ENGINEERING COUNCIL OF SOUTH AFRICA



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ADVISORY NOTE FOR THE PUBLIC:

THE ROLE, RESPONSIBILITIES AND CONDUCT OF PERSONS REGISTERED WITH ECSA APPOINTED FOR SMALL BUILDING WORKS

Revision One: 26 April 2012

FOREWORD

The Engineering Council of South Africa (ECSA) is a statutory body established in terms of the Engineering Profession Act, 46 of 2000 (EPA).

ECSA's primary role is to regulate the engineering profession in terms of the Act. This includes the registration of competent engineering practitioners and governing their professional conduct. In partnership with the state and the engineering profession, ECSA also promotes an appropriate level of education and training of engineering practitioners to facilitate full recognition of professionalism, both locally and abroad. ECSA enjoys full autonomy although it is accountable to the State, the profession and the public for the fair and transparent administration of its business in the pursuit of its goals.

ECSA will investigate any complaint, charge or allegation that has been brought against a registered person when it has reasonable grounds to contend that a registered person has committed an act of improper conduct. This process is not intended to account for or replace civil or criminal litigation.

In terms of the Rules of Conduct, registered persons are expected to:

- 1. Apply their knowledge and skill in the interests of humanity and the environment;
- 2. Execute their work with integrity, sincerity and in accordance with generally accepted norms of professional conduct;
- 3. Respect the interests of their fellow beings and honour the standing of the profession;
- 4. Continuously improve their professional skills and those of their subordinates:
- Encourage excellence within the engineering profession. 5.

1. INTRODUCTION

1.1 Purpose

This note provides advice to the public on the appointment of an engineer, the services the public can expect to receive and what members of the public need to do if they are dissatisfied with the conduct of an engineer. For the purposes of this document, the term "engineer" refers to any person registered with ECSA as a Professional Engineer, Professional Engineering Technologist, Professional Engineering Technician or a Professional Certificated Engineer.

This advisory note is written in the context of small projects where members of the public would typically be clients requiring the assistance of an engineer with, for example, the construction of a house or other small structure, or a residential community scheme, structural alterations to buildings, provision of engineering services and other situations requiring professional advice. It does not provide guidance for commercial or industrial projects where professional project management services are probably required.

1.2 Principal role players in engineering projects

The principal role players in the construction and maintenance of engineering infrastructure including buildings and structures would typically include those listed below. Depending on the scale of the project, other role players may be involved, each with their particular functions.

- a) The client (or owner) is the person for whom the work is done. The client is responsible for the appointment, instruction, management and payment of the contractor and of the various professionals involved in the project and of any subcontractor appointed directly by the client. The client may delegate certain of these responsibilities to one or more of the appointed professionals.
- b) The architect is responsible for the concept, position, layout, etc. of a building, the specification of finishes, the submission and approval of architectural plans, ensuring compliance with planning requirements and National Building Regulations, and similar activities. The architect often plays a co-ordinating role and may manage the project on behalf of the client.
- c) The engineer is responsible for the design of any engineering aspects of the project that require rational assessment or design. Typically these are aspects

that are not covered by the "deemed-to-satisfy" provisions of the Building Regulations. These could include investigation of site conditions, selection of appropriate types of construction and the specification of materials, design of structural elements (foundations, beams, suspended slabs, high boundary and/or retaining walls, etc.) or services (ventilation, water, electrical, mechanical, fire and other installations). The engineer should inspect the work for which he assumes responsibility and certify that the design has been correctly implemented. Unless specifically requested to do so, the engineer does not supervise the contractor or take responsibility for the contractor's workmanship.

- d) The contractor is responsible for the execution of the work in accordance with the drawings, specifications and instructions received from the client or from the engineer or architect where they act on behalf of the client. The contractor is also responsible for the quality of his work, compliance with the safety requirements pertaining to the execution of the work and compliance with the requirements of the National Building Regulations in respect of work not detailed by the architect or engineer.
- d) The sub-contractor, if applicable, is a contractor appointed to undertake a specific portion of the work, for example the electrical system or plumbing. The subcontractor may be appointed either by the client directly, or by the contractor and takes instructions from the appointing party.

Other role players could include a town planner, quantity surveyor or project manager.

In the case of communal residential schemes (e.g. sectional title developments), the developer may assume the role of the client and employ or appoint professionals to assist with the development. In some instances, the developer may also act as the contractor and appoint subcontractors or staff to carry out the work in the different disciplines. The individual residential units may be built in terms of a contract between the developer and the buyer of the unit or sold as a completed unit after construction. On completion, the housing unit owners will be members of a home owners' association and will collectively be responsible for the ongoing maintenance of the common infrastructure.

