



ASIA-PACIFIC
LEGAL METROLOGY FORUM

23rd APLMF Meeting
Tokyo, Japan

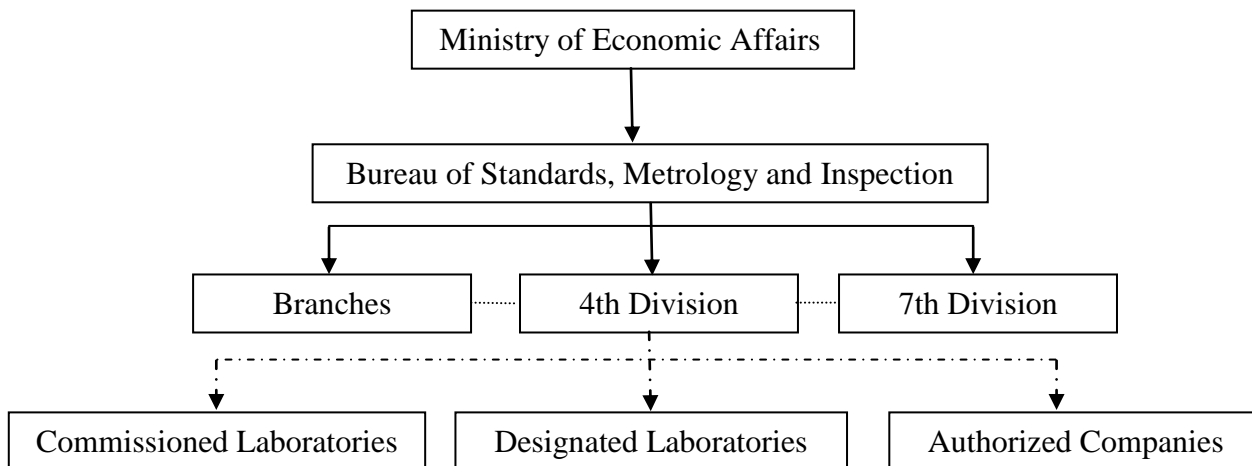
Economy Report

Chinese Taipei

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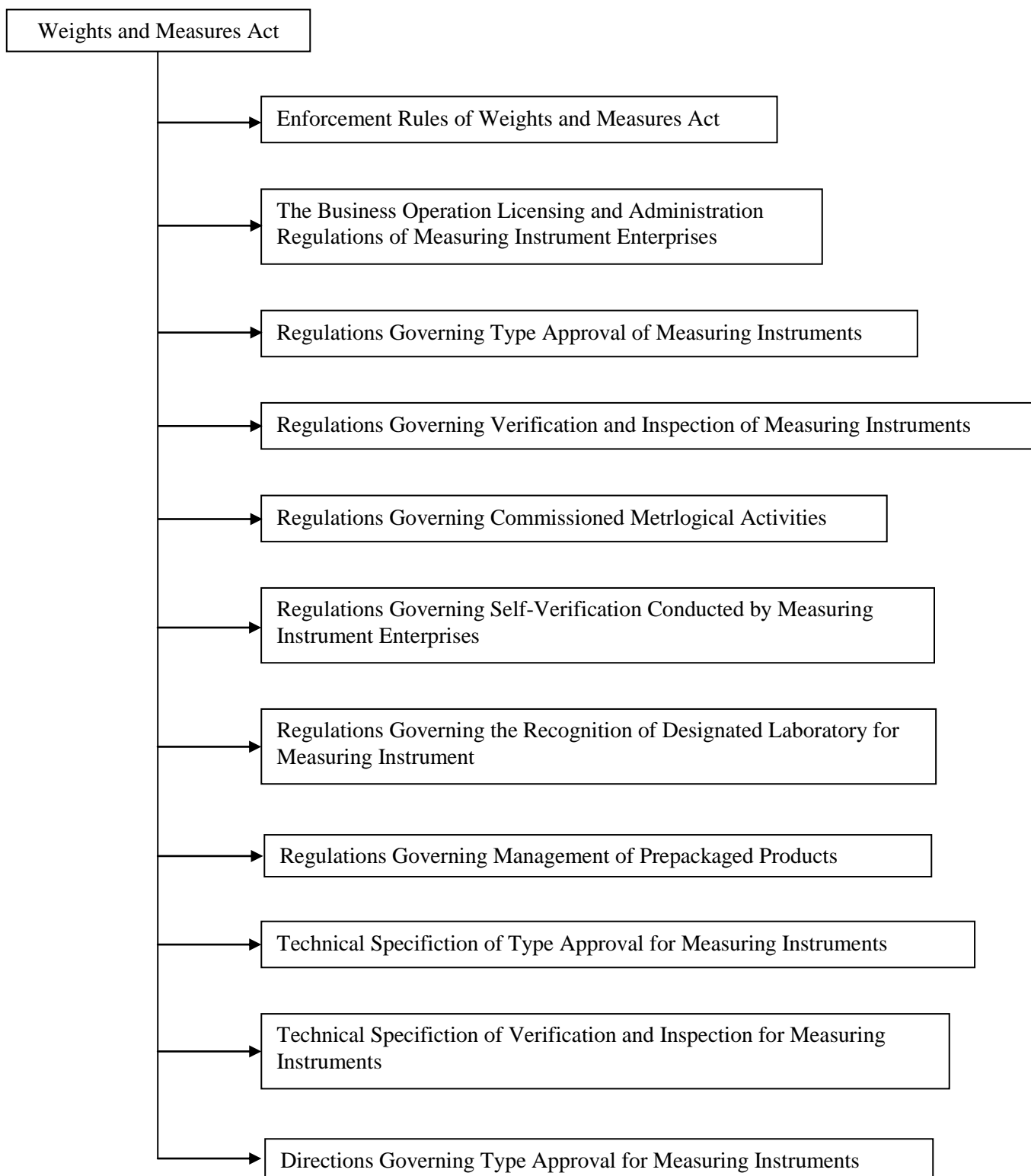
SECTION 1 – Organisation and structure for metrology

