



**VERIFICATION (INSPECTION & TESTING)
OF
LOW VOLTAGE ELECTRICAL
INSTALLATIONS
TO
IEC 60364 PART 6: VERIFICATION**

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- Low Voltage Electrical Installations Standards and IEC 60364
Part 6: Verification
 - Current ASEAN Scenario
 - AFEO Initiatives
 - Q&A

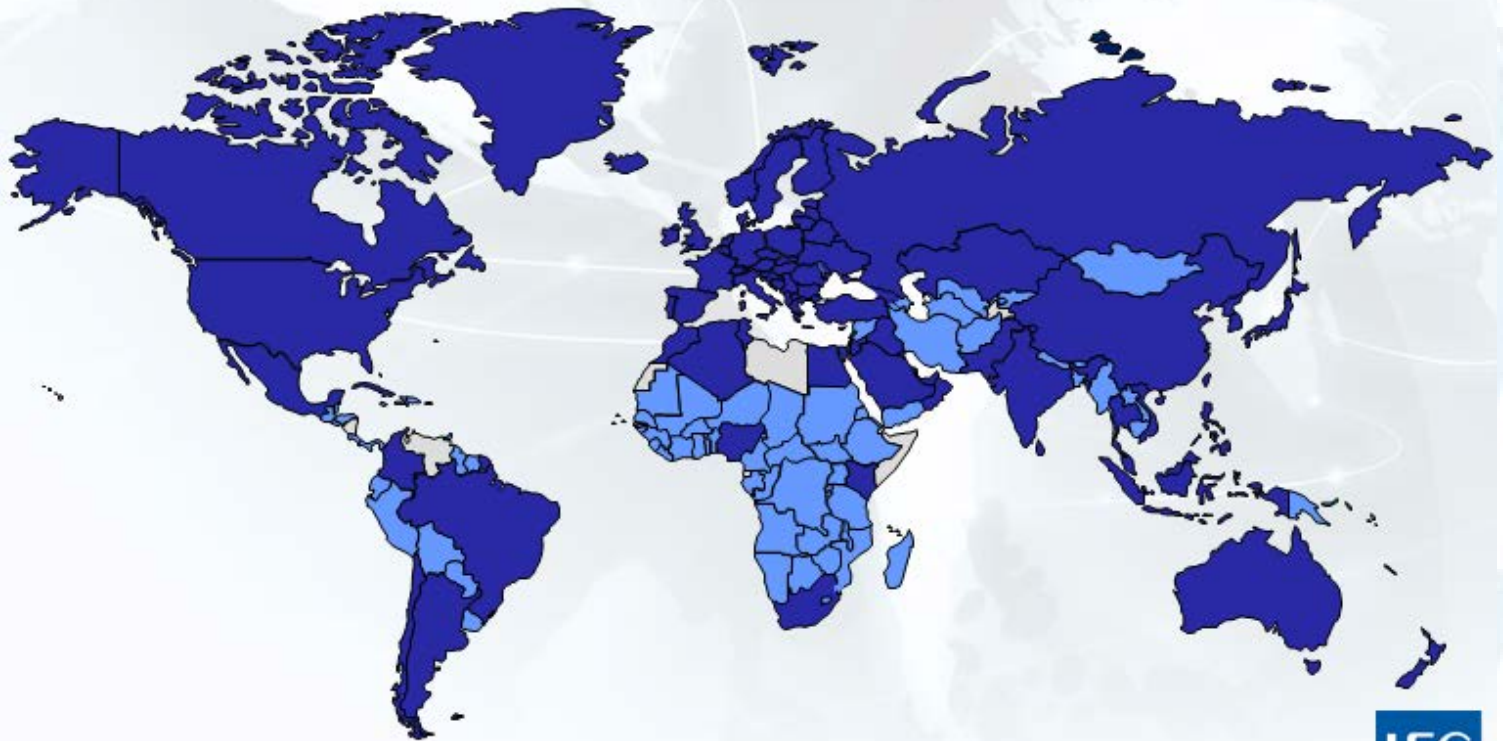
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Low Voltage Electrical Installations Standards And IEC 60364 Part 6: Verification

