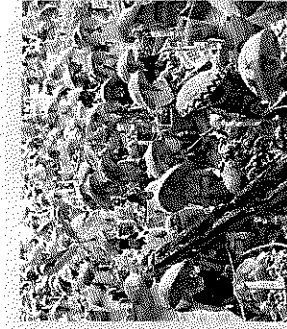
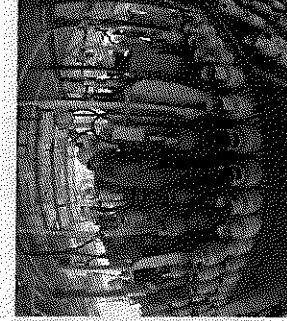
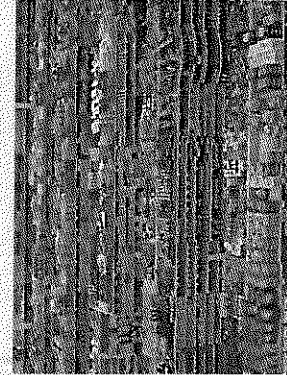


KEMENTERIAN  
PERDAGANGAN  
REPUBLIK INDONESIA

MINISTRY OF TRADE



## METROLOGICAL HUMAN RESOURCES DEVELOPMENT IN INDONESIA

Perdagangan Sebagai Sektor  
Penggerak Pertumbuhan dan  
Daya Saing Ekonomi, serta  
Penciptaan  
Kemakmuran  
Rakyat

