

FREQUENTLY ASKED QUESTION

PROFESSIONAL PRACTICE

ENDORSEMENT/SUPERVISION

1. *What types of plans can a P.E without Practising Certificate (PC) submit on behalf of his employer? Who bears the liability, the PE or his employer in such cases?*

PE without PC cannot submit any plans to the Authorities.

The PE with PC who submits the plan will bear the liability, even if the plan is not prepared by him.

2. *Does a PE without PC carry the same level of professional responsibility as a PE with PC? For example, a PE who signs the design and installation of proprietary roof trusses which happens to fail. Does he carry the sole responsibility? Or the PE with PC for the project carries the responsibility?*

Only PE with PC can be the Submitting Person and will be held liable for plans designed by him whether directly or indirectly, including proprietary roof trusses 'designed' by others which are deemed to be checked and approved by him.

The PE with PC can thereafter, take action against the PE without PC who signs the failed design and it will be up to the law to determine the extent of responsibility and liability of both signing PEs.

3. *Issue on liability; how to take action against foreign engineers?*

On issue of liability, there is a residency requirement for PE with PC. Also the Board is considering the imposition of Professional Indemnity Insurance (PII).

4. *There is a class of foreign engineers who are not registered as engineers as their qualifications are not recognized under the Washington Accord. They work as engineers and designers for prestigious projects such as the Penang 2nd Bridge, Bakun Dam, etc.*

Since this contravenes the Engineers' Act, what action can be taken to correct this situation?

There are indeed foreign engineers employed as PEs and BEM has uncovered a number of cases. BEM is unable to take direct action against them since they are not registered with BEM. However, BEM has lodged police reports against them and action taken is tracked by the Professional Practice Committee as a police representative sits on the PPC committee.

BEM has taken Court injunction on engineers who have violated the REA.

REA is very clear that no one can practise or provide professional engineering services without registration with BEM and no one shall employ any non-registered person, hence the employer of that unregistered engineer is also liable under the Act. Note that with CCC, BEM is able to detect unregistered as well as fraudulent engineers.

5. *There is information whether a Professional Engineer can submit plans for approval if he is not involved in business activity (i.e. for charity/without consultancy fees). How is BEM going to regulate or ascertain that this registration is not abused?*

Self-regulation will suffice as pro bono service is not a norm. Furthermore, the PE is still liable as the Submitting Person even if he charges no fees.

6. *Regulating the Engineers, especially the consulting practising engineers, is very good. However, just as BEM is the policeman, is the consulting engineer the policeman for the works of the contractors and tradesman? The latter are supposed to be 'competent' in their respective field. Which agency is supposed to regulate them? Since there is no response from CIDB after 5 years, what can BEM do?*

Responsibility of consulting engineers is very clear. Professionals carry out the design, site supervision & sign off, whereas the contractors are accountable for their workmanship.

7. *With the amendments in place how would these be regulated and enforced? Improper enforcement would lead to marginalization of qualified practising PEs.*

BEM has a Professional Practice Committee (PPC) who assigns Investigating Committees for prima facie cases. Where offence is committed, the Disciplinary Committee will conduct hearing and impose judgment and penalties against any errant engineer.

8. *A few years ago, BEM imposed CPD hours as one of the condition to renew the PE registration. Most engineers face problems with this as it is not FREE and involves time and a lot of money. Now PCE. ... What next? Do you think this can help to improve our engineering skills and prevent collapses and failures?*

BEM's role is to protect public interest. The recent collapses and failures undermine the public's confidence of engineers for which we must address. BEM is addressing this concern as the prevailing PAE tests the engineer "on what he knows but not on what he does not know". The imposition of the PCE which will test the aspiring PE "on what he does not know but ought to know".

9. *Can Sub-discipline under Civil be a Submitting Person?*

No. They can only endorse their own field of works.

10. *Why is the M & E Consulting Engineers burdened with preparing, administering M & E NSCs since the M & E Engineers are not trained to be QS?*

M & E engineers should take pride in being entrusted with such a responsibility.

11. *Due to pressure from EAC, academia is forced to obtain their PE. However, since there are no strict monitoring bodies, many academia simply obtain supporting letters from industries (claiming they have done attachments) when actually they did not do such attachments at all. This is very dangerous to IEM, BEM and our nation. How can these 'cheatings' be controlled? What is BEM and IEM's role to avoid this?*

Engineers are expected to uphold the Code of Professional Conduct. Where such unprofessional conducts are reported with evidence, BEM will take appropriate action.

