



Engineering Council of South Africa

Annual Report

2008- 2009



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Legislative Background and Mandate

The Engineering Council of South Africa (ECSA) is a statutory body established in terms of the Engineering Professions Act 46 of 2000. This Act superseded the Acts of 1990 and 1968 and progressively extended ECSA's scope beyond the original purpose, namely to regulate Professional Engineers. ECSA and its predecessor have thus regulated engineering practice for forty years.

ECSA exists as a regulatory body for the profession of engineering because of the recognition that, while engineering activity is essential and beneficial to society and the economy, substantial risks to health, safety and the environment accompany engineering activity that must be managed by competent professionals. In addition, engineering services must be of adequate quality in the interests of economy and avoidance of waste.

With these objectives in mind, the Act requires and empowers ECSA to perform the following functions:

- Visit education providers to evaluate programmes and accredit educational programmes that meet the educational requirements toward registration in each of the categories;
- Evaluate educational qualifications that are not already accredited or recognised;
- Register persons in professional categories who demonstrate competency against the standards for the categories;
- Register persons who meet educational requirements in candidate categories;
- Establish specified categories of registration to meet specific health and safety licencing requirements and registered persons in these categories;
- Require registered persons to renew registration at intervals and under conditions that the council prescribes;
- Enter international agreements for the recognition of educational programmes and registration;
- Establish a standards generating body and develop standards for engineering education and professional competency;
- Develop and maintain a code of conduct, supported where necessary by codes of practice;
- Investigate complaints of improper conduct against registered persons and conduct enquiries and impose sanctions as each case requires;
- Annually publish guideline professional fees and scope of work ;
- Recommend to the Council for the Built Environment ECSA's identification of the type of engineering work which may be performed by persons registered in any category;
- Recognise voluntary associations.

In addition, ECSA is empowered to advise government and other parties and to take necessary steps to protect the public interest, health and safety, improve standards of engineering services, create awareness of the need to protect the environment and conduct research.

The scope of the engineering industry - and the profession regulated by ECSA - touches on almost every need of society and the economy, as reflected by this incomplete list:

- *Building and Construction:* Housing, commercial and industrial buildings, civil engineering works (roads, bridges, dams, harbours, ..).
- *Local Government Services:* Electricity, potable water, roads, traffic, solid waste, sewage.

- *Manufacturing*: Iron and steel, cement, pulp and paper, petrochemicals, automobiles, furniture and appliances, electrical goods and equipment, food products, packaging, clothing, ...
- *Agriculture*: agricultural production, processing, mechanization, natural resource management.
- *Services*: Telecommunications, information services, broadcasting.
- *Transportation*: Road, rail, air and marine and supporting infrastructure, logistics, liquid fuel supply.
- *Bulk supply*: Electricity generation and transmission, bulk water supply.
- *Natural resource exploitation*: Mining, quarrying, forestry, oil and gas extraction.

While engineering has a significant built environment component, namely building and construction, engineering activity is of vital concern to many sectors of the economy and hence to a large number of government departments.

Chief Executive Officer's Review

The 2008/2009 year brought a number of challenges to ECSA but was also marked by a number of achievements.

The Chief Executive Officer, Professor Ravi Nayagar passed away in August 2008. I was appointed as Acting CEO from 12 January 2009 until ECSA could complete the process of appointing a new CEO.

For the first time since the establishment of ECSA, the database of registered persons went over the 30 000 mark, with the total number of registered Professional Engineering Technologists breaking through the 3 000 mark. As a result, a positive growth in registration numbers of 5% a year has been maintained for the past three financial years. Of concern is the static number of registered Professional Engineers, hovering around the 15 000 mark.

On the education front, ECSA successfully completed its schedule of accreditation visits to education providers, both at traditional universities and universities of technology. Currently 51 BEng, 88 National Diploma and 96 BTech programmes are accredited. The number of foreign qualified applicants continues to increase and the year saw ECSA evaluating the qualifications of 540 applicants.

ECSA's Investigating Committee considered 55 new complaints against registered persons and, after investigation, imposed sanctions of various types on a number of persons. ECSA also developed two codes of practice to better guide practice in structural and geotechnical engineering.

ECSA remains financially sound with, the 2008/2009 financial year realising a surplus of R2,6m that came as a result of annual and application numbers being higher than expected and good investment performance.

ECSA continues to host the Engineering Standards Generating Body and a number of standards were completed and submitted for registration on the National Qualifications Framework.

Returning to the challenges, little progress was made on finalising the Identification of Engineering Work (IDoEW). ECSA completed its obligations in 2006 and the matter rested with the Council for the Built Environment (CBE) to complete its part of the process of legally identifying work. ECSA's ability to protect the public in relation to the risks associated with engineering work is limited without the requirement for registration in order to perform identified engineering work.

The principal challenge during the year under review was the publication and partial passage through the legislative process of the Built Environment Professions Bill that sought to collapse the six independent "built environment" councils into a single body. While well-intentioned, this Bill was inappropriately designed. In ECSA's view, well articulated in a number of submissions, the new arrangement would have compromised key regulatory functions, including placing decisions that require the expertise of engineering peers in the hands of unqualified persons. The Minister of Public Works withdrew the Bill in November 2009 prior to consideration by the National Council of

Provinces. This was a costly process both in time and money. I must pay tribute to the ECSA volunteers as well as those from the engineering voluntary associations who put in long hours to achieve the correct outcome for ECSA and the public of South Africa.

In Summary, ECSA completes the 2008/2009 reporting year with considerable achievement but nevertheless facing ongoing challenges. The Council, volunteers and staff are however committed to discharging our functions and improving ECSA's operations and recognition.

In conclusion, I must pay tribute to several hundred engineering professionals who, on a voluntary basis populate ECSA's committees and do the hard work of evaluating programmes, assessing registration applications and sitting on the Investigating committee as well as participating in the overall governance of ECSA.

Professor Hu Hanrahan

A handwritten signature in black ink, appearing to read 'H Hanrahan', written in a cursive style.

Acting Chief Executive Officer.

ECSA Operations in 2008/9

The following report is structured according to ECSA's operating departmental functions, together with cross-cutting matters such as the Education and International Affairs Committees.

