



21-22 July 2011

Kuala Lumpur Convention Centre (KLCC), Malaysia

COMPETENCY ENHANCEMENT THROUGH ACCREDITED TRAINING INSTITUTIONS

Presented By

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Managing Director

TNB Integrated Learning Solution - ILSAS

Organized by:



The Synopsis



21-22 July 2011, KLCC

Accredited training institutions play a vital role in enhancing the competencies of the nation's workforce, particularly in industries such as energy, oil and gas, building, construction and manufacturing sectors. **TNB Integrated Learning Solution Sdn. Bhd. (ILSAS)**, a wholly-owned subsidiary of Tenaga Nasional Berhad (TNB) is one such accredited training institution. ILSAS are accredited not only by local authorities, agency and professional body like the Energy Commission of Malaysia (EC), Human Resource Development Fund (PSMB), Board of Engineer (BEM), but also recognized internationally. A well designed competency framework is a key link between the skills, knowledge and attitudes required by the individual and the tasks required by the job. Taking the time and effort to identify and develop competencies can save the organization time and money by helping to recruit the right people for the job and ensure existing employees are working in the areas of business where they can be most effective. ILSAS is committed to support the Malaysian government's high-income objective of inclusiveness and sustainability. In order to achieve the government's objectives, ILSAS engages and advocates a high level of professionalism at all levels of the organization within the industry. With the mission of churning out competent people, it provides skilled work force to the industries and nation. Most importantly, ILSAS provides a structured training and development process that encompasses employees' technical and functional competency development. It is a challenging task, as the training must be tailored in order to develop the right workers with the right knowledge and skills. The right competencies will make them versatile with positive attitudes for the organization.



TNB believes that...we need to



- Continually enhance capability to create the future
- Increase learning to respond to change
- Be agile, adaptive and innovative

With the transformational efforts for positive change, TNB is expecting development of **human capital** towards a state of professionalism and intellectualism.

To realize its vision and mission, **developing human** capability remains as an important agenda.



AN ACCREDITED TRAINING INSTITUTION

*ILSAS Reason for existence is to Churn Out
Competent Workforce*

Our History



1976
Technical
Training
Institute for
Lembaga
Letrik Negara
(LLN)

1983
HRM Sultan of
Pahang –
Sultan Ahmad
Shah Officiated
the Institute on
10th February

1990
Started the
framework of
setting up
University
Tenaga
Nasional



2001
Institut
Latihan Sultan
Ahmad Shah
(ILSAS)
"TNB Training
Institute"

2008

*A Wholly
Owned
Subsidiary of
TNB*





Our Mission

- Building Experts Through Learning Interventions

TNB Integrated Learning Solution - ILSAS

ILSAS Churn Out Competent Workforce

TNB INTEGRATED LEARNING SOLUTION
"Building Experts Through Learning Interventions"

COMPETENCY

- Observable **abilities**, *skills, knowledge, motivations or traits defined in terms of the behaviours* needed for **successful job performance**

TECHNICAL COMPETENCY

- Competencies required and desired **to ensure effective performance in specific area of expertise***

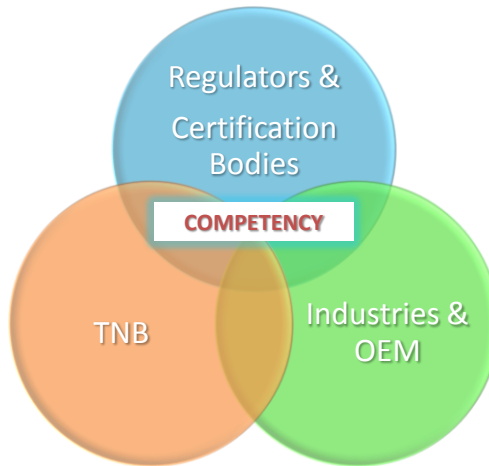
*An individual's knowledge and expertise in the specific group task and its processes, that is, knowledge of the skills, strategies and its rules and regulations.