IEC Family: 170 countries

83 Members

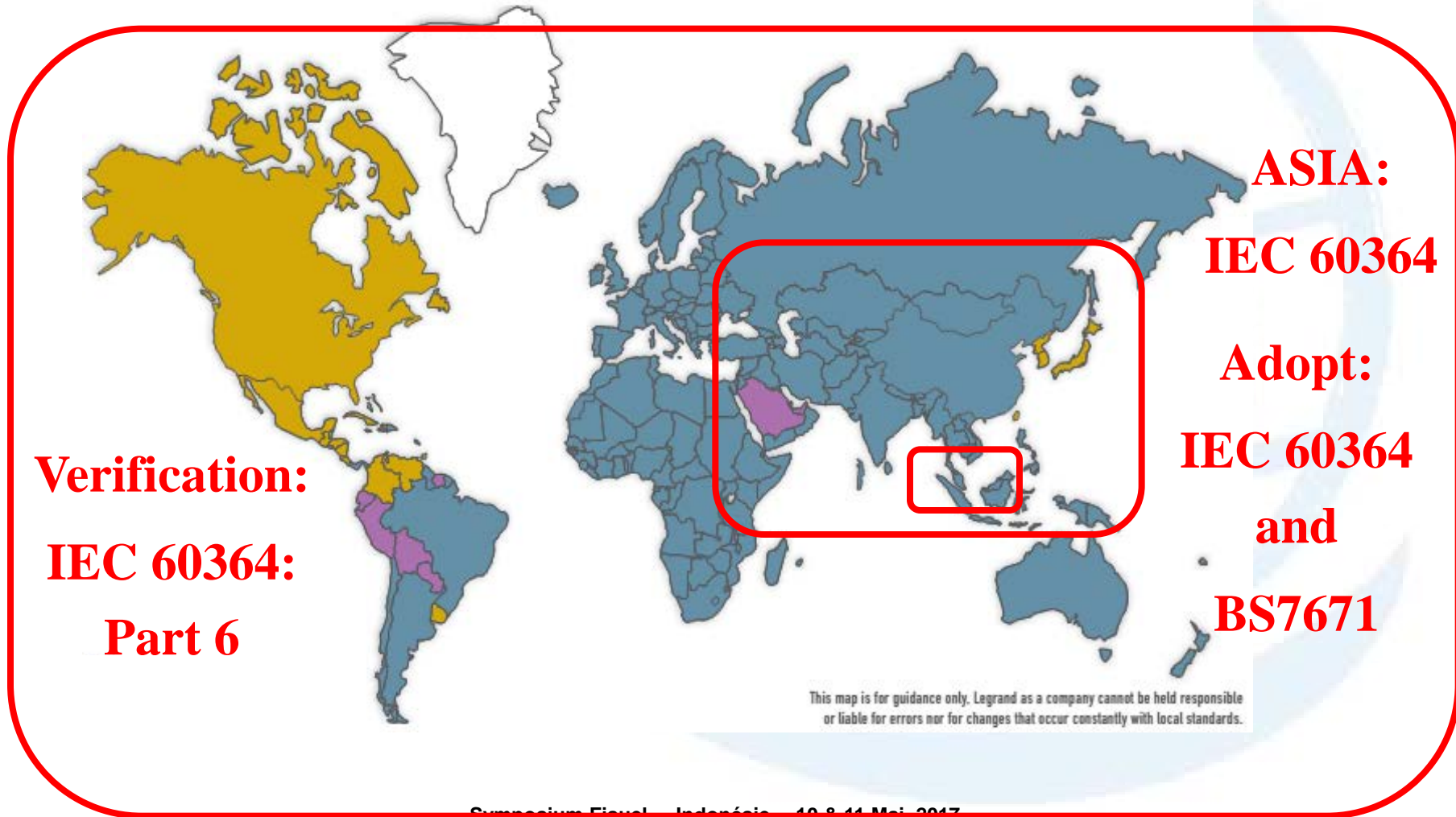
87 Affiliates



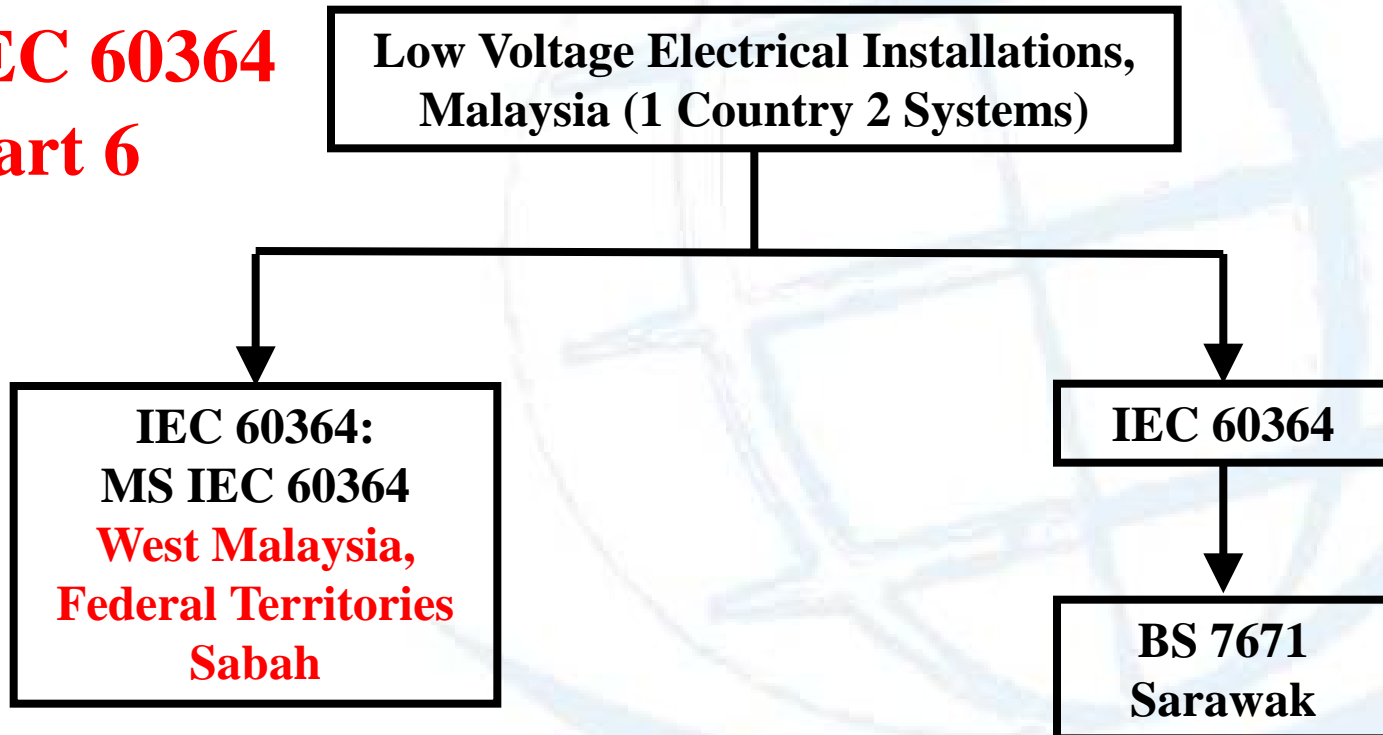
Symposium Fisuel – Indonésie – 10 & 11 Mai 2017