EDUCATION AND ACCREDITATION DEPARTMENT



Samantha Naidoo – Manager- Education

The education and Accreditation Department is responsible for accreditation of engineering (BEng-type) programmes, technology programmes (National Diploma and BTech), evaluation of other qualifications, and for supporting the ECSA Education Committee and the International Affairs Committee.

Accreditation:

The main function of the Education and Accreditation department at ECSA is to evaluate the quality and standard of engineering programmes offered at higher education institutions throughout the country. The purpose is to determine whether a programme meets the educational standard defined for the respective category of registration.

ECSA continues to work under the Memorandum of Understanding (MoU) with the Council on Higher Education (CHE) signed in November 2006. ECSA co-operates with the Higher Education Qualifications Committee (HEQC) when it evaluates proposed new engineering programmes. For programmes producing graduates, the HEQC is informed of ECSA's accreditation decisions and, under the delegation arrangement in the MoU, this satisfies the HEQC's responsibility to re-accredit programmes periodically.

To support the accreditation function, the department has compiled a pool of accreditation evaluators, who are experts in their respective fields, across both industry and academia. Further, ECSA also invites novice evaluators to its accreditation training workshops so as to introduce them to the peer review mechanisms. Refresher training courses for evaluators are offered at least once a year.

All scheduled regular visits as well as follow-up visits to the relevant institutions were successfully completed during the current reporting period. Engineering programmes at higher education institutions were accredited during 2008/2009:

Institution	Regular Visit	Month
University of Kwa-Zulu Natal	All ECSA accredited programs	August 2008
University of Stellenbosch	All ECSA accredited programs	September 2008
Cape Peninsula University of Technology	All ECSA accredited programs	October 2008

A milestone in accreditation is the first submission made to ECSA by a private higher education provider, namely Centurion Akademie (Pty) Ltd for a Diploma, in Electronic Engineering. The programme will be evaluated using the process and standards already applied to public providers' programmes. ECSA has worked closely on this development with the Higher Education Quality Committee under the Memorandum of Understanding with the Council on Higher Education. In total ECSA's list of currently offered accredited programmes reflects 51 BEng-type programmes, 96 BTech programmes and 88 National Diploma programmes. All known programmes are accredited.

Developments in Accreditation:

ECSA introduced outcomes-based (exit-level) standards for BEng-type programmes in 2000 together with revised accreditation policies and procedures. Technology qualifications had to conform to the national NATED standard and were evaluated via a different set of policies and procedures. With the introduction of the Higher Education Qualifications Framework, promulgated in 2008, and the repeal of the NATED requirements, ECSA decided that a generic accreditation policy that would apply to all types of programmes. The accreditation criteria would refer to standards that are specific to the qualifications and would harmonise CHE and ECSA accreditation criteria. The new policy and procedures were approved by Council in August 2007 after extensive stakeholder consultations. An implementation programme is still to be published.

Qualifications Assessment:

The department is also responsible for assessing engineering qualifications presented for registration but which are not ECSA-accredited or recognised under an international agreement. These are mainly foreign qualifications which are evaluated by the Qualifications and Examinations Committee (QEC).

For the period under review, the highlight was the launch of the Foreign Qualifications Assessment process in August 2008. This initiative is aimed at fast tracking the evaluation process of foreign qualifications. This allows holders of such qualifications, which are not recognised through any of the International Educational Agreements, to submit an application to have their qualifications assessed, in order to ascertain the equivalency of their qualification to that of a South African accredited degree.

A total of 540 applications were processed in entirety for registration with foreign qualifications by the Qualifications and Examinations Committee. These were assessed in accordance with ECSA's evaluation procedures.

The following is the summary of the applications received by discipline under the existing procedure:

Disciplinary Breakdown	Engineering Programmes	Technology Programmes
Agricultural	12	
Chemical		26
Civil	84	34
Electrical	101	13
Industrial	21	
Mechanical	91	29
Metallurgy	6	
Mining	4	
TOTAL	319	102

Of these applicants, 133 were evaluated as not substantially equivalent to a corresponding South African qualification and 41 did not provide information requested or attend interviews.

The new procedure was phased in toward the end of 2008. By the end of the reporting period 144 assessments were performed by the revised procedure.

Staffing in the Education Department:

During the period under review the education department experienced a number of staff changes, with the loss of intellectual capacity, which is critical in the efficient functioning of the department. This shortcoming has been addressed with the appointment of a permanent Manager, who comes from an academic environment and understands the Higher Education system. An additional Education Officer was also appointed.

REGISTRATION DEPARTMENT



Johan Pienaar : Manager - Registration

In terms of section 18 of the Engineering Professions Act, 46 of 2000, ECSA is empowered to register persons in four professional categories. Each professional category has a corresponding candidate category:

Professional Engineer		Candidate Engineer	
Professional Technologist	Engineering	Candidate Technologist	Engineering
Professional Engineer	Certificated	Candidate Engineer	Certificated
Professional Technician	Engineering	Candidate Technician	Engineering

These are at present two specified categories of registration

Registered Lift Inspectors

Registered Lifting Machinery Inspectors

The requirements for education, training and registration in each category of registration are defined in policy documents available on the ECSA website.

ECSA has reached the highest registration records in history during the 2008/2009 financial year when its registered persons passed the 30000 mark on 15 August 2008. the greatest increase in registration numbers was seen in the number of previously disadvantaged persons, accounting for 56% of new registrations over the past three years. On 1 April 2006 the number of previously disadvantaged practitioners registered with ECSA accounted for 16.4 % (4374 out of a total of 26606) which increased to 24.5% (7438 out of 30334) as 1 April 2009.

Two sections of the Act make provision that no person may practice in any of the categories unless he/she is registered in a specific category. Implementation of these sections awaits the completion of identification of engineering work by the CBE. Nevertheless, the upsurge in registration is thought to be due to the possibility of compulsory registration being implemented, an awareness of the benefits of registration and an increase in the number of foreign engineering practitioners seeking registration and employment in South Africa.

The following is a summary of the registrations in each category with ECSA at 31 March 2009. A demographic breakdown is given in Annexure 1.