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AN ACCREDITED TRAINING INSTITUTION

Accreditation:
 Certified;
 Recognized.
 (official approval to do something; officially accepted as being of a satisfactory standard)



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ILSAS Framework



Center Of Excellence = Shared Mind Set + Engaged Employees With Capacity for Change and Rapid Learning + Quality Processes and Products + Boundary less Behavior



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Market Segmentation



Target Market

- Industry (power utility, oil & gas and other related)
- Regulators (Energy Commission, DOSH)
- Government and nation
- International (regional – ASEAN & MENA)

Participant Category

- Power utility management team, Regulators
- Engineers, executives, technicians, electricians, fitters
- Youth & school-leavers (skills training program)

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Our Clients



LOCAL

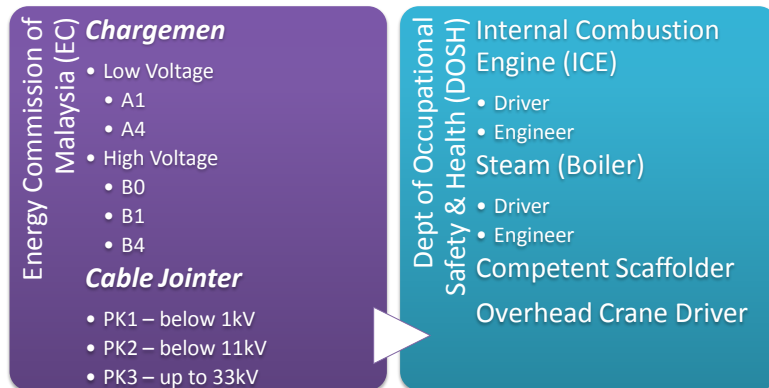
- TNB (& Subsidiaries)
- SESB
- Petronas
- ESSO
- Sejangkat Power
- Independent Power Producers
- Government Bodies
- Companies/ Contractors/ Individuals
- Training Agencies & Institutions



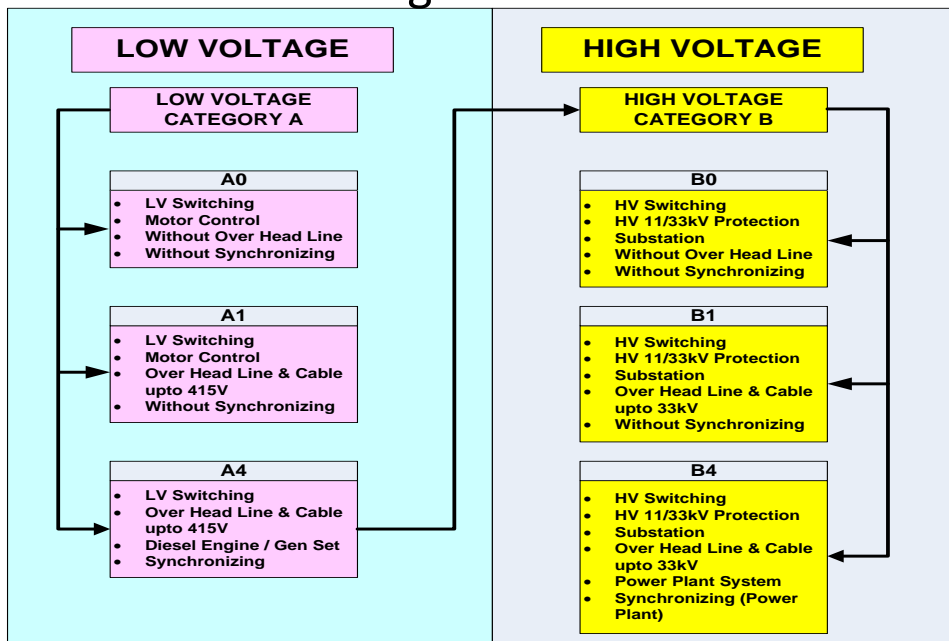
INTERNATIONAL

- Bosnia Elektroprivreda
- Electricite Du Laos
- Nepal Electricity Authority
- National Electricity of Ceylon
- PT Power Gen/PLN Indonesia
- Liberty Power Pakistan
- ABB Taiwan
- EVN Vietnam
- EEHC Egypt
- Mongolian
- EGAT
- Cambodia via Japan pjt

