



Talk on Overview of ASEAN Low Voltage Electrical Installation Regulation and Standards

by Dr Siow Chun Lim

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On 3rd March, the IEM Electrical Engineering Technical Division (EETD) has successfully organised the first back-to-back Saturday talk of the year 2018 on “Overview of ASEAN Low Voltage Electrical Installation Regulation and Standards” at Wisma IEM. The speaker was Ir. Yau Chau Fong. The talk was attended by more than 30 participants.

Ir. Elias, the Head Commissioner of ASEAN Engineering Register (AER) started by presenting an overview of what AER is all about before zooming in to set the scene for the talk on ASEAN Engineering Inspectorate (AEI) initiatives by Ir. Yau. After about 5 minutes, the main talk commenced with Ir. Yau starting his presentation by giving an overview of ASEAN Federation of Engineering Organisation (AFEO) and AEI. AFEO is a non-governmental body which was established to develop an ASEAN baseline standard for the engineering profession to facilitate the mobility of engineers within ASEAN region. In 1998, AFEO has formed the AER to compile the database of practicing engineers within the ASEAN countries. Ir. Yau then briefly introduced the history behind the AEI initiative which was first proposed by Engineering Institute of Thailand back in 2008 before being formally approved by AFEO in 2011. There are 3 AEI initiatives namely in the building inspection, boiler inspection and electrical inspection/installation. The talk of the day was mainly on AEI Electrical Installation (AEI-EI) which is currently being spearheaded by IEM. AEI-EI ultimately aims to harmonise the standards in electrical installation among ASEAN countries to catalyse the mobility of electrical engineers across the borders.

Ir. Yau then went on to furnish an overview of the global scenario of electrical standards. The world is predominantly adopting either IEC or NEC or combination of both electrotechnical standards. At the Asia Pacific region, the Joint Regulatory Advisory Committee on Electrical and Electronic Equipment (JRAC) was established to promote and facilitate effective functioning of the APEC Mutual Recognition Arrangement (MRA) on Conformity Assessment of Electrical and Electronic Equipment. Zooming in further, the ASEAN Sectoral MRA on Electrical and Electronic Equipment (ASEAN EE MRA) was formed to mimic the objective of APEC’s MRA at the ASEAN level. The ASEAN Harmonised Electrical and Electronic Equipment Regulatory Regime (AHEEERR) agreement was signed on 2005 to eliminate restriction to trade of electrical and electronic equipment through harmonisation of technical requirement. This effort is a part of the ASEAN’s roadmap towards ASEAN Economic Community 2025. In 2005, another significant MRA which is on engineering services was signed to facilitate the mobility of engineering services professionals via the establishment of ASEAN Chartered Professional Engineer (ACPE).

From ASEAN, Ir. Yau then zoomed in to the main agenda of the day which is the preliminary findings of the Feasibility Studies on Electrical Installation Standards in Buildings Amongst ASEAN Countries.

Due to the time constraint, Ir. Yau only presented briefly on the acts and regulations, registration of electrical professional engineers and cable colour coding practices at the 10 ASEAN countries.

Next, the speaker presented on the AEI-Electrical Blueprint (2018-2035) which was formulated based on the recommendation by the AFEO Secretary General in the AFEO Mid-term 2017 in Singapore which was then formalised by the Bangkok Declaration in November, 2017. The short term goals as captured in the blueprint would mainly be on creating awareness amongst engineers and relevant stakeholders in ASEAN on this AEI-EI initiative. The mid-term stage would be the implementation stage where the AEI-EI would be looking into introducing electrical standards to university students as well as registering electrical engineers. The long term plan would be the involvement of inter-governments to really putting harmonisation of electrical installation standards into effect.

As the conclusion, Ir. Yau re-emphasized the importance of standardisation to promote mobility of engineers amongst ASEAN countries. He also acknowledged the support by various institutions which have contributed towards making this feasibility study a success.

Figures below depict the participation rate as well as the presentation of a token of appreciation to the speaker.



Ir. Elias presenting a token of appreciation to the speaker



The participants