

UNIVERSITI TEKNOLOGI MARA

PEKELILING PENOLONG NAIB CANSELOR (PEMBANGUNAN INFRASTRUKTUR DAN INFOSTRUKTUR)

Bilangan 2 Tahun 2017

PELAKSANAAN PERATURAN KOD ETIKA ĴURUTERA

TUJUAN

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1. Pekeliling ini bertujuan memaklumkan bahawa pelaksanaan peraturan kod etika Jurutera peringkat Universiti Teknologi MARA (UiTM) di seluruh sistem untuk memastikan tatacara kelakuan dan etika seseorang Jurutera mengikut Pekeliling Lembaga Jurutera Malaysia Akta 1967 [Akta 138] dan selaras dengan dasar dan etika UiTM.

LATARBELAKANG

- Bagi maksud pemakaian Pekeliling ini berdasarkan Pekeliling Lembaga Jurutera Malaysia Akta 1967 [Akta 138] yang terkini seperti berikut dan disertakan bersama :
 - 2.1 Circular No.001: Code Of Conduct Of Registered Person (27.10.2016)
 - 2.2 Circular No.002 : Continuing Professional Development (CPD) Requirements (6.2.2017)
 - 2.3 Circular No.003 : For Submission Of Sewerage And Sanitary Plumbing Works (25.5.2017)
 - 2.4 Circular No.004: Supervision Of Construction Works (25.5.2017)
 - 2.5 Circular No.005: Advertising By Registered Engineers (25.5.2017)
 - 2.6 Guidelines No.001: The Role And Responsibility Of Professional Engineers For Temporary Works During Construction Stage (21.8.2015)
 - 2.7 Guidelines No.002: Industrialised Building System (IBS) Works And It's Impact On scale Of Fees (27.10.2016)

Semua Jurutera UiTM dikehendaki menggunakannya sebagai panduan dalam menjalankan kerja-kerja projek dan pengurusan fasiliti dan dibaca bersekali dengan pekeliling-pekeliling UiTM yang berkaitan.

TUJUAN PELAKSANAAN

3. Pekeliling Lembaga Jurutera Malaysia Akta 1967 [Akta 138] yang tersenarai dijadikan panduan dalam menjalankan kerja-kerja projek dan pengurusan fasiliti dan dibaca bersekali dengan pekeliling-pekeliling UiTM yang berkaitan. Semoga etika dan tatacara pelaksanaan kerja lebih baik dan teratur serta memenuhi kehendak dan peraturan yang telah ditetapkan oleh Lembaga Jurutera Malaysia bagi Jurutera yang berdaftar.

TARIKH DIKELUARKAN

4. Pekeliling ini dikeluarkan pada 18 Ogos 2017

TARIKH KUATKUASA

5. Pekeliling ini berkuatkuasa serta merta.

PROF DATIN OT HAJAH ZAINAB MOHAMED

Penolong Naib Canselor

(Pembangunan Infrastruktur & Infostruktur)

Di kelilingkan kepada:

Timbalan Naib canselor (Penyelidikan dan Inovasi)
Pendaftar
Bendahari
Semua Rektor UiTM Cawangan Negeri
Semua Penolong Rektor UiTM Kampus Negeri
Semua Ketua Bahagian Pejabat Pembangunan Infrastruktur & Infostruktur
Semua Ketua Pejabat Pengurusan Fasiliti dan ICT Kampus Cawangan & PFI

Bil Fail: Pejabat Pembangunan Infrastruktur Dan Infostruktur

No siri: 100-PPII(PTA. 6/7/3)

Rev. No.: 0

Date: 27.10.2016



BOARD OF ENGINEERS MALAYSIA

CIRCULAR NO. 001

CODE OF CONDUCT OF REGISTERED PERSON

In exercise of the powers conferred by paragraph 4(1)(f) of the Registration of Engineers Act 1967 [Act 138], the Board of Engineers Malaysia hereby determines the Code of Conduct of registered Person as stated herein below.

This Circular supersedes Circular No. 3/2005, Guidelines for Code of Professional Conduct (BEM/RD/PPC/08).

This Code of Conduct is in addition to Part IV, Code of Conduct of the Registration of Engineers Regulations 1990.

1.0 PROFESSIONAL ENGINEER WITH PRACTISING CERTIFICATE

- 1.1 Registered Professional Engineer with Practising Certificate not to falsify qualification, etc.
- 1.1.1 A registered Professional Engineer with Practising Certificate shall not falsify his qualifications or permit misrepresentation of his or his associates' qualifications. He shall not misrepresent or exaggerate his responsibility in or for the subject matter of previous assignments. He shall not misrepresent pertinent facts concerning employers, employees, associates, joint ventures', or past accomplishments.
- 1.1.2 A registered Professional Engineer with Practising Certificate shall check with due diligence the accuracy of facts and data before he signs or endorses any statement or claim. He shall not sign on such documents unless, where necessary, he has made qualifications on errors and inaccuracies.
- 1.1.3 A registered Professional Engineer with Practising Certificate shall respond, within reasonable time, to communication from the Board or any other relevant authority on matters pertaining to his professional service.

- 1.1.4 A registered Professional Engineer with Practising Certificate shall undertake assignments only if he is qualified by education and experience in the specific technical fields of that assignment in which he is to be involved.
- 1.1.5 A registered Professional Engineer with Practising Certificate shall approve and sign only those engineering documents that he has prepared or has been prepared under his direction and control.
- 1.1.6 A registered Professional Engineer with Practising Certificate shall not accept assignment and assume responsibility for coordination of an entire project and sign and stamp (Professional Engineer with Practising Certificate stamp) the engineering documents for the entire project unless the engineering documents for each technical segment of the project is signed and stamped personally by the qualified person who is involved in the respective segment of the project.
- 1.1.7 A registered Professional Engineer with Practising Certificate shall be objective and truthful in making professional reports, statements and testimonies. He shall include all relevant and pertinent information in such reports, statements, or testimonies, which should bear the date indicating when the information was current.
- 1.1.8 A registered Professional Engineer with Practising Certificate shall not express publicly technical opinions that are not founded upon his competence and knowledge of the facts in the subject matter.
- 1.1.9 A registered Professional Engineer with Practising Certificate shall not issue any statement, criticism or argument on technical matters that are inspired or paid for by interested parties, unless he has prefaced his comments by explicitly identifying the interested parties on whose behalf he is speaking and by revealing the existence of any interest he may have in the matter.
- 1.1.10 A registered Professional Engineer with Practising Certificate shall notify the Board in writing within three (3) months
 - (i) if he is convicted of an offence involving false or negligent certification, fraud or dishonesty in Malaysia or elsewhere; or
 - (ii) if he becomes a bankrupt.
- 1.2 Registered Professional Engineer with Practising Certificate to certify work only if he has control over supervision, etc.
- 1.2.1 A registered Professional Engineer with Practising Certificate shall certify satisfactory completion of a piece of work only if he has control over the supervision of the construction or installation of that work, and only if he is satisfied that the construction or installation has fulfilled the requirements of the engineering design and specifications.
- 1.2.2 A registered Professional Engineer with Practising Certificate who takes over a piece of work shall assume all liability and responsibility for the works done prior to his taking over.

- 1.2.3 A registered Professional Engineer with Practising Certificate shall not reveal facts, data or information without the prior consent of the Client or Employer, past and present, except as authorized or required by law or when the withholding of such information is contrary to the safety, health and interest of the public.
- 1.2.4 A registered Professional Engineer with Practising Certificate having knowledge of any violation of this Code of Conduct or any law or regulation shall report thereon to Employer or appropriate professional bodies and, where relevant, also to public authorities and cooperate with the appropriate professional bodies or the proper authorities in furnishing such information or assistance as may be required.
- 1.2.5 When the professional advice of a registered Professional Engineer with Practising Certificate is overruled or amended contrary to his advice, the registered Professional Engineer with Practising Certificate shall, if the amendment may in his opinion give rise to a situation that may endanger the safety, health and interest of the public, notify his Employer or Client and such other authority as may be appropriate and explain the consequences to be expected as a result of his advice being overruled or amended.
- 1.3 Registered Professional Engineer with Practising Certificate not to accept benefit from more than one party, etc.
- 1.3.1 A registered Professional Engineer with Practising Certificate shall not accept any benefit or compensation, financial or otherwise, from more than one party for professional engineering services on the same project, or for professional engineering services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.
- 1.3.2 A registered Professional Engineer with Practising Certificate shall disclose all known or potential conflicts of interest that may influence or appear to influence his judgment or the quality of his services.
- 1.3.3 A registered Professional Engineer with Practising Certificate shall not solicit or accept any consideration, financial or otherwise, directly or indirectly, from outside agents in connection with the work for which he is responsible.
- 1.3.4 A registered Professional Engineer with Practising Certificate acting as Advisor or Director of a company or an agency shall not participate in decision with respect to professional engineering services solicited or provided by him or his organization.
- 1.3.5 A registered Professional Engineer with Practising Certificate shall not solicit or accept a contract from a body or agency in which a principal or officer of his organization serves as a member of that body or agency unless with the knowledge and consent of that body or agency.

