



ICMEESA news

September
2008

THE INSTITUTION OF CERTIFICATED MECHANICAL AND ELECTRICAL ENGINEERS, SOUTH AFRICA

Tel: +27(11) 487 1683

Fax: 0866718533

Faxmail:0866718533

Website: www.icmeesa.com

Email: icmee@pixie.co.za

Street Address: 18A Gill Street,
Observatory
Johannesburg
2198

Postal Address: PO Box 93480
Yeoville,
2143



**ICMEESA – President 2008
Mr Chris Schnehage**

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1. ICMEESA written submission: Built Environment Professions Bill

Below is a summarised version of the formal written submission made by ICMEESA on the BEP Bill. I would consider the submission as reserved comment, in that one does not desire to be perceived negative or obstructive to change, which may be necessary in other areas. However, the reaction to the Bill from other sources implies that we should have been more aggressive in nature as the concerns of others exceed ours by a large margin. The feedback obtained from various sources on the internet and newspapers is summarised in Section 2 of this newsletter.

Rationale of Change.

The bill does not indicate the necessity of, or, how stripping the existing Professional Councils of their autonomy will improve the management of the identified issues of access to the professions, transformation, the lack of a macro-strategy for the built environment. The objects of the Bill, as stated, do not appear to introduce any purpose, or value-add, not specifically addressed in the current regulatory framework.

Management of Diversity

The Engineering profession consists of numerous specialist and diverse areas which individually require specific attention so as to ensure that registration achieves the desired objectives of ensuring competence in registration and protecting public safety. It is not clear how the proposed coordinating body in the CBE will provide the necessary leadership and guidance required to manage this diversity competently.

a. Autonomy of ECSA

Many of our members are registered with ECSA on a voluntary basis. We have actively encouraged this process of registration and participated in the registration process to ensure that registration achieves the correct objectives. It is a concern to members that this process will nullify those objectives and achievements.

Section 51(2) of the Bill provides that ECSA will cease to exist from the date of the first meeting of the intended South African Council for the Built Environment. It is a

concern that the Bill does not clarify the position of existing registration in the transition phase. This has implications to members both internationally and locally. The lack of opportunity to participate in the legislative process is of serious detriment to our members.

Compulsory Registration

ICMEESA has participated with ECSA with respect to finalizing acceptable mechanisms for compulsory registration of persons performing identified work. It is our considered opinion that to restart the existing process with modifications will be unduly onerous and retard the registration process by an equivalent period of time as it has taken to develop existing processes to this point of time. It will also create a negative effect on already registered members.

Financial Implications

ICMEESA considers it an oversight, the statement in Paragraph 5, and Section 13(1)(b) of the Bill, that the aforementioned Bill will not have any financial implications for the State. The Bill does not specify the payment of registration fees. The personal financial constraints of members are an identified constraint to registration. The structure of the Boards, and the source of financing of the Boards, needs to be clarified.

Representation

Concerns have been expressed with respect to Professional representation at both Council and Board level. On Council, subject to the number of Boards established, the implication is that less than half of the members will represent the various professions. Subject to the traditional ECSA being established as one, or more, Boards, the situation could arise where only one professional will represent the different disciplines and categories within the engineering profession. It is a concern that the professionals themselves will be in the minority on both Board and at Council level.

2. Public Comment on the BEP Bill.

It is ironic that in an environment where all countries are scrambling for scarce engineering resources, South Africa's DPW (Department of Public Works) is pursuing legislation that could undermine the international standing of South Africa's highly regarded professional engineers. The fundamental flaws inherent in the Bill are a real threat to the current global high standing attached to South African registered professionals.

The current system takes cognisance of international accords and best practice with respect to professional registration which is based on the criteria of: proof of a requisite academic qualification; and proof of requisite experience, which is assessed through a peer review. It is generally feared that global accords and recognition agreements will be placed in peril should the Bill become law and authority for registration be bestowed on the SACBE. (South African Council for the Built

Environment) Independence from government prescriptions on standards is a key principle in the Washington, Sydney and Dublin Accords. Current international recognition is premised on the independent registration process.

There is a degree of anxiety in the engineering profession as to the reason for the perceived haste at which the Built Environment Professions Bill was proceeding towards a legislated outcome. The "haste" is obvious in that there were a few uninformed and erroneous statements in the Bill, and supporting documentation. For example, it was stated that the Bill would not have any financial implications for the State. This omission was addressed in our submission, with other voluntary associations defining the extent of the problem. Cognisance does not seem to have been taken of the expense of the peer review system if based on market-related rates. One voluntary association estimates an associated cost at about R8-billion when considering that there are currently 29 000 registered professional engineers.

