

Economy Report

Thailand

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SECTION 1 – Organisation and structure for metrology
Organisation Structures

National Organization for Legal Metrology

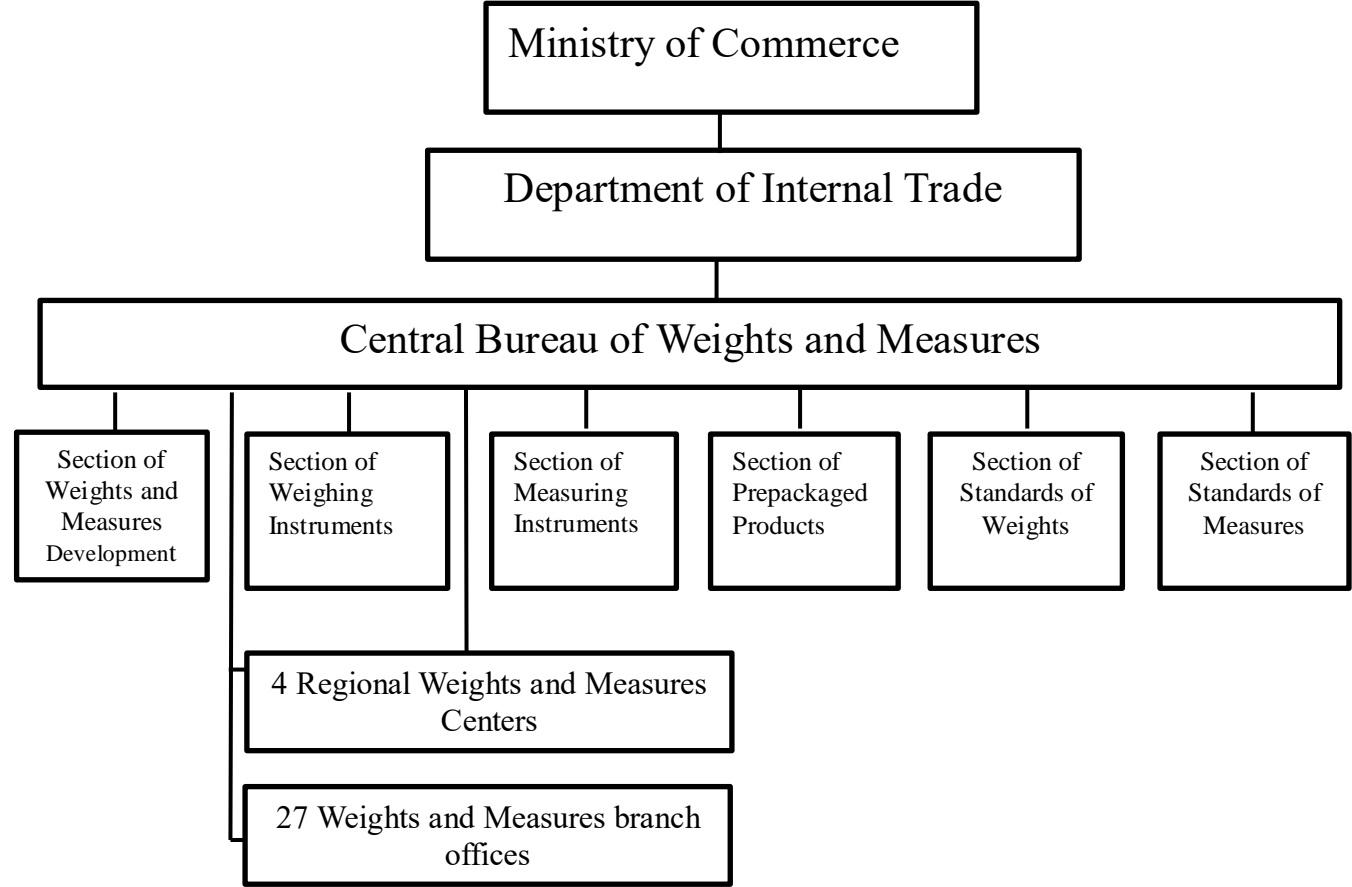
The Department of Internal Trade (DIT)

Ministry of Commerce

Nonthaburi Road, Nonthaburi 11000

Thailand

The Central Bureau of Weights and Measures of Thailand has the responsibility for all legal metrology activities, and acts under the direction of the Department of Internal Trade (DIT). The function of the Central Bureau of Weights and Measures include the registration, verification, inspection and general control of licenses, and of measuring instruments used in Thailand, in conformity with the requirements of the Law and Ministerial Regulations.



Custodian of National Standard

National standards are kept and maintained by:

National Institute of Metrology (Thailand)

3/4-5 Moo 3, Klong 5, Klong Luang, Pathumthani 12120, Thailand

National standards are held and maintained by the National Institute of Metrology (Thailand).

Regional and local weights and measures organization

At present, there are 27 weights and measures branch offices and 4 weights and measures regional centres within the organization of the Central Bureau of Weights and Measures, spreading over the country. Each weights and measures branch office and regional centre performs under the Weights and Measures Law and the policy of DIT to inspect, verify all measuring instruments used for trade. In addition, each weights and measures centre provides calibration services in its region for weights and measures branch offices and customers from industry.

Instrument Calibration and Evaluation Systems

The Central Bureau of Weights and Measures is responsible for calibrating, inspecting and verifying all measuring instruments prescribed in the Weights and Measures Law. There is no other accredited organization or laboratory that can perform the duty related to legal metrology.

For voluntary application, not legal, there are laboratories accredited by Thai Laboratories Accreditation Scheme (TLAS) provide calibration and testing services for the public.

RANGE OF EQUIPMENT SUBJECT TO LEGAL METROLOGY

All measuring instruments intended for trade use and covered by the Weights and Measures Law, must pass verification before being put on the market or used.