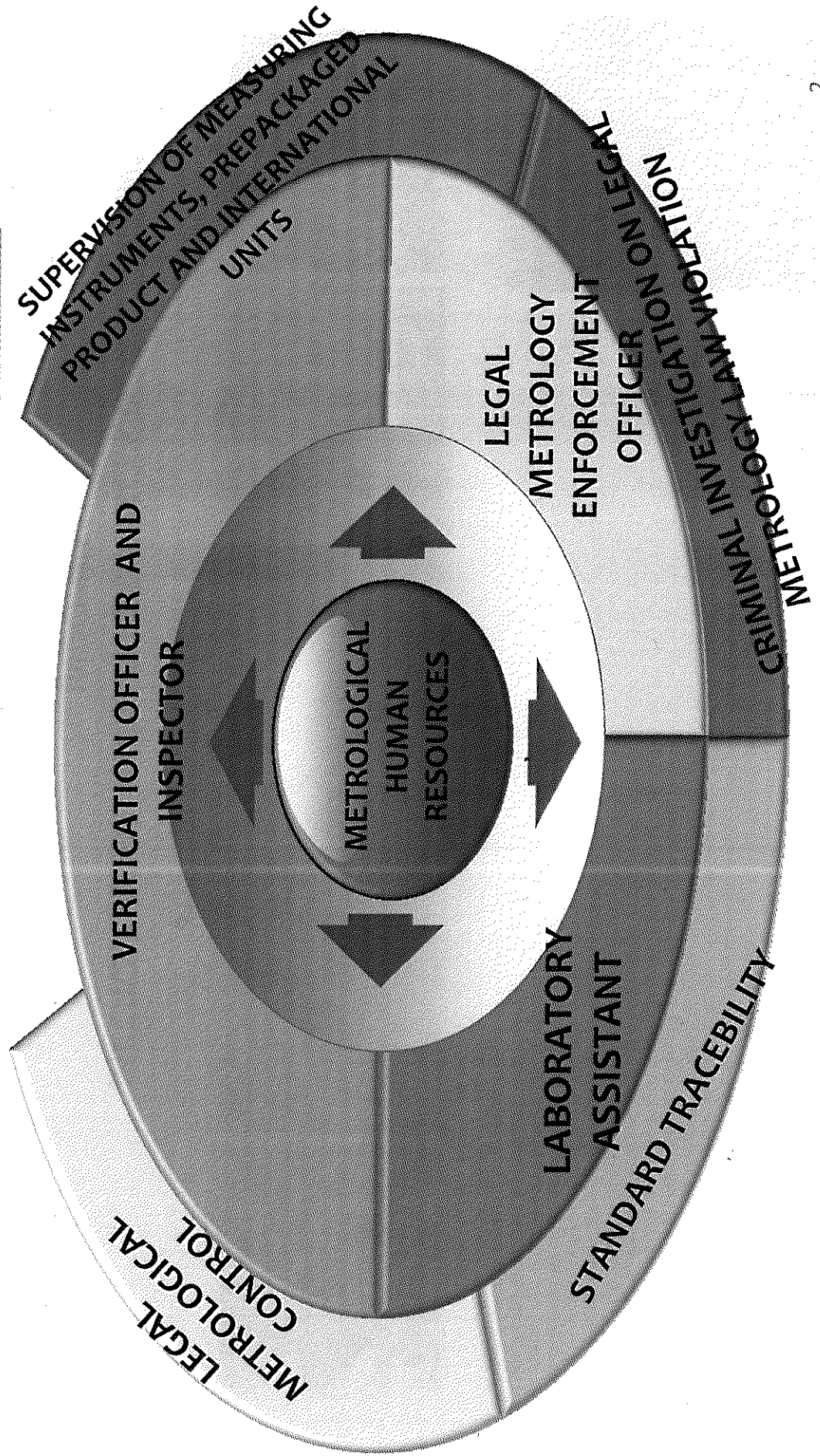
**remarkable  
Indonesia**

Yogyakarta, November 7th 2013

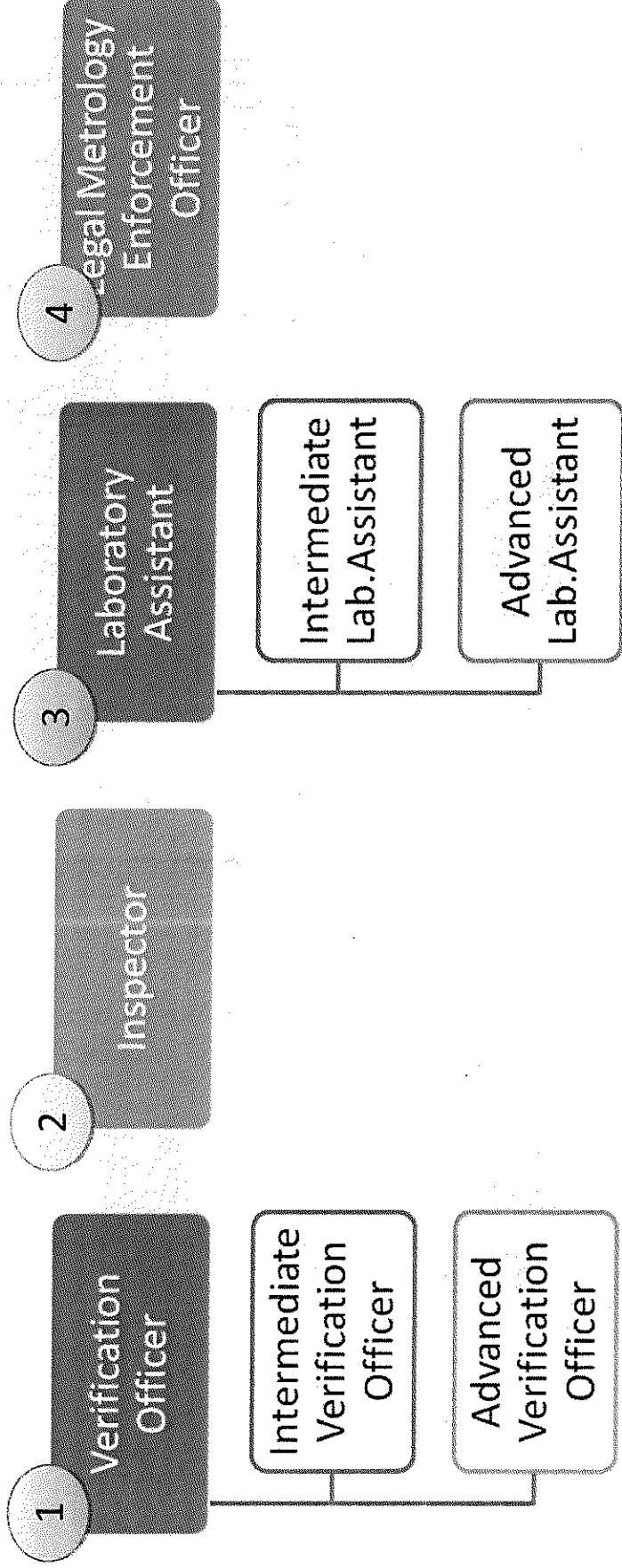
附件九

# LEGAL METROLOGY HUMAN RESOURCES ROLE IN INDONESIA

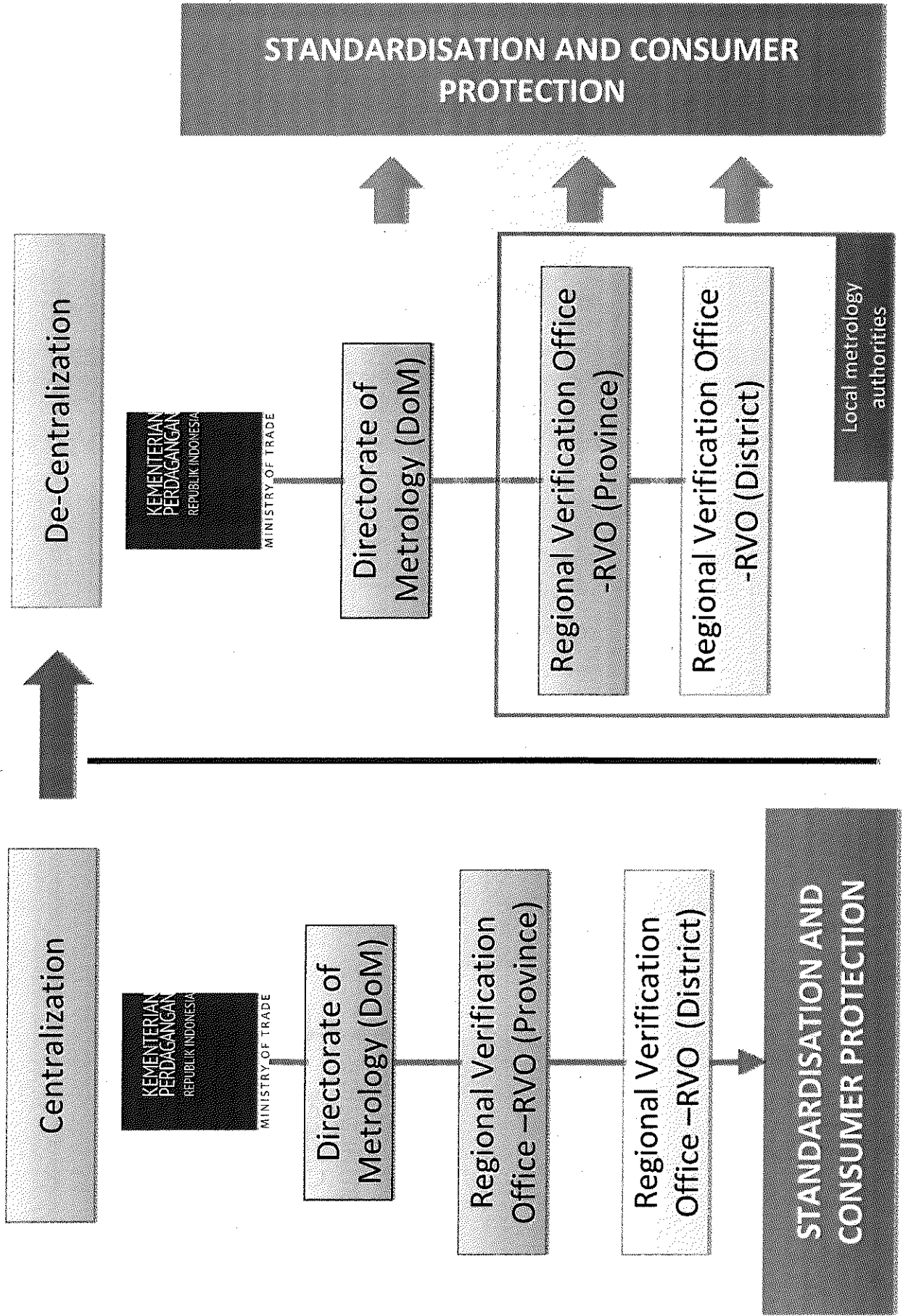
QUALITY INFRASTRUCTURE IN THE FRAME OF STANDARDISATION AND CONSUMER PROTECTION



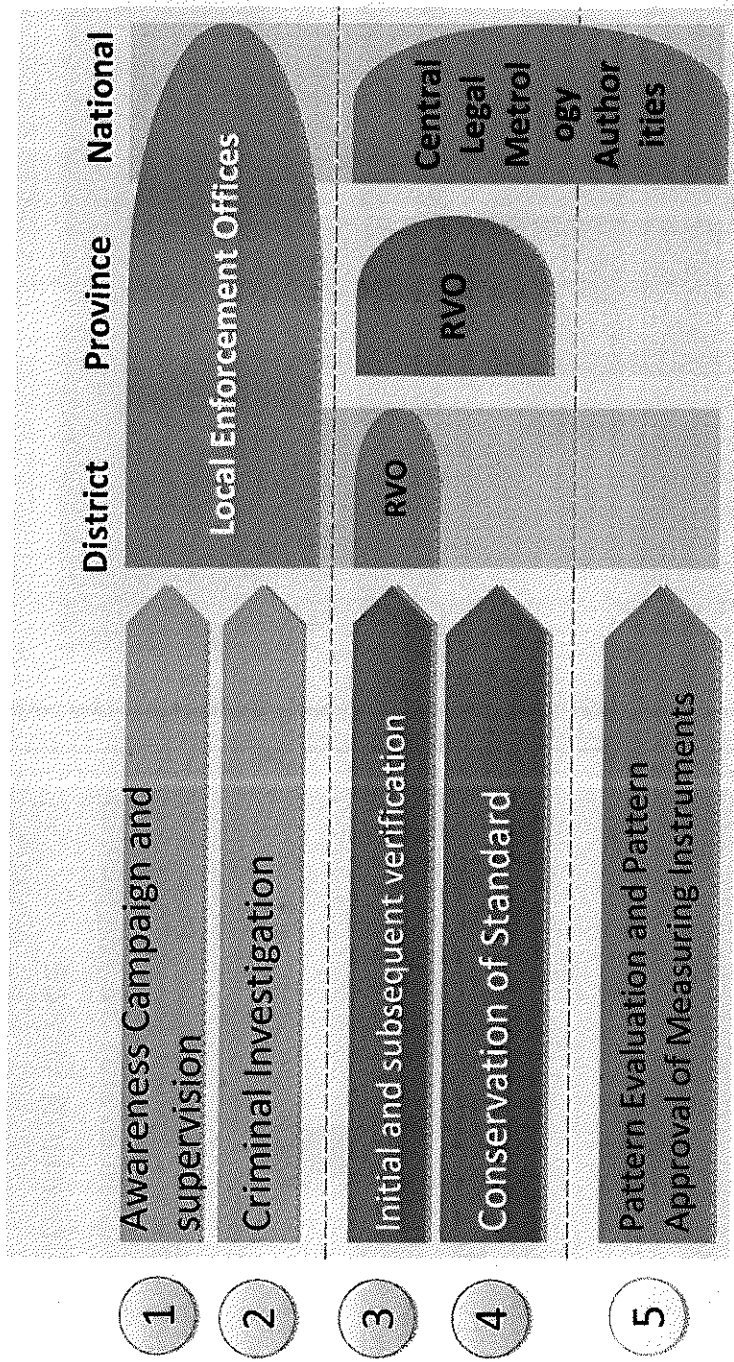
# Metrological Human Resources in Indonesia



# LEGAL METROLOGY SYSTEM IN INDONESIA



# LEGAL METROLOGY ACTIVITIES AND INSTITUTION IN INDONESIA



Region	RVO	Area
Sumatera	13	156 District
Jawa, Bali, and Nusa Tenggara	25	159 District
Kalimantan	5	55 District
Sulawesi, Maluku, and Papua	9	133 District
<b>Total</b>	<b>52</b>	<b>503 District</b>

## Existing Condition

Total Measuring Instruments : **12,4 Million (2012)**  
Consist of : *taxi meter, oil and gas measuring instruments, weighing instruments, gasoline dispenser, etc*

Initial and Subsequent Verification ability : **6 Million Measuring Instruments (48%)**

Conducted by **709 metrology Verification Officers in 52 Regional Verification Office**

## Problems

1. Insufficient RVO and Local Enforcement Office related to area that must be covered
2. Lack of Metrological Human Resources and Budget by Local Metrology Authorities
3. Geographical conditions that are difficult to reach
4. Lack of public awareness regarding legal metrology

## Solutions

Communicate with the local government to increase the number of RVO and Local Enforcement Office

Increase quantity and quality of Metrological Human Resources (HR) via various HR development program