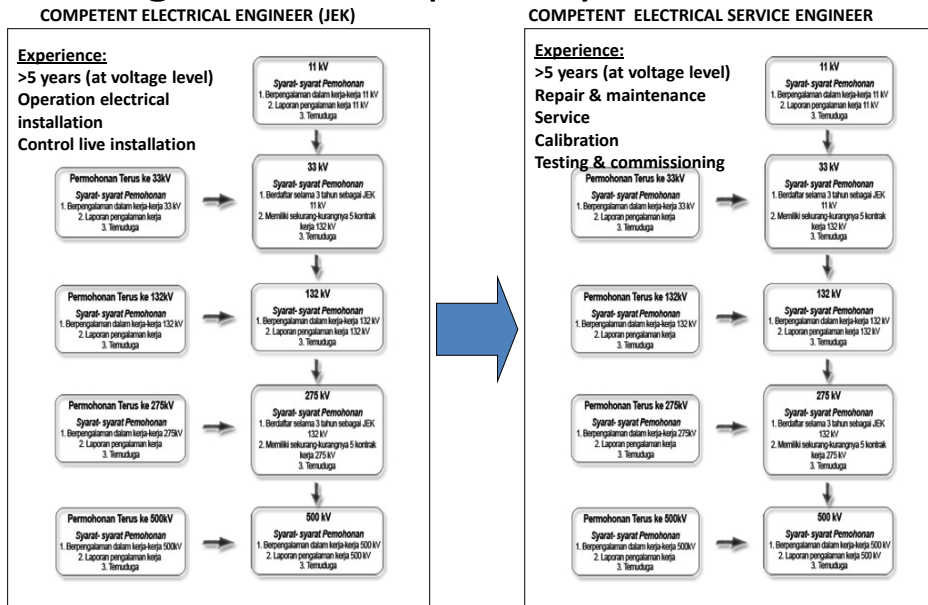
Training Products - Regulatory Requirement



Chargeman Path



Engineer's Competency Certificates



Source: Energy Commission Website (<http://www.st.gov.my>)

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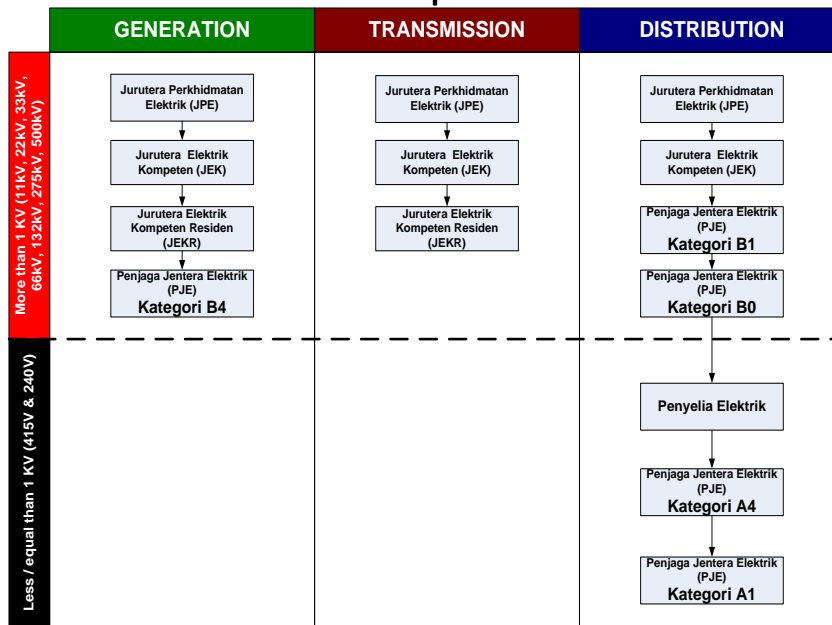
Accredited Training (Regulator "EC")