2.0 PROFESSIONAL ENGINEER

- 2.1 Registered Professional Engineer not to falsify qualification, etc.
- 2.1.1 A registered Professional Engineer shall not falsify his qualifications or permit misrepresentation of his or his associates' qualifications. He shall not misrepresent or exaggerate his responsibility in or for the subject matter of previous assignments. He shall not misrepresent pertinent facts concerning employers, employees, associates, joint ventures', or past accomplishments.
- 2.1.2 A registered Professional Engineer shall check with due diligence the accuracy of facts and data before he signs or endorses any statement or claim. He shall not sign on such documents unless, where necessary, he has made qualifications on errors and inaccuracies.
- 2.1.3 A registered Professional Engineer shall respond, within reasonable time, to communication from the Board or any other relevant authority on matters pertaining to his professional service.
- 2.1.4 A registered Professional Engineer shall undertake assignments only if he is qualified by education and experience in the specific technical fields of that assignment in which he is to be involved.
- 2.1.5 A registered Professional Engineer shall approve and sign only those engineering documents that he has prepared or has been prepared under his direction and control.
- 2.1.6 A registered Professional Engineer shall be objective and truthful in making professional reports, statements and testimonies. He shall include all relevant and pertinent information in such reports, statements, or testimonies, which should bear the date indicating when the information was current.
- 2.1.7 A registered Professional Engineer shall not express publicly technical opinions that are not founded upon his competence and knowledge of the facts in the subject matter.
- 2.1.8 A registered Professional Engineer shall not issue any statement, criticism or argument on technical matters that are inspired or paid for by interested parties, unless he has prefaced his comments by explicitly identifying the interested parties on whose behalf he is speaking and by revealing the existence of any interest he may have in the matter.
- 2.1.9 A registered Professional Engineer shall notify the Board in writing within three (3) months
 - (i) if he is convicted of an offence involving false or negligent certification, fraud or dishonesty in Malaysia or elsewhere; or
 - (ii) if he becomes a bankrupt.

- 2.2 Registered Professional Engineer to certify work only if he has control over supervision, etc.
- 2.2.1 A registered Professional Engineer shall certify satisfactory completion of a piece of work only if he has control over the supervision of the construction or installation of that work, and only if he is satisfied that the construction or installation has fulfilled the requirements of the engineering design and specifications.
- 2.2.2 A registered Professional Engineer who takes over a piece of work shall assume all liability and responsibility for the works done prior to his taking over.
- 2.2.3 A registered Professional Engineer shall not reveal facts, data or information without the prior consent of the Client or Employer, past and present, except as authorized or required by law or when the withholding of such information is contrary to the safety, health and interest of the public.
- 2.2.4 A registered Professional Engineer having knowledge of any violation of this Code of Conduct or any law or regulation shall report thereon to his Professional Engineer with Practising Certificate, or Employer or appropriate professional bodies and, where relevant, also to public authorities and cooperate with the appropriate professional bodies or the proper authorities in furnishing such information or assistance as may be required.
- 2.2.5 When the professional advice of a registered Professional Engineer is overruled or amended contrary to his advice, the registered Professional Engineer shall, if the amendment may in his opinion give rise to a situation that may endanger the safety, health and interest of the public, notify his Employer or Client and such other authority as may be appropriate and explain the consequences to be expected as a result of his advice being overruled or amended.
- 2.3 Registered Professional Engineer not to accept benefit from more than one party, etc.
- 2.3.1 A registered Professional Engineer shall not accept any benefit or compensation, financial or otherwise, from more than one party for professional engineering services on the same project, or for professional engineering services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.
- 2.3.2 A registered Professional Engineer shall disclose all known or potential conflicts of interest that may influence or appear to influence his judgment or the quality of his services.
- 2.3.3 A registered Professional Engineer shall not solicit or accept any consideration, financial or otherwise, directly or indirectly, from outside agents in connection with the work for which he is responsible;

- 2.3.4 A registered Professional Engineer acting as Advisor or Director of a company or an agency shall not participate in decision with respect to professional engineering services solicited or provided by him or his organization.
- 2.3.5 A registered Professional Engineer shall not solicit or accept a contract from a body or agency in which a principal or officer of his organization serves as a member of that body or agency unless with the knowledge and consent of that body or agency.

3.0 GRADUATE ENGINEER

- 3.1 Registered Graduate Engineer not to falsify qualification, etc.
- 3.1.1 A registered Graduate Engineer shall not falsify his qualifications or permit misrepresentation of his qualifications. He shall not misrepresent or exaggerate his responsibility in or for the subject matter of previous assignments. He shall not misrepresent pertinent facts concerning employers, employees, associates, joint ventures', or past accomplishments.
- 3.1.2 A registered Graduate Engineer shall check with due diligence the accuracy of facts and data before he signs or endorses any statement or claim. He shall not sign on such documents unless, where necessary, he has made qualifications on errors and inaccuracies.
- 3.1.3 A registered Graduate Engineer shall respond, within reasonable time, to communication from the Board or any other relevant authority on matters pertaining to his professional service.
- 3.1.4 A registered Graduate Engineer shall undertake assignments only if he is qualified by education and experience in the specific technical fields of that assignment in which he is to be involved.
- 3.1.5 A registered Graduate Engineer shall sign only those engineering documents that he has prepared or has been prepared under his control.
- 3.1.6 A registered Graduate Engineer shall be objective and truthful in making professional reports, statements and testimonies. He shall include all relevant and pertinent information in such reports, statements, or testimonies, which should bear the date indicating when the information was current.
- 3.1.7 A registered Graduate Engineer shall not express publicly technical opinions that are not founded upon his competence and knowledge of the facts in the subject matter.

- 3.1.8 A registered Graduate Engineer shall not issue any statement, criticism or argument on technical matters that are inspired or paid for by interested parties, unless he has prefaced his comments by explicitly identifying the interested parties on whose behalf he is speaking and by revealing the existence of any interest he may have in the matter.
- 3.1.9 A registered Graduate Engineer shall notify the Board in writing within three (3) months
 - (i) if he is convicted of an offence involving false or negligent certification, fraud or dishonesty in Malaysia or elsewhere; or
 - (ii) if he becomes a bankrupt.
- 3.2 Registered Graduate Engineer to certify work only if he has supervised, witnessed or inspected such work, etc.
- 3.2.1 A registered Graduate Engineer shall keep proper records of his participation, supervision, inspection or witnessing of activities on site including the dates and time, subject-matter, condition of site, weather, etc.
- 3.2.2 A registered Graduate Engineer shall check or verify with due diligence the accuracy of facts and data before he signs or endorses any statement or certification. He shall not sign on such documents unless he has supervised, witnessed or inspected the carrying out of such work.
- 3.2.3 A registered Graduate Engineer shall bring to the attention of the Engineer or Employer at the earliest possible opportunity of any instance where the work or materials used are not in compliance with the specifications, drawings or conditions of contract.
- 3.2.4 A registered Graduate Engineer shall not issue instructions to the Contractor or give verification or approval to works carried out by the Contractor unless he has been authorised by the Engineer or Employer to do so.
- 3.2.5 A registered Graduate Engineer shall not reveal facts, data or information without the prior consent of the Engineer or Employer, past and present, except as authorised or required by law or when the withholding of such information is contrary to the safety, health and interest of the public.
- 3.2.6 A registered Graduate Engineer having knowledge of any violation of this Code of Conduct or any law or regulation shall report thereon to the Engineer or Employer and, where relevant, also to public authorities and cooperate with the Engineer or Employer in furnishing such information or assistance as may be required.

- 3.3 Registered Graduate Engineer not to accept benefit from more than one party, etc
- 3.3.1 A registered Graduate Engineer shall not accept any benefit or compensation, financial or otherwise, from more than one party for professional engineering services on the same project, or for professional engineering services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.
- 3.3.2 A registered Graduate Engineer shall disclose all known or potential conflicts of interest that may influence or appear to influence his judgment or the quality of his services.
- 3.3.3 A registered Graduate Engineer shall not solicit or accept any consideration, financial or otherwise, directly or indirectly, from outside agents in connection with the work for which he is responsible.
- 3.3.4 A registered Graduate Engineer acting as Advisor or Director of a company or an agency shall not participate in decision with respect to professional engineering services solicited or provided by him or his organization.

4.0 ENGINEERING TECHNOLOGIST

- 4.1 Registered Engineering Technologist not to falsify qualification, etc.
- 4.1.1 A registered Engineering Technologist shall not falsify his qualifications or permit misrepresentation of his qualifications. He shall not misrepresent or exaggerate his responsibility in or for the subject matter of previous assignments. He shall not misrepresent pertinent facts concerning employers, employees, associates, joint ventures, or past accomplishments.
- 4.1.2 A registered Engineering Technologist shall check with due diligence the accuracy of facts and data before he signs or endorses any statement or claim. He shall not sign on such documents unless, where necessary, he has made qualifications on errors and inaccuracies.
- 4.1.3 A registered Engineering Technologist shall respond, within reasonable time, to communication from the Board or any other relevant authority on matters pertaining to his professional service.
- 4.1.4 A registered Engineering Technologist shall undertake assignments only if he is qualified by education and experience in the specific technical fields of that assignment in which he is to be involved.
- 4.1.5 A registered Engineering Technologist shall sign only those engineering documents that he has prepared or has been prepared under his control.