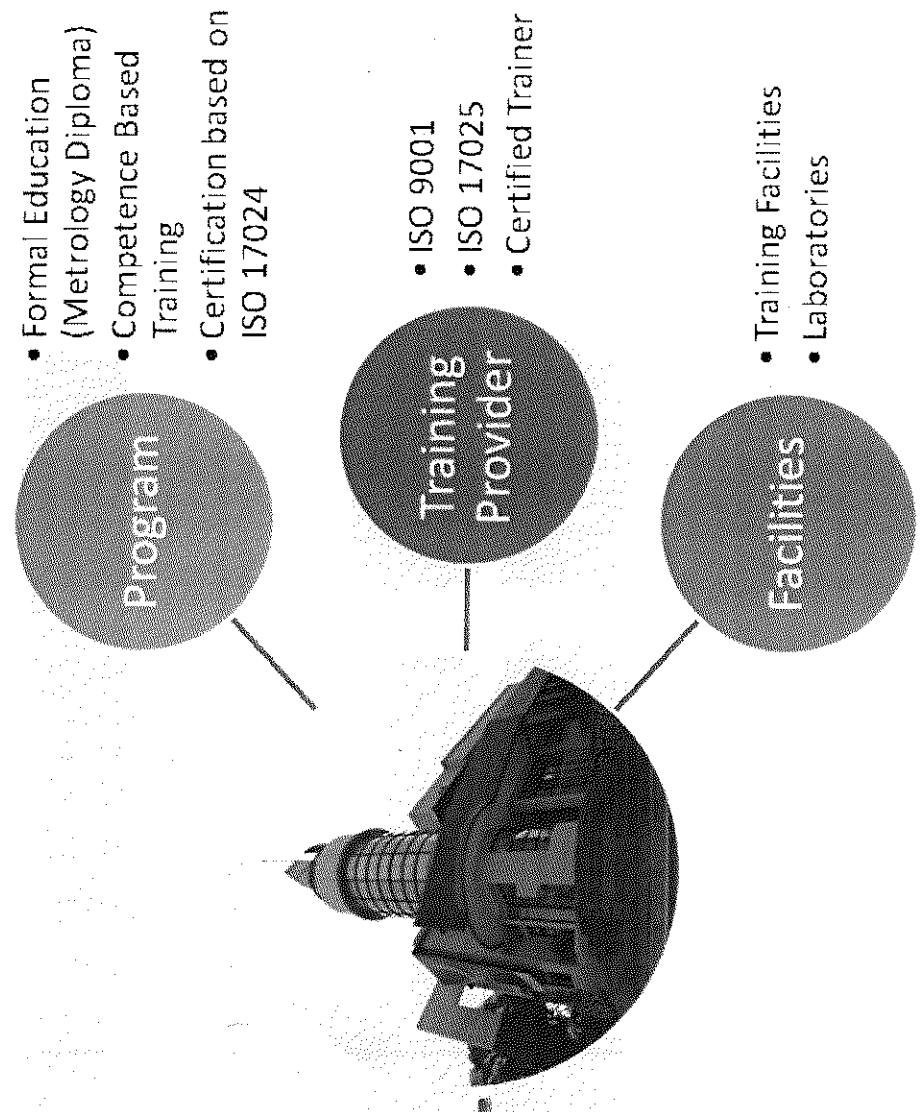
Increase awareness campaign through various communication media

# Metrological Human Resources Development Program

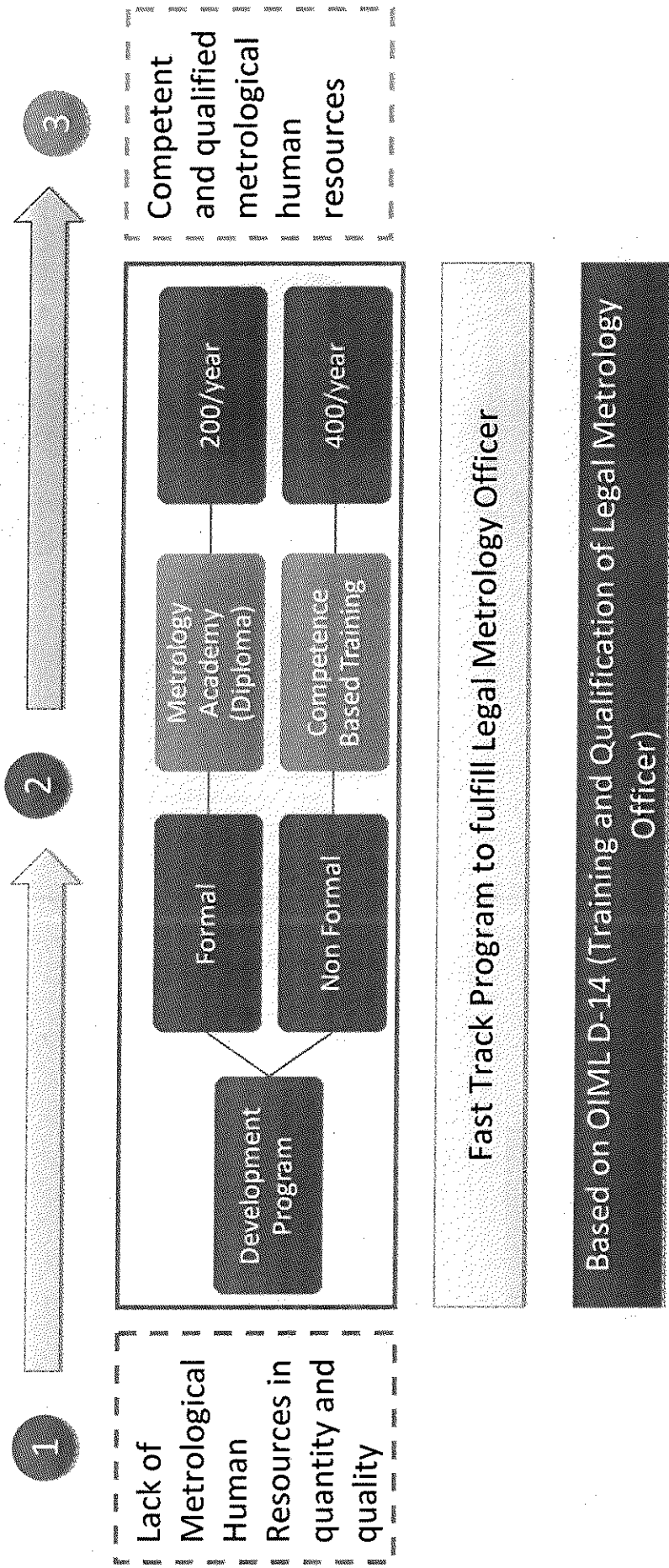
**Conducted by : Development Center of Metrological Human Resources (DCMHR)**

## Task and Function

- 1 Preparation of programs and promotion of Metrology Human Resource Development
- 2 Competency development of Metrology Human Resource
- 3 Development of novel and sophisticated Metrological Technology