COMPETENT ENGINEER & Chargeman – SET UP (DIVISION, STATE, REGION/PLANT LEVEL)



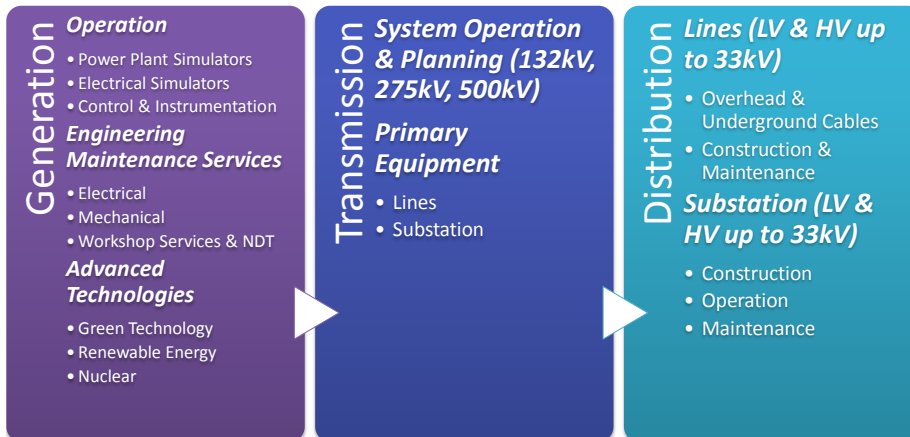
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Overall Requirements



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Training Products – Engineering