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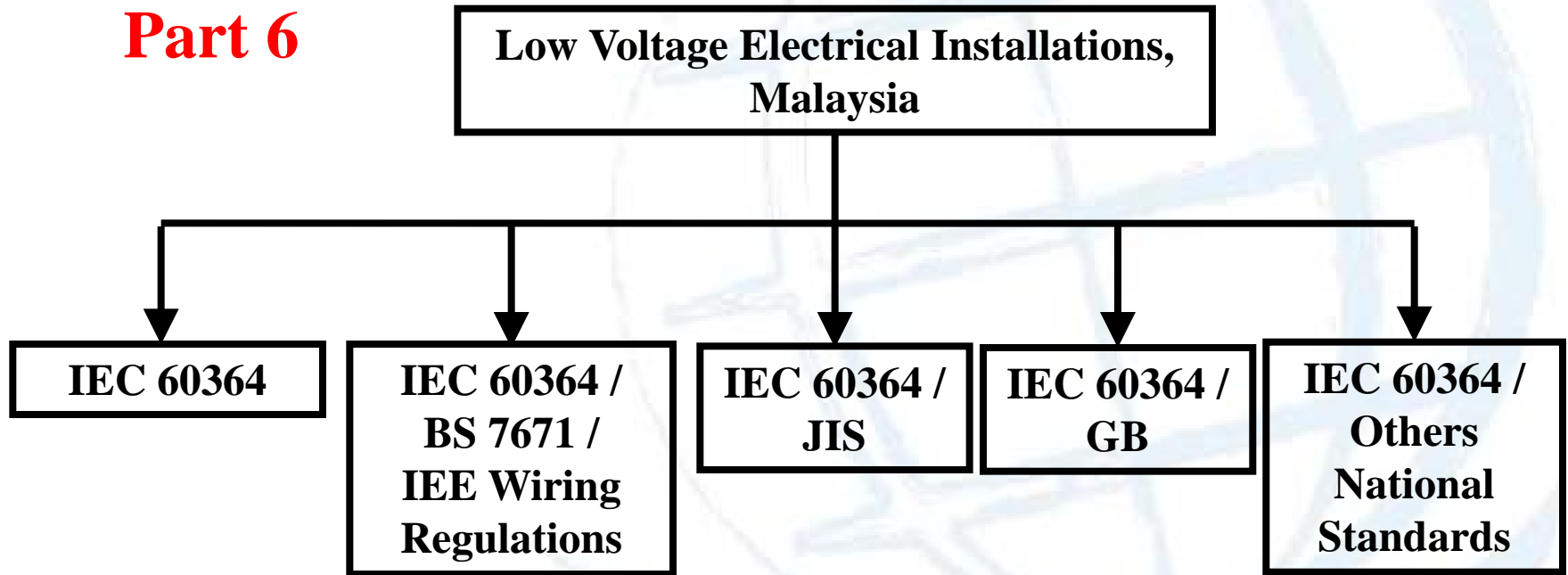
Low Voltage Electrical Installations Standards