- 4.1.6 A registered Engineering Technologist shall be objective and truthful in making professional reports, statements and testimonies. He shall include all relevant and pertinent information in such reports, statements, or testimonies, which should bear the date indicating when the information was current.
- 4.1.7 A registered Engineering Technologist shall not express publicly technical opinions that are not founded upon his competence and knowledge of the facts in the subject matter.
- 4.1.8 A registered Engineering Technologist shall not issue any statement, criticism or argument on technical matters that are inspired or paid for by interested parties, unless he has prefaced his comments by explicitly identifying the interested parties on whose behalf he is speaking and by revealing the existence of any interest he may have in the matter.
- 4.1.9 A registered Engineering Technologist shall notify the Board in writing within three (3) months
 - (i) if he is convicted of an offence involving false or negligent certification, fraud or dishonesty in Malaysia or elsewhere; or
 - (ii) if he becomes a bankrupt.
- 4.2 Registered Engineering Technologist to certify work only if he has supervised, witnessed or inspected such work, etc.
- 4.2.1 A registered Engineering Technologist shall keep proper records of his participation, supervision, inspection or witnessing of activities on site including the dates and time, subject-matter, condition of site, weather, etc.
- 4.2.2 A registered Engineering Technologist shall check or verify with due diligence the accuracy of facts and data before he signs or endorses any statement or certification. He shall not sign on such documents unless he has supervised, witnessed or inspected the carrying out of such work.
- 4.2.3 A registered Engineering Technologist shall bring to the attention of the Engineer or Employer at the earliest possible opportunity of any instance where the work or materials used are not in compliance with the specifications, drawings or conditions of contract.
- 4.2.4 A registered Engineering Technologist shall not issue instructions to the Contractor or give verification or approval to works carried out by the Contractor unless he has been authorised by the Engineer or Employer to do so.
- 4.2.5 A registered Engineering Technologist shall not reveal facts, data or information without the prior consent of the Engineer or Employer, past and present, except as authorised or required by law or when the withholding of such information is contrary to the safety, health and interest of the public.

4.2.6 A registered Engineering Technologist having knowledge of any violation of this Code of Conduct or any law or regulation shall report thereon to the Engineer or Employer and, where relevant, also to public authorities and cooperate with the Engineer or Employer in furnishing such information or assistance as may be required.

4.3 Registered Engineering Technologist not to accept benefit from more than one party, etc

- 4.3.1 A registered Engineering Technologist shall not accept any benefit or compensation, financial or otherwise, from more than one party for professional engineering services on the same project, or for professional engineering services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.
- 4.3.2 A registered Engineering Technologist shall disclose all known or potential conflicts of interest that may influence or appear to influence his judgment or the quality of his services.
- 4.3.3 A registered Engineering Technologist shall not solicit or accept any consideration, financial or otherwise, directly or indirectly, from outside agents in connection with the work for which he is responsible.
- 4.3.4 A registered Engineering Technologist acting as Advisor or Director of a company or an agency shall not participate in decision with respect to professional engineering services solicited or provided by him or his organisation.

5.0 INSPECTOR OF WORKS

- 5.1 Registered Inspector of Works not to falsify qualification, etc.
- 5.1.1 A registered Inspector of Works shall not falsify his qualifications or permit misrepresentation of his qualifications. He shall not misrepresent or exaggerate his responsibility in or for the subject matter of previous assignments. He shall not misrepresent pertinent facts concerning employers, associates or past accomplishments.
- 5.1.2 A registered Inspector of Works shall respond, within reasonable time, to communication from the Board or any other relevant authority on matters pertaining to his work or registration.
- 5.1.3 A registered Inspector of Works shall undertake assignments only if he is qualified by education and/or experience in the specific technical fields of that assignment in which he is to be involved.

- 5.1.4 A registered Inspector of Works shall be objective and truthful in making reports, statements and testimonies. He shall include all relevant and pertinent information in such reports, statements, or testimonies, which should bear the date indicating when the information was current.
- 5.1.5 A registered Inspector of Works shall not express publicly technical opinions that are not founded upon his competence and knowledge of the facts in the subject matter.
- 5.1.6 A registered Inspector of Works shall not issue any statement, criticism or argument on technical matters that are inspired or paid for by interested parties, unless he has prefaced his comments by explicitly identifying the interested parties on whose behalf he is speaking and by revealing the existence of any interest he may have in the matter.
- 5.1.7 A registered Inspector of Works shall notify the Board in writing within three (3) months
 - (i) if he is convicted of an offence involving false or negligent certification, fraud or dishonesty in Malaysia or elsewhere; or
 - (ii) if he becomes a bankrupt.
- 5.2 Registered Inspector of Works to certify work only if he has witnessed or inspected such work, etc.
- 5.2.1 A registered Inspector of Works shall keep proper records of his participation or inspection or witnessing of activities on site including the dates and time, subject-matter, condition of site, weather, etc.
- 5.2.2 A registered Inspector of Works shall check or verify with due diligence the accuracy of facts and data before he signs or endorses any statement or certification. He shall not sign on such documents unless he has witnessed or inspected the carrying out of such work.
- 5.2.3 A registered Inspector of Works shall bring to the attention of the Engineer or Employer at the earliest possible opportunity of any instance where the work or materials used are not in compliance with the specifications, drawings or conditions of contract.
- 5.2.4 A registered Inspector of Works shall not issue instructions to the Contractor or give verification or approval to works carried out by the Contractor unless he has been authorised by the Engineer or Employer to do so.
- 5.2.5 A registered Inspector of Works shall not reveal facts, data or information without the prior consent of the Engineer or Employer, past and present, except as authorised or required by law or when the withholding of such information is contrary to the safety, health and interest of the public.
- 5.2.6 A registered Inspector of Works having knowledge of any violation of this Code of Conduct or any law or regulation shall report thereon to the Engineer or Employer and, where relevant, also to public authorities and cooperate with the Engineer or Employer in furnishing such information or assistance as may be required.

- 5.3 Registered Inspector of Works not to accept benefit from more than one party, etc.
- 5.3.1 A registered Inspector of Works shall not accept any benefit or compensation, financial or otherwise, except from the Engineer or Employer for services pertaining to any project that he is engaged in as an Inspector of Works.
- 5.3.2 A registered Inspector of Works shall disclose all known or potential conflicts of interest that may influence or appear to influence his judgment or the quality of his services, etc.
- 5.3.3 A registered Inspector of Works shall not solicit or accept any consideration, financial or otherwise, directly or indirectly, from outside agents in connection with the work for which he is responsible.
- 5.3.4 A registered Inspector of Works shall not abuse the facilities available on site or seek payment for overtime or such services except where such services have been rendered by him.
- 5.3.5 A registered Inspector of Works shall not refer trades or other specialists input or solicit, receive or accept referral fees or commissions from such referral for any project that he is engaged in as an Inspector of Works.

[321st Board Meeting / 27th October 2016]

DATUK Ir. ADANAN BIN MOHAMED HUSSAIN

President
BOARD OF ENGINEERS MALAYSIA

Rev. No.: 0 Date: 6.2.2017



BOARD OF ENGINEERS MALAYSIA

CIRCULAR NO. 002

CONTINUING PROFESSIONAL DEVELOPMENT (CPD) REQUIREMENTS

IN exercise of powers conferred by Sections 13(2) and 13(3) of Act 138 Registration of Engineers Act 1967 (Revised 2015), and Regulation 20(1)(b) of the Registration of Engineers Regulations 1990 [P.U.(A) 128], the Board of Engineers Malaysia (BEM) hereby prescribes further conditions to be satisfied for the purpose of issuance of the Certificate of Registration to Registered Professional Engineers with Practising Certificates, Registered Professional Engineers and Registered Inspectors of Works as stated herein below.

- The BEM in performing its functions under Section 4(1)(ec) of Act 138 Registration of Engineers Act 1967 (Revised – 2015) has caused a mandatory Continuing Professional Development (CPD) Programme to be undertaken by all Registered Professional Engineers with Practising Certificates, Registered Professional Engineers and Registered Inspectors of Works.
- 2. This Circular announces the conditions hereon prescribed by the BEM in respect the fulfilment of the required CPD Programme for the purpose of issuance of the annual Certificate of Registration to Registered Professional Engineers with Practising Certificates and Registered Professional Engineers; and the triennial (once every three years) Certificate of Registration to Registered Inspectors of Works.

DEFINITIONS

3. For the purpose of this Circular the following definitions shall apply. Unless defined below, all terms used shall be as defined by the Registration of Engineers Act 1967.

CPD Programme

: The cumulative CPD Activities over a calendar year which contribute towards the Continuing Professional Development of a Registered Professional Engineer with Practising Certificates (PEPC), a Registered Professional Engineers (PE) or a Registered Inspectors of Works (IOW). Such a contribution would be reflected by the CPD Hours collected by the said PEPC, PE or IOW.

CPD Activities

: They are activities, engineering or otherwise, not within the job scope of a PEPC, PE or IOW while being employed or professionally engaged, such that these activities <u>directly</u> contribute to the competence of the said PEPC, PE or IOW.

Formal Education and Training

: Engineering studies and training leading to the award of a certificate, diploma, degree or higher degree with a formal assessment process.

Informal Learning - on job learning

: Engineering understudy and learning from a subject matter expert or equivalent, so as to be able to perform a new engineering task.

Informal Learning - private study

: Self-study through accessing engineering-related reading materials whether hard copy or online with the aim of increasing knowledge, capability and competency.

Conference and Technical Meeting

: The attendance and participation of a PEPC, PE or IOW in engineering conferences, seminars, forums and similar technical gatherings and meetings which provide the environment to gain insight and knowledge as well as be abreast with engineering development.

Presentation of Papers

: Research, preparation and presentation of an engineering-related paper normally to an audience of engineering and related background in a conference, seminar or technical meeting.

Engineering Service Activities

: Engineering-related activities such as giving talks and lectures, serving on committees, participating in engineering programme accreditation, becoming a mentor to young engineers or young inspectors of works, and serving as an industry adviser to an institution of learning, performed in the course of contributing to and promoting the engineering profession.

CPD Hour

: One hour of involvement in a CPD Activity undertaken by a PEPC, PE or IOW. Under all circumstances the BEM has the final discretion in determining the actual CPD Hour to be accorded to a CPD Activity.

