

RESPONSE FORM

Standardization needs and suggestions to EURAMET for consideration in their 2017 EMPIR call

In the frame of the between CEN, CENELEC and EURAMET, CEN and CENELEC have been invited by the EURAMET Management to put forward their testing and measurement needs in **Industry**, in **Fundamental** and in **Pre- and co-normative research**.

Relevant technical groups (sector fora, advisory boards, coordination groups, TCs...) are invited to contribute with:

- a short introduction or an overview paper of their unaddressed standardization needs for testing and measurement, and
- a contact person (secretary, chair, convenor, liaison officer, etc.) whom proposers for the Potential Research Topics can contact,

using the table below, **before 12 December 2016**

Source of the identified need (identification of TC, WG, etc, incl. title)	<input checked="" type="checkbox"/> CEN/TC 138/WG 02 and 03 <input type="checkbox"/> CLC/TC 000/WG 000 <input type="checkbox"/> ISO/TC 000/SC 000 / WG 000 <input type="checkbox"/> IEC/TC 000/SC 000 / WG 000 <input type="checkbox"/> Other, namely <i>Identification, Title</i>
European entity responsible for submission of the need	<i>CEN/TC 138</i> <i>Measurement uncertainty at eddy current and ultrasonic testing</i>
Person that can be contacted for more detail (name, e-mail and telephone number)	<i>István Skopál</i> <i>skopal.i@marovisz.hu</i> <i>+36 30 9023710</i> <i>Hungary</i>
Unaddressed need (short description)	<i>Measurement uncertainty at eddy current and ultrasonic testing</i> <i>Scope:</i> Determining and reporting the uncertainties of measurement results have been normative requirements also for NDT laboratories more than a decade (see EN ISO/IEC 17025). Neither NDT operators nor NDT experts are, however, familiar with metrology, thinking from a metrological aspect is missing in the field of NDT almost generally. Thus, it would be a great support for the NDT labs if the right procedures for determining measurements uncertainties would be standardised, at least for ET and UT. To this end an extensive preliminary work with cooperation of metrological and NDT experts is needed, of course. It is important to emphasize that not only conventional measurements (conductivity or wall thickness measurement, e.g.) but also measurements of discontinuity dimensions shall be concerned.
Type of work (more answers possible)	<input checked="" type="checkbox"/> pre-normative <input type="checkbox"/> SI-units <input type="checkbox"/> co-normative <input type="checkbox"/> interlaboratory study <input checked="" type="checkbox"/> testing <input type="checkbox"/> fundamental research

	<input checked="" type="checkbox"/> measurement <input type="checkbox"/> market support <input type="checkbox"/> energy <input type="checkbox"/> environment
Estimated effort (if known)	Person months:
Further explanation of need (TC business plan, road map, formal decision, work item, etc.)	<p>Due to the development of fracture mechanics, residual life-times can now be estimated with increased reliability also for critical plant components, which contain discontinuities. That is, more reliable acceptance criteria can be determined for various discontinuities present in these components. The results of such calculations depend on the type, extension and position of the discontinuity, on the stresses and their changes, the given component should bear during plant operation. As a straightforward consequence of the aforesaid tendency, the demand on determining flaw parameters by appropriate NDT techniques, as precisely as possible, and on reporting the uncertainties of these parameters, too, increases continuously.</p> <p><i>Estimated time frame: 2017-2018</i></p>
Enclosures	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Email address for sending the Response Form:

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