1.3 Clarification of roles

The roles of the various players may overlap, making more than one person responsible for particular aspects of the work. One such aspect is supervision which

may be seen by the client as being the responsibility of the contractor, the architect or the engineer. On the other hand, situations may arise where none of the role players is made responsible for what may be a critical aspect of the work.

With this potential for duplication or omission, it is essential that the client clearly defines the responsibilities of each of the role players. Although engineers and contractors have certain responsibilities in terms of legislation, it is preferable that these be clarified in their appointment.

2. RELEVANT LEGISLATION

There are three main pieces of legislation that deal with the appointment and duties of engineers, namely the National Building Regulations and Building Standards Act (Act No. 103 of 1977), the Housing Consumers Protection Measures Act (Act No. 95 of 1998) and the Occupational Health and Safety Act (Act No. 85 of 1993). The registration and conduct of engineers are regulated by the Engineering Profession Act (Act 46 of 2000). Copies of these Acts can generally be found by an internet search on the name of the Act.

Other legislation may also apply in addition to these three Acts.

2.1 National Building Regulations

The National Building Regulations set out requirements for all buildings. SANS 10400 provides details on the application of the National Building Regulations. In particular, SANS 10400 sets out measures that are deemed to satisfy the functional requirements of the Act. When the deemed-to-satisfy requirements are not used, a rational design is required.

Regulation A19 of the National Building Regulations requires the owner of a building to appoint a competent person (registered professional) to accept responsibility for the design, inspection and certification of the work if (a) a rational design or (b) a geotechnical investigation is required. This appointment is normally done by means of an "A19" form (Form 2, SANS 10400-A: 2010).

In Section 1 of this form, the owner undertakes to:

- a) inform the competent person when the work is due to start;
- b) notify the local authority if the appointment is prematurely terminated; and
- c) extend the appointment when additional competent persons are required for particular aspects of the work.

In Section 2 of the form, the competent person undertakes to accept full responsibility for:

- the rational design or geotechnical investigation of the project and, where relevant, for inspection of the work, including making sure that the construction methods do not compromise the design intent (Regulation A14);
- b) providing the local authority with drawings and other details where required;
- notifying the local authority should it appear that the work is being carried out in an unsatisfactory manner or if his/her appointment is terminated before completion of the work;
- d) the submission of a completion certificate (Form 4 of SANS 10400-A:2010); and
- e) maintaining contact with the owner as to when the services may be required.

Note that, in terms of the Regulations, the inspection by a competent person is a general inspection to ensure that the design assumptions are valid, that the design is being correctly implemented and that the work is being executed generally in accordance with appropriate construction techniques. It excludes detailed supervision and day-to-day inspection of the work. Should such detailed supervision / inspection be required, this should be specifically noted in the appointment of the competent person.

2.2 Housing Consumers Protection Measures Act, 95 of 1998

The Housing Consumers Protection Measures Act provides protection to the general public when building a home. It provides for the establishment of the National Home Builders Registration Council (NHBRC) and the registration of home builders (contractors). The Home Building Manual published by the NHBRC requires the home builder to appoint a competent person to undertake rational designs where these may be required or to perform specific functions including the classification of the site. Note that, in the case of this act, the onus for the appointment of the competent person rests with the home builder (contractor) rather than the home owner. The appointed person would, nevertheless, owe a duty of care to the home owner.

In terms of their appointment, a competent person undertakes to:

a) provide the home builder and the NHBRC's inspectorate with drawings and other particulars required in terms of the Home Building Manual and to inform the

NHBRC's inspectorate if it appears that any structural work is being carried out in

an unsatisfactory way;

b) advise the NHBRC if their appointment is terminated before construction work has

been completed; and

c) comply with the National Building Regulations and Building Standards Act.

On completion of the works, the competent person is required to certify that he/she

has inspected the work during the course of construction and found the work to be in

accordance with his/her requirements.

2.3 Occupational Health & Safety Act

Many of the activities for which a registered person would be appointed, including the

building of any structure, fall within the ambit of the Construction Regulations. In the

main, these regulations deal with the health and safety obligations of the various

parties involved in construction work, including the client, contractor and designer

(engineer). In terms of these regulations:

a) The designer is required to carry out sufficient inspections at appropriate times

during the execution of the work to ensure compliance with the design, to stop the

contractor from executing any work that does not comply and to issue a certificate

of completion (Regulation 9 (2)).

b) The contractor is required to appoint a full-time employee to supervise the

construction work (Regulation 6 (1)) and to ensure that any excavation work is

safely executed (Regulation 11).

c) The owner is responsible for ensuring that the structure is inspected periodically

after completion and is adequately maintained.