Training Products – Engineering



Training Products – Leadership, Management & IT





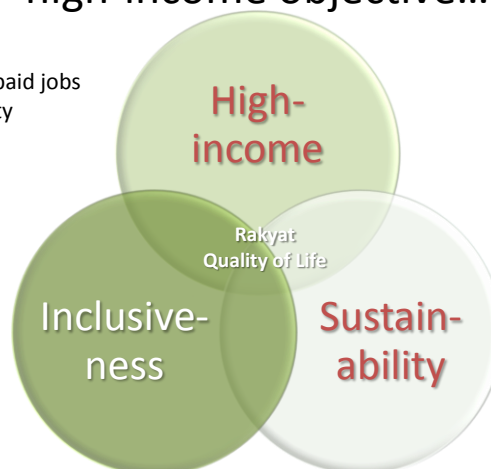
AN ACCREDITED TRAINING INSTITUTION

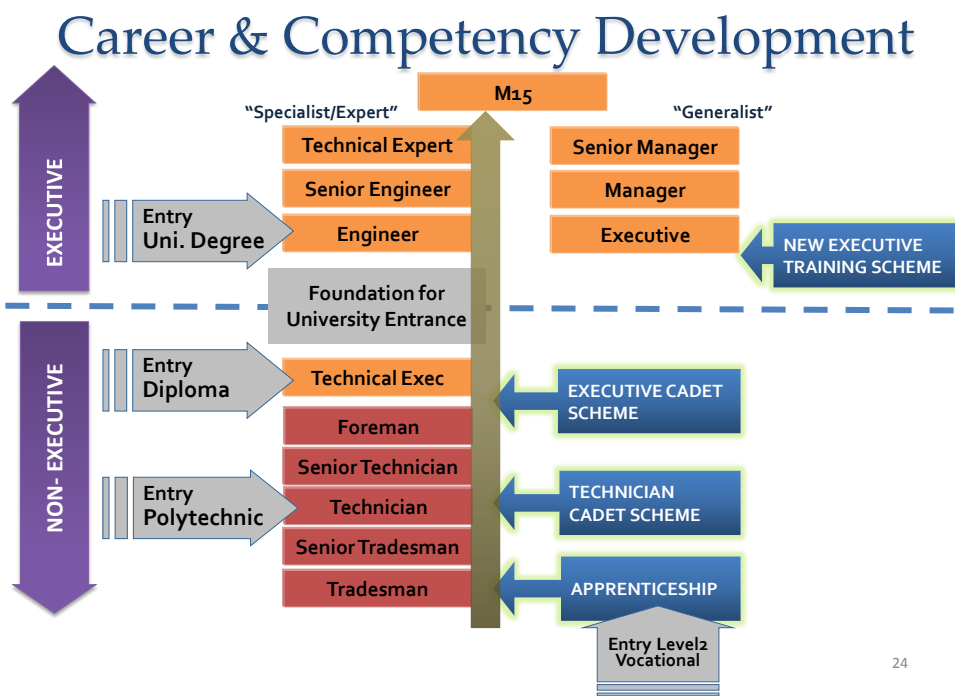
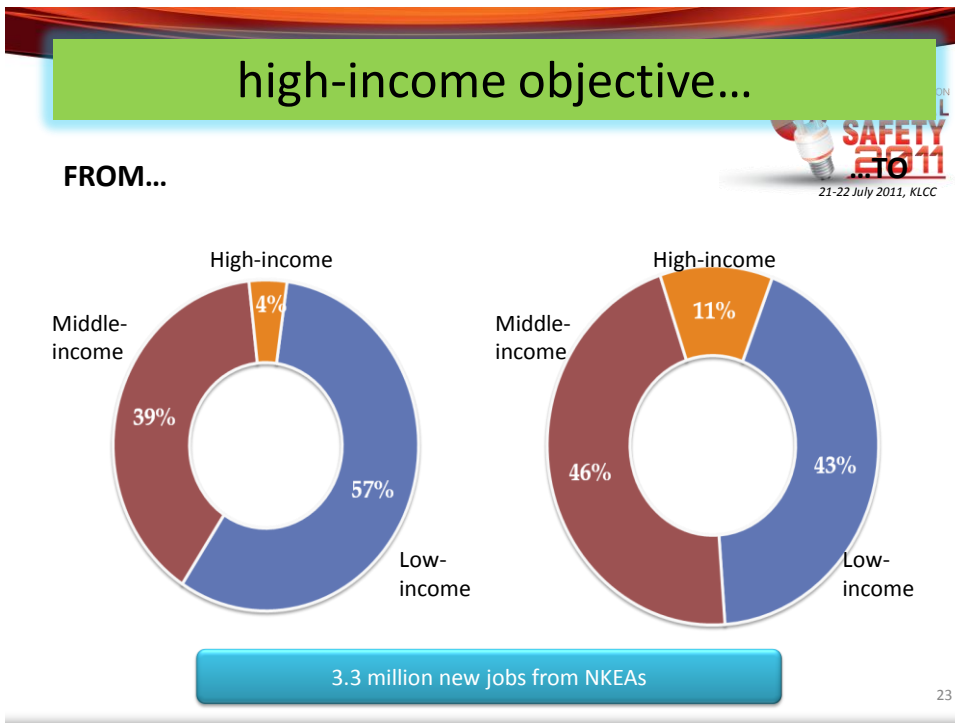
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The Malaysian government's high-income objective...



