

The Application Form of Calibration Laboratories ILAS-F-025-1

Applying organisation name	:	_____
Registration number (if applicable)	:	_____
Established in (place)	:	_____
Date of application	:	_____
Applicant name	:	_____

General information

This form is to be used in ILASe of:

- New applications for accreditation (ILAS-F-001),
- Applications for scope extension(s) with an activity or a location (ILAS-F100).

With each part of this form there is a distinction between demands that are made on a new organisation and an extending organisation.

1 Specification of the activities

Accreditation is sought for the following electrical quantities:

HCS code (1)	Measuring quantity, Measuring range (2)	Frequency (3)	CMC (4)	Remarks (5)

Accreditation is sought for the following non-electrical quantities:

HCS code (1)	Measuring quantity, Instrument, Measure (2)	Measuring range (3)	CMC (4)	Remarks (5)

EXPLANATION

In column 1 enter the code given in Appendix 1 for the activity concerned.

In column 2 for electrical quantities specify the quantity to be calibrated and the measuring range and for non-electrical quantities the quantity to be calibrated with the instrument and the measure.

In column 3 specify the frequency for electrical quantities and the measuring range for non-electrical quantities.

In column 4 enter the *Calibration and Measurement Capability* (CMC): demonstrated uncertainty of measurement, with coverage probability of 95%, at a given measuring point or in a given measuring range. The uncertainty of measurement, U, is calculated in accordance with

EA-4/02 “Expression of the Uncertainty of Measurement in Calibration” (see the web site of the European cooperation for Accreditation www.european-accreditation.org or www.ilac.org).

In column 5 state whether the calibration is (also) carried out on location (outside your own laboratory) or give additional information or provisions.

2 Documents to be submitted with the application

Documents can be offered on paper or digitally. In the last ILASe a clear contents list and a direction of use must be offered.

With this application the following documents must be submitted:

Documents to be submitted	New application for accreditation	Extension of the existing accreditation	
		Within quantity ¹⁾	Outside quantity ¹⁾
Proof of registration at the Chambers of Commerce (not older than 6 months); <i>(an official written statement about the identity of a company and (registered) representatives)</i>	√		
An organisation scheme and description of your organisation structure;	√		
Quality handbook and general management system procedures;	√		
The technical implementing rules for all the calibration quantities applied for	√	√	√
Validation reports for all the calibration quantities applied for;	√	√	√
Report internal audit;	√	√	√
Uncertainty measurement(s) conforming to EA-4/02 or ILAC P14:12 for all the calibration quantities applied for	√	√	√
A statement of the inter-laboratory comparison tests in which your laboratory has taken part (see ;	√	√	√
General procedures that have been developed or modified (and not included in handbook);	√	√ ²⁾	√ ²⁾
A cross reference between the requirements of ISO/IEC 17025 and your quality system according to the model in Appendix 2, if modified;	√	√ ²⁾	√ ²⁾
Modified chapter 1 of the report part A for this accreditation;			√
An example of a calibration report and calibration certificate to be issued;	√	√	√
Management review	√		√ ³⁾

¹⁾ See annex 1 of ILAS-R-001 ‘Police rule for the field of Activities’ for quantities.

²⁾ if applicable for this new activity

³⁾ for this new activity

APPENDIX 1: Coding of quantities according to the Harmonized Classification System

Coding			Description of quantity	
LF	0	0	DC/LF electricity	
LF	1	0		Direct voltage
LF	1	1		DV
LF	1	2		DV ratio
LF	1	3		Direct high voltage
LF	2	0		Direct current
LF	2	1		DC
LF	2	2		DC ratio
LF	2	3		Direct high current
LF	3	0		Alternating voltage
LF	3	1		AV
LF	3	2		AV ratio
LF	3	4		AV/DV transfer
LF	3	3		Alternating high voltage
LF	4	0		Alternating current
LF	4	1		AC
LF	4	2		AC ratio
LF	4	4		AC/DC transfer
LF	4	3		Alternating high current
LF	5	0		Power and energy
LF	5	1		Power factor/cos(θ)
LF	6	0		Impedance (DC/LF)
LF	6	1		Resistance
LF	6	2		DC resistance
LF	6	3		AC resistance
LF	6	4		Capacitance
LF	6	5		LF Capacitance
LF	6	6		RF Capacitance
LF	6	7		Inductance
LF	6	8		Dissipation factor
RF	0	0	High frequency electricity	
RF	1	0		High frequency voltage / CW Flatness
RF	2	0		Impedance
RF	2	1		(reflection factor)
RF	2	2		Attenuation
RF	3	0		High frequency power
RF	4	0		Noise
RF	5	0		Electrical/magnetic field quantities /EMC
MQ	0	0	Magnetic quantities	
MQ	1	0		Magnetic flux density
MQ	2	0		Magnetic material properties
TF	0	0	Time and frequency	
TF	1	0		Absolute time
TF	1	1		UTC time
TF	2	0		Relative time
TF	2	1		Frequency
TF	2	2		Time interval
TF	2	3		Phase angle
TF	2	4		Rise time
TF	3	0		Time interval and amplitude
TF	3	1		Modulation (FM/AM)
TF	3	2		Harmonic distortion
DM	0	0	Dimensional quantities	
DM	0	1		Length
DM	1	0		Length gauges