Category	Number
Professional Engineers	14 474
Candidate Engineers	4 330
International Professional Engineers	19
Professional Technologists	3 244
Candidate Technologists	1 357
Professional Technicians	1 887
Candidate Technicians	1 745
Professional Certificated Engineers	998
Candidate Certificated Engineers	184
Registered Lift Inspectors*	160
Registered Lifting Machine Inspectors*	556
Registered Engineering Technicians ⁺	936
Registered Eng Technicians(Master) ⁺	441
Total	30331
Note: * Specified Category + Categories defined in previous Act, now closed	

Improvement of Registration Process for Professional Engineers:

The process of assessment of application for registration as a Professional Engineer has been revised without reducing the integrity of the process. Council has approved the necessary policy changes and the new process will be phased in during the next reporting year.

Continuing Professional Development (CPD):

The CPD system is still in its implementation phase, as the first full five year cycle of renewal of registration through CPD will commence in 2011. The creation of a culture of CPD among all registered persons is of paramount importance and good progress has been made during the report period to establish this culture, judging from the co-operation received from registered persons.

LEGAL DEPARTMENT



Pieter Fourie – Manager – Legal Division.

The Legal Department is responsible for functions related to professional practice.

Investigation of complaints:

An important focus of the Act is aimed at promoting the safety, health and interest of the public as these are affected by the engineering work and professional conduct of persons registered with ECSA. The principal function of the Legal Department is to investigate complaints of improper conduct regarding engineering related activities by registered professionals. The Legal Department investigates such cases upon receiving a formal complaint. Where there are reasonable grounds to suspect that a registered person has committed an act that renders him or guilty of improper conduct, the Council will prefer charges and a disciplinary process follows.

A substantial volume of complaints have been received as evidenced by the statistics in the following table:

Stage of Process	Number of Matters
Complaints now received for investigation	56
Complaints carried over from previous period	72
Complaints finalized after investigation	32
Criminal matters pending	13
Disciplinary hearings concluded	14

Improvement of Investigation Process:

ECOSA has committed itself to a simplified and more expedient processes of investigation and hearing of disciplinary matters. The method of enquiry is being reviewed and a more pro-active approach to disciplinary matters is now followed. ECOSA has resolved, where appropriate, and in the public interest, to temporarily suspend the registration of a registered person pending the finalisation of a disciplinary hearing.

The turnaround time of investigations and hearings has improved. The cost of investigations and disciplinary hearings has been reduced by, *inter alia*, the use of internal expertise. The Method of Enquiry has been revised to allow for a more cost effective and pro-active process.

Identification of Engineering Work:

The Identification of Engineering Work (IOEW) was initiated to help assist registration and to identify the type of engineering work which may be performed by professionals registered in specific categories, including work which may fall within the scope of any other profession regulated by the Act.

ECOSA completed its task of identification of Engineering Work (IDoEW) in 2006 and the Council for the Built Environment (CBE) must identify the scope of work for every category of registered persons in terms of section 20 of the Council for the Built Environment Act, 2000.

Several difficulties had arisen about the form that the identification of work should take. At the end of February, the CBE Council set up a joint task team with ECOSA in an attempt to move this matter forward.

Development of Codes of Practice:

From the experience of the Investigating Committee while considering complaints against registered persons as well as ECOSA's interactions around the National Building Regulator, the need has arisen to provide guidance to both the public and practitioners. This guidance will take the form of codes of practice for practitioners and advisory notes for the public and other users of engineering services. During the year under review, ECOSA embarked on a process of creating codes of practice for two disciplines; these are Structural Engineering and Geotechnical Engineering. The codes will complement the code of conduct but require identification of engineering work be finalised to be effective.

STANDARDS AND PROCEDURES DEPARTMENT



Neggie Ndlovu – Manager: Standards and Procedures

The Standards and Procedures Department's core focus areas are: the development and maintenance of engineering education qualifications; competency standards for professional registration with ECSA as well as those for new specified categories of registration. The department has for some time been responsible for the harmonisation of registration policies and procedures applicable for all categories within ECSA through the Joint Implementation Committee.

Progress on these developments is recorded below.

Development of Qualifications and Unit Standards:

The Engineering Council of South Africa, through its Engineering Standards Generating Body (ESGB), continued the development and registration of engineering qualifications and unit standards on the National Qualifications Framework (NQF).

The following ESGB achievements were recorded during the period under review.

Qualifications/Unit Standards Registered on the NQF:

- Fire Unit Standards (NQF Level 6 and Level 7);
- Non-Destructive Testing Unit Standards (NQF Level 6);
- Energy Unit Standards (NQF Levels 6, 7 and 8);
- Metrology Unit Standards (NQF Levels 5 and 6);
- National Certificate: Engineering (NQF Level 5);
- National Certificate: Engineering (NQF Level 6);
- National Certificate: Certificated Engineer (NQF Level 7); and
- National Certificate: Forensic Engineering (NQF Level 7).

Qualifications and Unit Standards Completed and sent to SAQA for approval:

Note: These qualifications all align with the HEQF qualification types:

Bachelor of Engineering Qualification at NQF Level 8;
Bachelor of Engineering Technology at NQF Level 7;
Diploma in Engineering at NQF Level 6;
Advanced Certificate in Engineering at NQF Level 6;
Energy Unit Standards at NQF Levels 4 and 5.

Work in Progress :

National Certificate: Forensic Engineering at NQF Levels 5 and 6.

Specified Categories:

Significant work-in-progress was recorded in the following specified categories (at different developmental stages) following stakeholder requests for the creation of the specific registration categories of practitioners by ECSA:

Medical Equipment Maintainers (MEM):

This is a branch of the Clinical Engineering Practitioners. The MEM Steering Committee finalized the writing up of the policy documents necessary for the registration processes of persons practicing as Medical Equipment Maintainers. These documents have been channelled for consideration and approval by the Specified Categories Committee as well as the Central Registration Committee.

The Energy Practitioners:

The Energy stakeholders' work on the development of clusters of unit standards necessary for the registration of different energy practitioners was completed. Some of these are already registered on the NQF and others are still in the SAQA registration pipeline. The Energy Steering Committee re-visited the feasibility study and effected the necessary changes that were identified and submitted the document to the Specified Categories Committee for consideration and approval. Stakeholders are also finalizing the assessment guides.