Shift to pay higher paid jobs
Increase productivity





Example: Structured Engineer's Training

ENGINEER TRAINING MATRIX

Field Grade	FUNCTIONAL & TECHNICAL – KNOWLEDGE & SKILL		
	GENERATION	TRANSMISSION	DISTRIBUTION
E16 /E17	ADVANCED (Area & Field)	ADVANCED (Area & Field)	ADVANCED (Area & Field)
E14 /E15	INTERMEDIATE (Area & Field)	INTERMEDIATE (Area & Field)	INTERMEDIATE (Area & Field)
E12 /E13	GENERIC TECHNICAL (+ HANDS-ON) Area & Field: • Operation • Mechanical • Electrical • Control & Instrumentation	GENERIC TECHNICAL (+ HANDS-ON) Area & Field: • Substation • Overhead line • Protection • Tele-control • Telecommunication • Planning • Operation & Control	GENERIC TECHNICAL (+ HANDS-ON) Area & Field: • Operation (RCC) • Operation & Maintenance • Planning • Construction • Metering
Common module • Electrical Safety, Act & Regulation • Power system overview • Professional Engineer (BEM/EM) training			

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Capability & Strength

Product

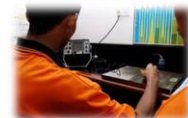
- Generation
- Transmission
- Distribution
- Career Development
- Specific Regulatory Requirement:
 - Energy Commission of Malaysia for Electrical
 - Department of Occupational Safety & Health of Malaysia for Mechanical

Experts

- Pool of Experts
- Trainers / Operation Engineers / Academicians / Researchers
- Training Partners

Infrastructure

- Simulators:
 - 300MW Coal-Fired
 - 300MW Combined-Cycle
 - 11kV & 33kV
 - LV/HV
 - RTU-SCS
 - Live Line (Transmission)
- Workshop & Labs:
 - Welding & machining
 - Cable jointing
 - Non-Destructive Testing
 - Metering
 - Protection
 - Sub-Operation
 - Electric & Instrumentation
 - HVAC
 - Vibration & Balancing
 - Thermography
 - Smart Labs



ILSAS Framework



Center Of Excellence = Shared Mind Set + Engaged Employees With Capacity for Change and Rapid Learning + Quality Processes and Products + Boundary less Behavior



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Capability & Strength - PEOPLE

	Numbers of certified trainers / staff	Awarded by
Certified Training Practitioner	181	ILSAS, ARTDO International, ITD, IAF
Master & Degree Holders	64	Local & International Universities
Diploma & Certificate Holders	78	Local & International Polytechnics & Universities
Technical/ Professional certification	81	Energy Commission, CSWIP, BGAS, PCN (BINDT), DOSH, NLP, MLVK/JKM, others
Professional Eng.	7	IEM/BEM
TOTAL	411	

*Data accurate as of May 2011

Category	Trainer	Support	Total
Executive	87	24	111
Non-exec	46	85	131
TOTAL	133	109	242

TNB Integrated Learning

Good and Reliable Partners

- Energy Commission of Malaysia
- Board of Engineers Malaysia (BEM)
- Institution of Engineers Malaysia (IEM)
- Government training-related agencies: IKBN, ILP, MARA
- TNB Subsidiaries: SESB, TCI, REMACO, TSG, MTM, Liberty Power
- Established Vendors: TYCO Electronics, ABB, TOPRANK
- OEM: SIEMENS, Dong Fang, Reinhausen
- CIDB (Construction Industry Development Board)
- SESCO (Sarawak Electricity Supply Corporation)
- NIOSH (National Institute of Occupational Safety & Health)