RATIONALE OF CPD

- 4. Engineering learning and technical training activities eligible to be considered as CPD activities shall provide the PEPC, PE or IOW with:
 - a) systematic maintenance, improvement and broadening of engineering and technical knowledge and skills such as to enable continuing competent performance of engineering and related professional and technical responsibilities.
 - b) avenues for development of personal qualities for execution of professional and technical duties throughout the PEPC's, PE's or IOW's working life.
- 5. An acceptable CPD Activity shall therefore fulfil at least the following objectives:
 - a) to maintain engineering and technical knowledge and skills to perform an engineering job competently.
 - b) to stay abreast with engineering developments, advancement and innovations in the relevant field of engineering practice as well as in general engineering knowledge.
 - c) to keep up-to-date with changes in engineering codes, regulations and guidelines.

REGISTERED PROFESSIONAL ENGINEERS WITH PRACTISING CERTIFICATES

- 6. In administering the CPD requirement as provided by this Circular, the **policy** adopted by the BEM for Registered Professional Engineers with Practising Certificates (PEPC) shall be:
 - a) The CPD requirement shall apply to all PEPC.
 - b) The annual CPD Hours required to be obtained by a PEPC shall be 50 CPD Hours; or any other quantity as may be prescribed by the BEM from time to time.
 - c) A Registered PEPC may apply to the BEM for an exemption of the CPD requirement the approval of which shall be at the discretion of the BEM.
 - d) Formal accreditation of an engineering activity as being an approved CPD Activity shall be accorded by the BEM based on criteria it has set. Such accredited CPD Activities can be carried out by credible and bona-fide learning and training organizations. The BEM can carry out deemed accredited CPD Activities at its own discretion.
 - e) An engineering activity which fulfils the criteria set by the BEM to be considered a CPD Activity but which has not been pre-accredited nor pre-approved by the BEM can be submitted as part of the CPD Programme undertaken provided always that the details of such an activity including information on the content, hours of involvement, mode of delivery, venue and dates of activity together with the profile of persons conducting the activity, shall accompany the submission accordingly.

- f) Engineering learning and training activities offered by professional institutions, educational institutions, employers and the industry shall be duly accredited upon application and fulfilling of the criteria set by the BEM. The decision of the BEM in approving or otherwise of any such application shall be final.
- g) The BEM shall promote continuing education opportunities in line with its prescribed functions.
- h) The BEM will encourage employers and the industry to promote and support CPD Activities of their employees.
- i) The BEM will administer a CPD audit system whereby up to 10% of PEPC are randomly audited each year.
- 7. There are 5 types of CPD Activity:
 - a) Formal Education and Training
 - b) Informal Learning
 - c) Conference and Technical Meeting
 - d) Presentation of Papers
 - e) Engineering Service Activities
- 8. The weightage and the allowable maximum CPD Hours for each of the recognised CPD Activities stated in Para 7 are given in the table below:

TYPE OF CPD ACTIVITY	TIME WEIGHTED FACTOR	MAX CPD HOURS*
1. Formal Education and Training	2	No limit
2a. Informal Learning Activities - on job learning	1	Maximum 20 for Type 2a
2b. Informal Learning Activities - private study	0.5	Maximum 10 for Type 2b
3. Conference and Technical Meeting	1	- No limit
4. Presentation of Papers	10	Maximum 30
5. Engineering Service Activities	1	Maximum 30

^{*} Annually

- In the annual renewal of the Certificate of Registration by PEPC, a submission in the
 prescribed manner by using the relevant form shall be made to the BEM stating the CPD
 Programme undertaken for the immediate preceding year.
- 10. The types of CPD Activity and allowable maximum CPD Hours stated under Para 8 may be amended as and when necessary at the discretion of the BEM.
- 11. At the sole discretion of the BEM, a Registered PEPC who in his/her application for the renewal of the annual Certificate of Registration, has failed for a period of not more than a rolling three consecutive years, to submit to the BEM a CPD Programme with the required minimum quantum of CPD Hours, may be allowed to continue to be registered subject to strict remedial actions as follows:
 - A Registered PEPC, accompanying the application for the renewal of the annual Certificate of Registration before the end of the rolling third consecutive year of having failed to submit the minimum requisite CPD Hours, has to furnish proof of having obtained a minimum of 150 CPD hours; failing of which may cause the refusal by the BEM of the said registration renewal.
- 12. Notwithstanding Para 11, the BEM may in such circumstances as it so determines, allow the renewal of registration of a PEPC even though he/she has failed to submit to the BEM a CPD Programme with the requisite CPD Hours.

REGISTERED PROFESSIONAL ENGINEERS

- 13. In administering the CPD requirement as provided by this Circular, the **policy** adopted by the BEM for Registered Professional Engineers (PE) shall be:
 - a) The CPD requirement shall apply to all PE.
 - b) The annual CPD Hours required to be obtained by a PE shall be 25 CPD Hours; or any other quantity as may be prescribed by the BEM from time to time.
 - c) A PE may apply to the BEM for an exemption of the CPD requirement the approval of which shall be at the discretion of the BEM.
 - d) Formal accreditation of an engineering activity as being an approved CPD Activity shall be accorded by the BEM based on criteria it has set. Such accredited CPD Activities can be carried out by credible and bona-fide learning and training organizations. The BEM can carry out deemed accredited CPD Activities at its own discretion.
 - e) An engineering activity which fulfils the criteria set by the BEM to be considered a CPD Activity but which has not been pre-accredited nor pre-approved by the BEM can be submitted as part of the CPD Programme undertaken provided always that the details of such an activity including information on the content, hours of involvement, mode of delivery, venue and dates of activity together with the profile of persons conducting the activity, shall accompany the submission accordingly.

- f) Engineering learning and training activities offered by professional institutions, educational institutions, employers and the industry shall be duly accredited upon application and fulfilling of the criteria set by the BEM. The decision of the BEM in approving or otherwise of any such application shall be final.
- g) The BEM shall promote continuing education opportunities in line with its prescribed functions.
- h) The BEM will encourage employers and the industry to promote and support CPD Activities of their employees.
- i) The BEM will administer a CPD audit system whereby **up** to 10% of PE are randomly audited each year.
- 14. There are 5 types of CPD Activity:
 - a) Formal Education and Training
 - b) Informal Learning
 - c) Conference and Technical Meeting
 - d) Presentation of Papers
 - e) Engineering Service Activities
- 15. The weightage and the allowable maximum CPD Hours for each of the recognised CPD Activities stated in Para 14 are given in the table below:

TYPE OF CPD ACTIVITY	TIME WEIGHTED FACTOR	MAX CPD HOURS*
1. Formal Education and Training	2	No limit
2a. Informal Learning Activities - on job learning	1	Maximum 10 for Type 2a
2b. Informal Learning Activities - private study	0.5	Maximum 5 for Type 2b
3. Conference and Technical Meeting	1	No limit
4. Presentation of Papers	10	Maximum 15
5. Engineering Service Activities	1	Maximum 15

^{*} Annually

- 16. In the annual renewal of the Certificate of Registration by a PE, a submission in the prescribed manner by using the relevant form shall be made to the BEM stating the CPD Programme undertaken for the immediate preceding year.
- 17. The types of CPD Activity and allowable maximum CPD Hours stated under Para 15 may be amended as and when necessary at the discretion of the BEM.
- 18. At the sole discretion of the BEM, a Registered PE, who in his/her application for the renewal of the annual Certificate of Registration, has failed for a period of not more than a rolling three consecutive years, to submit to the BEM a CPD Programme with the required minimum quantum of CPD Hours, may be allowed to continue to be registered subject to strict remedial actions as follows:

A Registered PE, accompanying the application for the renewal of the annual Certificate of Registration before the end of the rolling third consecutive year of having failed to submit the minimum requisite CPD Hours, has to furnish proof of having obtained a minimum of 75 CPD hours; failing of which may cause the refusal by the BEM of the said registration renewal.

19. Notwithstanding Para 18, the BEM may in such circumstances as it so determines, allow the renewal of registration of a PE even though he/she has failed to submit to the BEM a CPD Programme with the requisite CPD Hours.

REGISTERED INSPECTORS OF WORKS

- 20. In administering the CPD requirement as provided by this Circular, the **policy** adopted by the BEM for Registered Inspectors of Works (IOW) shall be:
 - a) The CPD requirement shall apply to all IOW.
 - b) The triennial CPD Hours required to be obtained by an IOW shall be 30 CPD Hours; or any other quantity as may be prescribed by the BEM from time to time.
 - c) An IOW may apply to the BEM for an exemption of the CPD requirement the approval of which shall be at the discretion of the BEM.
 - d) Formal accreditation of an engineering activity as being an approved CPD Activity shall be accorded by the BEM based on criteria it has set. Such accredited CPD Activities can be carried out by credible and bona-fide learning and training organizations. The BEM can carry out deemed accredited CPD Activities at its own discretion.
 - e) An engineering activity which fulfils the criteria set by the BEM to be considered a CPD Activity but which has not been pre-accredited nor pre-approved by the BEM can be submitted as part of the CPD Programme undertaken provided always that the details of such an activity including information on the content, hours of involvement, mode of delivery, venue and dates of activity together with the profile of persons conducting the activity, shall accompany the submission accordingly.