The Fire Engineering Practitioners:

Development work has progressed well within the fire stakeholders' community. Consensus on the clarification of roles of the major stakeholders was reached and confirmed via the signing of a Memorandum of Understanding. The fire engineering steering committee finalized the writing up of the legal registration documents. The documents were submitted to the Specified Categories Committee for consideration and approval, and for recommendation to Central Registration Committee.

Non-Destructive Testing (NDT) Practitioners:

Stakeholders have developed and registered unit standards, customized all registration material to suit the NDT needs, finalizing the assessment guide and currently re-working the feasibility study.

Joint Implementation Committee:

The Joint Implementation Committee (JIC) was established by Council with representation from the registration committees and the Engineering Standards Generating Body to steer the implementation of competency standards for registration in the professional categories and to define revised policies and procedures consequent on adopting competency standards. The JIC has the following main deliverables:

- Revised registration policy to accommodate competency based assessment;
- Revision of the policy and practice for evaluation of applicants without accredited or recognised degrees;
- Revision of the assessment policy and practice for competency assessment of applicants against competency standards for the category;
- Provide guidance on training to candidates, mentors and supervisors.

Substantial work on most of these documents has been covered and for the finalized sets of documents, JIC is now closer to making recommendations to Council for the approval of the integrated set of policies on Registration of Persons in Professional Categories and the application of Competency Standards for Registration as Engineer, Technologist and Technician.

International Affairs:

The International Affairs Committee is responsible for ECSA's international interactions. ECSA continues to be a signatory to the major international agreements listed below.

Washington Accord: Mutual recognition of educational qualifications for education of engineers;

Sydney Accord: Mutual recognition of educational qualifications for education of engineering technologists;

Dublin Accord: Mutual recognition of educational qualifications for education of engineering technicians;

Engineers Mobility Forum: Promoting the international recognition of registration as a Professional Engineer;

Engineering Technologist Mobility Forum: Promoting the international recognition of registration as a Professional Engineering Technologist;

Two Mutual Exemption Agreements: a) with the Engineering Council UK and the Institution of Civil Engineers, and b) with Engineers Ireland.

In 2008, ECSA held the chair of the Engineers Mobility Forum and the Vice Chair of the Washington Accord. ECSA chaired the International Engineering Alliance Working Group on Graduate Attributes and Professional Competencies. ECSA provided team members for accord monitoring visits to Australia, United States and Singapore.

Engineering Education

The Education committee is responsible for advising Council and outside parties on engineering education matters. Working with the Engineering Standards Generating Body, the Education Committee approved an ECSA Position Paper on the implementation of Engineering Qualifications under the Higher Education Qualifications Framework (HEQF), a policy published by the Department of Education in October 2007. Under that policy, qualifications must conform to type definitions. The present National Diploma and BTech do not conform and alternate qualifications have had to be defined for the education of engineering technologists and technicians. The Position Paper proposes an approach to guide providers in implementing these new qualifications and to the Department of Higher Education and Training and the Council on Higher Education in

approving new programmes. As reported under Standards Development, the standards for the new qualification types have been developed and submitted for registration on the NQF.

Voluntary Associations

The Act makes provision for ECSA to grant recognition to voluntary associations that meet defined criteria, including having a high proportion of their members registered with ECSA. The forty voluntary associations reflect the great extent and diversity of the engineering profession and industry. The voluntary associations registered by ECSA include 25 associations in category A, that is, bodies with individual membership who practice in an engineering registration category or discipline. The next biggest group is C with 11 associations whose members are firms or bodies engaged in carrying out engineering work. Four bodies whose members practice in engineering-related areas belong in category B. The Presidents Forum was held to give an opportunity for discussion of matters of mutual interest. Four of the larger voluntary associations worked with ECSA on the submissions on the Built Environment Professions Bill.

Determination of Guideline Fees and Scope of Work

ECSA discharged its obligation under the Act to determine guideline fees for professional services. The current fee structure and scope of services is published in Government Gazette no 31749 of 2 January 2009.

The Engineering Skills Shortage

It is common cause that there is a chronic shortage of Engineering Professionals – as well as supporting occupations including drafting, supervisory, inspection, artisans and operators. The shortage of engineering professionals has two consequences: not enough practitioners for ongoing work, and, more seriously, work that requires engineering decisions being done without competent engineering input. The following analysis of the skills shortage and ECSA's ongoing approach was put to the Minister of Public Works in March 2009.

The problems of the skills shortage, demographic transformation of the profession and access to the profession are, in practice, one problem. While measures such as importation of skilled people provide limited and temporary alleviation, the sustainable solution involves the education and training of substantially increased numbers of South Africans. This increase must come mainly from previously disadvantaged groups and, if successful, will inherently bring about transformation.

Blockages in the professional development pipeline are well understood. The small number leaving Grade 12 with adequate mathematics, physical science and language proficiency is also sought after for the health sciences, accountancy, and the natural sciences. The capacity of engineering higher education faculties is limited, resulting in low throughput and inability to handle rising numbers of students of varied preparedness via the new National Senior Certificate. The availability of training positions in industry is not a major blockage when the economy is good.

Progress toward a sustainable solution to the engineering skills problem must have co-ordinated thrusts:

- a substantial increase in the number of Grade 12 qualifiers with Mathematics, Physical Science and English language at an appropriate level; and

- a corresponding increase in the capacity of higher education in engineering programmes, well beyond the current Jipsa initiative; together with
- Matching provision of training positions in industry.

ECSA, working with appropriate partners in each instance, will continue its present efforts in these three areas. Other current measures such as special handling of foreign applicants are already in place. ECSA will continue to monitor the graduation, candidate and registration statistics to identify needs for interventions that are within its powers.

Corporate Communications



John Doolan – Manager – Corporate Communications

The Corporate Communications department has been re-staffed during the reporting period. Its mandate is to rejuvenate ECSA's image as well as to link it with its internal and external stakeholders via various communication channels.