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MS IEC 60364
Part 6**

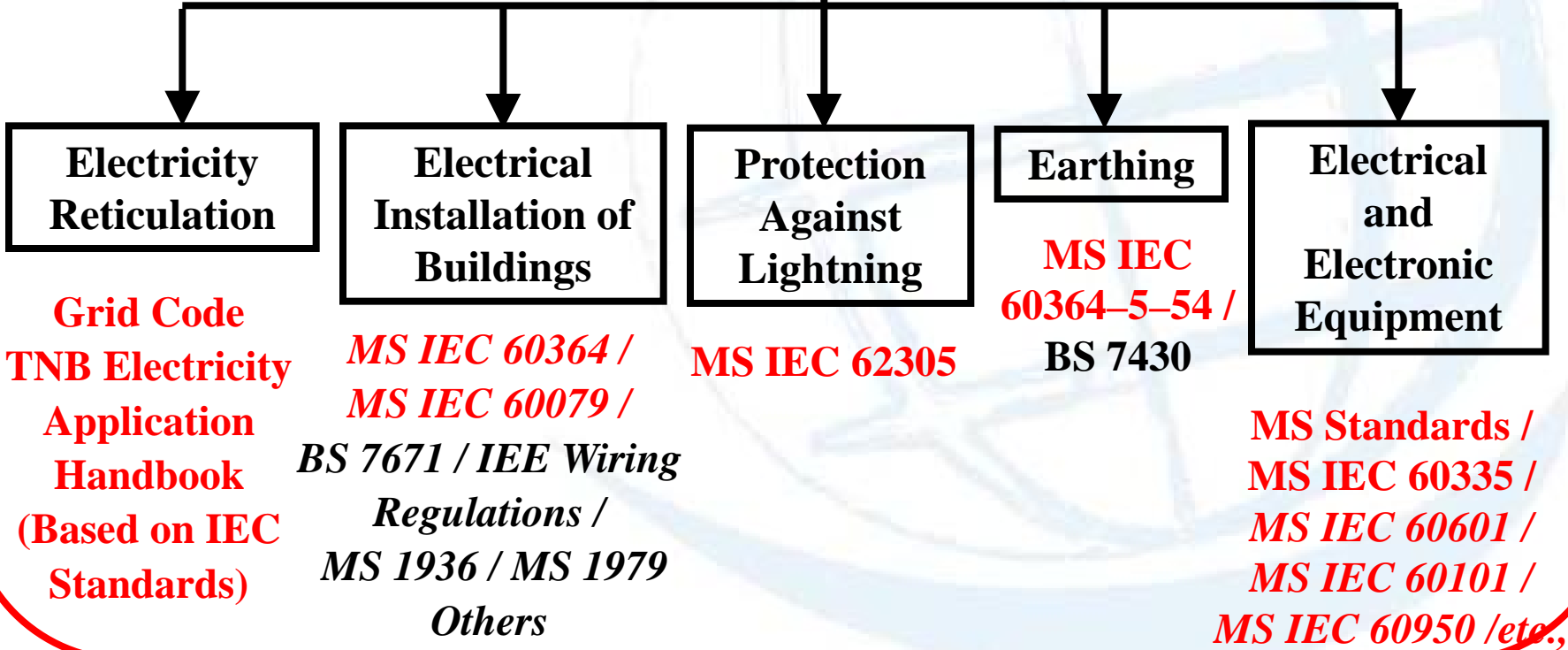


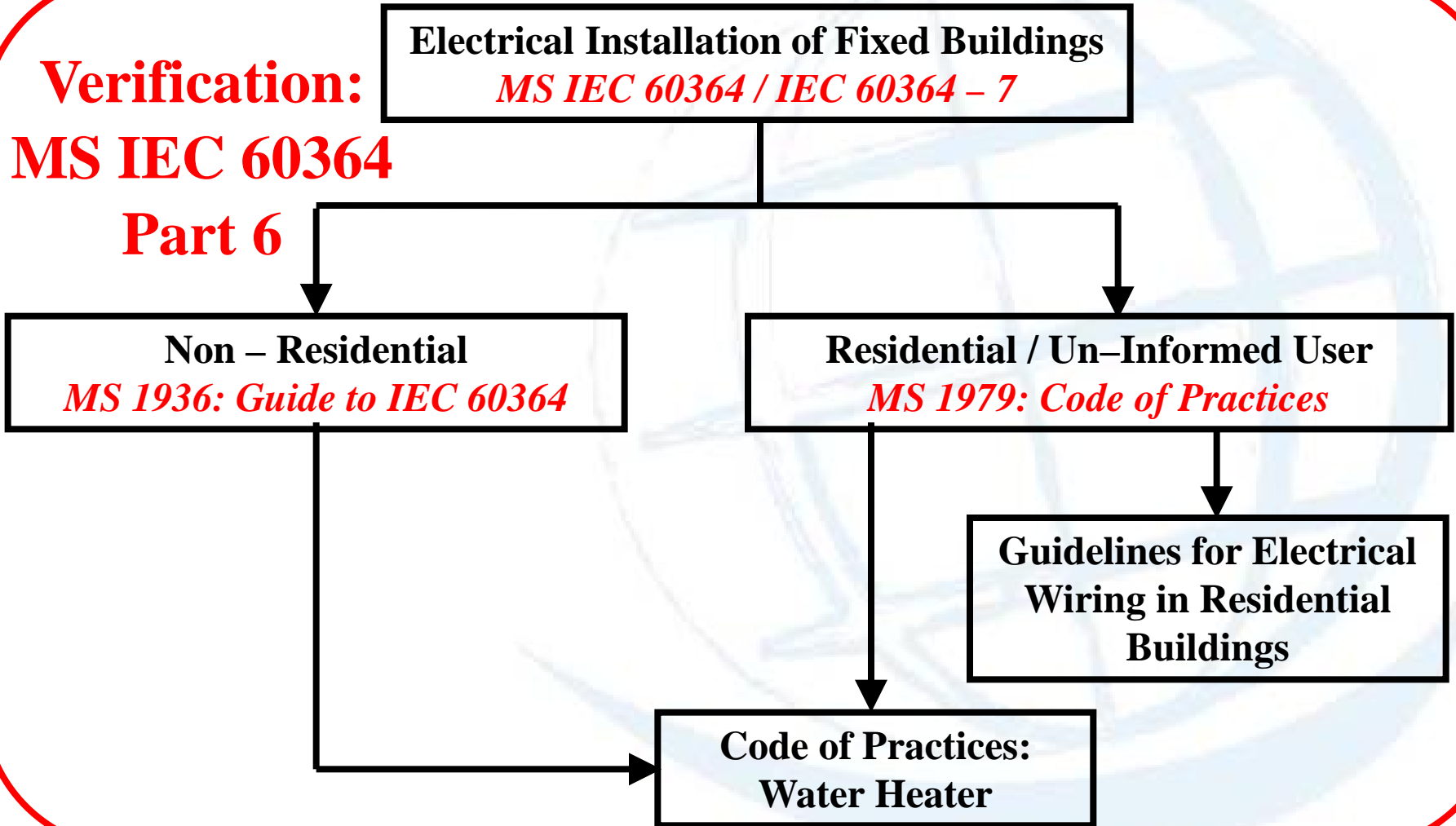
