



COUNCIL OF REGISTERED PROFESSIONAL ENGINEERS OF MAURITIUS

17-07-17.

The Engineering Council Bill.

Introduction,

Job searching in engineering is fast becoming an international exercise, hence the opinion shared by many of us that Mauritius should join the Washington accord, a club of accreditation institutions having common views about appropriate programmes for education and training of Engineers. This will not happen unless our structural arrangements for registration of engineers are amended to align with Washington accord guidelines.

The above mentioned bill, which was meant to lead to an Engineering Council Act for renewal of the Council of Registered Professional Engineers(CRPE) act of 1966, has been discussed under the leadership of the ministry of public infrastructure (MPI) since 2009. Consensus was not reached for its enactment.

This situation has led CRPE to organise a fresh effort towards finalising this business by submitting the latest version of the document, together with some sections excised from its original, to the scrutiny of those most directly concerned by its eventual outcome: the Engineers. It is in your interest to participate democratically in the elaboration of the law if you want Mauritian Engineering qualifications to be recognised internationally. You will find the relevant documents on the CRPE website.

To whet your appetite over this rather indigestible read, we are commenting hereunder, for your benefit, a resume of the salient aspects brought to the debate.

We look forward to your helpful response.

1. Functions of Council

These have been listed as

- Registration of Engineers,
- Issue of temporary registration to foreign engineers,
- Promotion of Continuous Professional Development(CPD)
- Dissemination of engineering information.
- Enforcement of ethics,
- Advising stake-holders,
- Creating the framework for accreditation of engineering degrees.

The view shared by IEM(the institution of Engineers ,Mauritius) and CRPE is that the new law must reflect the explicit objectives of the Washington Accord, notably about a reduced government role in the qualification process.



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2 Definition of Engineering Practice:

This is a crucial notion in that it determines who can and who cannot be called a “professional engineer”

You are invited to examine the definition of the 1966 act (summarised) which is

“Investigating, evaluating, supervising, and designing engineering works”. This excludes services given under a prescriptive standard. It includes approving, by signature, the design of juniors.

And to eventually propose a new definition, better applicable to the Mauritius of 2017. Ideally, your definition would deny the use of the word “engineer” to abusively describe activities unconnected or only remotely connected to the profession: e.g. “administrative re-engineering”

3 Composition of the board:

Initially pressure was brought to bear for council to be elected, not nominated. This sweeping change was reduced by lobbies, to the proposition that there would be

- Four members elected by professional engineers,
- Two members nominated by IEM,
- One member from the private sector, nominated by the MEF (more likely Business Mauritius).
- Three members from government, nominated by the ministries for infrastructure and utilities.

You are invited to carefully consider your preference as to the relative weights of election and nomination, Private and Public sectors, the experience of elected members and the distribution of member competence over the engineering disciplines, as well as the choice of nominating institutions.

4 Process:

It is proposed to have meetings at monthly intervals, conducted by a chairperson, assisted by a vice chairperson. Quorum is six members. Minutes are to be kept by the registrar, who is an employee of Council.



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Registration is organised at both stages around assessment panels which are named by the registrar, conduct interviews according to Council guide lines and advise the board about registration of candidates. Final decision is always with the board.

Sub committees constituted of registered engineers are named by Council for specific advisory missions such as enforcement of discipline.

Most of the secretarial, financial and administrative functions are delegated to the registrar who is assisted by officers employed by Council. The registrar must be a registered professional engineer. He may take part in the deliberations of the board but he does not have a vote. As you may guess, the role of the registrar is crucial. It requires time and energy on a scale which could be in conflict with the registrar's employment outside Council. You must consider whether this can be a part time job and whether it is essential that the registrar should be a registered professional engineer.

One final remark: There is a perception that registrars should issue from MPI for practical reasons linked to CRPE "office" being within MPI premises. The present registrar was the outcome of an invitation to apply, published only within MPI. The selection was done within MPI and only one candidate was presented to the board. Is this healthy? Should the appointment be open to all professional engineers?

5 Criteria for registration:

Candidates must

- be over 21,
- be free of any criminal offence,
- be in possession of a degree from a recognised university obtained after a four year full time period of study,
- have successfully passed an interview at stage two after a two year post- graduation period of training and submission of a report countersigned by a supervising registered engineer. First stage eligibility is granted after an interview, except for those who have first or second class honours degrees from the University of Mauritius or universities accredited by the Washington accord. These get eligibility certificates outright.