12. *Please clarify as a lot of PEs do not know: What is a submitting person and what is a submitting consulting firm? A lot of local authorities are accepting plans from submitting person without forming a consulting company registered with BEM.*

Submitting Person (SP) is a PE who submits plans to the Local Authority. There is no term called submitting consulting firm but rather Engineering Consultancy Practice or ECP.

Every State (with its respective local authorities) has its own rules but as far as BEM is concerned, every submission must be by a PE practising under a registered ECP. Note that with the amendments, the SP must be a PE with PC.

13. *In road projects where the relocation of existing services like 33kV, 132kV, telecom cables, water mains, sewerage, are prepared by civil engineers and submitted by them as they involve civil works i.e. trenching, reinstatement of works etc. Is this acceptable? So far these have been accepted and approved by the Utility Authority.*

Yes, if this is part of the infrastructure works for a building project.

14. *Is supervision from a consultant engineer who carries out the design a must? For example, the client appoints a consultant engineer just for design but not for supervision, as supervision is by client team.*

Under UBBL, supervision must be by the Submitting Person. Even if carried out by the client, the SP shall remain responsible and liable. Therefore he must have full control over the supervision team.

15. *If a Professional Engineer is allowed to endorse plans/drawings for charity works, who will be liable for any loss arising although he does not have a licence to practise?*

The PE who acts as the Submitting Person is liable.

16. *I was appointed in 1997. Subsequently, the project was abandoned. Recently it was revived without my knowledge. The job is now completed and the architect asked me to re-submit and I refused. Am I acting correctly?*

You are right not to sign anything you did not supervise.

You may lodge a complaint with BEM if another engineer takes over to sign the submission without your release.

17. *The Board of Engineers' circular requires buildings of 5 storeys and above and more than 10 years old to be inspected at regular intervals:*

1. *Who are the accredited persons to carry out the inspection?*

2. *What are the parameters required for inspection, i.e. testing, visual, calculation etc.?*

3. *When is the effective date of implementation?*

This is not BEM's Circular. This is under the Street, Drainage & Building Act 1974.

18. *An RE at site ought to act independently in commenting on design, drawings and construction method. However, if the RE comments and enforces the construction method, the RE may lose his job. Suggestion: All RE must be appointed by BEM.*

RE as an engineer must at all times conform to the Code of Professional Conduct and protect public interest.

REs are already registered as engineers with BEM and similar to the appointment of consultants, BEM (as the regulator) do not interfere with their appointments.

19. *What do you mean by supervision?*

Supervision means supervision by the professional who is responsible for the design or by qualified and experienced staff under his control. The personnel carrying out the supervision shall be full time at site and have the necessary knowledge and experience on the works to be supervised.

20. *Is Subsurface Investigation or Site Investigation (S.I.) required for each project to be developed?*

YES. You should specify adequate S.I. to obtain the relevant subsurface information (e.g. soil and rock characteristics and parameters, groundwater information, etc.) so that the foundation design can be properly carried out to ensure public safety. The adequacy of S.I. includes carrying out correct type and adequate numbers of field and laboratory tests.

21. *Do I need to supervise the Subsurface Investigation (S.I.)?*

YES. All S.I. should be supervised by the professional who is responsible for the design or by qualified and experienced staff under his control. (BEM Reference : BEM Circular 4/2005 "Engineers' Responsibility for Subsurface Investigation")

22. *Can I just leave the scope of works of the Subsurface Investigation (S.I.) (e.g. locations, numbers, types of field and laboratory tests, etc.) to be specified to the S.I. contractor?*

NO. You should properly specify and determine the numbers and suitable types of field and laboratory tests required for the site for your design later. (BEM Reference : BEM Circular 4/2005 "Engineers' Responsibility for Subsurface Investigation")

23. *Can I just get the Subsurface Investigation (S.I.) contractor to get other Professional Engineer to endorse the S.I. report and thereafter, I do not have any more responsibility and liability on the adequacy and correctness of the works being carried out, information obtained and used in the design?*

NO. As the Submitting Person (Qualified Person) of the project or professional engineer who endorses the design, you are fully responsible for the adequacy and correctness of the S.I. works being carried out, information obtained and used in your design.

24. *Can I certify completion of construction if I do not supervise the construction works of the project despite it being designed by me?*

NO. As the Submitting Person (Qualified Person) who submits plan, drawing and calculation to Authority or for construction you are required to provide supervision of the construction. Therefore, you MUST provide supervision to ensure you can certify completion of the construction.

25. *Where do engineers stand when the 'supervision' part of a project is taken off from the scope of work by the JKR? In contracts with JKR it is stated clearly that the services of the Engineer are required only up to the design stage. The question is 'will the engineers still be legally responsible for the work?'*

The BEM Circular is very clear on the matter; if 'supervision' is not included in the Scope of Works; do not sign the Certificate of Practical Completion, especially for projects in the private sectors!