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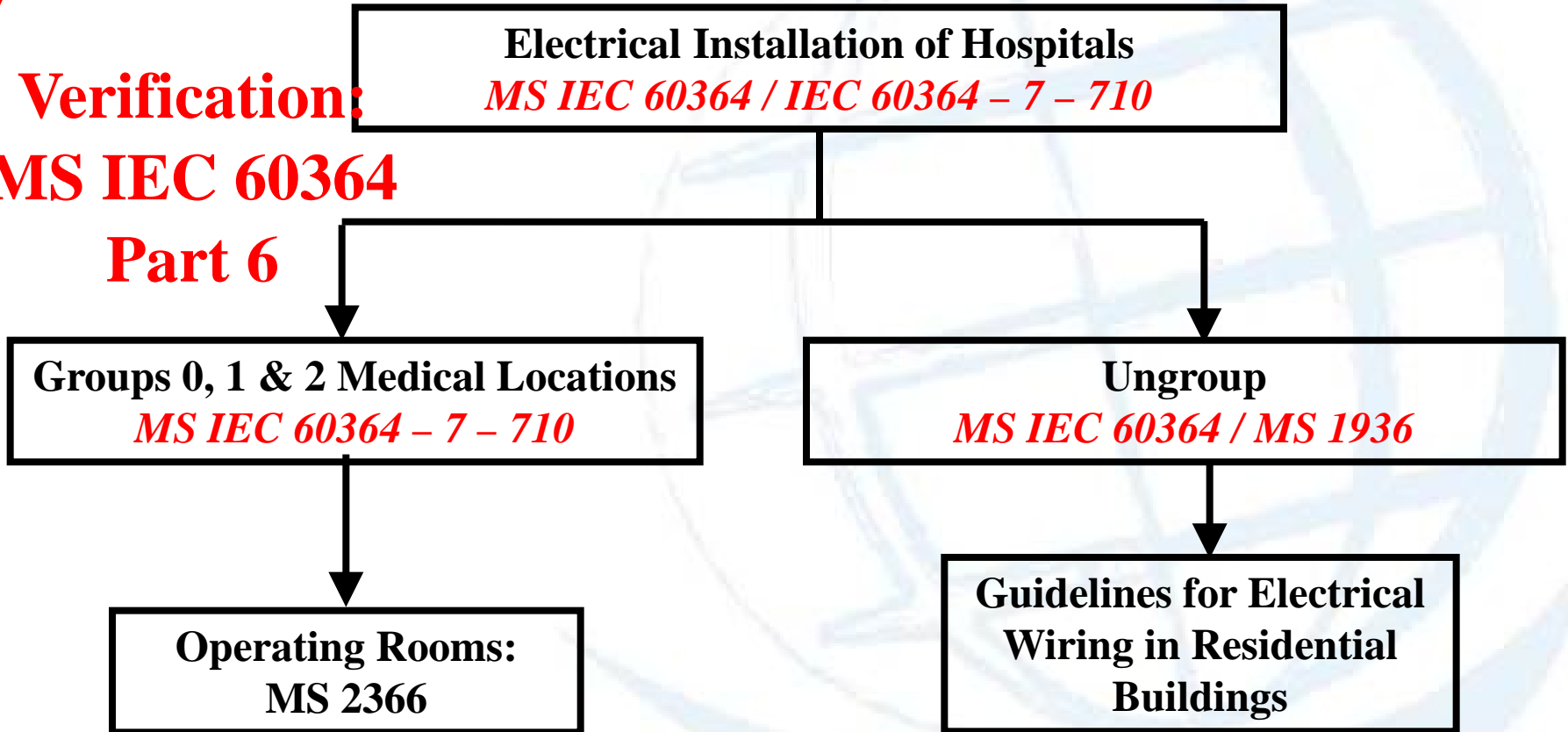
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**Low Voltage Electrical Installations,
 Malaysia (IEC)**





