



Recognised Testing Laboratory (Flowmeter) Scheme

Information Booklet 2010 Edition

Weights and Measures Office (WMO)
SPRING Singapore
2 Bukit Merah Central
Singapore 159835

Preface

Having a uniform and accurate weights and measures system is important to all businesses and consumers. At SPRING Singapore, the Weights and Measures Office (WMO) plays an important role in protecting businesses and consumers by regulating the use of weighing and measuring instruments used for trade and pre-packaged goods. It is responsible for the legal metrology of all weighing and measuring instruments used for trade, such as mass, length and volumetric measurements of food, fuel and other essential commodities including pre-packaged goods.

Towards this end, WMO has implemented the Recognised Testing Laboratory (RTL) (Flowmeter) Scheme. This Scheme aims to supplement the verification capability of flowmeters in Singapore.

This information booklet aims to help interested flowmeter manufacturers and suppliers to understand the requirements and criteria stipulated in this booklet before applying to WMO, the Designating Authority.

The WMO under SPRING Singapore, as the Designating Authority reserves the right to amend and introduce new requirements to the aforementioned scheme without reference to the holder of this booklet and encourages feedback from readers to ensure that improvements to this booklet could be made from time to time.

For more information, please contact

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5th Storey Podium Block
2 Bukit Merah Central
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Tel : 1800 457 5033
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RECOGNISED TESTING LABORATORY (FLOWMETER) SCHEME

1. Criteria for Recognition as Recognised Testing Laboratory (Flowmeter)

A flowmeter laboratory, who wishes to be recognised by SPRING Singapore as a RTL to carry out calibration of flowmeters must fulfil the following criteria:

- (a) It has the knowledge, capability and competence to perform the calibration of flowmeter to the relevant requirements as specified by SPRING Singapore, the Designating Authority.
- (b) It shall provide to the Designating Authority such other information or documents as may be required.
- (c) It shall provide the Designating Authority or any such person as the Designating Authority may authorise access to the laboratory or other premises of the RTL to enable the Designating Authority or such person to observe and assess the calibration procedures of the laboratory.
- (d) It sets up procedures for ensuring that its staff know and can comply with the latest Weights and Measures Authority requirements on an on-going basis.
- (e) It needs to ensure that all necessary test equipment is provided with proper characteristics and tolerances.
- (f) It sets up a procedure for maintaining proper calibration of all test equipment, including reference standards.

2. Assessment Procedures

As the RTL is likely to be located outside of Singapore, the Designating Authority will require the RTL to bear all costs and travelling expenses incurred by the Designating Authority or any such person in conducting the following activities:

- (a) Initial assessment of the RTL for the purpose of Recognition.
- (b) Subsequent assessments which must be conducted at least once in three years if the RTL is accredited to ISO/IEC 17025 by an ILAC and/or APLAC-multilateral MRA signatory accreditation body. If the RTL is NOT accredited to ISO/IEC 17025 by an ILAC and/or APLAC- multilateral MRA signatory accreditation body, subsequent assessments must be conducted at least once a year.
- (c) Investigative assessments as a result of complaints filed with the Designating Authority.

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3. Assessment Fee

The fee for site assessment and surveillance includes (and not limited to) the following:

- (i) Pre- and Post Assessment Fee
- (ii) Actual assessment fee based on SPRING's charge out rates for each SPRING officer appointed to conduct the assessment or surveillance visit
- (iii) Airfare
- (iv) Hotel accommodation
- (v) Subsistence allowance
- (vi) Local and overseas transportation cost.

4. Validity Period of Recognition and Renewal of Recognition

For the RTL who is accredited to ISO/IEC 17025 by an ILAC and/or APLAC-multilateral MRA signatory accreditation body, the recognition as RTL shall be valid for a period of 3 years, and shall be renewed 3 months before the Certificate of Recognition expires.

For the RTL who is NOT accredited to ISO/IEC 17025 by an ILAC and/or APLAC-multilateral MRA signatory accreditation body, the recognition as RTL shall be valid for a period of 1 year, and shall be renewed 3 months before the Certificate of Recognition expires.