Presently the cost is minimised through the involvement of individuals drawn from the voluntary associations. These volunteers offer their services and support to the process through ECSA, for modest compensation of travelling expenses. To find volunteers with the time available to participate in these activities is a problem inherent in all voluntary organisations, professional or charity. The feared end result is that the cost of maintaining the required standard of peer review system will be prohibitive and bring about a far less rigorous approach to the registration process.

Motivation for the new Bill is that the present existing system is perceived as a barrier to access to the professions by previously disadvantaged individuals. The proposed Bill would then accelerate the transformation of what is perceived as white-dominated disciplines. Accusations have been made that, while government was working to alleviate the engineering skills shortage, ECSA was sabotaging it by deliberately delaying the registration of qualified black engineers. Statistics show that 56% of all the professional engineers registered with ECSA over the past three years had been previously disadvantaged individuals. While another asserted that previously disadvantaged persons comprised 61% of all registrations between 2005 and 2008.

Having personally served on the ECSA Registration Committee for Pr Cert Engineers for many years, I see this racial accusation of as a uniformed one. The registration process is often regarded as unnecessarily onerous process, but for good reason. I have been approached on many occasions by frustrated Engineers for assistance with the registration process. The registration procedure and process must be adhered to irrespective of race or creed. Embarrassing as it is to admit, my own registration took me about 3 years.

Relaxing the present stringent registration system and having more persons registered through a watered-down compulsory registration process will not resolve the real problem. I was of the opinion that the real

problem resulting in the shortage of home grown engineers had been identified as the chronic inadequacies in our schooling system, specifically in maths and science. There is no doubt that the wrong end of the problem is being addressed.

South African engineers are in high demand, not only at home, but also abroad. There are adverts very day in newspapers across the country, seeking to entice these precious individuals from our shores. Although not formally recognising the South African Certificate of Competency in Australia, certificated engineers are in high demand, more so if they are professionally registered. I questioned a recruiter on an advert requiring possession of a GCoC for a post in Australia. The answer was that, possession of the GCoC qualification was a measure of the competence of the person who had completed that process. The qualification is therefore seen globally as a sound measure of both academic qualification and experience. So why change a winning formulae.

3. New members 2008

We welcome the following new members who have joined since our previous newsletter. We trust that it will be a long and fruitful association. New membership for 2008 to date is 49.

<u>MemGrade</u>	<u>Title</u>	<u>Surname</u>	<u>Initials</u>	<u>Branch</u>
Student	Miss	Cele	NE	Kwazulu
Student	Mrs	Delport	L	Westcape
Student	Mr	Dlamini	BN	Kwazulu
Member	Mr	Glennie	D	Kwazulu
Member	Mr	Hahn	WA	International
Student	Mr	Madaka	BS	Westcape
Student	Mr	Mudau	TI	Central
Member	Mr	Munsamy	R	Central
Student	Mr	Naidoo	PS	Kwazulu
Student	Mr	Setlaelo	LW	Central
Student	Mr	Shiluvana	JS	Rustenburg

4. Unidentified payments

We regularly receive payments that we are unable to link to a specific member as the payment does not reflect the required reference number. It is this reference number that contains the membership number and forms the link to that specific member. As can be seen in the short list below, the problem normally occurs when the payment is made on behalf of the member by his employer. We urge all our members employed by Eskom members to please contact the secretary and assist in verifying the payments below.

26 June 2008 Magtape Credit Escom Dis R538-00
 27 June 2008 Magtape Credit Escom Neskomb R538-00
 15 July 2008 Magtape Credit Eskom Dis R538-00
 18 July 2008 Magtape Credit Escom Dis R538-00

5. Where are we going? - Our Academic Engineering Qualification

It appears to have been forever that the process in obtaining the Certificate of Competency has been under the scrutiny of the powers that determine the status of the qualification in comparison to other similar qualifications.

There is no doubt that due to the different specialist fields of engineering, determining a generic qualification is a complex process. The rationale behind the qualification is that Engineering is an activity concerned with the solution of problems of economic importance and those essential to the progress of society. The standard defines the level of competency required by a Certificated Engineer at the baseline level required for competent to practice and to register with ECSA as a Professional Certificated Engineer. In keeping with the objectives of the National Qualifications Framework (NQF), a person assessed as competent against this standard qualifies for a Stage 2 Certificated.