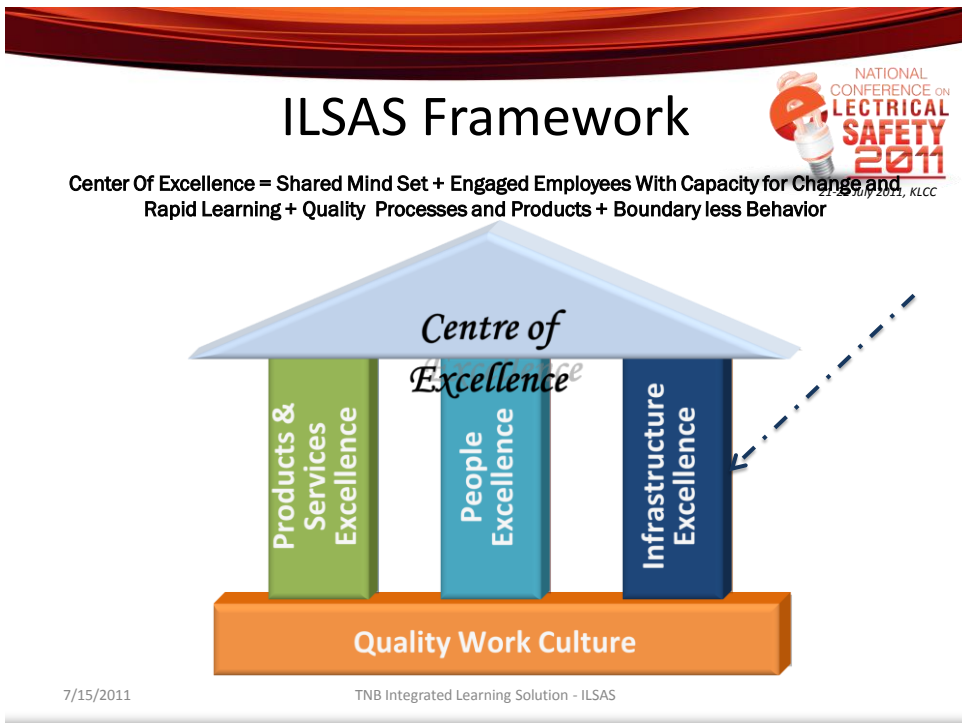


TNB Integrated Learning Solution - ILSAS

Internationally

- Turboinstitut - Hydro mechanical equipment
 - Water turbines & pumps for power generation
- TWI (CSWIP)
 - Power Plant Assessment & Certification
 - Non Destructive Testing
 - Welding Inspection
- EMPOWER (City & Guild)
 - Combined Cycle Gas Turbine Part 2





Laboratory & Workshops

21-22 July 2011, KLCC

300MW Coal-Fired Simulator	300MW Combined-Cycle Gas Turbine Simulator	LV Live Poles
Vibration Analysis	Welding Bays	33kV Substation Simulator



ILSAS
TNB INTEGRATED LEARNING SOLUTION



NATIONAL CONFERENCE ON
ELECTRICAL SAFETY 2011
21-22 July 2011, KLCC

Other Amenities



Buses & Vans



Muslim Prayer Facilities



Food & Dining



Seminar Rooms



Tennis & Badminton Courts



Football & Netball Fields

Satellite Training Centers

ILP

1. Kepala Batas, P Pinang
2. Kota Kinabalu, Sabah

MARA

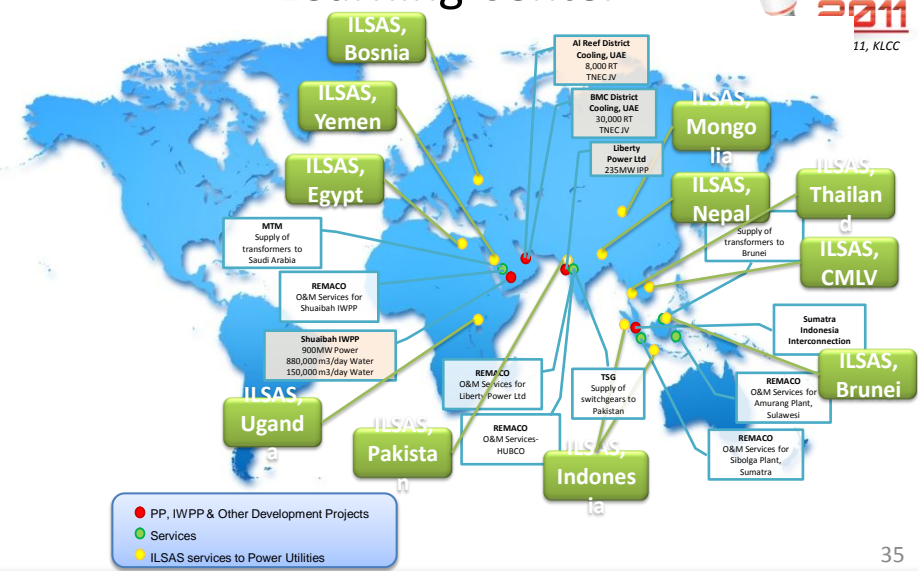
1. KKTm Pasir MAS
2. IKM Kota Kinabalu
3. IKM Besut
4. IKM Jasin
5. IKM Kuala Lumpur
6. IKM Johor Bahru
7. IKM SIK
8. IKM Beseri
9. IKM TSYA, Pekan
10. IKM Lumut
11. IKM Sg Petani