Media Liaison/Relations:

The department has gone on an awareness campaign especially in the print media and industry publications, and also electronic publications, television and radio. Since its resumption of duty, the department has managed to organise a television appearance (interview) conducted by then Acting CEO, Mr Enslin Naude. The President, Mr Goba, also took part on E-TV's Sunrise early in 2009 and spoke about the state of engineering in South Africa as well as the role of ECSA.

Press release production has been increased with an average of two being sent out to the media per month except in quieter months like December/January.

ECSA Branding:

Branding of the organisation has been increased. To date the ECSA vehicle has been branded, and other promotional materials include ties for men and scarfs for ladies, work wear for men and ladies and casual wear as launched at the ECSA Golf Day in August.

The exercise was taken to another level as the organisation was represented at four of the major exhibitions that took place in Johannesburg and the wider Witwatersrand area. These included the NEPAD summit, Tomorrow's Leaders as well as the Petrotek Summit held at Gallagher Estate in Midrand. The exhibitions played an invaluable role in raising ECSA's profile and publicity as there was room to interact with various delegates from different industries and individuals from various sectors.

Website management:

With the help of an external consultant, a new interactive website has been designed which, it is hoped, will be able to assist external stakeholders in their communication with Council.

Electronic Bulletin:

Substantial work has also been done on the production of an electronic bulletin for the engineering industry.

Internal Newsletter:

An internal newsletter has been produced on a quarterly basis to inform staff of the professional and social interactions within the organisation.

Engenius:

The Engenius initiative was also revived during the year under review, but activities were kept at a very low key level until the responsibilities of the various VAs have been clarified, and ECSA's role as co-ordinator and project manager have been likewise clarified.

Governance

The ECSA Council is comprised of 30 professionals, 10 State-nominated members and 10 members nominated to represent the public interest. The present council took office in August 2005 and its period of office expires in August 2009. The membership of the Council is as follows:

Mr T T Goba (President)		Mr C J Campbell (Vice President)
Mr N Alli	Mr M F Allie	Mr S A S Amod
Mr D Argyrakis	Mr H Bhengu	Mr P Camay
Dr. N E Chinkanda	Ms. M Cilliers	Mr B N Currin
Mr A D du Plessis	Mr du T Grobler	Prof. B deL Figaji
Mrs C Fourie	Dr. O S W Franks	Mr R P Gerber
Prof U H J Grimsehl	Mr A J Hay	Ms J Janjic
Mr G H Jansen van Rensburg	Prof. E P Kearsley	Mr M Kibido
Mr B F Kirchmann	Prof B M Lacquet	Mr L S Mabuda;
Mr L J Madisha	Mr S E Madonsela	Mr J K S Makaleng
Mr H E Makwarela	Mr J P Malatse	Mr M M Maliba
Mr T N Maphumulo	Mr R P Mohring	Mr P. S Moncur
Mr PD Naidoo	Mr V P Padayachee	Mr J. C Perkins
Dr F.W Petersen	Ms H S Pieterse	Mr R A Pullen
Mr K Ramjee	Mr F B Reinders	Mr W Skowronski
Ms BG Sudano		

The Council has an Executive Committee that has defined powers to act between Council meetings. A number of standing committees have defined functions and delegated powers are listed in Annexure 2.

FINANCE DEPARTMENT



Gerard Schekkermann: Manager- Finance

The Financial Statements are attached. The Auditor's report was clean.

ENGINEERING COUNCIL OF SOUTH AFRICA
(Established under Act 46 of 2000)
FINANCIAL STATEMENTS
for the year ended 25 MARCH 2009

STATEMENT BY THE COUNCIL

The financial statements set out on pages 3 to 14 for the year ended 25 March 2009 are approved by the Council on 19 August 2009 and are signed on its behalf by:

T.T. GOBA PRESIDENT

H HANRAHAN ACTING CHIEF EXECUTIVE OFFICER

REPORT OF THE INDEPENDENT AUDITORS

TO THE MEMBERS OF THE ENGINEERING COUNCIL OF SOUTH AFRICA

We have audited the annual financial statements set out on pages 2 to 19, which comprise the balance sheet as at 25 March 2009, the income statement, the statement of changes in equity and the cash flow statement for the year ended 25 March 2009, a summary of significant accounting policies and other explanatory notes.

Director's Responsibility for the Financial Statements

The Council's directors are responsible for the preparation and fair presentation of these financial statements in accordance with *International Financial Reporting Standards*. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements.

The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the council's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the council's internal control.

An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting as evaluating estimates made by the directors, as well as the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Unqualified Audit Opinion

In our opinion, the financial statements present fairly, in all material aspects, the financial position of the Council at 25 March 2009 and of its financial performance and its cash flow for the year then ended, in accordance with International Financial Reporting Standards.

**VAN WYK
Chartered Accountants (S.A.)
20 August 2009
Pretoria**

ENGINEERING COUNCIL OF SOUTH AFRICA (Established under Act 46 of 2000)
BALANCE SHEET as at 25 March 2009

	Notes	25/03/2009 R	31/03/2008 R
ASSETS			
Non-current assets			
		12,912,897	9,625,756
Fixed property and -assets	1.1 & 2	2,979,189	2,297,000
Investments	1.2 & 3	9,933,708	7,328,756
Current assets			
		4,313,310	5,543,166
Accounts receivable and prepayments	4	4,112,570	4,986,115
Cash and cash equivalentents	9.3	200,740	557,051
Total assets		17,226,207	15,168,922
RESERVES AND LIABILITIES			
Reserves			
		11,911,316	10,264,665
Accumulated funds		7,816,890	6,165,589
Funds reserved for future expenses	5	2,869,657	2,070,270
Unrealised fair value adjustments	1.2 & 3	1,224,769	2,028,806

Current liabilities

Accounts payable

Annual- and application fees received in advance

Total reserves and liabilities

	5,314,891	4,904,257
	3,970,224	3,729,940
	1,344,667	1,174,317
	<u>17,226,207</u>	<u>15,168,922</u>

ENGINEERING COUNCIL OF SOUTH AFRICA
(Established under Act 46 of 2000)
INCOME STATEMENT
for the year ended 25 March 2009

	Notes	25/03/2009 R	31/03/2008 R
INCOME			
FEES			
Annual fees	1.3	36,413,971	27,319,480
		28,758,162	22,153,203
Application fees		4,071,458	2,498,663
		32,829,620	24,651,866
OTHER INCOME	6	3,584,351	2,667,614

EXPENDITURE

		33,825,980	28,754,659
Council and committee meetings	7	5,259,691	3,296,348
Bad debts written off		1,827,377	834,923
Administrative expenditure	8	23,207,678	21,636,869
Auditors' remuneration		45,000	90,000
Consulting fees		667,594	537,592
Depreciation charge for the year	2	214,065	108,713
Legal costs and inquiry expenses		2,604,575	2,224,017
Interest on long-term liabilities		-	26,197
NET SURPLUS for the year		<u>2,587,991</u>	<u>(1,435,179)</u>

ENGINEERING COUNCIL OF SOUTH AFRICA
(Established under Act 46 of 2000)
STATEMENT OF CHANGES IN FUNDS
for the year ended 25 March 2009

	Accumulated funds	Funds reserved	Unrealised fair value adjustments	Total
	R	R	R	R
Balance at 31 March 2007	7,621,539	2,983,953	2,643,958	13,249,450
Net surplus for the period	(1,435,179)	-	-	(1,435,179)
Adjustment to available-for-sale instruments	-	-	(615,152)	(615,152)
Transfer to funds reserved	(1,015,763)	1,015,763	-	-
Written back	994,992	(994,992)	-	-
Funds expenditure	-	(934,454)	-	(934,454)
Balance at 25 March 2008	6,165,589	2,070,270	2,028,806	10,264,665
Net surplus for the year	2,587,991	-	-	2,587,991
Adjustment to available-for-sale instruments	-	-	(804,037)	(804,037)
Sundry adjustments	(200,564)	-	-	(200,564)
Transfer to funds reserved	-	-	-	-

	(360,000)	1,040,540		680,540
Written back	(376,126)	376,126	-	-
Reserved funds expenditure	-	(617,279)	-	(617,279)
Balance at 25 March 2009	<u>7,816,890</u>	<u>2,869,657</u>	<u>1,224,769</u>	<u>11,911,316</u>

ENGINEERING COUNCIL OF SOUTH AFRICA
(Established under Act 46 of 2000)
CASH FLOW STATEMENT
for the year ended 25 March 2009

	Notes	25/03/2009	31/03/2008
		R	R
Cash flows generated from operating activities		3,268,392	276,869
Operating surplus / (deficit) before working capital changes	9.1	716,873	(3,638,580)
Working capital changes	9.2	1,284,179	2,537,789
Cash flows applied to operations		2,001,052	(1,100,791)
Interest and dividends received		1,267,340	1,403,857
Interest paid on long-term liabilities		-	(26,197)

Cash flow from investing activities	(3,624,703)	336,232
Assets aquired	(939,399)	(684,702)
Disposal of fixed assets	(80,352)	-
(Increase) / decrease in investments	(3,408,989)	1,636,086
Fair value adjustments to investments	804,037	(615,152)
Cash flow from financing activities	-	(504,598)
Increase / (decrease) in long-term liabilities	-	(504,598)
Net increase / (decrease) in cash and cash equivalents	(356,311)	108,503
Cash and cash equivalents at beginning of this year	557,051	448,548
Cash and cash equivalents at the end of this year	<u>200,740</u>	<u>557,051</u>

9.3

ENGINEERING COUNCIL OF SOUTH AFRICA
(Established under Act 46 of 2000)
NOTES TO THE FINANCIAL STATEMENTS
for the year ended 25 MARCH 2009

1. ACCOUNTING POLICIES

The financial statements are prepared in accordance with International Financial Reporting Standards (IFRS)
The financial statements are prepared under the historical cost convention as modified by the revaluation of certain property, plant and equipment, marketable securities and investment properties.

1.1

Fixed assets

Fixed assets are reflected at cost less accumulated depreciation and accumulated impairments losses. Depreciation rates are based on the useful life of an asset and are reviewed yearly. Fixed property is shown at cost and no depreciation is provided.

Fixed assets are tested for impairment on an annual basis.

Rates of depreciation are as follows:

- | | |
|----------------------------|----------|
| - Furniture and fittings | 6 years |
| - Office equipment | 5 years |
| - Computer equipment | 3 years |
| - Improvements to premises | 10 years |
| - Motor vehicles | 5 years |

Financial instruments held by the entity consist of assets held at various financial institutions. The entity is risk adverse when investing funds and keeps its exposure to market-, credit-, liquidity- and interest rate risk to a minimum. The financial assets held by the entity are classified and measured as follows:

Available-for-sale investments - after initial recognition these instruments are measured at their fair value with adjustments recognised directly in equity. These fair value adjustments will be recognised in profit and loss when the financial asset is derecognised and these gains or losses are realised.

1.3

Revenue recognition

Fees are recorded in the financial statements at the date when the fees are raised.

ENGINEERING COUNCIL OF SOUTH AFRICA
(Established under Act 46 of 2000)
NOTES TO THE FINANCIAL STATEMENTS
(continued)
for the year ended 25 MARCH 2009

25/03/2009
R

31/03/2008
R

2. FIXED PROPERTY AND - ASSETS

Property at cost

1,411,243

1,330,000

Property consist of :

- Sections 9 and 10, Waterview corner (South)
 Bruma, Johannesburg

The directors have valued the property's market value as R5,680,500 on 25 March 2009 based on information from property developers in the area.