The decision of renewing the Recognition of RTL is at the discretion of the Designating Authority.

5. Duties and Obligations

As an RTL

- (1) RTL shall ensure that it maintains its accreditation status, where applicable.
- (2) RTL shall ensure that its calibration of equipment and reference standards are in accordance with the above procedures, rules and policies of international standards and practices.
- (3) RTL shall publish, maintain and make available to SPRING Singapore on request:
 - (a) Calibration reports and other documents or information in connection with the business of calibration;
 - (b) Evidence of participation in appropriate proficiency testing programmes;and

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- (c) Evidence that it has carried out all other tasks stipulated in the Terms and Conditions of Recognition.
- (4) RTL shall notify SPRING Singapore in writing of the occurrence of any of the following not later than **2 weeks** prior to the date on which it intends to effect such change:
 - (a) The cessation of its business of conformity assessment for which it is recognised;
 - (b) Changes to its shareholding;
 - (c) Changes to its organisational structure;
 - (d) Changes to its accreditation status;
 - (e) Changes in key personnel;
 - (f) Changes to its business address;
 - (g) Changes which may affect its ability to properly calibrate any product for conformity to the requirements for which it is recognised;
- (5) RTL shall maintain the standards of practice as are necessary to properly carry out the calibration of flowmeters to the relevant OIML Recommendation(s).
- (6) RTL shall participate in proficiency testing or other appropriate comparison exercises where such exercises are technically possible and within reasonable cost.

6. Post-Recognition Surveillance

As and when required, the Designating Authority may conduct surveillance assessments and other non-routine assessments on the RTL. This is: -

- (a) To ensure that the RTL standards of practice are maintained; and
- (b) To investigate complaints made against the RTL on matter related to its recognition.

The Designating Authority shall require the RTL to participate in proficiency testing or other appropriate comparison exercises where such exercises are technically possible and within reasonable cost.

7. Suspension or Withdrawal of Recognition

The Designating Authority may withdraw the recognition as RTL, if:

- (a) It ceases to carry on the business of conformity assessment for which it is designated; or it ceases to carry on the business of calibrating for which it is recognised; or

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- (b) It applies to the Designating Authority for withdrawal of its recognition; or
- (c) Its accreditation status with its accreditation body is withdrawn; or
- (d) It has contravened any provision stated in the Terms and Conditions stipulated by the Designating Authority; or
- (e) It fails to maintain the standards required by the Designating Authority; or
- (f) It is guilty of any offence involving fraud or dishonesty; or
- (g) It has insufficient capital and financial resources to maintain viable operations such as bankruptcy; or

In the event the Designating Authority is of the view that there is cause for the withdrawal of recognition as RTL, the Designating Authority will suspend the recognition of the RTL and:

- (a) Notify the respective RTL in writing of the suspension and the intention of the Designating Authority to withdraw the recognition of the RTL
- (b) If necessary, meet the suspended RTL to discuss any corrective measures to be undertaken by the suspended RTL;
- (c) Disallow RTL whose recognition has been suspended from issuing any Calibration Report during the period of suspension.

Where, after suspending the recognition of the RTL, the Designating Authority takes the view that the recognition as RTL should be withdrawn, the Designating Authority will:

- (a) Notify the respective RTL of its intention in writing
- (b) Request the RTL to return its Certificate of Recognition to the Designating Authority for cancellation;
- (c) Disallow RTL whose recognition has been withdrawn from issuing any Calibration Report.

8. Procedure for Lifting of Suspension / Against Withdrawal

This procedure applies to a RTL whose recognition has been suspended.

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Upon suspension of the recognition of a RTL, the RTL will be allowed to make representations in writing to the Designating Authority within **14 days** of receipt of the notice of suspension, for the suspension of the recognition of the RTL to be lifted and that such recognition not be withdrawn. The RTL shall provide any documents or information together with an explanation as to why the suspension should be lifted and the recognition not withdrawn.



