

HKIE Certifications of Engineering Air Modelling Professional and Engineering Noise Modelling Professional Grandfathering Arrangement

1. Introduction

The Hong Kong Institution of Engineers (HKIE) will administer two certifications recognised by the Environmental Protection Department (EPD):

- Engineering Air Modelling Professional (Eng AM Pro): This certifies eligible members to act as the certified professional for air quality impact assessments (AQIA), in accordance with EPD's modelling guidelines for EIAs, licensing, and planning cases.
- Engineering Noise Modelling Professional (Eng NM Pro): This certifies eligible members to act as the certified professional for noise impact assessments (NIA), in line with relevant noise assessment guidelines under the EIAO and other EPD advisory notes.

Both certifications aim to enhance the competence of HKIE members in preparing and endorsing technical submissions, thereby improving the quality and efficiency of the approval processes for infrastructure and residential developments.

2. Proposal

To address the immediate need for qualified professionals, a simplified grandfathering arrangement is proposed for experienced HKIE members currently practicing in these fields. This streamlined pathway will recognise their existing expertise and responsibility in preparing models for EPD submissions, ensuring enough certified professionals to fulfil project requirements while maintaining the high standards of the two certifications.

3. Criteria for Grandfathering

3.1 Engineering Air Modelling Professional (Eng AM Pro)

Eng AM Pro	
Qualifications	Corporate Members of the HKIE (FHKIE/ MHKIE) or Associate Members of the HKIE (AMHKIE)
Work Experience	6 years of work experience
Recognised Practical Air Modelling Experience	Applicants should have no less than FOUR YEARS of air modelling work experience (including at least six months in Hong Kong) in data collection, air modelling setup, interpretation of modelling data, reporting of air impact assessment or submissions to authorities for EIA licensing and planning cases, counting up to the application form submission date.
Submission of Supporting Document	1. Completed and submit online Application Form for Certification of Engineering Air Modelling Professional (Grandfathering); and 2. Provision of air modelling experience on all core competencies (Appendix A), including key project information, the applicant's role and air modelling tasks accomplished (incorporated in the online application form).

3.2 Engineering Noise Modelling Professional (Eng NM Pro)

Eng NM Pro	
Qualifications	Corporate Members of the HKIE (FHKIE/ MHKIE) or Associate Members of the HKIE (AMHKIE)
Work Experience	6 years of work experience
Recognised Practical Noise Modelling Experience	Applicants should have no less than FOUR YEARS of noise modelling work experience (including at least six months in Hong Kong) in data collection, noise modelling setup, interpretation of modelling data, reporting of noise impact assessment or submissions to authorities for EIA licensing and planning cases, counting up to the application form submission date.
Submission of Supporting Document	1. Completed and submit online Application Form for Certification of Engineering Noise Modelling Professional (Grandfathering); and 2. Provision of noise modelling experience on all core competencies (Appendix B), including key project information, the applicant's role and noise modelling tasks accomplished (incorporated in the online application form).

4. Assessment

Experience demonstrating the attainment of core competencies as vetted by the responsible committee.

5. Fee Schedule

A total fee of HK\$3,620 will be charged upon successful application for the certification. The fee structure for the certifications of Engineering Air Modelling Professional or Engineering Noise Modelling Professional (Grandfathering) is as follows:

Application Fee: HK\$620 upon submission of the application for certifications of Engineering Air Modelling Professional or Engineering Noise Modelling Professional (Grandfathering).

Assessment Fee: HK\$2,000 upon the applicant being considered eligible for assessment.

First Registration Fee: HK\$1,000 upon confirmation of meeting all certification requirements.

All payment received are non-refundable and non-transferable

6. Others

EPD requires all the HKIE members who are certified as Engineering Air Modelling Professionals or Engineering Noise Modelling Professionals through grandfathering to attend a CPD course offered by EPD within six months after certification, in order to maintain EPD's recognition.