Organisation Structures



Specialty	Scientific Metrology			Legal Metrology
Organization	Center for Measurement Standards	Institute of Nuclear Energy Research	Chunghwa Telecom Laboratories	Bureau of Standards, Metrology and Inspection
Field	Physical and chemistry metrolog	Ionizing radiation metrology	Time and frequency metrology	legal metrology policy and legal metrology affairs
Director	Dr. Tzeng-Yow Lin	Dr. Yin-Peng Ma	Dr. Wen-Hau Yang	Dr. Ming-Jong Liou
Location	HsinChu	TaoYuan	TaoYuan	Taipei

Legislative Frameworks



International arrangements and engagement

Chinese Taipei sent two trainees to the training course on Non-Automated Instruments in Beijing, China in July 2016.

Moreover, Chinese Taipei also sent a participant to the Seminar on Legal Metrology Management System in Guangzhou, China in August 2016.

Chinese Taipei is reviewing her technical specification of type approval for Non-Automated Weighing Instruments (NAWIs) and type approval scheme. Rather than module or family of NAWIs, existing type approval scheme of NAWI requires every different maximum capacity weighing instrument in completely assembled status shall be sent for type evaluation and approval. However, the measures is not exactly the same as the requirements set by OIML. A proposal has been submitted for reviewing. According to the proposal, we will accept module of instrument or family of instrument to be applied for type evaluation of NAWI.

SECTION 2 – Key activities of 2015/16

Working with industry

Legislation Affairs

Two technical specifications, technical specification of verification and inspection for electricity meters and technical specification of type approval for diaphragm gas meters, have been revised. The moves would facilitate private sector to realize the regulations easily and clearly and settle down the dispute between users and consumers.

Examinations for Metrological Technical Personnel

Six examinations were held in 2016, including three for Class A metrological technical personnel and three for Class B metrological technical personnel. So far, 2,486 examinees have passed the examination since the program was launched in 2010. According to the weights and measures related regulations, technicians and technical supervisors conducting verification in manufacturers or importers which are allowed to do self-verification shall pass the examinations. The same requirements also apply to technicians and technical supervisors conducting verification in commissioned laboratories which are commissioned to conduct verification.