- f) Engineering learning and training activities offered by professional institutions, educational institutions, employers and the industry shall be duly accredited upon application and fulfilling of the criteria set by the BEM. The decision of the BEM in approving or otherwise of any such application shall be final.
- g) The BEM shall promote continuing education opportunities in line with its prescribed functions.
- h) The BEM will encourage employers and the industry to promote and support CPD Activities of their employees.
- i) The BEM will administer a CPD audit system whereby **up** to 5% of IOW are randomly audited each year.
- 21. There are 5 types of CPD Activity:
 - a) Formal Education and Training
 - b) Informal Learning
 - c) Conference and Technical Meeting
 - d) Presentation of Papers
 - e) Engineering Service Activities
- 22. The weightage and the allowable maximum CPD Hours for each of the recognised CPD Activities stated in Para 21 are given in the table below:

TYPE OF CPD ACTIVITY	TIME WEIGHTED FACTOR	MAX CPD HOURS*
1. Formal Education and Training	2	No limit
2a. Informal Learning Activities - on job learning	1	Maximum 10 for Type 2a
2b. Informal Learning Activities - private study	0.5	Maximum 5 for Type 2b
3. Conference and Technical Meeting	1	No limit
4. Presentation of Papers	10	Maximum 15
5. Engineering Service Activities	1	Maximum 15

^{*} Triennially (every 3 years)

- 23. In the triennial renewal by IOW, a submission in the prescribed manner by using the relevant form shall be made to the BEM stating the CPD Programme undertaken for the immediate preceding three years.
- 24. The types of CPD Activity and allowable maximum CPD Hours stated under Para 22 may be amended as and when necessary at the discretion of the BEM.
- 25. At the sole discretion of the BEM, a Registered IOW who in his/her application for the renewal of the triennial Certificate of Registration, has failed to submit to the BEM a CPD Programme with the required minimum of 30 CPD Hours, may be allowed to continue to be registered subject to strict remedial actions as follows:
 - a. His/her having already obtained at least 15 CPD Hours at the point of making the application;
 - Having obtained at least 15 CPD Hours in the first year of being allowed to continue to be registered;
 - Having obtained a minimum of 45 CPD Hours (inclusive of the 15 CPD Hours mentioned in item b. above) when the next application of renewal of registration is submitted to the BEM;

failing of which may cause the refusal by the BEM of the said registration renewal.

26. Notwithstanding Para 25, the BEM may in such circumstances as it so determines allow the renewal of registration of an IOW even though he/she has failed to submit to the BEM a CPD Programme with the requisite CPD Hours.

EFFECTIVE DATE

27. The implementation of CPD requirements as intended by this Circular shall be as of the date of the Registration of Engineers Act 1967 (Revised 2015) coming into force, namely 31 July 2015.

[324th Board Meeting / 6th February 2017]

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DATO' SRI Ir. Dr. ROSLAN BIN MD TAHA
President
BOARD OF ENGINEERS MALAYSIA

Rev. No.: 0

Date: 25th May 2017



BOARD OF ENGINEERS MALAYSIA

CIRCULAR NO: 003

FOR

SUBMISSION OF SEWERAGE AND SANITARY PLUMBING WORKS

In exercise of the powers conferred by paragraph 4(1)(f) of the Registration of Engineers Act 1967 [Act 138], the Board of Engineers Malaysia hereby determines that:

- Sanitary plumbing works shall be submitted by registered Professional Engineers with Practising Certificate in the Mechanical or Civil disciplines.
- Septic tanks and sewage treatment plant including associated structural works shall be submitted by registered Professional Engineers with Practising Certificate in the Civil discipline only.

[326th Board Meeting / 25th May 2017]

DATO' SRI Ir. Dr. ROSLAN BIN MD. TAHA

President

BOARD OF ENGINEERS MALAYSIA

Rev. No.: 0 Date: 25,5.2017



CIRCULAR NO.004

SUPERVISION OF CONSTRUCTION WORKS

In exercise of the powers conferred by paragraph 4(1)(f) of the Registration of Engineers Act 1967 [Act 138], the Board of Engineers Malaysia hereby determines the following:

- Street Drainage and Building Act 1974 (Act 133) requires plans pertaining to engineering works
 to be submitted by qualified person. The 'qualified person' means any Professional Engineer
 with Practising Certificate registered under Section 8 of the Registration of Engineers Act 1967
 in the appropriate engineering discipline.
- 2. Act 133 only allows qualified person to supervise and certify completion of construction of engineering aspects of building works. No erection or continuation of erection of building works shall take place unless that qualified person or any person duly authorised by him undertakes the supervision of the works. This means that the submitting person shall supervise the construction works.
- 3. A submitting person shall not certify completion of construction works unless he or any person duly authorised by him has carried out supervision. Where another engineer takes over the works of the previous engineer, he shall ensure all works are done properly before certifying completion of construction.

[326th Board Meeting / 25th May 2017]

DATO' SRI Ir. Dr. ROSLAN BIN MD. TAHA

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President

BOARD OF ENGINEERS MALAYSIA

Rev. No.: 0

Date: 25.5.2017



BOARD OF ENGINEERS MALAYSIA

CIRCULAR NO.	005

ADVERTISING BY REGISTERED ENGINEERS

In exercise of the powers conferred by paragraph 4(1)(f) of the Registration of Engineers Act 1967 . [Act 138], the Board of Engineers Malaysia (the Board) hereby determines as follows:

I. INTRODUCTION

- 1. Recognising the need for the public to have easy access to information on what engineering consultancy services are available and from whom, the Board in pursuance of Regulation 27(c) of the Registration of Engineers Regulations 1990 hereby permits a Professional Engineer or an Engineering Consultancy Practice (ECP) to:
 - (i) make known to the public the services offered by him or the ECP, and
 - (ii) seek engagement from potential Clients.
- 2. This Circular incorporates the requirements of Regulations 23, 24 and 26 of the Registration of Engineers Regulations 1990. The Professional Engineer or ECP must ensure that:
 - (i) any information given is factual and accurate:
 - (ii) any action taken is not detrimental to public interest;
 - (iii) any action taken does not bring the profession into disrepute.

II. GENERAL REQUIREMENTS

- Advertisements are permitted through any medium and may be placed separately or as part of a news feature or in conjunction with an article or report on a particular project, or in the classified columns.
- 2. A Professional Engineer or an ECP is permitted to contribute to or have his/its name associated with items in the press or electronic media for the purpose of providing assistance or information of interest to the public.
- 3. In all cases, it is the personal responsibility of a Professional Engineer to ensure that neither he nor his ECP compromises professional ethics or decorum in any way. He should ensure that the following conditions are complied with:

- that no advertisement contains comparative, superlative, ostentatious or laudatory descriptions of his practice or ECP;
- (ii) he may indicate his area of practice without claiming, suggesting or implying that the services offered by him or his ECP can only be obtained from him or his ECP or are better than those available from other Professional Engineers or ECPs.

III. GENERAL RECOMMENDATIONS

1. ADVERTISEMENTS

Advertisements for Staff

Advertisements for staff placed in any medium including websites, newspapers, technical journals and other publications may include the name and logo of the company making the advertisement and may contain a brief relevant statement describing the company.

2. SIGNBOARDS

(i) Signboards at Work Sites

Signboards with the logo, name and address of the Professional Engineer or his ECP may be put up at work sites. The logo and lettering shall be of the same size as the logo and lettering of the other companies on the signboard. A statement indicating the type of services rendered by the Professional Engineer or his ECP to the project is permitted.

(ii) Office Signboards and Nameplates

Lettering and logo on office signboards located on the exterior of the office shall be of appropriate size. In the tenants' directory of an office complex, the nameplate shall be of similar size as those of other tenants. A statement of the services provided by the company e.g. mechanical, electrical and civil, is permitted.

3. STATIONERY & MULTIMEDIA

(i) Letterheads

The letterheads of a Professional Engineer or his ECP may carry his name and qualifications or the names and qualifications of key personnel, and the name, postal and e-mail address, website, telephone and facsimile number, and logo of the company. A statement of the services provided by the company is permitted.

(ii) Envelopes

A Professional Engineer may incorporate his name, postal and e-mail address, telephone and facsimile number, website and logo in postal franks, envelopes or other covers used to send letters or parcels by post, provided that undue prominence is not given to them.

(iii) Calendars, Diaries, Greetings

A Professional Engineer or his ECP may print calendars, diaries or greeting cards containing factual information with regard to works for which he or his ECP was responsible.

(iv) Telephone, Electronic Media and Other Directories

An entry into Telephone Directory, Electronic Media or in trade and commercial directories is permitted and may be given prominence with the use of boldface type or a special layout. The logo of the Professional Engineer or his ECP may also be included in such an entry together with a statement of type of practice and other information useful to the public.

(v) Change of Address

Advertisement in the press or publication containing details of the change of address is permitted.

(vi) Name Cards

Name cards of a Professional Engineer may carry, inter alia, in addition to his name, qualifications, awards and designation, the name, address and logo of his ECP.

(vii) Joint-Ventures

If the company is a joint-venture company its stationery may carry the name of the joint-venture company.

4. PUBLICATIONS

A Professional Engineer or his ECP may publish or consent to the publication of circulars, brochures or books containing factual information with regard to works for which he or his company was responsible.

He may also allow his works, ideas, views, illustrations, writings, descriptions or any other matters of interest to be published in the press or in trade journals, or be presented in a forum, conference, seminar or other similar gathering, or be broadcast, with or without monetary consideration, provided always that such published or broadcast materials are of interest to the general public and to the profession.

5. EXHIBITIONS

A Professional Engineer or an ECP may publicise his services or those of his company at exhibitions.

6. DIRECT APPROACH TO POTENTIAL CLIENTS

A Professional Engineer or ECP may approach directly persons or organisations who have an interest in services offered by Professional Engineers or ECPs. Such an approach may include presentation of details of the experience and services available from the Professional Engineer or his ECP. However, canvassing for work such as distribution of circulars concerning his practice to the general public is not permitted.