However, for public sector projects, the issue of the interpretation Act which stipulates that any law of parliament is not binding on the government unless specifically stated otherwise, will need to be addressed.

Meanwhile, the Board of Engineers has advised the Director General of the JKR to include supervision by the consulting engineer when engaged to carry out design works.

26. *'Unqualified' contractors are awarded projects for which they do not possess the experience, expertise or the competence. Projects should only be awarded to qualified contractors.*

Contractors are regulated by the Construction Industry Development Board (CIDB).

LETTER OF RELEASE

1. *A developer who is also a PE appointed a civil engineer for his project. When design & drawings were completed, the developer is of the strong opinion that the works produced by the appointed engineer is sub-standard and/or over or under-designed. Is expressing his opinion considered supplanting?
How can the developer replace the appointed engineer in the interest of the project?*

The developer, as the client who appointed the engineer, is at liberty to express his concern to the engineer. The question of supplanting only arises when a PE who is also providing consulting engineering services, offers unsolicited opinion, and who is subsequently appointed to take over the first engineer's services.

However, it should be noted that any PE should be responsible for his comments made in his capacity as a professional and abide by the Code of Professional Conduct.

A client is at liberty to replace the services of the engineer in accordance with the terms and conditions of their service agreement. However, if there is a dispute over non- payment of fees or quantum of any outstanding fees under the contract, the client may request BEM to be the stakeholder. Please refer to BEM circular 1/2006 for further details.

2. *Please clarify whether LOR is necessary in the case of a 2nd PE taking over the 1st PE's works where the 1st PE does not have a practising certificate?*

Until the REA amendment is gazetted, there currently is no such thing as a PE without practicing certificate. As such, under the present scenario, an LOR is necessary.

If in doubt (even in future with the REA amendment in place), the 2nd PE is advised to seek clarification from BEM.

3. *Please distinguish "taking over" as an employee from that of one in private practice?*

Whether you are an employee or employer, all PE's must abide by the Code of Professional Practice.

4. *Reference to Circular 1/2006 on "An Engineer taking over the work of another", please define the meaning of "client" in relation to a design & build contract where the design & build contractor has been terminated and construction works is only partially completed.*

Please refer to item 2.4 of Circular 1/2006 where the definition of 'client' is clearly elaborated and includes the design and build contractor who is empowered by the client.

5. *An Engineer who is responsible for submission of drawings to local authority resigns or retires half way through a project. Another engineer within the same Engineering Consultancy Practice (ECP) takes over. How does the Board view this issue in the context of engineer taking over the works of another?*

If it can be established that the 2nd Engineer is from the same Engineering Consultancy Practice as the 1st Engineer, then the issue of supplanting does not arise.

6. *If the project has changed hand i.e. previous owner has sold to another company, does circular No. 1/2006 apply? What is the ruling?*

Letter of Release is still applicable where the new project has linkage to the previous project, whether in terms of ownership or development details. If in doubt, it is advisable to refer to the Board for clarification.

7. *What is the meaning of "intervene or attempt to intervene" under Clause 1. (b) of Circular 1/2006? What if the client is seeking a second opinion especially where there is a cost implication and the client is looking for a more economical design solution? If a 3rd party engineer by chance came to know certain works under construction is not 'correct' (e.g. design not correct), can he make it known to client? Is this considered intervening?*

"Intervene" in this instance would include offering opinion, advice, etc. unsolicited to the client when there is already a registered engineer on board. If the client wishes to seek a second opinion, then the 2nd Engineer, who is approached by the client shall follow the guidelines listed under BEM Circular 1/2003 "Guidelines for Checking/Reviewing The Work of Another Engineer" and BEM Circular 5/2005 "General Advice On Giving Of Second Opinion".

If the 3rd party engineer finds certain works is unsafe, he can write to the 1st engineer (submitting person) of the project and the Authority to express his concern on public safety and state his view. This is not considered as "intervening" as public safety is more important. However, the 3rd party engineer shall NOT write to the Client as this will be construed as intervening.

8. *In a design & build contract, the 1st Engineer is engaged by contractor to design & supervise. However, after the contract is awarded to the contractor, the contractor decides to engage a 2nd Engineer to carry out supervisory work, with no change made to the design works by 1st Engineer. Does the 2nd Engineer need a LOR for supervision work?*

BEM's Circular No.7 clearly stipulates that the Submitting Engineer must design and supervise the project to completion.

If the 1st Engineer does not supervise the construction then he should not sign the CCC.

