



**Forum: Metrology – Trade Facilitator
Offer of support by:**



Japan International Cooperation Agency (JICA)

What can be offered:

Group Training Course in Legal Metrology

- 1 **Course title:** Asia Pacific Legal Metrology System
- 2 **Cooperation Period:** 2003 FY-2007 FY
- 3 **Duration of Course:** 3 months
- 4 **Number of Participants:** 6 participants/FY
- 5 **Target Region:** ASEAN countries, mainly
- 6 **Overall Goal:** This course is organized for government officers working as senior verification officers responsible for verification and inspection of measuring instruments in the field of legal metrology. It will serve as a good opportunity (1) to acquire the knowledge about the principle and the structure of measurement instruments, and the procedures and technologies of verification/inspection methods in Japan through lectures, practical training and observation, and (2) to obtain the information about the central and local administrative organizations and their respective duties in measurement and the latest metrological technology of Japan.
- 7 **Qualification of Applicant:**
 - Currently, engaged in the practical work of verification/inspection or its supervision in the field of legal metrology at governmental or semi-governmental institute with at least three years' occupational experience,
 - University graduates
 - Between the age of 30 and 45
- 8 **Language:** English
- 9 **Training Institution:** National Institute of Advanced Industrial Science and Technology
- 10 **Example of Curriculum:**

I. Japan's Measurement System in general	
1	Outline of Japanese Measurement Law
2	The Japanese traceability / measurement system (primary standards, designated calibration organizations and accredited calibration laboratories)
3	Measurement systems stipulated by law: (1) System of Designated Manufacturer (2) System of proper on-site measurement control (3) System of certified measurers (4) System of measurement certification business
4	Roles, laws and ordinances relating to regional weights & measures verification institutes (2) Commodity net weight inspection (3) Verification work (4) Inspection work (5) Guidance work (6) On-the-spot inspection work
5	Others (1) Legal metrology with respect to watt-hour-meter (2) Present situation of measuring instrument industries (3) Outline of weights and measures training institute, METI
II. International Metrological Organizations, Systems and Regulations	
1	Systems of mutual recognition
2	Activities of the OIML and the APLMF
3	SI units, VIM and APMP
4	Collection of metrological information through internet and industrial standards
5	Uncertainty of measurement
6	ISO 9000, 14000 and ISO/IEC Guide 65 and ISO/IEC 17025 etc.
III. Technical training programs	
1	Measurement standards
2	Type approval
3	Verification and periodical inspection of 18 kinds of specified measuring instruments for use for trade or certification business stipulated by law
4	Inspection of verification standards
5	Measuring instruments not stipulated by legal metrology (1) Precision type length measuring instruments (calibration of gauge blocks, vernier calipers, dial gauges) (2) Length measuring instruments except taximeter (inspection) (3) Electricity meter (calibration of digital multimeters), electronic measurement (AC voltage, AC current, oscilloscope) (4) Chemical volumetric meter (5) Environmental measuring instruments (chromatographic analyzer)
IV. Technical Tour	
1.	Organizations, enterprises and manufacturing factories relating to measurement
2.	Research institutes, laboratories relating to measurement
3.	Others
V. Other programs etc.	
Oral presentations by participants, program orientations (JICA, NMIJ, TMIWM, HIIWM), evaluation meetings, Japanese language program, days of transfers	
Time allocated in 2004: Lectures 45 %, Practice, discussion & presentation 40 %, Technical tour 15 %	

What are the prerequisites and conditions

JICA's programs are available upon the government's request of the developing countries through the diplomatic channels between the each government of developing countries and the Government of Japan (GOJ).

The Government of Japan provides the following allowances and covers the following expenses through JICA in accordance with relevant laws and regulations: Round-trip air ticket between an international airport designated by JICA and Japan, accommodation allowance, living allowance, outfit allowance, book allowance, shipping allowance, expenses for JICA study tours, free medical care for participants who become ill after arrival in Japan (costs related to pre-existing illness, pregnancy and dental treatment are not included), etc.

Whom to address

During the Forum:	After the Forum:
Ms. Hiroe SAKAI, NMIJ International Metrology Cooperation Office	For more practical information about JICA's assistance, please contact the Embassy of Japan in your country: