EUROPEAN ACCREDITATION

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Procedure for Regional Calibration ILCs in Support of the EA MLA

PURPOSE

This document describes the implementation of the EA policy for interlaboratory comparisons (ILCs) at the regional level in order to support the EA MLA in calibration. Furthermore, it describes how regional ILCs shall be undertaken for the purposes described in 3.1.

Authorship
This document has been written by the EA LC wg ILC cal.

Official language
The publication may be translated into other languages as required. The English language version remains the definite version.

Further information
For further information about this publication, contact your national member of EA or the Chairman of the EA MLA Committee. Please check our website for up-to-date information at http://www.european-accreditation.org.

Category: Members' Procedural Documents

EA-2/14 is a mandatory document

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1. INTRODUCTION

The accreditation standard ISO/IEC 17025, “General requirements for the competence of testing and calibration laboratories” requires laboratories to have quality control procedures for monitoring the validity of tests and calibrations they undertake. One important tool in this respect is the participation in interlaboratory comparisons/proficiency testing at the national level as part of the assessment process. The document EA-2/10 states the current “EA policy for participation in National and International Proficiency Testing activities (PT activities)”.

2. NATIONAL ILCs

The EA policy for participation of accredited calibrations laboratories in national Interlaboratory Comparisons is stated in EA-2/10 and is therefore not covered by this document.

3. REGIONAL ILCs

3.1. EA will initiate regional ILCs for calibration laboratories for the following purposes**:**

- To support the EA MLA in calibration.
- To investigate EA concerns, e.g. in case the EA suspects that one or more national Accreditation Bodies or a group of laboratories has a problem in a specific field of calibration.
- To cover the need for ILCs for parameters that cannot be covered by the national ILC schemes, if deemed necessary.

3.2. The EA wishes to make the best use of the existing infrastructure and support its future development by taking advantage of ILCs organised by members of Euramet, accredited providers or other competent providers in the market of ILCs. Proposals for regional ILCs by any of the parties mentioned above as well as national Accreditation Bodies can at any time be sent to the EA LC wg ILC cal (see www.european-accreditation.org) for consideration. The schematic procedure is shown as a flowchart in Annex 5. The timescale set by the provider should ensure that the period of time from measurement start until the report is issued does not exceed one year. Otherwise the ILC should be split in several loops reported separately.

Proposals should contain the following information:

- Name of organisation behind the proposal
- Reference laboratory
- Contact person with contact details
- Objective of the ILC
- Justification for the ILC (the reasons why EA should initiate the ILC)
- Quantity to be measured (incl. indication of measurement uncertainty for the reference values)
- Device(s) to be circulated
- The resolution and stability of the device(s)*
- Prescribed measurement points or ranges*
- Type of ILC (star or loop, no. of loops)*
- Estimated number of participants *
- Measurement instructions
- Reporting from the participating laboratories (formats, calibration certificate, language, etc.)
- Methods of transport
- Proposed start date(s)*
- Proposed end date(s)*
- Expected date for final report(s)*
- Estimated cost (total and per participant)
- Proposed provider(s)
- Additional remarks
- Name of the contact person in the EA LC wg ILC cal (to be filled in by the wg if not specified by the body submitting the proposal).

*To be specified if possible.

3.3. Proposals for ILCs in calibration (calibration fields are given in annex 2) shall be examined by the EA LC wg ILC cal against the criteria given in 3.1. Where the EA LC wg ILC cal does not have the necessary expertise to evaluate the proposal then Euramet shall be consulted. The evaluation of the proposals, together with a recommendation for their initiation, shall be forwarded to the EA LC.

3.4. The EA LC will authorise which ILCs shall be initiated as regional ILCs and by which provider in order to support the EA MLA in calibration.

3.5. When an ILC has been authorised, the EA LC wg ILC cal shall assign an identification number to the ILC.

3.6. The number of regional ILCs initiated in any one year shall not exceed six and they shall normally cover different fields of calibration. In the event that insufficient proposals are made or recommended, ILCs shall be selected from a reserve list held and maintained by the EA LC wg ILC cal.

3.7. EA LC wg ILC cal shall provide information about the ILCs to be performed in any one year together with estimated costs for planning and budgeting to the National Accreditation Bodies.

4. PLANNING, PREPARATION AND IMPLEMENTATION OF ILCs INITIATED BY EA

4.1. Participating laboratories shall normally be accredited or applicants seeking accreditation for the particular measurement to be performed.

4.2. The EA LC wg ILC cal will recommend to the EA LC the maximum duration of each ILC and the extent of participation. Participation in regional ILCs is mandatory unless there are strong reasons why accredited laboratories in a particular country should not participate (e. g. special situation in smaller countries). Laboratories from other regions or other organisations may, if agreed by the EA LC, also be invited to participate in the regional ILCs.

4.3. Each national Accreditation Body is responsible for informing the provider of the number of laboratories that are accredited for the measurements covered by the ILC and which of these laboratories will participate.
If the number of laboratories is in the range 1 to 5 then at least 1 shall participate.
If the number of laboratories is in the range 6 to 10 then at least 2 shall participate.
If the number of laboratories is greater than 10 then at least 3 shall participate.
Normally the number of laboratories from one country will not exceed 3. However, an additional number of participants can be agreed between the provider and the National Accreditation Body provided the deadlines for the ILC are met. The National Accreditation bodies shall, as far as possible, rotate the laboratories nominated to participate in regional ILCs.