Fixed assets at nominal value

1

1

Fixed assets comprise of computer equipment and office furniture and equipment

1,411,244

1,330,001

Furniture and fittings

Opening balance - beginning of the year	200,064	131,047
Cost	263,293	156,383
Accumulated depreciation	(63,229)	(25,336)
Additions	137,300	106,910
Disposals	-	-
Depreciation for the year	(54,822)	(37,893)
Closing balance at year end	282,542	200,064
Cost	400,593	263,293
Accumulated depreciation	(118,051)	(63,229)

Office equipment

Opening balance - beginning of the year	40,971	36,851
Cost	60,311	46,616
Accumulated depreciation	(19,340)	(9,765)
Additions	94,034	13,695
Disposals	-	-

Depreciation for the year	(17,686)	(9,575)
Closing balance at year end	117,319	40,971
Cost	154,345	60,311
Accumulated depreciation	(37,026)	(19,340)

Computer equipment

Opening balance - beginning of the year	101,698	35,608
Cost	147,439	58,136
Accumulated depreciation	(45,741)	(22,528)
Additions	354,356	89,303
Disposals	(13,145)	-
Depreciation for the year	(50,214)	(23,213)
Closing balance at year end	392,695	101,698
Cost	488,650	147,439
Accumulated depreciation	(95,955)	(45,741)

Improvements to premises

Opening balance - beginning of the year	426,202	187,504
Cost	483,213	206,483
Accumulated depreciation	(57,011)	(18,979)
Additions	242,466	276,730
Disposals	-	-
Depreciation for the year	(51,730)	(38,032)
Closing balance at year end	616,938	426,202
Cost	725,679	483,213
Accumulated depreciation	(108,741)	(57,011)

Motor vehicle

Opening balance - beginning of the year	198,064	-
Cost	198,064	-
Accumulated depreciation	-	-
Additions	-	198,064
Disposals	-	-
Depreciation for the year	(39,613)	-
Closing balance at year end	158,451	198,064

Cost	198,064	198,064
Accumulated depreciation	(39,613)	-
TOTAL FIXED PROPERTY AND -ASSETS	2,979,189	2,297,000

3. INVESTMENTS

Long - Term Investments

Momentum Endowment Policy

- at cost

1,338,746

1,169,282

Fair value adjustments

(140,750)

202,920

- Previous years

202,920

202,920

- Current year

(343,670)

-

Momentum Endowment Policy

1,197,996

1,372,202

Although this investment has a fixed maturity date the directors have decided to classify it as an Available-for-sale instrument because of the uncertainty regarding the value at maturity. The growth rate associated with the instrument is uncertain but is expected to range between 4% and 10%.

SIS Inflation and Money Markets	4,421,534	4,124,460
Fair value adjustments	1,365,519	1,825,886
- Previous years	1,825,886	2,441,038
- Current year	(460,367)	(615,152)
SIS Inflation and Money Markets	<u>5,787,053</u>	<u>5,950,346</u>

These instruments consist of investments held at financial institutions and their market values are quoted in the market place.

Standard Bank Money Market	2,948,659	6,208
This represents a bank balance and its fair value equals its cost.		
Total investments	<u>9,933,708</u>	<u>7,328,756</u>

ENGINEERING COUNCIL OF SOUTH AFRICA
(Established under Act 46 of 2000)
NOTES TO THE FINANCIAL STATEMENTS
(continued)
for the year ended 25 MARCH 2009

	25/03/2009	31/03/2008
	R	R
4. ACCOUNTS RECEIVABLE		
Annual- and application fees outstanding	1,025,171	808,722
Prepaid expenses and sundry debtors SETA's financing Engineering Standards Generating	2,117,760	2,130,758
Board expenses	<u>969,639</u>	<u>2,046,635</u>
	<u>4,112,570</u>	<u>4,986,115</u>

5. FUNDS RESERVED

Funds set aside on an ongoing basis to provide for the replacement of:

Motor Vehicle

Balance - beginning of this year	-	225,610
Expenditure	-	(225,610)
Balance - end of this year	<u>-</u>	<u>-</u>

Computer software

Balance - beginning of this year	96,487	-
Funds set aside	140,000	200,000
Expenditure	(236,487)	(103,513)
	<hr/>	<hr/>
Balance - end of this year	-	96,487

Professional services

Balance - beginning of this year	1,973,783	2,758,343
Funds set aside	900,540	815,763
Written back and adjustments	376,126	(769,382)
Expenditure	(380,792)	(830,941)
	<hr/>	<hr/>
Balance - end of this year	2,869,657	1,973,783
	<hr/>	<hr/>
TOTAL FUNDS RESERVED	<u>2,869,657</u>	<u>2,070,270</u>

ENGINEERING COUNCIL OF SOUTH AFRICA
(Established under Act 46 of 2000)
NOTES TO THE FINANCIAL STATEMENTS
(continued)
for the year ended 25 MARCH 2009

	25/03/2009	31/03/2008
	R	R
6. OTHER INCOME		
Bad debts recovered	560,520	225,835
Evaluation of qualifications	83,950	3,509
Interest received		
- on long-term investments	1,267,340	1,403,857
Inspection of register and duplicate		
certificate fees	6,289	4,035
Rent received	474,162	474,162
Sundry income	1,192,090	556,216
	<hr/>	<hr/>
	<u><u>3,584,351</u></u>	<u><u>2,667,614</u></u>

7. COUNCIL AND COMMITTEE MEETINGS

Member expenses for attending meetings	1,910,197	1,271,860
Travel, accommodation and refreshments	3,349,494	2,024,488
	<hr/>	<hr/>
	<u>5,259,691</u>	<u>3,296,348</u>

8. ADMINISTRATIVE EXPENDITURE

Bank charges	147,605	123,133
General expenses	371,284	222,172
Insurance	215,999	124,901
Maintenance of computer and office equipment	155,427	82,408
Maintenance of offices	96,797	81,468
Personnel recruitment	140,494	110,191
Personnel travel and related expenses	369,175	292,465
Printing, stationery and publications	1,140,141	682,779
Rent, electricity and parking	2,204,352	1,808,939
Rental of office equipment		

	1,413,464	1,142,727
Salaries and related expenses	16,036,512	16,109,148
Secretarial services	232,624	257,967
Telephone and postage	683,804	598,571
	<u>23,207,678</u>	<u>21,636,869</u>

ENGINEERING COUNCIL OF SOUTH AFRICA
(Established under Act 46 of 2000)
NOTES TO THE FINANCIAL STATEMENTS
(continued)
for the year ended 25 MARCH 2009

25/03/2009	31/03/2008
R	R

9. CASH FLOW STATEMENT

9.1 CASH FLOW FROM OPERATIONS

Net surplus for the period	2,587,991	(1,435,179)
Adjustment for:		
- depreciation charge	214,065	108,713
- reserve funds expenditure	(617,279)	(934,454)
- sundry adjustments	(200,564)	-
- interest received	(1,267,340)	(1,403,857)

- interest paid on long-term liabilities	-	26,197
Operating surplus / (deficit) before working capital changes	<u>716,873</u>	<u>(3,638,580)</u>

9.2 WORKING CAPITAL CHANGES

Decrease in accounts receivable	873,545	1,821,202
Increase in accounts payable	410,634	716,587
	<u>1,284,179</u>	<u>2,537,789</u>

9.3 CASH AND CASH EQUIVALENTS

Current Bank account	196,676	542,489
Cash on hand	4,064	14,562
	<u>200,740</u>	<u>557,051</u>

10. STAFF RETIREMENT FUNDING

It is the policy of the Council to provide retirement benefits for staff by way of a separate pension fund.