Coding			Description of quantity	
DM	2	0		Line scales, distances
DM	3	0		Length measuring instrument
DM	4	0		Diameter
DM	5	0		Form error
DM	6	0		Roughness
DM	7	0		Thread quantities
DM	8	0		Coordinate measuring machines
DM	8	1		Machine tools, work pieces
DM	9	0		Angle
DM	10	0		Angle gauges
DM	11	0		Index tables
DM	12	0		Clinometers
FQ	0	0	Force	
MW	1	0		Mass
MW	1	1		Mass (mass and density of mass std)
MW	1	2		Weighing instruments
PV	0	0	Pressure and vacuum	
PV	1	0		Gas pressure
PV	1	1		Absolute pressure over atmospheric pressure
PV	1	2		
PV	2	0		Liquid pressure
PV	2	1		Absolute pressure over atmospheric pressure
PV	2	2		
PV	3	0		Vacuum quantities
PV	3	1		under atmospheric pressure
TQ	0	0	Torque	
AC	0	0	Acoustical quantities	
AC	1	0		Acoustical pressure
AC	2	0		Transducers (electrical quantities)
AM	0	0	Accelerometry	
US	0	0	Ultrasonics	
DV	1	0		Density and viscosity
DV	1	1		Mass, volume and density of gases and liquids
FG	1	0		Flow of gas
FG	1	1		Gas flow rate
FG	1	2		Flow transducers
FL	1	0		Flow of liquids
FL	1	1		Liquid flow rate
FL	1	2		Flow transducers
VG	1	0		Volume of flowing gases
VG	1	1		Velocity of gases
VL	1	0		Volume of flowing liquids
OQ	1	0		Optical quantities
OQ	1	1		Radiometric properties
OQ	1	2		Photometric quantities
OQ	1	3		Optical system properties
OQ	1	4		Luminous flux
OQ	1	5		(Old: output light source)
OQ	1	6		Optical power
OQ	1	6		Glass fibres
IR	1	0		Ionising radiation and radioactivity
IR	1	1		Radiometric quantities
IR	1	2		Dosimetric quantities
IR	1	3		Radioprotection quantities
IR	1	4		Activity of radioactive sources

Coding			Description of quantity
TE	0	0	Temperature
TE	1	0	Resistance thermometers
TE	1	1	
TE	1	2	
TE	1	3	
TE	1	4	
TE	2	0	
TE	2	1	
TE	2	2	
TE	3	0	
TE	3	1	
TE	3	2	Thermocouples
TE	3	3	
TE	4	0	
TE	4	1	Self-indicating thermometers
TE	4	2	
TE	4	3	Radiation thermometry
TE	5	0	
TE	5	1	
TE	6	2	
TE	7	0	Radiation sources
TE	7	1	
TE	7	2	
TE	7	3	Thermophysical properties
TE	8	0	
TE	8	1	
TE	8	2	
TE	8	3	
TE	8	4	
TE	9	0	
TE	9	1	Simulators/indicators
TE	9	2	
TE	10	0	Contact thermometry fixed points for realising ITS-90
TE	10	1	
TE	10	2	Radiation thermometer items for realising ITS-90
TE	11	0	
TE	11	1	
TE	11	2	Primary fixed-point cells Complete apparatus realising fixed points
TE	11	3	
TE	11	3	Primary fixed-point cells Complete apparatus realising fixed points Standard radiation thermometers