Conformity to Type (CTT)

The BSMI has been executing annual CTT scheme for years. Each year the BSMI picks different kinds of measuring instruments for CTT. During the past year, the BSMI collected 9 water meters and sent for type evaluation. The final results are expected to be released in early 2017 or even later.

Self-Verification Scheme

One more private company was granted to conduct self-verification on its products 2016. There are 12 entrepreneurs allowed to conduct self-verification, including 7 for water meters and five for diaphragm gas meters by the end of October, 2016. These authorized companies verified more than one and a half millions legal measuring instruments in 2015. That number is about one third of verified legal measuring instruments..

In 2016, the BSMI sent staff to private companies authorized to implement self-verification and conduct on-site follow-up audit and sampled verified water meters for re-test.

Fee-Charging Standards for Measuring Instruments

National Metrology Institutes provide necessary calibrations to domestic industries or even foreign industries. National Metrology Institutes collect fees from industries for these calibrations. The BSMI reviews the fees annually, according to the field and capacity of calibration, to help industries decreasing the cost. The BSMI changed the fees for calibration on pin gauges, line width standards, spinning rotor viscosity gauges, reflectance standards and chroma meters.

Protecting consumers

Voluntary Self-Management Measures on Gas Stations, Traditional Markets and Post Offices

According to the Weights and Measures Act, the BSMI shall implement inspection against measuring instruments used for trade. However, only a small portion of in-service measuring instruments which are used for trade have been

inspected. Therefore, the BSMI launched a program, Voluntary self-management measures on gas stations, traditional markets and post offices, to encourage the owners or the operators of gas station, vendors in traditional market and post offices to take required calibration and maintenance procedures so that the measuring instruments in such places could keep in good accuracy. The BSMI issues a certificate to each of the gas stations, traditional markets or post offices that meets the requirements and the consumers might have better confidence when they buy gas or products at such places. Up to date, 890 gas stations and 100 traditional markets and post offices are granted the certificates.

Major projects - What we did and what we learned

Training

Four sessions of training programs were held in 2015. These programs were focused on verification skills and opened to BSMI's staff and technicians that passed the aforementioned examinations for metrological technical personnel.

Webinar

An e-learning website (<https://metrology.bsmi.gov.tw/>), set up by the BSMI to provide relating metrological knowledge, has been updated for adding lifelong learning sections and better user interface in 2016.

New taximeter

As Ministry of Transportation and Communication initiated the new type taximeters with new function, such as audio alarm, multi-fare rate for different areas and printing in the 4th quarter, 2015, the BSMI has completed verification on more than 68000 taximeters up to the present time.

World Metrology Day

The BSMI organized a series of seminars on metrology affairs to celebrate the World Metrology Day in middle May, including a seminar on International Metrology Development and Trend on May 18. Domestic industries were invited to participate in.

SECTION 3 – Future focus

New initiatives planned (next 1-2 years)

Weights and Measures Legislation

The revision of Weights and Measures Act:

The existing edition of Weights and Measures Act entered into force in 2003. Since then, the related technologies have been changing dramatically. Therefore, we are drafting a new edition of this Act. Meanwhile, we are collecting comments from the stakeholders.

The revision of Regulations Governing Self-Verification Conducted by Measuring Instrument Enterprises:

The self-verification scheme has been introduced to Chinese Taipei for more than a decade. Currently, up to twelve private companies have been authorized to conduct verification on their products. Aiming to encourage

more private companies to apply for the scheme to further guarantee the accuracy of measuring instruments, the BSMI will amend the regulations to make the scheme more flexible to meet the needs of industry.

The revision of Technical Specification for Type Approval of Non-Automatic Weighing Instruments (NAWIs) :

Non-automatic Weighing Instruments with Pricing function are subject to type approval in Chinese Taipei. Rather than module or family NAWIs, existing type approval scheme of NAWI requires every different maximum capacity weighing instrument in completely assembled status shall be sent for type evaluation and approval though the technical specification for type approval is compatible to OIML R 76. The BSMI will establish a project to review the corresponding type approval scheme and the technical specification. The new project is to introduce the concept of family of NAWIs and help to reduce the burden of related manufacturers.