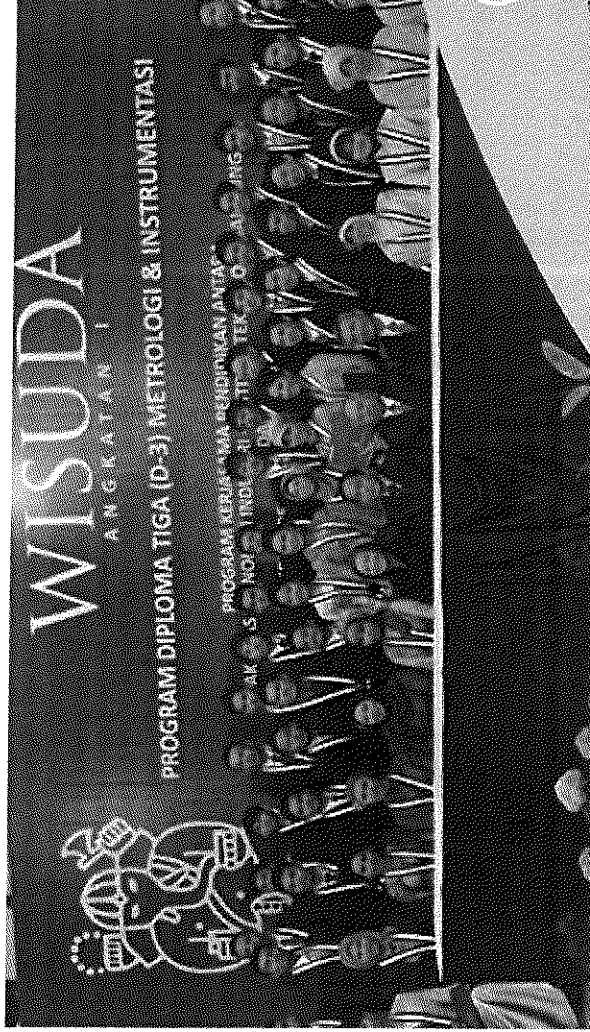


# Strategic Development for Metrological Human Resources





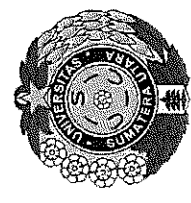
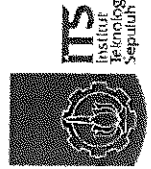
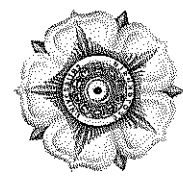
# Formal Education (Metrology and Instrumentation Diploma)



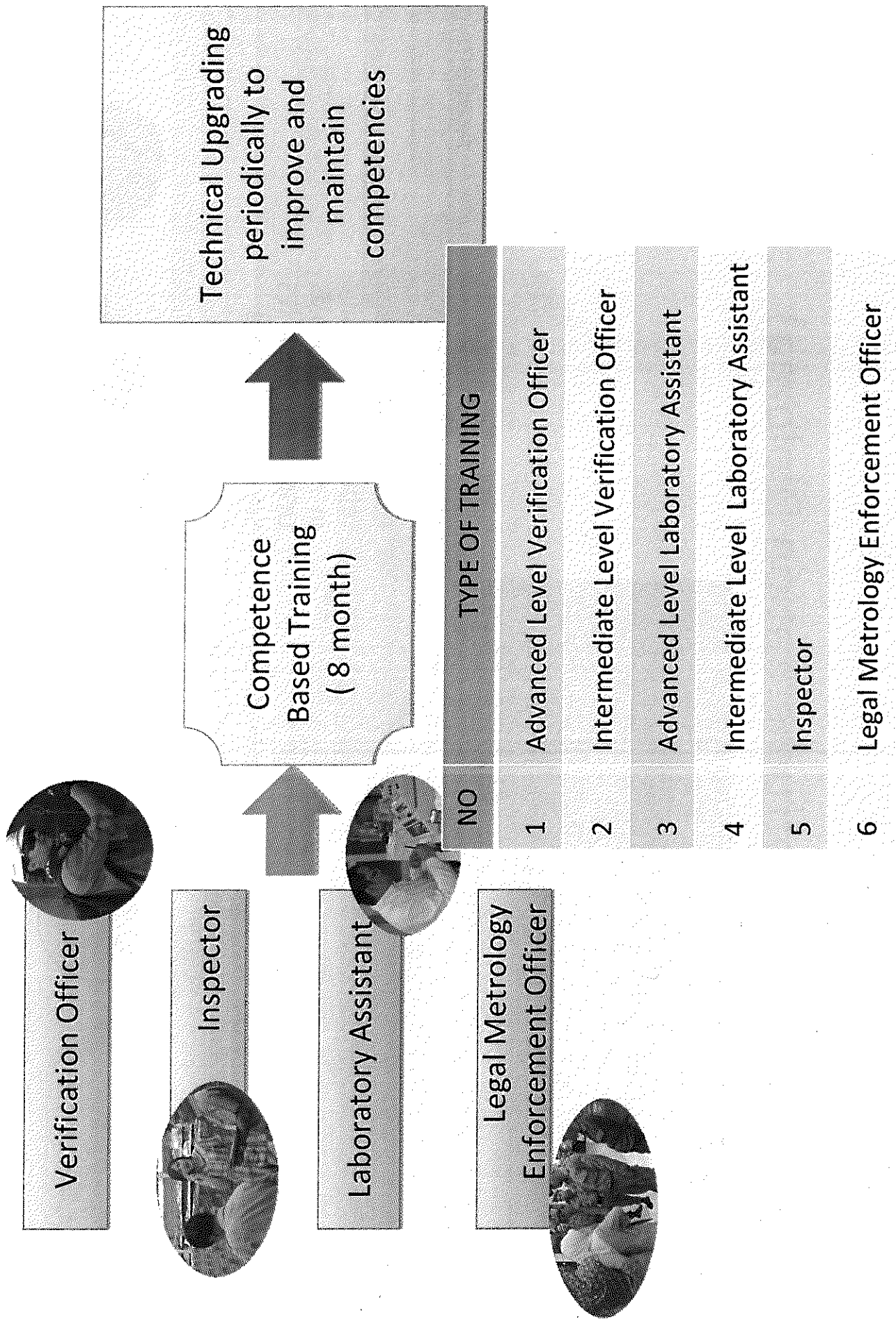
Metrology Academy

Followed by another reputable University in Indonesia, such as UGM Yogyakarta, ITS Surabaya and USU Medan

Started in 2009, Ministry of Trade cooperate with ITB Bandung to conduct Metrology and Instrumentation Diploma Program

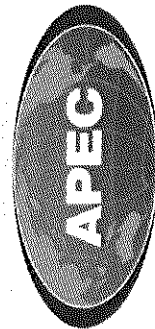


# Non Formal Education (1)



## Non Formal Education-Technical Upgrading Program (2)

NO	TYPE OF TRAINING
1	Operational Management of Metrology
2	Uncertainty Measurement
3	Gasoline Dispenser
4	Temperature
5	Orifice Gas Meter
6	Automatic Tank Gauging
7	ISO 17025
8	Electricity Meter
9	Automatic Weighing
10	Flowmeter and Dispenser
11	Weighing Instruments Technician
12	Electricity Meter Technician