With the above process underway, there are serious frustrations existing presently, with both students and employers attempting to have candidates' pass the Certificate of Competency. I refer here to the lack of direction with respect to the Technical subjects required by a student to be accepted as a candidate to write the examinations. With respect to subjects required, the DoL guideline is reasonably specific whereas the DME lacks direction.

The problem originates from the requirement in the DME Rules and Syllabi document which states that:

- *Individual Technikon's may structure a curriculum to cover the electrical and mechanical course according to the requirements of the Plant Engineering syllabus.*
- *The Department of National Education will structure a curriculum to cover the electrical and mechanical course according to the requirements of the Plant Engineering Syllabus*

The above gives the impression that all is under control, yet it appears that the Technikon's use their own discretion to structure a curriculum, which in their opinion, covers the required syllabus. The Department of National Education has obviously failed in its task to structure the necessary curriculum and provide a uniform specific list of subjects, or combination of subjects, to have been obtained.

The result of the confusion is that students in possession of a B Tech Degree, when applying to be accepted as a candidate for the examination, is informed by the Commissioner of Examiners that they are required to obtain additional specific subjects prior to being accepted as a candidate.

This state of affairs is demoralising to both the student and employer and an undesirable financial constraint to one, or at times, both parties. The DME presently submits the qualifications of the applicant to a third party for approval. The problem appears to be that the

decision is then made on personal opinion and not a common and defined guideline. This issue needs to be urgently addressed by the DOE and DME.

One also hears of the frustration of candidates not passing the examination. Only last week I had the opportunity to scrutinise three examination papers of students who recently wrote the June examinations. After this session I have more sympathy with the examiners than the students. It is obvious that the problem is more the art of writing the examination than technical incompetence. It was disappointing to see that students do not read, nor answer, the question correctly.

Two examples are:

- The question required an answer in kg/day. Not one of the three papers scrutinised by me answered in the correct units, with the answers being in kg/sec, kg/hour and l/s.
- The given information was that an emergency generator was not available. Yet one student stated that the first thing he would do is start the emergency generator.

Reading a report on the results, it would appear that my observations were common to other papers as well, which explains why only 42 of 136 candidates passed legal knowledge Mines, with 18 of 146 passing Plant. As Certificated Engineers, we need to question our personal commitment and involvement in training the new generation.

6. Why Engineers should not write personal advice columns

The male species is considered to be inherently lacking in empathy, with engineers probably near that top of that grouping. The story below shows the engineers ability to concentrate on the real problem and not to be distracted by external factors. Our wives, however, may not agree.

Letter from distressed lady, Sheila.

Dear Walter, (Walter being the Engineer)
I hope you can help me here.

The other day, I set off for work leaving my husband in the house watching the TV as usual. I hadn't driven more than a mile down the road when the engine conked out and the car shuddered to a halt. I walked back home to get my husband's help. When I got home I couldn't believe my eyes. He was in our bedroom with the neighbour's daughter. I am 32, my husband is 34, and the neighbour's daughter is 22.

We have been married for ten years. When I confronted him, he broke down and admitted that they had been having an affair for the past six months. I told him to stop or I would leave him.

He was let go from his job six months ago and he says he has been feeling increasingly depressed and worthless. I love him very much, but ever since I gave him the ultimatum he has become increasingly distant.

He won't go to counselling and I'm afraid I can't get through to him anymore.

Can you please help?

Sincerely, Sheila

Reply from Walter:

Dear Sheila:

A car stalling after being driven a short distance can be caused by a variety of faults with the engine. Start by checking that there is no debris in the fuel line. If it is clear, check the vacuum pipes and hoses on the intake manifold and also check all grounding wires. If none of these approaches solves the problem, it could be that the fuel pump itself is faulty, causing low delivery pressure to the injectors.

I hope this helps,

Walter

7. Annual Function – Gauteng Branch

All members of ICMEESA are invited to attend the **Annual Function of the Gauteng Branch** to be held on:-

DATE: Saturday 25th October 2008

TIME: 12H00 FOR 12H30

VENUE: Tuscan BBQ Buffet Restaurant, Montecasino, Johannesburg Shop 52, Cnr William Nicol Drive & Montecasino Blvd, Fourways, Johannesburg,

Price: R200.00 per couple or R100.00 per person.
(This will include a small gift for the ladies and wine at the table)

RSVP: On or before: Monday 20th October 2008
Contact:
The Secretary: Mrs Fiona Revolta
Phone: 011 478 1683
Email: icmee@pixie.co.za

DRESS: Smart Casual

The President and his wife will be delighted to have you and your partner join them on this very enjoyable festive occasion.