Core Competencies of “Eng AM Pro”

The Core Competencies of an “Eng AM Pro” include the capability:

- i) To comprehend and apply professional air modelling knowledge of EIAO statutory, EIA Guidance Notes, Air Pollution Control Ordinance (APCO) and its subsidiary regulations, Air Quality Objectives (AQOs), Best Practicable Means (BPM) and other requirements underpinning good practices for professional air modelling. (Possession of the professional knowledge and expertise in statutory requirements for air modelling stipulated in EIAO, EIA Guidance Notes, Air Pollution Control Ordinance (APCO) and its subsidiary regulations, Air Quality Objectives (AQOs), Best Practicable Means (BPM), etc.)
- ii) To define, analyse, and develop technical air models for air impact assessment and development of air mitigation measures. (Professional experience in defining the scopes of the air modelling, such as vehicular emission, industrial emission, odour emission, marine vessel emission, construction dust, etc.; recommending air modelling methodologies and computation software; analysing potential air mitigation measures and designing or developing solution to meeting EIAO, TM-EIA, Study Brief, EIA Guidance Notes, Air Pollution Control Ordinance (APCO) and its subsidiary regulations, Air Quality Objectives (AQOs) and Best Practicable Means (BPM) requirements)
- iii) To manage one or more developments of air modelling activities in accordance with good management practices to meeting EIAO, Air Pollution Control Ordinance (APCO) and its subsidiary regulations, Air Quality Objectives (AQOs) and Best Practicable Means (BPM) requirements. (Ability to describe the responsibilities of various professionals including Eng EIA Pro, the Authority, project proponents, developers, urban planners, architects, engineers, contractors, EM&A professionals, etc., in an AQIA study; proficiency in statutory and non-statutory requirements of air assessment criteria, methodologies and computation software)
- iv) To be responsible for preparing, analysing and interpreting air modelling results for AQIA of EIA report, environmental review, town planning or land lease requirements. (Proficiency in statutory and non-statutory requirements of EIAO, Town Planning Ordinance and land lease)
- v) To communicate clearly with decision-makers, other engineers/professionals in the AQIA study and recognize quality management of the air models and reporting. (Ability to apply effective interpersonal and communication skills presentations, meetings, AQIA report writing and quality assurance etc.)

Core Competencies of “Eng NM Pro”

The Core Competencies of an “Eng NM Pro” include the capability:

- i) To comprehend and apply professional noise modelling knowledge of EIAO statutory, EIA Guidance Notes GN 16/2023 and GN 9/2023, ProPECCPN 4/23, ProPECCPN 1/24 and other requirements underpinning good practice for professional noise modelling. (Possession of the professional knowledge and expertise in statutory requirements noise modelling stipulated in EIAO, Noise Control Ordinance and its subsidiary regulations, TM-EIA, Study Brief and EIA Guidance Notes, ProPECCPN, etc.)
- ii) To define, analyse, and develop technical noise models for noise impact assessment and development of noise mitigation measures. (Professional experiences in defining the scopes of the noise modelling, such as road traffic, railway, fixed noise sources, construction noise, etc.; recommending noise methodologies and computation software; analysing potential noise mitigation measures and designing or developing solution to meeting EIAO, Noise Control Ordinance and its subsidiary regulations, TM-EIA, Study Brief and EIA Guidance Notes, ProPECCPN, etc. requirements)
- iii) To manage one or more developments of noise modelling activities in accordance with good management practice to meeting EIAO, Noise Control Ordinance and its subsidiary regulations, and ProPECCPN requirements. (Ability to describe the responsibilities of various professionals including Eng EIA Pro, the Authority, project proponents, developers, urban planners, architects, engineers, contractors, EM&A professionals, etc., in a NIA study; proficiency in statutory and non-statutory requirements of noise assessment criteria, methodologies and computation software)
- iv) To be responsible for preparing, analysing and interpreting noise modelling results for NIA of EIA report, environmental review, town planning or land lease requirements. (Proficiency in statutory and non-statutory requirements of EIAO, Town Planning Ordinance and land lease)
- v) To communicate clearly with decision makers, other engineers/professionals in the NIA study and recognize quality management of the noise models and reporting. (Ability to apply effective interpersonal and communication skills presentations, meetings, NIA report writing and quality assurance etc.)