If the 2nd Engineer wishes to take up the supervision work then he must obtain LOR from the 1st Engineer and also take over as the Submitting Person regardless of whether the original design is changed or not.

9. *In the event that the PE voluntary discharges / releases himself during the project (ie. not completed) and there is no 2nd Engineer to take over, will the Local Authority accept it as there will be no engineer responsible for the project?*

A PE cannot simply relinquish his services unilaterally without the consent of the Local Authority. The PE must notify the Local Authority first. If there is no Qualified Person (Submitting Person) supervising construction, site work cannot proceed.

Note that improper termination of duties by the PE will affect public interest, and also subject him to legal recourse by the client on losses suffered amongst others.

10. *Is the 2nd engineer liable for the design and works supervised by the 1st Engineer?*

The "last man standing" rule applies. Whoever is the Submitting Person signing the relevant CCC forms will assume full liability even if some of the works had been carried out earlier before his involvement.

11. *A project or piece of property changes ownership and the new owner appoints his consulting engineer. If the previous owner has not settled the fees to his engineer (1st Engineer) and no physical work has commenced on site, has the newly appointed engineer (2nd Engineer) erred in accepting the appointment as he may not be aware of the previous appointment by the old owner.*

It is the duty of the 2nd Engineer to verify that there is no previous 1st Engineer on board. In the event that the 2nd Engineer was initially not aware of a previous appointment by the previous owner, but subsequently finds out that there was, then it is his duty to immediately inform his client and seek a LOR from the 1st Engineer.

Note that a Letter of Release is applicable where the new project has linkage to the previous project, whether in terms of ownership or development details. If in doubt, it is advisable to refer to the Board for clarification.

12. *When a project is partially completed and the owner terminates the 1st Engineer's services and appoints a 2nd Engineer to take over, will the 2nd Engineer be liable for the portion of works already partially completed under the 1st Engineer?*

The "last man standing" rule applies. Whoever is the Submitting Person signing the relevant CCC forms will assume full liability even if some of the works had been carried out earlier before his involvement.

13. *How does an Engineer respond when the Client's draft Memorandum of Agreement with the Engineer has a clause which stipulates that the Engineer shall give a pre-signed Letter of Release or to forward a Letter of Release immediately upon receiving a termination letter from the Client?*

The Engineer should inform the Client that the Law overrides all contractual provisions and he must follow the Board of Engineers, Malaysia Circular on 'Taking Over Another Engineer' procedures. Otherwise, he will be contravening the Law. He should then insist for such a clause to be deleted from his Agreement.

CERTIFICATE OF COMPLETION AND CCOMPLIANCE (CCC)

1. *What is Certificate of Completion and Compliance (CCC)?*

It replaces the Certificate of Fitness for Occupation (CFO) issued by Local Authorities for projects approved prior to April 2007. Due to government policy to encourage self-regulation by professionals, the Street, Drainage and Building Act (Amendment) 2007 (Act A1286) was amended to stipulate that a Principal Submitting Person must sign a certificate called Certificate of Completion and Compliance (CCC) for him to confirm that the project for which he had obtained Building Plans approval from a Local Authority, is completed and has met all statutory requirements with regards to health and safety aspects and is ready to be occupied with all essential utilities services connected. The Principal Submitting Person can only be either a Professional Architect or a Professional Engineer depending on the type of building involved. Copies of the CCC issued to the Owner must be submitted to BEM and the Local Authority within 14 days of issue together with all 21 supporting forms signed by the relevant Submitting Person of various Professions / Engineering Disciplines.

2. *Local Authorities (LA) may not issue CCC but the issuance of CCC will still depend on them. That is why many CCCs issued cannot be released within 14 days. For instance, after the issuance of Forms G4 – G21, certain LAs verbally instructs that Form F not be issued until they conduct inspection.*

So long as all documents are in order, the PSP can issue the CCC. LAs cannot impose any additional conditions. As far as the LAs are concerned, they still retain their rights under the UBBL e.g. for site inspection during construction. LAs can report to the Board any conduct violation by the engineer. The objective of CCC on self-regulation must be maintained.

I hope all registered engineers registered with BEM are liable for their building to uphold our image for Malaysia.

Registered engineers must abide by their code of professional conduct to safeguard public interest at all times.

I plead for BEM to work with LAs to ensure plans submitted are in order and once it is in order, we are then responsible.

This system is already in place under the CCC scheme.

3. *Original set of plans is submitted by Submitting Person (SP), Engineer A, but somehow the developer managed to obtain CCC signed by another SP, Engineer B. If the building then collapses, who should be responsible?*

The Submitting Person (SP) signing the CCC is liable. The second engineer (Engineer B) who takes over as the SP is also deemed to have taken over the all responsibilities and liability.