Verification:
MS IEC 60364
Part 6



Current ASEAN Electrical Installations Standards Scenario

Electrical Installations Standards Amongst ASEAN COUNTRIES

Description	Malaysia	Singapore	Thailand	Indonesia
Electricity Regulations & Electrical Safety Regulations Authority	Energy Commission (EC)	Energy Marketing Authority (EMA)	Energy Regulatory Committee (ERC)	Direktorat Jenderal Ketenagalistrikan (DGE)
Standards Writing Authority	Department of Standards Malaysia (DSM)	Spring Singapore (Standards, Productivity and Innovation Board)	Engineering Institute of Thailand (EIT) – for engineering standards	Standards Nasional Indonesia (SNI)
Registration of Electrical Products	Energy Commission (EC)	Spring Singapore (Standards, Productivity and Innovation Board)	Thai Industrial Standards Institute (TISI)	Lembaga Sertifikasi Produk
National standards on Electrical Installation and Electrical Safety	MS1979, MS1936 & MS IEC 60364	CP 5 & CP 88	Thai Electricity Code 2013	Electrical Installation Regulation: Persyaratan Umum Instalasi Listrik (PUIL) 2011
General Reference Standards	IEC	IEC/BS	IEC	IEC

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AFEO Initiatives

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AFEO Initiatives



- The ASEAN Federation of Engineering Organisations (AFEO) is a non-governmental body. Its members are the engineering institutions and organisations of ASEAN countries with the following main objectives:
 - To promote goodwill and mutual understanding
 - To establish and develop a ASEAN baseline standard for the engineering profession with the objective of facilitating the mobility of the engineers within the ASEAN countries. Current ASEAN Scenario

AFEO Member Organizations



The ASEAN Federation of Engineering Organisations (AFEO) is formed by 10 ASEAN member organisations.



Pertubuhan Ukur Jurutera & Arkitek (PUJA)



Board of Engineers Cambodia (BEC)



Persatuan Insinyur Indonesia (PII)



Lao Union of Science and Engineering Associations (LUSEA)



The Institution of Engineers, Malaysia (IEM)



Myanmar Engineering Society (MES)



The Philippine Technological Council (PTC)



The Institution of Engineers Singapore (IES)



The Engineering Institute of Thailand (EIT)