Application for Recognition as Recognised Testing Laboratory (Flowmeter)

APPLICANT'S DATA

Notes:

1. Please submit this form to SPRING Singapore at the address given below together with the following:
 - a) Assessment fee;
 - b) The RTL's Organisation Structure and Staffing Chart with evidence of qualifications of key personnel and any other relevant information regarding integrity and professional standing;
 - c) Certificate of Accreditation by an ILAC and/or APLAC- multilateral MRA signatory accreditation body, indicating the scope of accreditation;
 - d) The RTL's Laboratory Layout;
 - e) A sample copy of the calibration report;
 - g) The RTL's Quality Manual; and
 - h) Information on its key personnel: share holdings, directorship with other companies, criminal records and suspension records if any.

2. Payment should be made with a crossed cheque payable to "SPRING Singapore". The fee is not refundable.

Applicant's Name & Address:

Contact Name & Designation:

Email:

Tel:

Fax:

Recognised Testing Laboratory's Name & Address

OIML Recommendation(s) thereof for which recognition is sought:
(if space is insufficient, please attach additional sheet (s))

Equipment

Applicable OIML Recommendation(s)

SPRING Singapore

2 Bukit Merah Central Singapore 159835

Tel : 1800-4575 033 Fax : 6458 1441 Website : www.spring.gov.sg/wmo

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APPLICANT'S LEGAL STATEMENT

AGREEMENT: THE APPLICANT AGREES TO

- i) Fulfil all conditions and meet all requirements in accordance with the Recognised Testing Laboratory (Flowmeter) Scheme; and
- ii) Indemnify SPRING Singapore from and against all liabilities, damages, claims, cost and expenses incurred or sustained by SPRING Singapore as a result of any action taken by SPRING Singapore relating to the recognition as Recognised Testing Laboratory.

Signature:

Name:

Designation:

Date:



Application for Renewal of Recognition as Recognised Testing Laboratory (Flowmeter)

APPLICANT'S DATA

Notes:

1. Please submit this form to SPRING Singapore at the address given below together with the following:
 - a) Assessment fee;
 - b) Any other documentation if there are any changes in the information submitted earlier at the time of application for recognition as RTL.
2. Payment should be made with a crossed cheque payable to "SPRING Singapore".

Recognised Testing Laboratory's Name & Address

Certificate of Recognition (Certificate No):

Contact Name & Designation:

Email:

Tel:

Fax:

Information on any modification to be submitted for renewal:

APPLICANT'S LEGAL STATEMENT

AGREEMENT: THE APPLICANT AGREES TO:

- i) Fulfil all conditions and meet all requirements in accordance with the Recognised Testing Laboratory (Flowmeter) Scheme; and
- ii) Indemnify SPRING Singapore from and against all liabilities, damages, claims, cost and expenses incurred or sustained by SPRING Singapore as a result of any action taken by SPRING Singapore relating to the recognition as Recognised Testing Laboratory (Flowmeter).
- iii) That the decision on renewal is at the discretion of the Designating Authority.

Signature:

Name:

Designation:

Date:

SPRING Singapore

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Recognised Testing Laboratory (Flowmeter)

CERTIFICATE OF RECOGNITION

Certificate No :

Date of Issue :

Date of Expiry :

This is to certify that SPRING Singapore has under the Recognised Testing Laboratory (Flowmeter) Scheme, recognised the testing laboratory described below. The Laboratory is recognised to carry out calibration of flowmeter for custody transfer in Singapore specified in the attached Annex subject to the terms and conditions specified therein.

