# Procedure for **Purchasing and Supplier Evaluation**

#### 1. Introduction

This is the metrology laboratory procedure for purchase, storage, and evaluation of supplies and services. Obtaining products or services from organizations registered to ISO 9001 or accredited to ISO/IEC 17025 is required where possible; however, this is no guarantee of acceptable quality. The laboratory inspects and evaluates products or services and identifies any unique storage requirements when products are received or returned.

#### 2. Purpose

It is imperative that supplies and services obtained by the laboratory reflect the expected quality of service and that they do not adversely contribute to the quality of measurement results.

#### 3. Responsibility and Authority

- 3.1. The Technical Manager is responsible for ensuring that suitable specifications are used to purchase supplies and services.
- 3.2. The Quality Manager is responsible for ensuring that products and services meet designated specifications and are evaluated once received.

### 4. Operations

- 4.1. The laboratory will use national or international specifications for standards as appropriate and where available and inspect the standards upon receipt to determine that standards meet specifications. Examples of standards include:
  - 4.1.1. Mass standards: OIML R 111 or ASTM E 617;
  - 4.1.2. Mass field standards: NIST Handbook 105-1, 105-8;
  - 4.1.3. Volumetric field standards: NIST Handbook 105-2, 105-3, 105-4, 105-7;
  - 4.1.4. Timing Devices: NIST Handbook 105-5;
  - 4.1.5. Thermometers: ASTM E 1 or NIST Handbook 105-6; and
  - 4.1.6. Proving rings or Load Cells: ASTM E 74.
- 4.2. In addition to specifications, and if specifications are not available, the following criteria will be used in purchase considerations as applicable:
  - 4.2.1. Accreditation status of the laboratory as from an ILAC-signatory (International Laboratory Accreditation Cooperation) Accreditation Body;
  - 4.2.2. Accuracy, stability, contribution to measurement uncertainty (quality factor);
  - 4.2.3. Familiarity with the product, word of mouth experience from other laboratories (quality factor);
  - 4.2.4. Prior relationship with supplier, supplier's reputation, and commitment to customer satisfaction;

- 4.2.5. Cost and turn-around time; and
- 4.2.6. Availability of product, parts, or services.

### 4.3. Communicating requirements

The laboratory communicates requirements to providers of products and services requirements listed in Sections 4.1 and 4.2 and in addition, the following requirements if/as applicable:

- 4.3.1. Specific products or services to be provided;
- 4.3.2. Acceptance criteria;
- 4.3.3. Competency requirements (including personnel qualifications); and
- 4.3.4. Any activities that would be performed at the provider's facility (uncommon).

#### 4.4. Maintenance of records

4.4.1. The laboratory will maintain purchase and warranty records and maintain performance history files. In situations where the quality of product or services are not adequate for the intended purpose, the laboratory will investigate the issue prior to additional purchases. See Form 3 for Evaluation records that will be maintained;

## 4.5. List of acceptable suppliers

The laboratory will maintain a list of acceptable suppliers for laboratory standards, equipment, supplies, and services where the quality of such products or services may affect the quality of the measurements. Each supplier will be evaluated initially and prior to use thereafter according to criteria in section 4.2. See Form 4 for acceptable List that will be maintained.

- 4.6. Examples of purchases affecting quality of measurement results
  - 4.6.1. Laboratory supplies affecting measurement quality
    - Chemicals
    - Wipes
    - Weight handling equipment gloves, forceps, filter paper
    - Meniscus reading tools, magnifiers

#### 4.6.2. Standards

- Weights
- Volumetric
- Thermometers
- Barometers
- Hygrometers
- Tapes

#### 4.6.3. Equipment

- Balances
- Water purification system

## 4.6.4. Services

- Calibration of standards
- Balance repair and/or maintenance

# 4.7. Inspection prior to use

All products and services are inspected or validated prior to use.

# Form 3. Supplier Evaluation

Supplier Evaluation							
Date:							
Supplier:							
Supplier products:							
Evaluation Questions:							
Applicable specification	Yes	No					
Title of applicable specification:							
Supplier registration/accreditation:							
Accuracy, stability, uncertainty evaluation:							
Familiarity with product, word of mouth experience from other laboratories:							
Prior relationship, supplier reputation, commitment:							
Availability of products, parts, service:							
Other comments regarding supplier:							
Evaluation upon Receipt: (Acceptable?)							
Signature of responsible staff:							

Form 4. List of Acceptable Suppliers

Supplier (Address, Contact Info, Website)	Product(s)	Accreditation Status (AB, Date)	Acceptance Date	Latest Evaluation Date