[326th Board Meeting / 25th May 2017]

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DATO' SRI Ir. Dr. ROSLAN BIN MD. TAHA

President
BOARD OF ENGINEERS MALAYSIA

Rev. No.: 0

Date: 25.5.2017



BOARD OF ENGINEERS MALAYSIA

CIRCULAR NO.	005

ADVERTISING BY REGISTERED ENGINEERS

In exercise of the powers conferred by paragraph 4(1)(f) of the Registration of Engineers Act 1967 [Act 138], the Board of Engineers Malaysia (the Board) hereby determines as follows:

I. INTRODUCTION

- 1. Recognising the need for the public to have easy access to information on what engineering consultancy services are available and from whom, the Board in pursuance of Regulation 27(c) of the Registration of Engineers Regulations 1990 hereby permits a Professional Engineer or an Engineering Consultancy Practice (ECP) to:
 - (i) make known to the public the services offered by him or the ECP, and
 - (ii) seek engagement from potential Clients.
- 2. This Circular incorporates the requirements of Regulations 23, 24 and 26 of the Registration of Engineers Regulations 1990. The Professional Engineer or ECP must ensure that:
 - (i) any information given is factual and accurate:
 - (ii) any action taken is not detrimental to public interest;
 - (iii) any action taken does not bring the profession into disrepute.

II. GENERAL REQUIREMENTS

- Advertisements are permitted through any medium and may be placed separately or as part of a news feature or in conjunction with an article or report on a particular project, or in the classified columns.
- 2. A Professional Engineer or an ECP is permitted to contribute to or have his/its name associated with items in the press or electronic media for the purpose of providing assistance or information of interest to the public.
- 3. In all cases, it is the personal responsibility of a Professional Engineer to ensure that neither he nor his ECP compromises professional ethics or decorum in any way. He should ensure that the following conditions are complied with:

- (i) that no advertisement contains comparative, superlative, ostentatious or laudatory descriptions of his practice or ECP;
- (ii) he may indicate his area of practice without claiming, suggesting or implying that the services offered by him or his ECP can only be obtained from him or his ECP or are better than those available from other Professional Engineers or ECPs.

III. GENERAL RECOMMENDATIONS

1. ADVERTISEMENTS

Advertisements for Staff

Advertisements for staff placed in any medium including websites, newspapers, technical journals and other publications may include the name and logo of the company making the advertisement and may contain a brief relevant statement describing the company.

2. SIGNBOARDS

(i) Signboards at Work Sites

Signboards with the logo, name and address of the Professional Engineer or his ECP may be put up at work sites. The logo and lettering shall be of the same size as the logo and lettering of the other companies on the signboard. A statement indicating the type of services rendered by the Professional Engineer or his ECP to the project is permitted.

(ii) Office Signboards and Nameplates

Lettering and logo on office signboards located on the exterior of the office shall be of appropriate size. In the tenants' directory of an office complex, the nameplate shall be of similar size as those of other tenants. A statement of the services provided by the company e.g. mechanical, electrical and civil, is permitted.

3. STATIONERY & MULTIMEDIA

(i) Letterheads

The letterheads of a Professional Engineer or his ECP may carry his name and qualifications or the names and qualifications of key personnel, and the name, postal and e-mail address, website, telephone and facsimile number, and logo of the company. A statement of the services provided by the company is permitted.

(ii) Envelopes

A Professional Engineer may incorporate his name, postal and e-mail address, telephone and facsimile number, website and logo in postal franks, envelopes or other covers used to send letters or parcels by post, provided that undue prominence is not given to them.

(iii) Calendars, Diaries, Greetings

A Professional Engineer or his ECP may print calendars, diaries or greeting cards containing factual information with regard to works for which he or his ECP was responsible.

(iv) Telephone, Electronic Media and Other Directories

An entry into Telephone Directory, Electronic Media or in trade and commercial directories is permitted and may be given prominence with the use of boldface type or a special layout. The logo of the Professional Engineer or his ECP may also be included in such an entry together with a statement of type of practice and other information useful to the public.

(v) Change of Address

Advertisement in the press or publication containing details of the change of address is permitted.

(vi) Name Cards

Name cards of a Professional Engineer may carry, *inter alia*, in addition to his name, qualifications, awards and designation, the name, address and logo of his ECP.

(vii) Joint-Ventures

If the company is a joint-venture company its stationery may carry the name of the joint-venture company.

4. PUBLICATIONS

A Professional Engineer or his ECP may publish or consent to the publication of circulars, brochures or books containing factual information with regard to works for which he or his company was responsible.

He may also allow his works, ideas, views, illustrations, writings, descriptions or any other matters of interest to be published in the press or in trade journals, or be presented in a forum, conference, seminar or other similar gathering, or be broadcast, with or without monetary consideration, provided always that such published or broadcast materials are of interest to the general public and to the profession.

5. EXHIBITIONS

A Professional Engineer or an ECP may publicise his services or those of his company at exhibitions.

6. DIRECT APPROACH TO POTENTIAL CLIENTS

A Professional Engineer or ECP may approach directly persons or organisations who have an interest in services offered by Professional Engineers or ECPs. Such an approach may include presentation of details of the experience and services available from the Professional Engineer or his ECP. However, canvassing for work such as distribution of circulars concerning his practice to the general public is not permitted.

[326th Board Meeting / 25th May 2017]

DATO' SRI Ir. Dr. ROSLAN BIN MD. TAHA

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President
BOARD OF ENGINEERS MALAYSIA

Rev. No.: 0

Date: 21.8.2015



BOARD OF ENGINEERS MALAYSIA

GUIDELINES NO: 001

THE ROLE AND RESPONSIBILITY OF PROFESSIONAL ENGINEERS FOR TEMPORARY WORKS DURING CONSTRUCTION STAGE

In exercise of the powers conferred by paragraph 4(1)(f) of the Registration of Engineers Act 1967 [Act 138], the Board of Engineers Malaysia hereby determines The Role And Responsibility Of Professional Engineers For Temporary Works During Construction Stage as stated herein below.

1.0 Introduction

In the construction industry, temporary works are required in erecting permanent works under the contractor's responsibility. Temporary works are defined as parts of the works that allow or enable construction of, protect, support or provide access to, the permanent works and which might or might not remain in place at the completion of the works. Relating to this, there were many incidents of mishaps, failures and weaknesses in Temporary Works leading to collapse of structures and accidents at site that are hazardous to public safety. Some incidents have even caused fatalities and injuries to the public and workers at site.

The Board of Engineers Malaysia (BEM) holds the view that these failures can be avoided and wishes to remind all Professional Engineers of their role and responsibility on Temporary Works to ensure that the safety and interest of the public and workers at site are safeguarded.

Although Temporary Works are mainly the Contractor's responsibility, it is however important that Professional Engineers involved in the project either as Owner, Consultant or Contractor play an active role in ensuring its safety. In view of this, BEM is publishing this "Guidelines on the Role and Responsibility of Professional Engineers for Temporary Works during Construction stage" as a guide to all professional engineers involved in temporary works.

The design of Temporary Works shall be given the same due respect as that of the design of Permanent Works by Professional Engineers.

Note: For the purpose of this guideline, the definition of Stakeholders are as follows:

- Contractor = Include Main Contractor, Sub Contractor, Specialist Contractor, Tradesmen and any other companies or their personnel carrying out the physical works at site.
- ii. Consultant = Professional Engineers registered with the Board of Engineers Malaysia (BEM) who are the Submitting Person (Qualified Person) to the Authority and Specialists and Professional Engineers (including specialist) whose names appear in the drawings used for tender or construction.
- iii. Owner = Project proponent, Developer or Government agencies who develop a project.
- iv. **Professional Engineer for Temporary Works (PETW)** = Refer to the Professional Engineer (PE) registered with the Board of Engineers Malaysia (BEM) and with a Practicing Certificate in force. They can be employed by Contractor to carry out the design, endorsement and supervision of Temporary Works that required the PE's certification.

2.0 Acts and Code of Practice

Registered engineers designing and supervising Temporary Works in construction shall familiarize themselves with the following to ensure compliance to the laws and design practices.

Act

- Occupational Safety and Health Act 1994 (Act 514)
- Factories and Machinery Act 1967 (Act 139)
 - Factories and Machinery (Notification, Certificate of Fitness and Inspection)
 Regulations, 1970
 - Factories and Machinery (Building Operations & Works of Engineering Construction)
 (Safety) Regulations, 1986 (BOWEC)
- Registration of Engineers Act 1967 (Revised 2007)

Code of Practice

- BS5975:2008+A1:2011 "Code of Practice for Temporary Works Procedures and The Permissible Stress Design of Falsework"
- Malaysian Standard MS 1462-1:2012, Metal Scaffolding Part 1: Prefabricated scaffolds
 Specifications for steel frame scaffolding (First revision), Department of Standards Malaysia.
- Malaysian Standard MS 1462-2-1-2010, Metal Scaffolding -- Part 2: Tubular (Tube and coupler) scaffolds -- Section 1: Specifications for steel tubes, Department of Standards Malaysia
- Malaysian Standard MS 1462-2-2-2010, Metal Scaffolding
 — Part 2: Tubular (Tube and coupler) scaffolds
 — Section 2: Specifications for aluminium tubes, Department of Standards Malaysia
- Malaysian Standard MS 1462-2-3-2011, Metal Scaffolding
 — Part 2: Tubular (Tube and coupler) scaffolds Section 3: Specifications for steel and aluminium couplers, fitting and accessories, Department of Standards Malaysia
- Malaysian Standard MS 1462-3-1-2011, Metal Scaffolding
 — Part 3: Prefabricated scaffolds
 — Section 1: Specifications for steel and aluminium modular system scaffoldings, Department of Standards Malaysia
- Malaysian Standard MS 1462-3-2-2011, Metal Scaffolding
 — Part 3: Prefabricated scaffolds Section 2: Particular methods of structural design for steel and aluminium modular system scaffoldings, Department of Standards Malaysia
- Malaysian Standard MS 1462-4-1-2013, Metal Scaffolding
 — Part 4: Temporary Works equipment Section 1: Scaffolds
 — Performance requirements and general design, Department of Standards Malaysia
- Malaysian Standard MS 1462-4-2-2013, Metal Scaffolding
 — Part 4: Temporary Works equipment Section 2: Information on materials, Department of Standards Malaysia

Guidelines

- Guidelines for public safety and health at construction sites, DOSH 2007
- · Guidelines for the prevention of falls at workplaces
- Guidelines on trenching for construction safety
- · Guidelines on occupational safety and health in tunnel construction

3.0 <u>Legal Provision</u>

Registered Engineers are reminded of certain laws that regulate the profession and the construction industry as follows:

(A) Regulation 24 (Code of Professional Conduct) under the Registration of Engineers Act 1967 states that;

"A registered Engineer in his responsibility to his employer, client or the profession shall have full regard to the public interest,"

The purpose of the Registration of Engineers Act 1967 is to safeguard public interest, welfare, health and property. The registered Engineer may be charged by the Board if he is found to have failed to discharge his duty in the event there are mishaps or failures in temporary works under his care. This is irrespective of whether the Engineer is the Consultant or the Contractor.