At this juncture, you should give some thoughts to the importance of academic studies compared to experience. There have been highly vocal suggestions that selection for entry to engineering courses should be subject to good HSC(or equivalent) results in Mathematics, Physics and general paper. There has also been a suggestion that the period of training should be five years.

6 Continuous Professional Development(CPD):

Council will be empowered to encourage continuous professional development of registered engineers. It is suggested that renewal of registration, which intervenes yearly, should be



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subject to minimum efforts on the part of the engineer towards that goal, as is the case in many countries and as stipulated by the Washington Accord.

Council will have to specify the areas of this study, the scale of merit points allocated and the threshold of merit points required. It is worth mentioning that the prospective law is about empowering a new Engineering Council. It should not stipulate details. Given the tone of past debates, this is, maybe, a point you ought to emphasize in your feedback message.

7 Register:

Council will keep a roll of registered engineers to be published yearly in the government gazette. Presence of engineer's name on the roll is conditional to him paying his yearly subscription (should this be written in the law or left to the discretion of Council?)

8 Accreditation:

Council will participate in the process of accreditation of engineering courses through institutions approved for that purpose such as IEM and TEC. This item was the principal target of the lobbies: they did not see CRPE as an accreditation body. You should consider whether CRPE should have a say in accreditation of engineering courses, given its intervention thereafter in the registration of students (judge and party). One thing is certain: CRPE is having a lot of trouble with the quality of students issuing from local universities. It is very unhappy with the selection grades at entry to engineering courses. (There is a case where a student was admitted with three Es at HSC!)

9 Ethics:

Council will publish codes of ethics and will enforce them within its roll. Breaches will be treated as disciplinary cases to be dealt with by a sub-committee. You should carefully consider the stipulation that CRPE would need the permission of the public service commission to deal with disciplinary cases against public servants (Is this a form of discrimination against private sector engineers, not protected in this way?)

10 Finance

Council is in control of funds collected as subscription, application scrutiny fees and interview fees. It uses this money to meet its expenses such as salaries and allocations and, ideally, to improve the service given to engineers. This is subject to a yearly audit by two independent auditors. You should consider whether members should be allowed, on request, to look at the auditors' report.

In the past, CRPE has been scolded by the ministry of infrastructure for making a profit over a FIDIC seminar it had minutely organised. The ministry was of the opinion that CRPE should not be profit making. Because of that unfortunate episode, CRPE has since shied away from



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the organisation of seminars. You will need to issue your verdict over this important point regarding the capacity of CRPE to generate funds for its development in the service of engineers. This is also a case where the independence of CRPE was put in question by the ministry.

11 Prerogative of the minister.

According to the existing law, the minister can ask questions about CRPE deliberations and decisions. A previous minister expressed the opinion publicly that Council must inform cabinet about its policy decisions as soon as taken; another dent in the independence of Council!

The minister would also be within his right to issue regulations with regard to application of the law.

It will be up to you to approve or disapprove this disposition.

12 Grades of membership.

This was an item erased from the original version of the bill under pressure from lobbies. It was about the creation of new classes of membership as follows:

- a) A title of “Licensed Engineer” granted to registered professional engineers having more than fifteen years’ experience. This would be a recognition of higher competence arising from the breadth and depth of experience of the individual, in the same way that fellowship of institutions is differentiated from ordinary membership. The efforts of the individual in the area of continuous professional development would be an important factor of evaluation with respect to the grant of this status.
- b) A title of “Engineering Technologist” given to individuals incapable of meeting the definition of engineering practice but capable of providing service in a prescribed environment. The English institutions describe these people as incorporated engineers. Their academic standard is slightly lower e.g. Higher National Diploma instead of degree. You will need to consider whether this class of engineering competence should be given recognition for filling a damaging vacuum presently existing between technicians and engineers, especially in the private sector.

More importantly and generally, you will have to consider whether it is within the ambit of CRPE’s mission to look after people other than professional engineers and whether such an additional mission would be beneficial for the profession and its international ambition. Institutions like the IET and the Engineering Council in UK which enjoy WA recognition, certainly venture into the fellowship (FIET) and the incorporated engineer (IEng) areas, this in spite the fact that WA is not about technologists (The Sydney accord is).

To facilitate understanding of the majority views, we have organised a small survey of your thoughts about this important development, in the form of multiple choice answers to specific



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questions. You will find the relevant excel spreadsheet, herewith attached. We hope you will contribute to the success of this initiative by filling the questionnaire and sending it back to us at CRPE office in MPI premises , Phoenix, before 20-08-17. Please include your name and CRPE registration number.

The Board.