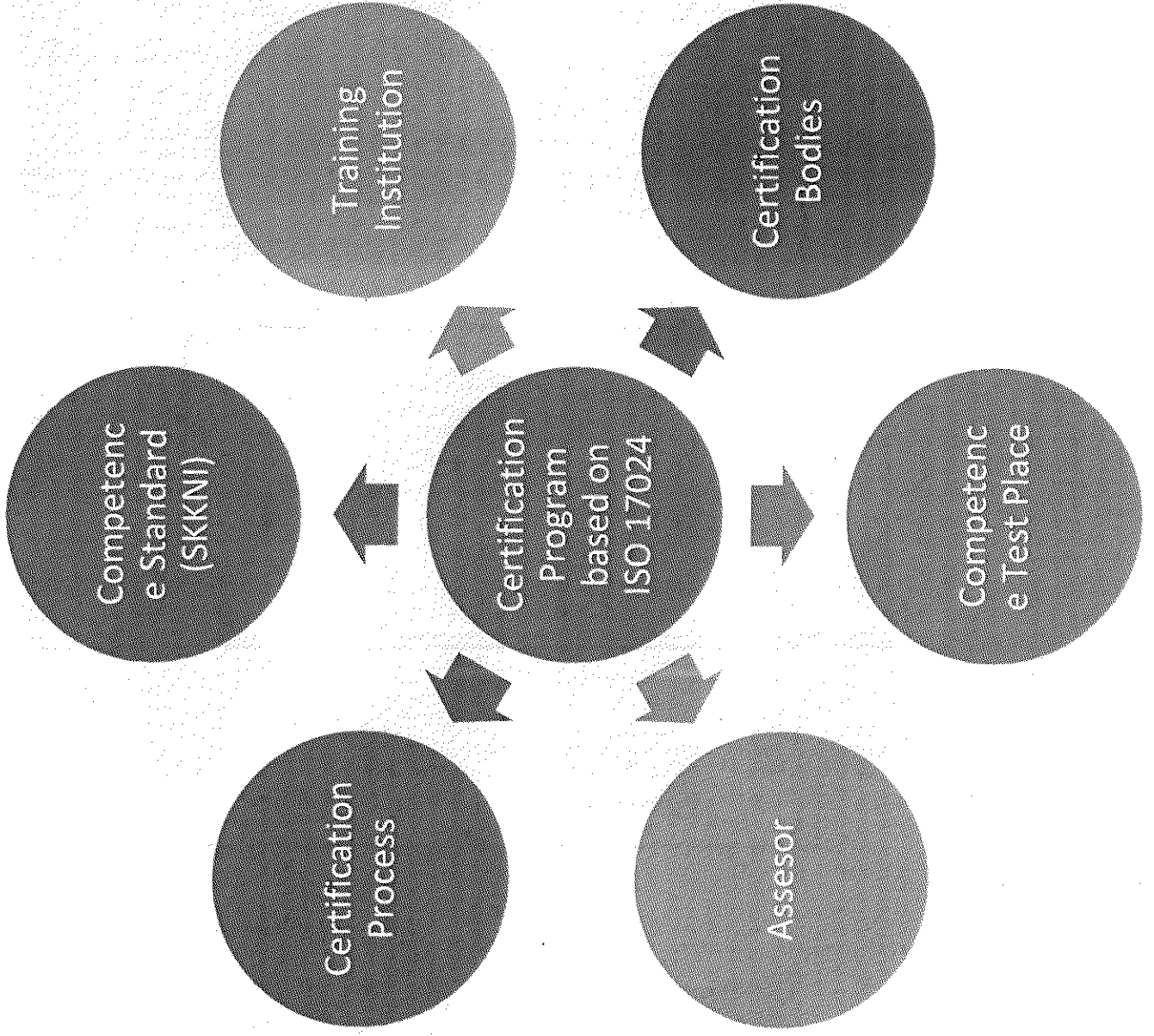
**Asia-Pacific  
Economic Cooperation**

## Non Formal Education -TRAINING PROGRAM COOPERATION (3)

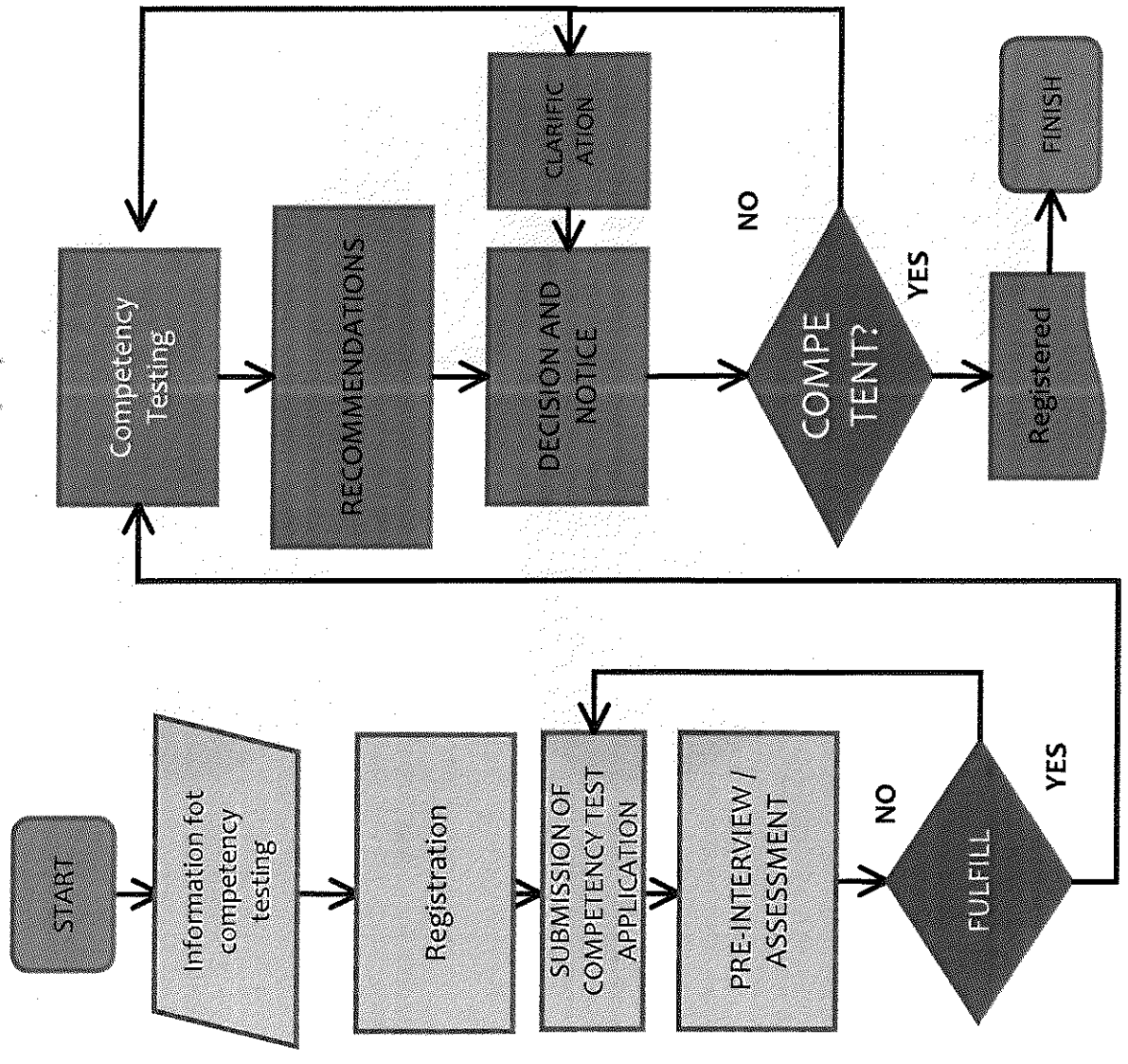


NO	TRAINING COURSE	DATE	PARTICIPANS
1	Training Course on Verification of NAWI Weight bridge	7 <sup>th</sup> -8 <sup>th</sup> June 2010	Thailand, Malaysia, China, Mongolia, Vietnam, Singapura, Philipina, Australia and Indonesian regional metrologi
2	APLMF training course on Traceability In Rice Moisture measurement	June 2011	Vietnam, Laos, Kamboja, Malaysia and Indonesia Regional Metrology
3	Prepackaged Product Training	February 2012	Metrology Corporation Malaysia
4	PTB-ASEAN Training Course on Verification Of NAWI Weigh bridge	Agustus 2013	Country of ASEAN members

