Overview of Legislation
System of Metrology in China
1. The Legislation System of Metrology in China
2. The Metrology Law of the People's Republic of China
3. The Management System of Metrology in China
4. The Management of National Metrological Technical Regulation
5. National Technical Committee on Metrology
中国计量法规体系
Legal system of Metrology

计量行政法规体系
Administrative legal system of Metrology

计量技术规范体系
Technical legal system of Metrology

规章
Regulation

行政法规
Administrative Statute

法律
Law

地方性法规规章
Local Statute

规范性文件
Administrative documents

计量检定规程
Verification Regulation

计量检定系统表
Verification Scheme

其他计量技术规范
Other Technical Criterion

国家计量检定规程
National Verification Regulation

部门计量检定规程
Service Verification Regulation

地方计量检定规程
Local Verification Regulation
The Legislation System of Metrology in China is one of the key infrastructures of metrology in China, focuses on protection on the benefits of the state, the enterprises and the individuals, protects the public health and safety, and ensures the fair trade and competition, its major goal is to assure the reliability of the measurement result by applying the legal terms.
Metrology Law

Rules significant for the organizations, procedures and measuring instruments

Binding rules and technical regulations which are based on OIML recommendations, ISO/IEC

Voluntary criterions for metrological calibration specification

Adopted at the National People's Congress and promulgated by Order of the President

- Mandatory administrative laws and regulations
- List of categories of measuring instruments

- National Metrological Verification Regulations shall be promulgated by the AQSIQ;
- Departmental Metrological Verification Regulations shall be promulgated by the other authorities;
- Local Metrological Verification Regulations shall be promulgated by the metrological administrative departments of the local people's government

- National metrological calibration specification
- Departmental metrological calibration specification
- Local metrological calibration specification agreed voluntarily by both parties

Chinese Featured Legislation System of Metrology
Administrative regulation system of metrology

Composition

- 1 Metrology Law;
- 8 administrative regulation;
- 20 departmental rules of metrology;
- 30 local regulation of metrology;
- 16 metrology rules of local government.
There are 1579 national technical regulation of metrology in total; and other technical regulations include the metrological calibration specification, general and fundamental technical criterions of metrology, examination standard and assessment criterions, operation guidance and operation criterions.
The Metrology Law of the People’s Republic of China - History

- **1985**: Adopted by the National People’s Congress on September 6
- **1986**: Became effective as of January 7
- **2009**: Amended on August 27
- **2013**: Amended on December 28
- **2015**: Amended on April 24
The Metrology Law of the People’s Republic of China - Structure

Chapter 1: General provisions

Chapter 2: Management of Measuring instrument

Chapter 3: Metrological supervision

Chapter 4: Supplementary provisions

Chapter 5: Legal obligations

Chapter 6: Supplementary provisions

总则  General provisions

计量器具管理  Management of Measuring instrument

计量监督  Metrological supervision

附则  Supplementary provisions
Purpose of legislation

✓ Strengthen the metrological supervision and administration
✓ Ensure the uniformity of the national system of units of measurement and the accuracy and reliability of the values of quantities
✓ Contribute to the development of production, trade and science and technology
✓ Meet the needs of social and economic growth
✓ Safeguard the interests of the state and the people

Scope of adjustment

✓ Units of measurement
✓ Instruments of measurement

Supervisory authority

✓ The metrological administrative departments of the government

The Metrology law of the People’s Republic of China-Connotation
Administrative System of Metrology established by the Metrology Law of China

1. 采用法定计量单位
   (apply the legal unit of measurement)
2. 计量标准器具核准
   (assessment of measurement standard)
3. 计量器具型式批准
   (pattern approval of measuring instrument)
4. 计量器具制造和修理许可
   (permission for manufacture and repair of measuring instrument)
5. 计量器具检定
   (verification of measuring instrument)
6. 计量检定员考核
   (assessment of verification personnel)
7. 计量授权
   (metrological authorization)
8. 计量认证
   (metrological authentication)
Organized and drafted by
National Technical Committee on Metrology

Established and approved by
AQSIQ

Requirement on formulation

- It shall comply with the relevant state laws and regulations;
- The scope of application shall be clarified, and it shall be complete to the maximum extent defined;
- The requirements shall be scientifically reasonable, practical in operation and economical during implementation.

Principle for formulation

- It shall actively adopt the international recommendations and international documents issued by international organizations in legal metrology, as well as the international standards issued by the relevant international organizations;
- Such adoption shall be subject to the relevant state laws and regulations, and the policy of active adoption and substantial result focused.

Basis
Metrology Law and Administrative Methods for National Metrological Verification Regulations

Administration of National Technical Criterions of Metrology
Concept
A technical organization which is engaged in the tasks related to the metrological technology in the certain professions.

Duty
It mainly responsible for formulating national technical regulation of metrology in its own profession, and carrying out the unified management of comparison of national standards of measurement and the national value of quantities.

Quantity
There are 28 National Technical Committees on Metrology which are divided into comprehensive committees and professional committees, and the professional committees include the academy-based committees and application-based committees.
National Technical Committee on Metrology

Comprehensive Committee

- NTC on legal metrology management

Professional Committee

- Academy-based Committee
  - NTC on force, temperature, etc.

- Application-based Committee
  - NTC on MI for railway, Marine application, etc.
Most such technical committees have established corresponding relations with the technical committees founded by the international organizations of legal metrology:

- NTC on Length in Geometrical Sense
- NTC on Engineering Parameters in Geometrical Sense
- NTC on Flow Rate and Capacity
- NTC on Optics
- NTC on Environmental Chemical
- NTC on Temperature
- NTC on Electromagnetism
- NTC on Mass Density

- OIML TC7/SC1, TC7/SC5
- OIML TC7/SC3
- OIML TC8
- OIML TC14
- OIML TC16
- OIML TC11
- OIML TC15
- OIML TC9/SC3及SC4, TC3/SC5
China has actively performed its duties as the member of OIML, and undertakes the tasks as the secretariat to OIML TC., for example:

- Secretariat to OIML/TC10/SC3
  Subcommittee on Pressure is set in National Institute of Metrology
- Secretariat to OIML/TC17/SC1
  Subcommittee on Humidity is set in National Institute of Metrology
- Secretariat to OIML/TC18/SC1
  Subcommittee on Sphygmomanometer is set in Shanghai Institute of Metrological Testing; etc.

Tasks undertaken by China as the Secretariat to OIML TC
In future, we will always strive for gearing the metrology with the international standards, insist on the concept of fairness, joint discussion, joint building and sharing, under the principle of opening-up, cooperation, mutual-learning, mutual benefits and win-win, intensify the cooperation with the countries around the world in the aspect of strengthening the communication of metrology policy, promoting the internationally mutual accreditation of metrology, deepening the discussion on metrological technology, improving the service capacity of metrology.
THANK YOU