The pension fund consists of a defined benefits plan and a defined contribution fund and is governed by the Pension Fund Act, No.24 of 1956.

Current service contributions are included with salaries and related expenses in the financial statements.

The fund was last valued as at 1 April 2008 and the independent actuary's opinion was that the fund is in a financially sound position.

11. TAXATION

The Council is exempt from income tax.

Annexure 1: Detailed Registration Statistics

<u>Professionals</u>		Total Registrations	New registrations	Transfers from Candidate	Cancellations	Deregistrations
Professional Engineer	Total registered	14476	543	196	223	625
	Male	14118	523	171	212	604
	Female	358	20	25	8	24
	Black	640	60	36	3	63
	White	13189	442	122	214	527
	Indian	540	34	35	3	31
	Coloured	107	7	3	0	7
Professional Engineering Technologist	Total registered	3244	327	85	40	121
	Male	3183	318	75	39	119
	Female	61	9	10	0	3
	Black	269	52	38	0	14
	White	2650	240	35	38	100
	Indian	181	29	10	1	7
	Coloured	86	6	2	0	1
Professional Certificated Engineer	Total registered	998	71	6	18	63
	Male	996	71	6	18	62
	Female	2	0	0	0	1
	Black	24	6	1	0	3
	White	932	59	3	18	57
	Indian	35	4	2	0	3
	Coloured	7	2	0	0	0
Professional Engineering Technician	Total registered	1887	291	66	47	191
	Male	1680	250	43	45	176
	Female	207	41	23	1	16

	Black	802	142	47	3	74
	White	822	110	10	39	103
	Indian	166	20	7	3	13
	Coloured	97	19	2	1	2

<u>Candidate Professionals</u>		Total registered	Number of candidates registered (3 years and less)	Number of candidates registered (4-5 years)	Number of candidates registered (over 6 years)
Candidate Engineer	Total registered	4330	2153	880	1297
	Male	3604	1701	709	1194
	Female	726	452	171	103
	Black	1130	744	254	132
	White	2535	1039	446	1050
	Indian	628	353	171	104
	Coloured	37	17	9	11
Candidate Engineering Technologist	Total registered	1357	909	290	158
	Male	1110	729	233	148
	Female	247	180	57	10
	Black	748	555	146	47
	White	400	243	83	74
	Indian	181	99	54	28
	Coloured	28	12	7	9
Candidate Certificated Engineer	Total registered	184	105	27	52
	Male	184	105	27	52
	Female	0	0	0	0
	Black	46	33	8	5
	White	114	59	15	40

	Indian	20	11	3	6
	Coloured	4	2	1	1
Candidate Engineering Technician	Total registered	1745	1213	351	181
	Male	1337	905	266	166
	Female	408	308	85	15
	Black	1202	908	229	65
	White	335	195	60	80
	Indian	183	97	56	30
	Coloured	25	13	6	6

Specified categories

Name of specified category	Lifting Machinery Inspectors	Lift Inspectors
Total registered	556	159
Male	555	158
Female	1	1
Black	22	4
White	497	134
Indian	30	15
Coloured	7	6

Annexure 2: ECSA Committees

Committee	Principal functions
Executive Committee	All powers of council except electing a President or Vice president, cancelling registration, decide on appeals
Education*	Generally advise council and external parties on matters relating to engineering education. Decide on withdrawal of registration
Engineering Programme Accreditation Committee	Appoint and receive reports from accreditation teams, grant accreditation (with or without conditions) to BEng-type programmes
Technology Programme Accreditation Committee	Appoint and receive reports from accreditation teams, grant accreditation (with or without conditions) to National Diploma and BTech-type programmes
Certificated Engineers Accreditation Committee	Consider policy related to education of Certificated Engineers.
Qualifications and Examinations Committees	Consider applicants who do not have accredited or recognised qualifications and evaluate qualifications
Deans Committee	Provides a means of consultation and communication between ECSA and the Deans of engineering faculties
Central Registration Committee* (CRC)	Decide on policies and procedures for registration, decide on all refusals of registration
Registration Committees (RC)	One for each professional category: Professional Engineers, Professional Engineering Technologists, Professional Engineering Technicians, Professional Certificated Engineers. An RC may decide to register a person but must recommend refusal to the CRC
Professional Advisory Committees	One for each engineering discipline: Aeronautical, Agricultural, Chemical, Civil, Electrical, Industrial, Mechanical, Metallurgy, Mining. Have delegated power to decide to register persons who meet requirements for PrEng
Registration Committee (for specified categories)	One for each of Lift Inspectors and Lifting Machinery Inspectors Consider applications for registration and register persons who qualify in the respective category
Investigating Committee*	Conduct investigations of complaints of misconduct, recommend to Council that charges be preferred
Finance and Staff Committee*	Recommend annual budget to Council, monitor income and expenditure approve unbudgeted expenditure, determine fees, exempt persons from fees, determine staff increases, ..
Communications, Information and Marketing Committee+	Advise Council, the CEO and the head of Corporatate Communications on strategies for CIM, monitor effectiveness of activities.

Corporate Governance Committee*	Recommend good governance practices to Council
Engineering Standards Generating Body	A body recognised by SAQA to generate standards for engineering higher education qualifications and professional competencies, as well as related qualifications
International Affairs Committee	Consider and decide on policy on international agreements and interactions, promote and pursue mutual recognition of educational qualifications and registration

Note: * Chair serves on Executive Committee + In abeyance in 2008/2009: to be re-established.

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