RTL DESCRIPTION

Name of RTL :

Address of RTL :

Officer's name
for Designating Authority

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Annex to Certificate No:

Scope of Recognition			
Equipment	OIML Recommendation	Accredited by an ILAC and/or APLAC- multilateral MRA signatory accreditation body	Recognised Date

Annex to Certificate No:



Terms & Conditions of Recognised Testing Laboratory (Flowmeter)

Obligations of RTL

- (1) RTL shall ensure that it maintains its accreditation status, where applicable.
- (2) RTL shall ensure that its calibration of equipment is in accordance with the above procedures, rules and policies of international standards and practices.
- (3) RTL shall publish, maintain and make available to SPRING Singapore on request:
 - (a) Calibration reports and other documents or information in connection with the business of calibration;
 - (b) Evidence of participation in appropriate proficiency testing programmes; and
 - (c) Evidence that it has carried out all other tasks stipulated in the Terms and Conditions of Recognition.
- (4) RTL shall notify SPRING Singapore in writing of the occurrence of any of the following not later than **2 weeks** prior to the date on which it intends to effect such change:
 - (a) The cessation of its business of conformity assessment for which it is recognised;
 - (b) Changes to its shareholding;
 - (c) Changes to its organisational structure;
 - (d) Changes to its accreditation status;
 - (e) Changes in key personnel;
 - (f) Changes to its business address;
 - (g) Changes which may affect its ability to properly calibrate any product for conformity to the requirements for which it is recognised;
- (5) RTL shall maintain the standards of practice as are necessary to properly carry out the calibration of flowmeters to the relevant OIML Recommendation.
- (6) RTL shall participate in proficiency testing or other appropriate comparison exercises where such exercises are technically possible and within reasonable cost.
- (7) The calibrated flowmeter for custody transfer use in Singapore shall be sealed by the RTL to prevent tampering and it shall advise its client to approach SPRING Singapore, the weights and measures authority to have the flowmeter stamped and resealed before the flowmeter is allowed for trade use.
- (8) For flowmeters with operating flowrates within the capability of the Authorised Verifier(s) in Singapore, the RTL is required to inform its clients that they have to get their flowmeters re-verified after the first year of their initial verification. The RTL is required to include this requirement into its contract with its clients.
- (9) The RTL shall immediately inform SPRING Singapore in the event that there is any error detected in the calibration process following the release of the flowmeter from its premises.

Post-Recognition Surveillance

- (10) As and when required, the Designating Authority may conduct surveillance assessments and other non-routine assessments on the RTL. This is: -
 - (a) To ensure that the RTL standards of practice are maintained; and

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- (b) To investigate complaints made against the RTL on matter related to its recognition.
- (11) The Designating Authority shall require the RTL to participate in proficiency testing or other appropriate comparison exercises where such exercises are technically possible and within reasonable cost.

Suspension or Withdrawal of Recognition

- (12) The Designating Authority may withdraw the recognition as RTL, if:
- (a) It ceases to carry on the business of conformity assessment for which it is recognised; or it ceases to carry on the business of calibrating for which it is recognised; or
 - (b) It applies to the Designating Authority for withdrawal of its recognition; or
 - (c) Its accreditation status with its accreditation body is withdrawn; or
 - (d) It has contravened any provision stated in the Terms and Conditions imposed by the Designating Authority; or
 - (e) It fails to maintain the standards required by the Designating Authority; or
 - (f) It is guilty of any offence involving fraud or dishonesty; or
 - (g) It has insufficient capital and financial resources to maintain viable operations such as bankruptcy; or
- (13) In the event the Designating Authority is of the view that there is cause for the withdrawal of recognition as RTL, the Designating Authority will suspend the recognition of the RTL and:
- (a) Notify the respective RTL in writing of the suspension and the intention of the Designating Authority to withdraw the recognition of the RTL
 - (b) If necessary, meet the suspended RTL to discuss any corrective measures to be undertaken by the suspended RTL;
 - (c) Disallow RTL whose recognition has been suspended from issuing any Calibration Report during the period of suspension.
- (13) Where, after suspending the recognition of the RTL, the Designating Authority takes the view that the recognition as RTL should be withdrawn, the Designating Authority will:
- (a) Notify the respective RTL of its intention in writing
 - (b) Request the RTL to return its Certificate of Recognition to the Designating Authority for cancellation;
 - (c) Disallow RTL whose recognition has been withdrawn from issuing any Calibration Report.