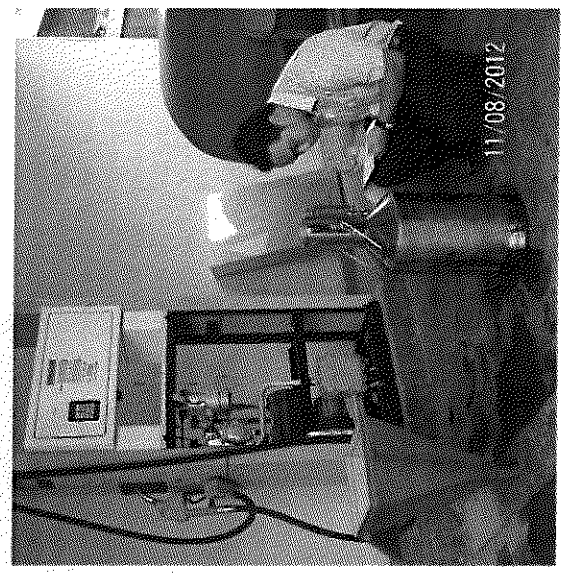
# Non Formal Education - COMPETENCE CERTIFICATION (4)



# Non Formal Education - COMPETENCE CERTIFICATION -Certification Process (5)

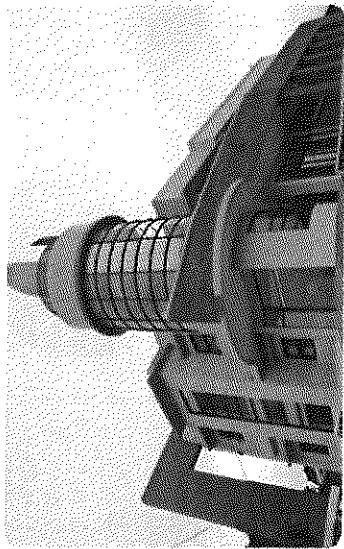


**Goal:** measuring the competencies and professionalism of legal metrology human resources for recognition of independent agencies so it can be recognized both nationally and internationally

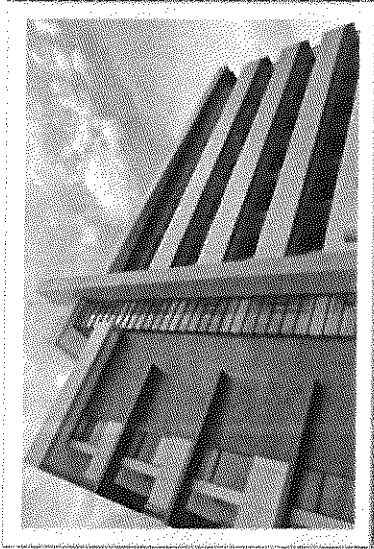


# DCMHR INTERNATIONAL STANDARD FACILITIES

To support formal education & competence based training program



Representative Office Building



Dormitory  
capacity of 187 People,



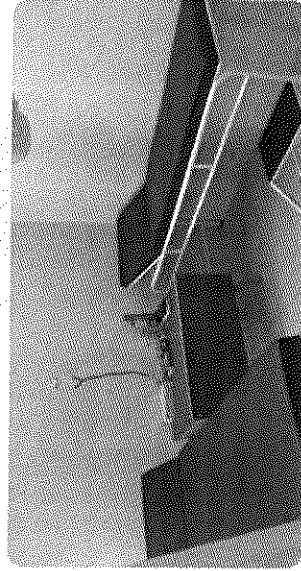
Multipurpose building  
capacity of 200 people



