REPORT ON the Training on Outcome-Based Professional Engineer Development and Assessment

The training on Training on Outcome-Based Professional Engineer Development and Assessment was held on **December 18th**, **2020** virtually using Zoom. The training was hosted by the NPU-FEIAP "Belt and Road" Engineering Education Training Centre (NFTC) and supported by China Association of Science and Technology (CAST). The speakers are Engr. Dr. Nasir Mahmood Khan (PEC) and Ir. Lee Boon Chong (IEM). The training was focused on Professional Engineer Registration and Examination—Outcome-based Competence Assessment with experience shared from Pakistan and Malaysia. A total of 117 participants from China, Myanmar, Malaysia, Singapore, the Philippines and Cambodia, etc., attended the training.

Objectives of the training:

The objectives of the training are divided into two major sections, namely:

- 1) To introduce Outcome-based Competence Assessment for Professional Engineer Registration and Examination;
- 2) To solve problems arising from the practice in assessment using experiences in Pakistan and Malaysia.

Training Part I:

In this part, the speaker, Engr. Dr. Nasir Mahmood Khan (PEC), started with the introduction to the establishment of PEC and its major function, which brought to the topic of outcome-based education and assessment system. He explained the practices in engineering programs accreditation. The speaker then explicitly explained certain competency-based professional system in Pakistan.

Training Part II:

This part was led by Ir. Lee Boon Chong from IEM, who shared the assessment practices and system in Malaysia. He also showed the assessment process and format used in the whole process and answered audience's questions concerning the benchmarking standards and competence standard.

Visions and Objectives

NPU-FEIAP B&R Engineering Education Training Centre (NFTC)

Visions

1. To have a unified and inclusive Engineering Education Standards which promotes mutual

- recognition of the Engineering Education Programs (Engineer, Engineering Technologist and Technician programs) among Economies in the B&R Initiative region and FEIAP member economies.
- 2. To facilitate and to promote mobility of the Engineers, Engineering Technologists and Technicians among the economies in B&R Initiative region and FEIAP member economies.
- 3. To provide continuous professional development to increase the number of competent Engineers, Engineering Technologists and Technicians who will help the economies to develop into developed nations
- 4. To promote understanding of civilization in B&R Initiative region and FEIAP member economies via cultivation of cultural intelligence in engineering education.
- 5. To promote students exchange programs among universities in the B&R Initiative region and FEIAP member economies.

Objectives

- 1. The NFTC is set up in NPU, Xian, China.
- 2. To conduct Engineering Education Accreditation Training (EEAT) based on established FEIAP Engineering Education Guidelines, FIEAP Engineering Technologist and Technician Education Guidelines
- 3. The Engineering Education Accreditation Training (EEAT) will cover training of Assessors, Academics and Accreditation Agencies of the economies in the B&R Initiative region and FEIAP member economies.
- 4. To facilitate and promote of mutual recognition of Engineering Education Programs among the Universities in the B&R Initiative region and FEIAP member econmies, which is keystone for the mobility of Engineering Personnel (e.g. Engineers, Engineering Technologists and Engineering Technicians).
- 5. To facilitate and promote students exchange program among the Universities in the B&R Initiative region and FEIAP member economies.
- 6. To facilitate and promote the mobility of engineering personnel (e.g. Engineer, Engineering Technologist and Technician) who has fulfilled the FEIAP Engineering Education Standards in the economies of the B&R Initiative region and FEIAP member economies.
- 7. To conduct Professional Development courses for Infrastructure Development and

- Maintenance for the Engineers, Engineering Technologists and Technicians.
- 8. To facilitate and promote the networking of the engineering personnel (e.g. Engineer, Engineering Technologist and Technician and Academics) to share knowledge, experiences, business
 - opportunities and friendship for closer ties among the engineering fraternity in the economies of the B&R Initiative region and FEIAP member economies.
- 9. To improve and keep up to development of the world on the Engineering Education and Training to benefit the economies of the B&R Initiative region and FEIAP member economies.
- 10. To be a platform for exchange of academics and engineering students in B&R and FEIAP member economies.