4.4. Participating laboratories must adhere to the instructions and timescale set by the provider of the EA regional ILC. Unless otherwise stated in the measurement instructions, the measurement results shall be reported in English, in their normal certificate/report format. The measurement uncertainties shall be calculated and stated according to the guidelines given in EA-4/02.

4.5. The execution of the ILC shall be conducted in accordance with the relevant requirements of ISO/IEC Guide 43 and ILAC-G13. The provider will be responsible for recovering the costs of the ILCs directly from the participating laboratories or the National Accreditation Body, depending on the situation in the different countries.

4.6. Preliminary E_n-values shall be made available to the national Accreditation Bodies and the participating laboratories by the provider.

4.7. Where a laboratory obtains results that are considered to be outside of the acceptable range ($|E_n| > 1$), it is the responsibility of the National Accreditation Body to assess the corrective actions taken by the laboratory (ensuring a root cause analysis is undertaken).

4.8. The provider of the ILC will compile the results together with general comments on the outcome of the ILC in a report. In the report, the ID of the participating laboratories will be coded so that it is not possible to identify the name of the laboratories or the National Accreditation Bodies. The identification of an individual laboratory will be made available only to the participating laboratory and their Accreditation Body.
A copy of the report will be sent by the provider to each participating laboratory, the Accreditation Bodies and the EA LC wg ILC cal.

4.9. Sub-groups shall be established by the EA LC wg ILC cal to review the ILCs in relation to the effectiveness of the MLA. The members of the sub-groups are members of the EA LC wg ILC cal and can be supported by external experts if considered necessary. The sub-group will review the final report and any other relevant documentation/ information and report to the EA LC wg ILC cal utilising the template found in Annex 1. The sub-group may ask individual national Accreditation Bodies for further information.

4.10. The EA LC wg ILC cal shall discuss the report of the sub-groups and evaluate whether the corrective actions taken by the National Accreditation Bodies are appropriate and satisfactorily close out the problem. Whenever relevant, the conclusions drawn shall be forwarded to the EA MAC. A copy of the final report and a recommendation regarding the overall outcome of the ILC will be forwarded to the EA LC. The EA LC officially closes the ILC.

4.11. The provider of the ILC must adhere to the confidentiality requirements of ISO Guide 43 and ILAC–G13 and in particular with regard to the specific identification of the participating laboratories.

4.12. Records of regional ILCs for calibration laboratories such as final reports from ILCs and reviews are kept and maintained by the EA secretariat for further reference**.**

ANNEX A ILC REPORT REVIEW FORM Review performed by: (fill in the names)

ILC code:	
Title:	
Objective of the ILC:	
Instrument/ device used:	
Name of Provider:	
Total time of execution (months):	
Number of participating laboratories:	
Number of participating accreditation bodies:	
Percentage of measurements with $E_n > 1$:	
Description of any problems related to the device which was circulated:	
Description of any problems related to the reference values:	
Description of any problems related to reporting from participants:	
Particular concerns (individual participants or countries, specific quantities/measurement points/ranges):	
Need for follow-up activities:	
General conclusions/ learning points:	

Please list below the participants that are required to take improvement action and indicate in the right hand column when evidence of satisfactory action has been received.

Code of the Participants	Name of the Accreditation Body Concerned	Closed Date

ANNEX B FIELDS OF CALIBRATION

Accelerometry, velocity and displacement
Acoustics and ultrasonics
Chemical (pH, gas mixture analysis,…)
Density and viscosity
Dimensional
Electricity DC and LF
Electricity HF
Flow (incl. velocity of fluid)
Force and torque
Hardness
Humidity
Ionising radiation
Magnetism
Mass
Optical
Pressure and vacuum
Reference materials
Temperature
Time and frequency
Volume
Other

ANNEX C ACRONYMS

EA	European co-operation for Accreditation
ILAC	International Laboratory Accreditation Cooperation
EA LC	EA's laboratory committee
ISO	International Organization for Standardization
MLA	Multi-lateral agreement
wgILCcal	Working group for ILCs in calibration

ANNEX D REFERENCES

Document ID	**Title**
ISO/IEC Guide 43	Proficiency testing by interlaboratory comparisons – Part 1: Development and operation of proficiency testing schemes Part 2: Selection and use of proficiency testing schemes by laboratory accreditation bodies
ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories
EA-2/10	EA Policy for Participation in National and International Proficiency Testing Activities
EA-4/02	Expression of the uncertainty of measurement in calibration
Euromet Guide No.3	Euromet Guidelines on Conducting Comparisons
ILAC-P9	ILAC Policy for Participation in National and International Proficiency Testing Activities
ILAC-G13	Guidelines for the Requirements for the Competence of Providers of Proficiency Testing Schemes

ANNEX E FLOWCHART OF REGIONAL ILCs FOR CALIBRATION