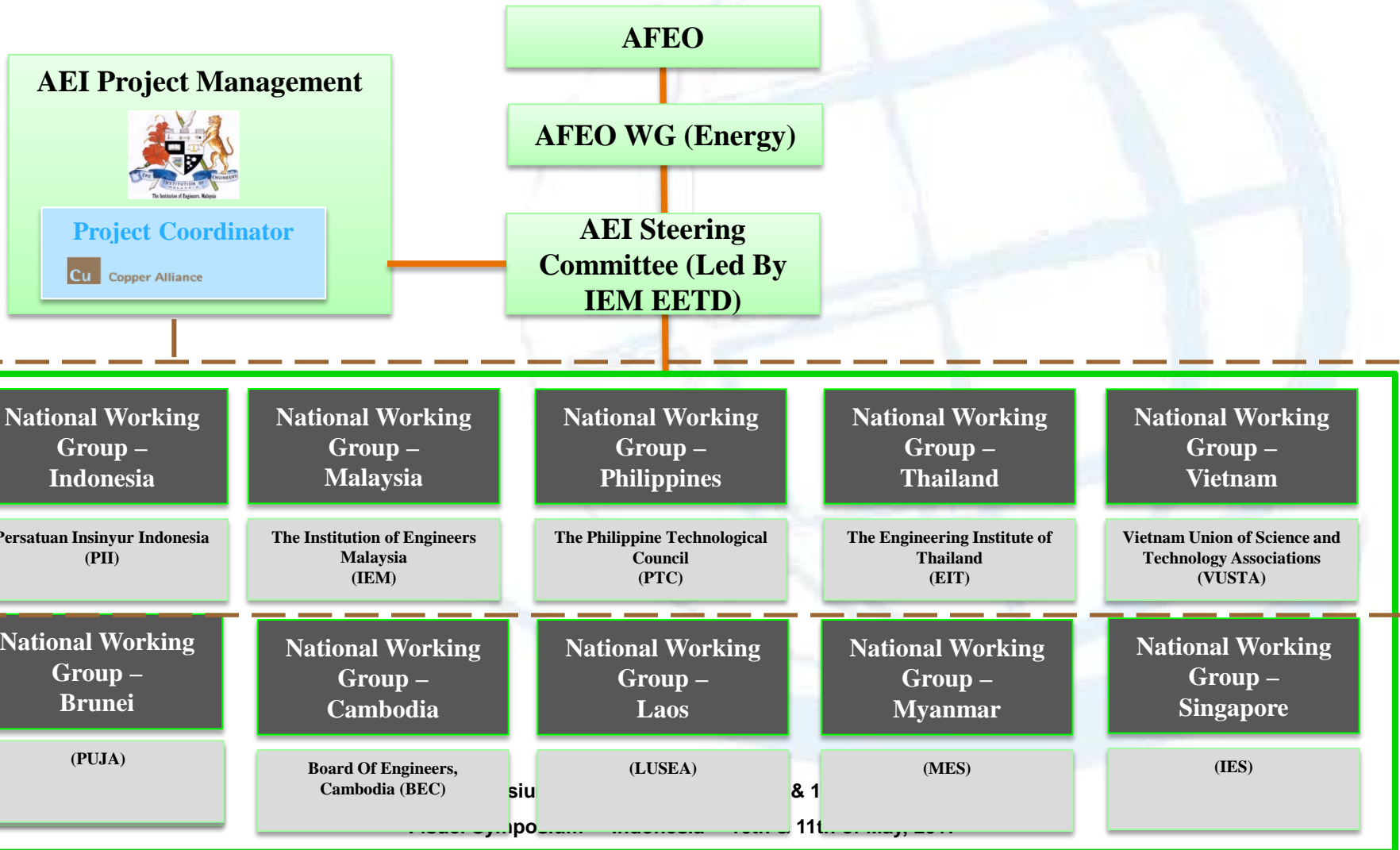


Vietnam Union of Science and Technology Associations (VUSTA)

AEI (ASEAN Engineering Inspectorate)

- Each ASEAN country has its own inspection procedures for engineering services which may defer from country to country in regulatory requirements and national emphasis. Therefore, an idea was mooted in 2008 by the Engineering Institution of Thailand (EIT) to have harmonization in this respect for the entire ASEAN region.
- This project has been accepted by the AER Commission Meeting in December 2010 at Hanoi, Vietnam and approved by AFEO in December 2011 at Brunei on the following three (3) areas:
 - 1. Building Inspection standard hosting TC by EIT , Thailand
 - 2. Boiler Inspection standard hosting TC by PII , Philippines
 - 3. Electrical Inspection standard hosting TC by IEM , Malaysia

AEI (Electrical Installation) Structure



➤ AEI (Electrical Installation) Objectives

Immediate

- To review, study and identify the possible gap in the various ASEAN Countries Electrical Installation Standards & Regulations and Application
- To update the ASEAN Engineering Inspectorate (AEI) Electrical Installation Guidelines based on inputs from the survey.
- Facilitate Mobility of Engineers with the knowledge sharing of each country regulation and Standards & Regulations.

Long Term

- To provide training and certification of electrical engineers and contractors as per AEI guidelines
- To work in line with the ASEAN initiatives of ASEAN Connectivity 2025 and to initiate a MRA for Electrical Installation Works amongst ASEAN Countries
- To work towards the harmonisation of ASEAN Electrical Installation Standards & Regulations

