance or uncertainty is expressed in % of reading, and the instrument has a large-scale error (some vacuum gauges exhibit a factor 3 between true pressure and reading), the meaning of the value is unclear – open to misinterpretation.</p>	<p>To aid in clarity of expression of uncertainty in calibration certificates when percentage is applied, it should be expressed as % of full scale or % of corrected-reading or % of property. Note % of reading is discouraged as it may be ambiguous where large instrument errors occur.</p>	<p>Thank you for the feedback.</p> <p>As this section was not changed from the previous version of the document, this will be tabled at the next AAC meeting for consideration. No change has been made to the document at this stage.</p>