Coding			Description of quantity	
TE	11	4		Absolute radiation thermometers // thermodynamic measurements
TE	12	0		Temperature-controlled chambers
TE	13	0		Other temperature enclosures
TE	13	1		Dry block calibrators
TE	13	2		Thermostat baths and ovens
TE	13	3		Secondary fixed-point cells and apparatus, for contact thermometry
TE	13	4		Fixed-point materials for melting point measurements
TE	14	0		Bridge linearity
TE	15	0		Cold junction compensation
TE	15	1		Compensation wires for reference junction
TE	15	2		Reference junction compensators
RH	0	0	Humidity	
RH	1	0		Hygrometers
RH	1	1		
RH	1	2		Dew/frost-point hygrometer
RH	1	3		Psychrometers
RH	1	4		Relative humidity sensors
RH	2	0		Other hygrometers
RH	3	0		Other instruments for humidity
RH	3	1		Generators for humidity
RH	3	2		
RH	3	3		Dew/frost-point generators
RH	3	4		Relative humidity generators
RH	3	5		Flow mixing generators
RH	3	6		Permeation tube/diffusion tube
RH	4	0		Salt solution (saturated/unsaturated)
RH	4	0		Reference gases
CH	0	0		Chemical analysis
CH	0	1		
CH	1	0	Analytical instruments/monitors	
CH	2	0	pH measuring equipment	
CH	3	0	Hardness (of water)	
CH	3	1	Olfactometry (odour)	
CH	4	0	Dilution instruments	
RM	0	0	Reference materials	
RM	1	0		Calorific value/ Wobbe index
RM	2	0		Amount of substance
RM	3	0		Gas mixtures
RM	3	0		Hardness

APPENDIX 2: Model cross reference list ISO/IEC 17025:2005

Criterion	Body's documents (code and date)
4	Management requirements
4.1	Organisation
4.1.1	Legal entity
4.1.2	Responsibility of the laboratory
4.1.3	Scope of the management system
4.1.4	Identification of potential conflicts of interest
4.1.5	General requirements
a	Availability of managerial and technical personnel
b	Undue pressure
c	Confidentiality
d	Undue activities
e	Organisation and management structure
f	Responsibilities and authorisation
g	Supervision
h	Technical management
i	Quality manager
j	Deputies
k	Awareness of personnel
4.1.6	Communication by (top) management
4.2	Quality system
4.2.1	Setup, documentation, implementation, availability and maintenance
4.2.2	Policies and objectives
4.2.3/4	Commitment of top management
4.2.5	Documentation structure
4.2.6	Roles and responsibilities of technical management and quality manager
4.2.7	Ensure integrity of management system upon changes
4.3	Document control
4.4	Review of requests, tenders and contracts
4.5	Subcontracting of tests and/or calibrations
4.6	Purchasing services and supplies
4.7	Service to the customer / customer satisfaction
4.8	Complaints
4.9	Control of nonconforming testing and/or calibrations
4.10	Improvement (continual)
4.11	Corrective action
4.12	Preventive action (pro-active)
4.13	Control of records
4.14	Internal audits

Criterion	Body's documents (code and date)
4.15 Management reviews	
5 Technical requirements	
5.2 Personnel	
5.2.1 Qualification of personnel	
5.2.2 Education and training	
5.2.3 Personnel in permanent employment; supervision of temporary personnel	
5.2.4 Job descriptions	
5.2.5 Specific tasks	
5.3 Accommodation and environmental conditions	
5.4 Test methods and method validation	
5.4.1-4 General, selection and method development	
5.4.5 Validation of methods	
5.4.6 Estimation of uncertainty of measurement	
5.4.7 Management and control of data	
5.5 Equipment	
5.6 Measurement traceability	
5.7 Sampling	
5.8 Handling of items	
5.9 Assuring the quality of test and calibration results	
5.9.1 Quality controls	
5.9.1b Participation in interlaboratory comparison or PT	
5.9.2 Data analyses of quality controls	
5.10 Reporting	
5.10.1/2 General, test reports and calibration certificates	
5.10.4 Calibration certificates	
5.10.5 Opinions and interpretations	
5.10.6 Test and calibration results from subcontractors	
5.10.7 Electronic transmission of results	
5.10.8 Format of reports and certificates	
5.10.9 Amendments of test reports and calibration certificates	