1. Alor Setar, Kedah
 2. Bandar Perda, P Pinang
 3. Ketereh, Kelantan
 4. Kuala Terengganu, Terengganu
 5. Kepong, Kuala Lumpur
 6. Temerloh, Pahang
 7. Port Dickson, Negeri Sembilan
 8. Muar, Johor
 9. Kulai, Johor
- IKBN**
1. Bukit Mertajam, P Pinang
 2. Alor Gajah, Melaka



TNB Satellites

Visible Presence as a Leading Energy Learning Center

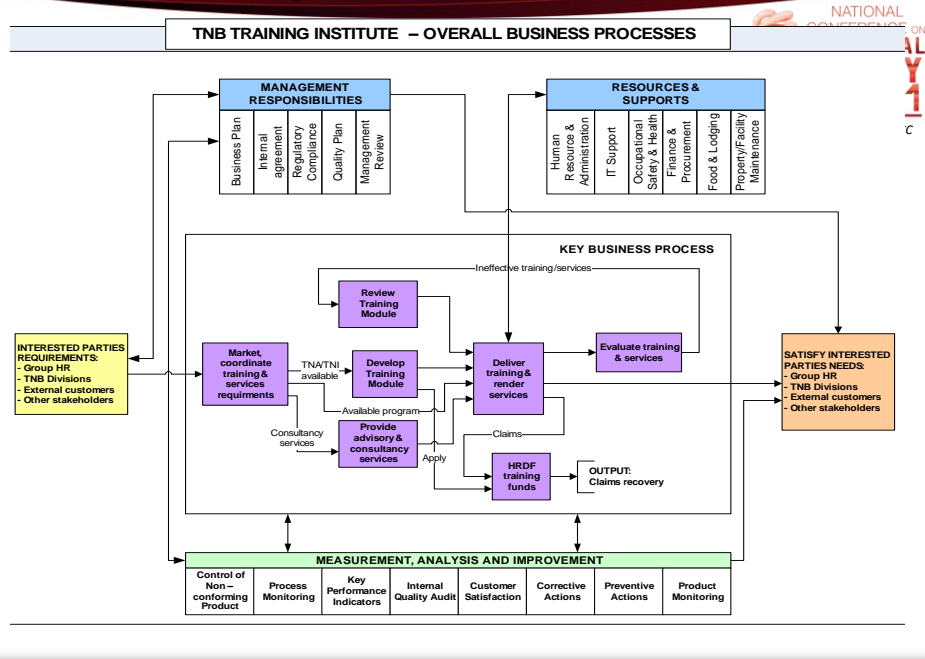


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Proven Quality Process



Achieved recognitions

- Class 'A' training provider - Human Resource Development Corporation, Malaysia (HRDC)
- Human Resource Minister - Training Provider Award 2007
- MS ISO9001:2008 Certified
- High Voltage Chargeman Certified Training Provider, Energy Commission of Malaysia
- 5S Certified by MPC
- BEM
- IEM
- OEM



Human Resource Minister -
Training Provider Award 2007



Thank You



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