- (B) Section 258(1) of the Uniform Building By-Laws 1984 which states that;
 "In the event of any failure to any building or part of the building, whether in the course of construction or after construction, the qualified person who:-
 - (a) submitted the plans, drawings or calculations for such building;
 - (b) supervised the setting out of such building;
 - (c) certified that the setting out was carried out in accordance with the approved site plan;
 - (d) supervised the construction of such building;
 - (e) certified that the proper supervision of such building as carried out;

shall within one week of the occurrence of such failure or such further period as may be specified by the local authority within whose jurisdiction such building is situated;-

- (aa) report such failure;
- (bb) explain the cause of such failure; and
- (cc) if such failure occurred <u>during construction of such building</u>, state the remedial action taken."

The qualified person may be the Architect or Professional Engineer who has submitted plans to the local authority and is in charge of the supervision of the works. The onus is on the qualified person to undertake the above task with due diligence.

(C) Penalties as mentioned in the Street, Drainage and Building Act 1974 under Section 71 (Penalty for failure of building or earthworks);

"Where any building or part of a building fails, whether in the <u>course of construction</u> or after completion, or where there is any failure in relation to any earthworks, or part of any earthworks, whether in the course of the carrying out of the earthworks or after completion thereof, and the course of such failure is due to any one or more of the following factors:-

- (a) misconstruction or <u>lack of proper supervision during construction</u>;
- (b) misdesign or miscalculation; or
- (c) misuse of such building or part of such building, or such earthworks or part of such earthworks, the <u>person responsible</u> for :-
 - (aa) such misconstruction or such lack of proper supervision;
 - (bb) such misdesign or miscalculation;
 - (cc) such misuse

shall be liable on conviction to a fine not exceeding five hundred thousand ringgit or to imprisonment for a term not exceeding ten years or both."

The Act targets a wider range of stakeholders whereby the "person" includes a company, a partnership, a body corporate and sole proprietorship. As such, engineer working as Consultants or Contractors should be fully aware of this burden of liability.

Apart from the local authorities that regulates the construction site, the Department of Occupational Safety and Health (DOSH) regulates the site during construction. As spelt-out under the Factories and Machinery Act 1967, a construction site is treated as a "factory" and hence it requires the approval of DOSH before construction can proceed. The submission for approval for this purpose is the responsibility of the Contractor.

Registered Engineers as defined in the Registration of Engineers Act 1967 (revised 2007) play a major role in the Contractor's organization whereby they not only supervise the temporary works but at times are also involved in their design. Hence they are also liable under the Street, Drainage and Building Act 1974 and Registration of Engineers Act 1967 if they fail to discharge their duties as required of them.

(D) Under the Factories and Machinery (Building Operations and Works of Engineering (Construction) (Safety) Regulations 1980 or BOWEC, certain design of Temporary Works requires the certification by the Professional Engineer, among these are:

Regulation 28(1) (General Requirements)

"Formwork and reshores shall be <u>certified structurally safe by a Professional Engineer</u> and shall be properly braced or tied together so as to maintain position and shape."

Regulation 30(5) (Concrete Work)

"Where the formwork structure is designed by a Professional Engineer, he shall be responsible for the supervision of the construction and the stability of such structure".

Regulation 43(2) (Catch platforms)

"Such platform shall be <u>designed by a Professional Engineer and certified for safety</u> prior to erection."

Regulation 75 (Design and drawings of scaffolds to be approved)

- "(1) Every metal tube scaffold exceeding 40 meters in height and every other scaffold exceeding 15 meters in height shall be constructed in accordance with the <u>design</u> and drawings of a <u>Professional Engineer</u>. All other metal tube scaffolds shall have their designs and drawings approved by the Chief Inspector.
- (2) A copy of the design and drawings of the structure shall be submitted to the Chief Inspector for his records prior to the erection of the structure.
- (3) A copy of the design drawings certified by the Professional Engineer shall be made available at the worksite for inspection by an Inspector."

Regulation 112 (Stability of structures)

"Where there is any question of stability of structures adjoining or over areas to be excavated, such structures shall be supported where necessary by underpinning, sheet piling, shoring, bracing or other means made or erected according to the design of a Professional Engineer to prevent injury to any person."

Regulation 116(1) (Trench excavation)

"Pilings, shoring and bracing used in trench excavation to protect employees against falling or sliding materials shall be of adequate strength. Where the trench is to be excavated exceeds 4 meters in depth, such protection shall be constructed in accordance with the design and drawings of a Professional Engineer."

Regulation 124 (Piling)

"Where there is any question of stability of structures adjoining areas to be piled, such structures shall be supported where necessary by underpinning, sheet piling, shoring, bracing or other means in accordance with the design of a Professional Engineer to prevent injury to any person."

Registered engineers are reminded to review BOWEC in detail and implement these requirements as required by law.

4.0 Classification of Temporary Works

The Temporary Works is classified into three main classes, namely:

Class 1: Minor Temporary Works
Class 2: Major Temporary Works

Class 3: Temporary Works that form part of Permanent Works

4.1 Class 1: Minor Temporary Works:

Class 1 Temporary Works (Minor) are temporary works that when subject to any failures, defects or losses of serviceability, **would unlikely** affect the public and workers safety and life. Other than those already listed below, the Consultant and Contractor shall discuss and itemize the temporary works for each project prior to construction.

Class 1 Temporary Works will not require professional engineer's endorsement but still subject to compliance with other relevant guidelines, laws and Act (e.g. DOSH, etc.).

Examples of Class 1 Temporary Works are:-

- i) Excavation or Trenching shallower than 1.5m in all direction with slope steeper than 27 degrees with no stockpiling of materials adjacent to the excavation.
- ii) Temporary Cut slopes (excluding those in soft clay) not more than 5m high and gentler than 27 degrees.
- iii) Temporary Fills of Soil and rock that are backfilled to form a bund, embankment or platform with not higher than 1.5m.
- iv) Scaffolding / Falseworks that are lower than 3m high supporting low load and with no public or workers beneath it.

4.2 Class 2: Major Temporary Works:

Class 2 Temporary Works (Major) are temporary works that when subject to any failures, defects or losses of serviceability would likely affect public and workers safety and life. The Consultant and Contractor shall discuss together and determine the temporary works that fall into this class. As Class 2 Temporary Works carry similar level of risk to life as permanent works, it therefore shall be given same respect on safety as that of Permanent Works.

Class 2 Temporary Works shall be designed, endorsed and supervised by a Professional Engineer for Temporary Works (PETW). Owner and Consultant shall state and specify clearly in the tender and contract document to the Contractor that the Contractor shall have Professional Engineer for Temporary Works (PETW) to design, endorse and supervise the Class 2 Temporary Works. It shall be the responsibilities of the Consultant who are the submitting person (qualified person) to the Local Authorities or other Government agencies (e.g. JKR, etc.) and as designer of Permanent Works, to ensure the Contractor comply with these requirements to safe guard public interest and safety.

Examples of Class 2 Temporary Works are but not limited to:-

- i) Scaffolding / Falseworks : Scaffolding / Falseworks covers any form of construction methods and materials used to support the construction of structure / buildings and for pouring of concrete or machineries or for workers. The works includes supply, installation, maintenance, ensuring of foundation and structural stability, and the removal of the scaffolding.
- Temporary Excavations: Temporary excavation that does not fall under Class 1 or Class 3.

- iii) Temporary Cut Slopes: temporary cut slope that does not fall under Class 1 or Class 3
- iv) Temporary Fills: temporary fills that does not fall under Class 1 or Class 3.
- v) **Demolition Works**: Demolition or removal of any obstruction and old construction works which can be either man-made or natural.
- vi) Pre-stressing Works: Works required to form pre-stressed structural elements.
- vii) Crane foundation: The design and construction of the foundation to support a static tower crane.
- viii) **Temporary strutting and bracing for excavations**: The temporary strutting and bracing used at site to support the retaining wall for excavation.
- ix) Temporary ground anchors: Temporary ground anchors used at site to support the temporary and permanent retaining wall for deep excavations or for cut slopes or excavations.
- x) Load Testing of Foundation and Buildings: Includes setting up of system for load testing such as kentledge, ground anchors, soil nails, steel beams, truss or concrete blocks, reaction system, jacking system, etc.
- xi) Temporary structures that when subject to any failures, defects or loss of serviceability could affect public and workers safety and life.

