

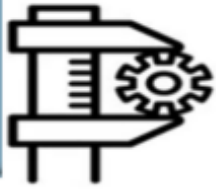


## Metrology and India's Initiatives

[Source: IE](#)

The Department of Consumer Affairs, Government of India, celebrated **World Metrology Day 2025**.

- **World Metrology Day 2025:** The day commemorates the 150th anniversary of the **Metre Convention** signed in Paris on **20th May 1875**, which established the **metric system to standardize units globally**.
  - The celebration was first initiated in 1999 by the **International Committee for Weights and Measures (CIPM)**.
  - The theme for 2025 is **“Measurements for all times, for all people,”** highlighting measurement's continuous impact across history, present, and future.
- **Metrology:** It is the scientific **study of measurement**, establishes common standards for **units and instruments**. It plays a vital role in various fields such as navigation, construction, product development, environmental monitoring, medicine, and food processing.
  - Metrology aligns with **UNESCO's vision of advancing science for a better world**.
- **India's Initiatives in Metrology:** India joined the **Metre Convention in 1957** following the enactment of the **Standards of Weights and Measures Act, 1956**.
  - India became the 13th country globally to issue **OIML ([International Organization of Legal Metrology](#)) certificates**, boosting global trust in its measurement systems.
  - The **eMaap portal**, digitizes legal metrology processes across 18 states for easier licensing, registration, and enforcement.
  - The launch of the **“One Nation, One Time”** initiative under **Draft IST Rules 2025** aims to **provide millisecond-accurate Indian Standard Time** through Regional Reference Standard Laboratories, benefiting critical sectors like telecom and banking.



# Metrology



## Scientific

1. Establishment of unit of measurement (SI)
2. Development of new measurement methods.
3. The realisation of measurement standards.
4. The transfer of traceability from these standards to users in a society.



## Industrial

1. Application of measurement to manufacturing
2. Other processes and their use in society
3. Ensuring the suitability of measurement instruments, their calibration and quality control.



## Legal

1. Establishing the law, for example for measurement instruments.
2. Supervising and enforcing the law.
3. Providing legal traceability systems for measurements and measuring instruments.

Read more: [India Authorised to Issue OIML Certificates](#)