VERIFICATION (CONFORMITY ASSESSMENT), INSPECTION AND REVERIFICATION

Legal and Technical Requirements for Verification and Reverification

All measuring instruments prescribed for trade use or any other applications under this Law, or the Ministerial Regulations, must be verified by the Central Bureau of Weights and Measures, Regional Centre, Branch offices or other organizations, manufacturers or repairers designated by DIT.

There are two types of verifications for the measuring instruments. The first verification of a measuring instrument, which has never been verified, is called an initial verification and the reverification after repairing and expiration of the term of validity for verification is called a reverification.

The requirements for verification or reverification are as follows:

- The instrument must operate within the appropriate limits of error that may be tolerated under the Ministerial Regulations.
- The instrument must provide graduations in a unit of measurement under Metric System or certain additional customary units of measurement within the meaning of Weights and Measures Law.

Range of Equipment Verified and Reverified and any Statistical Information Available

The range of equipment verified or reverified include the following:

- Non-automatic weighting instruments
- Automatic weighting instruments:
 - Belt-Conveyor Scale Systems
 - Automatic Bulk Weighing Systems
- Weights
- Liquid Measures
- Dry Measures
- Linear Measures:
 - Measuring tapes
 - Straight rules
- Fabric-Measuring Devices
- Liquid-Measuring Devices
- Mass Flow Meters
- Water Meters

- LPG -Measuring Devices
- Gas Meter
- Rice Moisture Meters

Fee Structure

Fee for verification or reverification ranging from US \$ 1-200 depending on type and capacity of measuring instrument.

LEGAL METROLOGY PRACTITIONERS

Numbers

152 officials are involved in legal metrology functions; 49 officials in the Central Bureau of Weights and Measures, and 103 officials in the regional verification branch officials.

Qualification/Training

The qualifications of the weights and measures officials are in the fields of engineering and physics. Inspectors must complete the Inspector Training Course and be authorized by DIT.

Training Organizations and Courses Organized

The Central Bureau of Weights and Measures provides and organizes the following courses:

- Inspector Training Course;
- Verification of Measuring Instruments;
- Calibration of Measuring Instruments
- Checking the Net Content of Prepacked Products.

Each course, except Inspector Training Course, is offered every year, mainly emphasizing on verifying, inspecting and calibrating methods, and law.

Legislative Frameworks

Primary Legislation	1923	- Weights and Measures Act BE2466
	1999	- Weights and Measures Act BE2542
	2006	- Revised Weights and Measures Act BE2542
	2014	- Revised Weights and Measures Act BE2542

Secondary Legislation Ministerial Regulations

- Type of Weighing and Measuring Instrument under the Law, the Accuracy of Weighing and Measuring Instrument, Private Mark Registration.
- Fees.
- The weights and Measures Inspector Identification Card.
- Granting and Issuing Licences and Permit.

Ministerial Notification

- The Weighing and Measuring Instruments which are exempted the verification requirement
- The Weighing and Measuring Instrument of the permanently fixed type which is relocated and such Instrument has been verified.
- Prepackaged Products.
- The kind of commodities which purchasing, selling or distributions in the kingdom have to use the Metric System of Weights and Measures.
- The prescribing the practices to be follow by the users of the Digital Truck Scale.
- The prescribing the practices to be follow by the users of the Rice Moisture Meter.
- The Notification of the establishment of a Branch Bureaus.

International arrangements and engagement

OIML -2016 the member state of the International Organization of Legal Metrology .

(1995 the corresponding member).

APLMF	-1999 the full member of the Asia-Pacific Legal Metrology Forum.
ACCSQ	-2001 Working Group on Legal Metrology under the ASEAN Consultative Committee for Standards and Quality: ACCSQ

SECTION 2 – Key activities of 201/17

Project for extension of supervising more measuring instruments

1. Study for supervising longan grading machines under legal metrology act

- The staff of Bureau of Weights and Measures have studied construction of the longan grading machines used for trade, how to test it and looked for the suitable standards.
- The Department of Internal Trade approved the project of supervision of longan grading machines.
- The Department of Internal Trade appointed the working group for drafting ministerial notification for supervision of longan grading machines.



Figure 1: A longan grading machine



Figure 2: A longan grading machine



Figure 3: A longan grading machine



Figure 4: Study how to test the longan grading machine

2. The government has approved to allocate the budget for fiscal year 2018 about \$ 100,000 to study which measurement instruments of agricultural products significantly impact on fair trade and the domestic economy. With the result of study, CBWM can determine to supervise which instruments under legal metrology act.

SECTION 3 – Future focus

New initiatives planned (next 1-2 years)

- The Latest revised the weights and Measures Act is included the type approval system in this Act, So the initiatives planned CBWM will focus on the type approval system as follow.
 - Study on type approval procedure from the other economies which have had a type approval function in the metrology system.
 - Collect database of capability of manufacturers of weighing and measuring instruments.
 - Draft the Ministerial Notification for Type Approval.
 - Discuss with the Stakeholder, about the Draft.
- Revise the other weights and measure requirements:
 - Weighing Instrument**
 - Non-automatic weighting instruments,
 - Automatic weighting instruments:
 - Belt-Conveyor Scale Systems
 - Automatic Bulk Weighing Systems
 - Weights
 - Weigh in Motion Scale
 - Measuring Instrument**
 - Liquid Measures
 - Dry Measures
 - Linear Measures:
 - Measuring tapes
 - Straight rules
 - Automatic level gauges for measuring the level of liquid in stationary storage tanks
 - Liquid-Measuring Devices and LPG -Measuring Devices
 - Mass Flow Meters
 - Water Meters
 - Gas Meter
- Extension of supervising more measuring instruments:
 - Grading Machine of longan
