

## RESEARCH AND STANDARDISATION

### RESPONSE FORM for Standardisation groups

### To contribute to *EMPIR - the European Metrology Programme for Innovation and Research* \*

**Objective: to collect standardization needs and suggestions to develop research projects in testing and measurements for the upcoming EMPIR calls (2019 and 2020)**

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 research** for consideration by metrology institutes for future calls under EMPIR.

**Relevant technical groups** (sector fora, advisory boards, coordination groups, TCs, WGs...) **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,

by using this Response Form and send it at :

STAIR EMPIR secretariat, Mr Ortwin Costenoble: [empir@nen.nl](mailto:empir@nen.nl)

Deadline for the consultation: **14 December 2018**.

*Proof of need by the TC/SC is highly recommended for a successful submission.*

<p><b>Source of the identified need</b> (identification of TC, WG, etc, incl. title)</p>	<p><input type="checkbox"/> CEN/TC 0/WG 0</p> <p><input checked="" type="checkbox"/> CLC/TC 210</p> <p><input type="checkbox"/> ISO/TC 0/SC 0 / WG 0</p> <p><input checked="" type="checkbox"/> IEC/TC 77/SC 77B/JTF REV, Joint Task Force CISPR/A/SC 77B on Reverberation chambers</p> <p><input checked="" type="checkbox"/> CISPR/A, Radio-interference measurements and statistical methods</p> <p><input checked="" type="checkbox"/> CISPR/H, Limits for the protection of radio services</p> <p><input checked="" type="checkbox"/> CISPR/I, Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers</p>
<p><b>European entity</b> responsible for submission of the need</p>	<p>CEN/CLC TC 210, Italian National Standardization Organizaton CEI (Comitato Elettrotecnico Italiano) CT 210 "EMC"</p>
<p><b>Person that can be contacted for more detail</b></p>	<p>Beniamino Gorini (Nokia, chair CISPR/A and chair CEI CT210) <a href="mailto:beniamino.gorini@nokia.com">beniamino.gorini@nokia.com</a> Phone number: +393355791514 Italy</p> <p>Carlo Carobbi (University of Florence, member IEC TC 77/SC 77B/MT 12 and chair CEI SC 210/77 B) <a href="mailto:carlo.carobbi@unifi.it">carlo.carobbi@unifi.it</a></p>

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<p><b>Unaddressed need</b> (short description)</p>	<p><u><i>Title</i></u> <i>Traceable disturbance emission measurements in reverberation chamber for conformity assessment purposes.</i></p> <p><u><i>Scope</i></u> <i>Investigating the feasibility of the reverberation chamber as a test site for traceable disturbance emission measurements. Determining the emission limits that apply to the reverberation chamber on the basis of those that presently apply to the open area test site.</i></p>
<p><b>Further explanation of need</b> (TC business plan, road map, formal decision, work item, etc.)</p>	<p><i>In 2014-09-19 CISPR/A issued the document for information CISPR/A/1092/INF concerning the status of the project for the use of reverberation chambers for radiated emission measurements in CISPR JTF A-H. In CISPR/A/1092/INF it is stated that “the project for the use of reverberation chambers for radiated emission measurements is late due to funding problems.”</i></p> <p><i>In 2016-09-09 CISPR/A issued the document for comments CISPR/A/1184/DC. In CISPR/A/1184/DC it is recalled that a Joint Task Force between CISPR/A and CISPR/H (JTF A/H) was set up with 6 members. The plan in JTF A/H was to determine conversion factors between disturbance power measurements in reverberation chambers and maximum field-strength measurements in open area test site of various sizes of artificial EUTs. This plan was abandoned due to funding problems. The purpose of the document CISPR/A/1184/DC was to ask National Committees if they supported a theoretical determination of the conversion factors based on already published scientific literature and if they could make available experimental data for the same purpose.</i></p> <p><i>In 2016-12-16 CISPR/A issued the informative document CISPR/A/1205/INF containing the results of CISPR/A/1184/DC. The majority of IEC members supported the proposal of determining radiated power limits for reverberation chamber but no measurement results were provided to confirm theoretical predictions.</i></p> <p><i>In summary there is evidence of interest from the IEC member National Committees in the use of the reverberation chamber for radiated disturbance emission measurements. However in absence of metrological and financial support no significant progress in the standardization of this test environment is expected. It is also evident from the time span of the CISPR/A documents referred above that the topic, although important, is not urgent and therefore compatible with the timing of the EMPIR process.</i></p> <p><i>The work under this project will be provided to CISPR/A to amend the publication CISPR 16-4-5 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4-5: Uncertainties, statistics and limit modelling – Conditions for the use of alternative test</i></p>

	<i>methods</i>
<b>Enclosures</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>CISPR/A/1092/INF</i> <i>CISPR/A/1184/DC</i> <i>CISPR/A/1205/INF</i>

\*See more information at [EMPIR website](#)  
[CEN/CENELEC website](#) "Standards and metrology"