4. *Contractor submits a counter proposal which is signed by his (contractor's) own Professional Engineer. However, upon completion, the original SP endorsed the G forms and CCC, who should be responsible?*

The SP who signs the G form is responsible.

5. *Each LA/One Stop Centre (OSC) has its own procedures for CCC submission. If all the OSCs are very familiar with the submission there would be no problem.*

Please take note that CCC is different from OSC. For CCC, there are Local Authorities (LAs) who are doing very well as they understand the CCC process. However, it is acknowledged that there will always be new staff and problems do arise. Please inform BEM of any discrepancies for BEM to refer to Kementerian Perumahan dan Kerajaan Tempatan (KPKT) to resolve the problem.

BEM, however, was not involved in the development of the OSC. This is under the jurisdiction of KPKT who has to deal with each State in charge of their respective LAs.

6. *For a building or structure built for temporary use (say 4-5 years), then demolished or renovated for other use, is the procedure of CCC repeated for renovation?*

Temporary structures only need a permit from the local authority. There is no need to issue a CCC. For internal changes not affecting type of use, there is no need for CCC.

7. *Is CCC required for renovation works?*

Where building plan submission is required (e.g. change of building façade), then CCC is required. For replacement with new lift including lift car without changes to the building (e.g. no additional floors) then no CCC is needed.

8. *For Form Fs signed by Architects, are their corresponding Form G's submitted to BEM?*

Where the architect is the PSP, all Form Fs and Gs are submitted to the Board of Architects including those Form Gs signed by PEs.

BEM works closely with BAM to conduct checks on the Form Gs submitted to BAM.

9. *Can the PE employed by ECP, submit / sign the G forms?*

Yes.

10. *Under CCC, who should sign for marine / fishery projects?*

"Marine structures & facilities" falls under the scope of Engineer to issue CCC. Refer to www.bem.org.my Appendices A, B and C, under BEM Circular No.1, jointly issued by BAM and BEM.

11. *Form Gs – with reference to Approved Plan (Infra Works)-construction done but with variation from Approved Plan. Do we need to submit as-built plan to reflect changes. What is the best way to solve this?*

Submit as-built plans to the local authority before or when issuing CCC

12. *Contractor has split-up; who then can sign form Gs on behalf of the contractor for CCC certification?*

The moment a particular work is completed, arrange for its Form G to be signed (& keep it). Do not wait until all works are completed. However, in unforeseen situations, e.g. demise of the contractor, then furnish proof and BEM will advise on a case by case basis.

13. *As stipulated in the UBBL, the submitting person who submits the drawings shall certify the completion of work. May I know why it is that in the case of lift, Form G11, the PE must certify the completion of lift work for which the PE did not submit the (manufacturer's) design?*

Under Form G 11 the PE must certify as the SP. Note that the PE, as the consultant; designs, specifies and integrates the lift services with all other systems within the building. The Lift company's Competent engineer/person shall sign Form G11 as the trade contractor and is NOT PERMITTED to sign as the SP.

14. *For Form G18 on Street Lighting, are road side lightings which are situated within the compound of a building owner, required to be submitted to the Local Authority for approval as 'Street Lighting' even though they are not handed over to the LA?*

Road side lightings are defined as Street Lighting where these are handed over to the LA. As such these Street Lighting plans are required to be submitted for approval by the LA. An example would be road side lightings within a residential housing development scheme.

However, road side lightings which are installed within a property boundary, and which are not surrendered to the LA and are maintained by the property owners are defined as Compound Lightings. Such Compound Lightings need not be submitted to the LA for approval and Form G18 shall be signed off as "Not Applicable" by PSP for the issuance of CCC. Examples would be road side lightings installed within the property boundary of an institutional, standalone residential, commercial or industrial development. Such lighting installations are deemed to be certified under Form G 7 on Internal Electrical.

In exceptional cases when the road and drainage works within a property boundary are to be handed over to the LA but not the road side lightings (e.g. for petrol stations) then approval by the LA is required and Form G18 endorsement of such road side lighting is applicable.

15. *Does the 'deemed approved rule' still apply for Local Authority or JKR/LLM for failing to reply after the Submitting Person has made the official request for the Letter of Support for a Form G, for the issuance of Form F (CCC)?*

Yes it is deemed approved if no reply is received by the Submitting Person after 14 days from the date of submission letter of the official request for the Letter of Support. The Letter of Support is then no longer necessary to be attached with the relevant Form G for the issuance of CCC.