4.3 Class 3: Temporary Works that form part of Permanent Works

Temporary Works that form part of Permanent Works are temporary works that are hazardous to life in which any failure, defect or loss of serviceability **would seriously affect** the public and workers' safety and life. The Class 3 temporary works are works that form part of the Permanent Works (e.g. basement retaining wall, top down construction, temporary cut slopes that later become part of the permanent slopes, tunneling, etc.). The Consultant shall determine the temporary works in construction that fall into this class. As Class 3 Major Temporary Works carry similar level of risk to life as permanent works, they shall then be given the same respect in regards to safety as Permanent Works.

Class 3 Temporary Works that form part of Permanent Works shall be designed, endorsed and supervised by the Consultant, who is the submitting person (qualified person) to the Local Authorities or other Government agencies (e.g. JKR, etc.). The Consultant shall ensure that the design of the Class 3 temporary works (includes analyses, calculations, drawings and specifications) shall be structurally stable with sufficient details for construction and buildable by Contractor with considerations of construction sequence at site and safe. The design, calculations, reports and drawings of Class 3 temporary works shall be endorsed by the Consultant and to be submitted to the Authorities. Only Professional Engineer registered with BEM in their respective discipline with the relevant experiences on similar works shall carry out the works to safe guard public interest and safety.

The Contractor can propose alternative design if the method of construction is to be modified or changed but he must engage a Professional Engineer for Temporary Works (PETW) to design, endorse submit the alternative design (with calculations, drawings, specifications, method statement, work procedures, etc.) to the Consultant. The Professional Engineer for Temporary Works (PETW)) who endorses the alternative design of these temporary works shall be responsible and liable for the design and supervision of the alternative design. The Consultant shall be responsible to review the design concept by the PETW. Only the alternative design that has been reviewed and approved by the Consultant is allowed to be constructed at site.

Examples of Class 3 Temporary Works that form part of Permanent Works are:-

i) Scaffolding / Falseworks that form part of the Permanent Works: Scaffolding / Falseworks that form part of the Permanent Works covers any form of construction methods and materials used to support the construction of structure / buildings and for

pouring of concrete or machineries, for workers and public. The works including supply, installation, maintenance, ensure foundation and structural stability, and removal of the scaffolding.

- iii) Cut Slopes (that form Permanent Slopes): Soil or rock slopes that form the Permanent slopes.
- iv) Strengthening measures of slopes (that form Permanent Slopes): soil nails, ground anchors, rock strengthening measures for permanent slopes and retaining walls.
- v) Retaining Wall: all types of permanent retaining wall (e.g. rubble wall, crib wall, gabion wall, reinforced concrete wall, reinforced soil wall, sheet pile wall, soldier pile wall, contiguous bored pile wall, secant pile wall, diaphragm wall, barrette wall, etc.) that also function during temporary stage.
- vi) Strutting and bracing for excavations that form part of the Permanent Works: The permanent strutting and bracing used at site to support the retaining wall for excavation.
- vii) Permanent Embankment, Bund or Fill: For permanent embankment, bund and fill.
- viii) Ground Treatment that form part of the Permanent Works: Ground treatment works (e.g. stone columns, excavate and replace, prefabricated vertical drains, piled embankment, embankment construction stages) that form part of the Permanent Works.
- Temporary structures and works that form part of the Permanent Works, that when subject to any failures, defects or loss of serviceability could affect public and workers safety and life.

5.0 Role and Responsibility of Professional Engineers on Temporary Works

The Professional Engineers who are entrusted with the design of the Temporary Works shall ensure the following:

- 1) He must practice within the discipline of engineering he is registered with BEM.
- 2) He must only practice on works that he has the necessary experiences and competence to safeguard public safety and interest.
- 3) A Professional Engineer with Practicing Certificate in force can be engaged by Contractor or Owner to design, endorse and supervise the Class 2 and Class 3 Temporary Works.
- 4) He shall design and supervise the Temporary Works according to the relevant standards, code of practice and good engineering practice.
- There shall be adequate numbers of qualified and experienced Professional Engineer's representatives at site (Temporary Works Site supervising personnel) to supervise the Temporary Works full time. This supervisory staffs are responsible to the Professional Engineer who design and endorse the Temporary works. These supervising staff shall be independent from the Contractor's staff in carrying out the Temporary Works
- No physical works shall be allowed to proceed on the Class 2 and Class 3 temporary works unless all the design which include but are not limited to construction drawings, specifications, method statements and construction procedures have been properly endorsed and approved by Professional Engineers, and with supervision team ready at site.
- 7) It is the responsibility of the Consultant who is the submitting person (qualified person) of the project to the Local Authorities to ensure that the project comply with the guidelines on temporary works. Any temporary works of Class 2 and Class 3 category without

proper documentations (e.g. drawings, specifications, method statement, etc.) and proper full time supervision and inspection shall not be allowed to be carried out.

(BEM- 313th Meeting /21st August 2015)

Registrar BOARD OF ENGINEERS MALAYSIA

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BOARD OF ENGINEERS MALAYSIA

GUIDELINE NO. 002

INDUSTRIALISED BUILDING SYSTEM (IBS) WORKS AND IT'S IMPACT ON SCALE OF FEES

1.0 Introduction

- 1.1 The following two (2) modes of procurement for IBS works are considered
 - (a) The Catalogue System Where the Consulting Engineer (CE) designs around a set of preferred standard sizes that IBS providers have in common. The CE's scope of work will remain the same as described in the Scale of Fees (Revised 1998) on Stages of Payment of Fees (Stage 1 to 5).
 - (b) Registered IBS System Provider (RISP)
 Where it is envisaged that the RISP provides part or full services related to detail design and calculation of the IBS components as described under Stage 3 Design Stage (ii) of the Stages of Payment of Fees.

2.0 Rationale on Impact to the Scale of Fees

- 2.1 The key basis to be considered for fee computation involving IBS are
 - (a) the amount of input (in terms of knowledge, experience and time) the CE has put into the design; and
 - (b) the responsibilities the CE carries for the design.
- 2.2 Any adjustment of fee for IBS content in design shall be analysed using these two criteria, irrespective of the type of IBS listed by CIDB.
- 2.3 The construction industry has been encouraged to use IBS as a means of reducing labour content and dependence on foreign labour. IBS may be able to deliver projects at an earlier completion period. However, IBS may not necessarily deliver projects below the cost of conventional construction methods. Generally it may cost more but is delivered with improved quality.

- 2.4 When a CE is engaged for a building project, he is mandated, by virtue of his appointment, to be the Submitting Person (to the Local Authority) for civil and structural works for the project, unless it has been specifically stated otherwise by the client at the time of appointment.
- 2.5 A building system, or a building sub system, is a system consisting of components which, when assembled, will function on its own as designed. A building system using IBS is one in which almost all the building components are prefabricated (e.g. precast concrete column, walls, floor, beam. etc.) and altogether the components work as a system e.g. load bearing wall system for an apartment. A building sub system using IBS is one which can be designed and prefabricated independently and assembled on site in conjunction with other sub systems to form the whole building, e.g. roof truss, structural steel frame, load bearing wall, precast staircase, etc. For a building system or a sub system which incorporates IBS, adjustment of the CE's fees may be warranted under certain circumstances.
- 2.6 The use of precast components designed by the CE, or selected by the CE from commercial catalogues, or the use of reusable formwork, though considered as IBS by CIDB, does not warrant adjustment to the CE's fee because it is merely a different method of fabrication. The CE's design input and responsibilities remain unchanged.
- 2.7 The design of an IBS system or sub system shall be undertaken by a Professional Engineer (referred herein as **IBS Designer** for ease of reference) registered with the Board of Engineers, Malaysia. The IBS Designer shall be responsible for the design as well as the fabrication and installation of the system or sub system on site in coordination with other contractors of the project.
- 2.8 For any IBS system or sub system, the IBS Designer shall be considered, for his part of the work, as "PROVIDING SPECIALIST TECHNICAL ADVICE" referred to in Clause 2(2)(b)(i) of the Scale of Fees of the Board of Engineers. He shall be mandated to sign all design drawings of the IBS works. If the IBS is a proprietary system, the IBS Designer shall take professional liabilities for the design by endorsing the proprietary drawings. He shall also take full professional responsibilities for the system installation on site (and sign off as the installation contractor) in compliance with the requirements of issuance of the **Certificate of Completion and Compliance Form G4**.
- 2.9 Where the CE has been instructed to prepare, and has prepared, preliminary drawings which include structural layout comprising beams, columns, slabs, etc. for tendering which allows the tenderers to offer their own IBS systems, the CE shall be paid the design fees of **Preliminary Stage** and **Design Stage** (i), as stipulated in Clause 1.(2)(a) and (b)(i) of the Scale of Fees. In addition, he shall be paid a fee as described in (2.11) below.
- 2.10 The CE shall coordinate the work of the IBS Designer to ensure that the IBS works fit into the whole building structural system. The CE shall also undertake the administrative works of being the Submitting Person. The IBS Designer and RISP shall indemnify the CE jointly and severally in writing against claims for injuries or damages due to inadequacy or failure of the IBS works.

- 2.11 As the Submitting Person, the CE is required to check the design undertaken by IBS Designer as stipulated in Clause 1.(2)(b)(ii) which includes preparing all other drawings in sufficient details to enable construction to be carried out that would have been otherwise carried out by the CE. For this checking work, the CE becomes a design checker.
- 2.12 The CE shall be paid by his Client a portion of Design Stage (ii) fees for submission to any appropriate authority, advising on conditions of contract and specifications relevant to the works.
- 2.13 In conjunction with (2.11) and (2.12) should there be no change in the scope and responsibility of the CE, then no reduction in fees shall apply.
- 2.14 Notwithstanding the above, a Client may reduce the scope of services with mutual consent of the CE.

[321st Board Meeting / 27th October 2016]

DATUK Ir. ADANAN BIN MOHAMED HUSSAIN
President

BOARD OF ENGINEERS MALAYSIA