➤ AEI Completed Works

General Booklet (A Guide to LV Electrical Installations)



AEI Moving Forward

1. Adoption of AEI at ASEAN Member States

- Feasibility study on adoption of AEI guidelines (by end of 2017)
 - Survey on electrical inspection systems in ASEAN (ongoing)
 - Comparison of AEI guide with existing country inspection systems
- Organized dissemination workshops
 - Introduce AEI guide
 - Localization of AEI guidelines?
 - Formation of country AEI Work Group

AEI Moving Forward

Progress of feasibility studies:



*January 2017:
Courtesy Visit To Malaysia's Energy
Commission*



*March 2017:
Courtesy Visit To Engineering Institute of
Thailand (EIT)*

Progress of feasibility studies:



*March 2017:
Courtesy Visit To Singapore;*

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Progress of feasibility studies:



*April 2017:
Courtesy Visit To Jakarta;*

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Fisuel Symposium – Indonesia – 10th & 11th of May, 2017

progress of feasibility studies:

Upcoming Visits:

Vietnam - 7th May 9th May

Philippines – 24-25 May

Sarawak - 26th June

Singapore (AFEO Mid-term) - 17th July 18th July (Draft)

Cambodia - 6th August 8th August

Laos - 20th August 22nd August

Myanmar - 3rd September 5th September

Brunei - 17th September 19th September

Thailand (CAFEO) - 16th November 19th November (Final)

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Q&A

Symposium Fisuel – Indonésie – 10 & 11 Mai 2017

Fisuel Symposium – Indonesia – 10th & 11th of May, 2017

THANK YOU

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