Classroom capacity of 180  
people

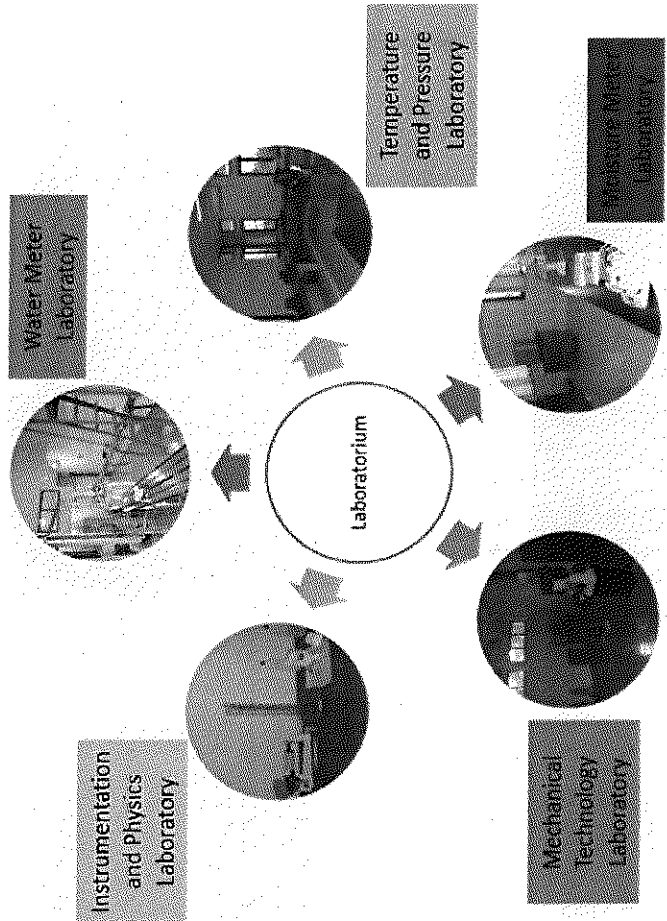
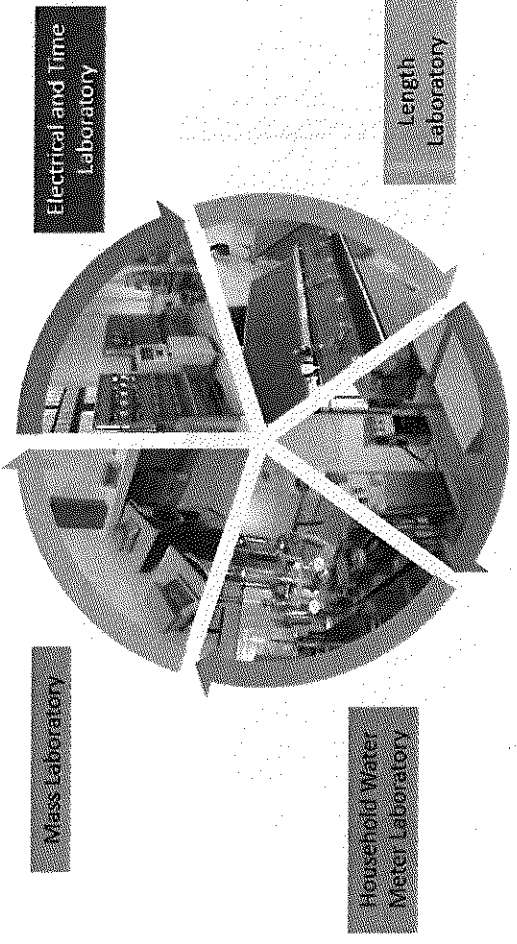


Library with a collection  
of more than 3,000 titles.

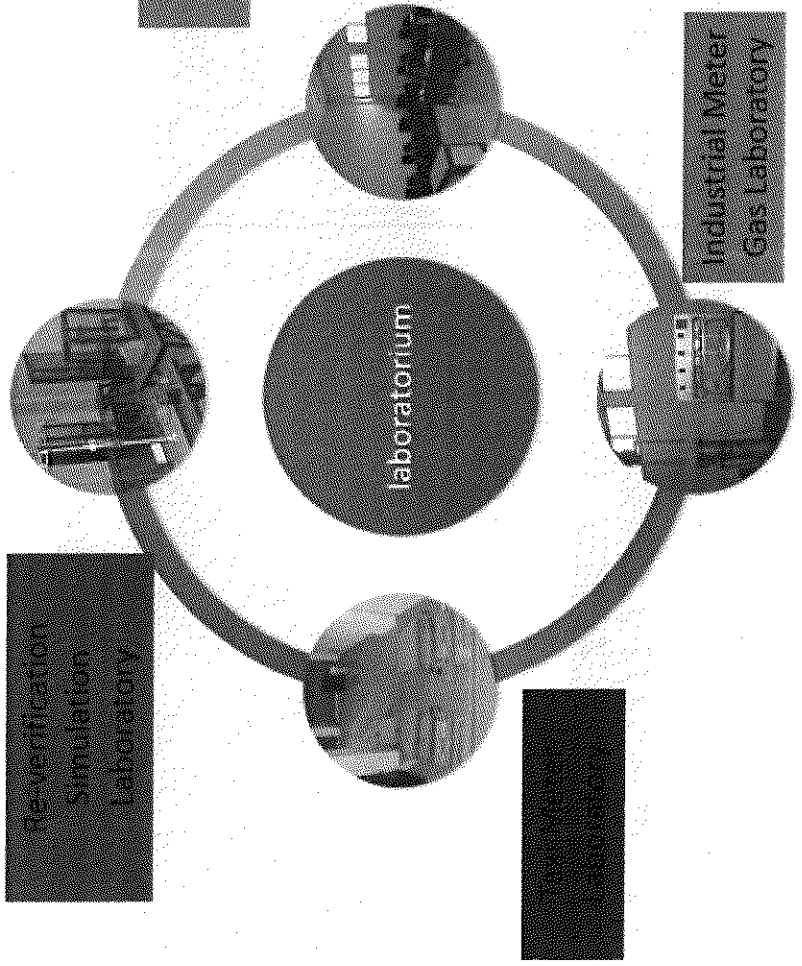


Polyclinic as health support facilities

**LABORATORIES TO SUPPORT FORMAL EDUCATION & COMPETENCE BASED PROGRAM**



**13 LABORATORIES ON PROCESS OF ISO 17025 CERTIFICATION**





KEMENTERIAN  
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MINISTRY OF TRADE

THANK YOU