The Construction Regulations do not deal with the terms of appointment of the

designer who may be appointed either by the owner or the contractor.

3. <u>APPOINTMENT AND OBLIGATIONS OF THE ENGINEER</u>

3.1 **Appointment of an Engineer**

The role of the engineer is defined by the terms of his or her appointment. This

appointment may take a number of forms but would typically fall into the following

categories:

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 a) an A19 Appointment by the owner in terms of the Building Regulations or a B1 appointment by the contractor in terms of the NHBRC requirements;

b) a standard form of agreement; or

c) an ad hoc oral or written agreement.

The obligations of the Engineer may be different for each of these methods of appointment as outlined below.

3.2 A19 Appointment or NHBRC Appointment

The obligations of the engineer (referred to in these documents as the competent person) are defined in terms of the National Building Regulations or in the Home Building Manual in the case of an NHBRC appointment. These obligations are set out in Sections 0 and 2.2 above.

It is of particular importance to note that the obligations of the engineer extend only to those aspects of the work for which he or she was appointed. Typically, these are limited to the geotechnical investigation (classification of the site) and any aspect of the work requiring rational design or assessment. The obligations with regard to supervision or inspection of the work extend only to ensuring that the design assumptions are valid, that the design is being correctly interpreted and that the execution of the work fulfils the design intent. In terms of these appointments, the competent person is not responsible for the day-to-day supervision of the contractor's activities nor for the quality of the contractor's work except where such workmanship could endanger the integrity of the structure or adjoining development.

3.3 Standard Forms of Agreement

There are a number of standard forms of agreement for the appointment of registered persons providing professional services. The most common of these are:

- a) The Short Form of Agreement issued by Consulting Engineers South Africa.
- b) The PROCSA Client / Consultant Professional Services Agreement.
- c) The NEC Professional Services Contract.
- d) The FIDIC Client / Consultant Model Services Agreement.

Most of these documents are available from Consulting Engineers South Africa (www.cesa.co.za) or from the South African Institution of Civil Engineering (www.civils.org.za). All the above documents are standard forms of agreement and

should be adapted to suit a particular contract. As such, the scope of the services to

be provided by the registered professional need to be defined, generally in an

appendix to the main agreement.

In these agreements, the obligations of the engineer are stated in generic terms. The

engineer (consultant) is required to exercise reasonable skill, care and diligence in the

performance of his or her obligations in accordance with the norms of the profession.

Any specific obligations need to be spelt out in the agreement.

3.4 Ad hoc Oral or Written Agreements

In the absence of any standard form of agreement, the contract between the client and

the engineer may simply take the form of an ad hoc oral or written agreement. Such

agreements should ideally include the scope and purpose of the services to be

provided and the compensation to be paid. Obviously, it is preferable that such

agreements are in writing and are signed by both parties.

In the absence of any terms and conditions, the provisions of common law would

prevail. Under these circumstances, the conduct of the engineer would be judged

against the norms of the profession.

3.5 Guideline Scope of Services and Tariff of Fees

ECSA's guideline scope of services and tariff of fees provides guidance on the scope

of services and remuneration of registered professionals. Although this guideline is

applicable more to major projects, it provides useful information on the type of services

and the various levels of construction monitoring for which the engineer may be

appointed. It also provides guidance on the remuneration of engineers. This document

is available on ECSA's website www.ecsa.co.za.

Under the normal scope of services, the engineer is required to attend regular site

meetings and inspect the works for conformity to the contract documents. Any

additional supervision of construction activities needs to be agreed with the engineer.

The guideline provides four levels of construction monitoring that can be used as a

basis for such an agreement.

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3.6 Norms of the Profession

The requirements for the conduct of registered engineering professionals are set out in

the Engineering Profession Act (Act 46 of 2000) and, in particular, Board Notice 15 of

2006 – Rules of Conduct for Registered Persons, otherwise known as the ECSA Code

of Conduct. Copies of this code are available from the Engineering Council of South

Africa (www.ecsa.co.za). The rules of conduct lay down requirements to which all

registered persons must comply relating to competency, integrity, public interest,

environment and dignity of the profession.

4. <u>DISSATISFACTION WITH PROFESSIONAL SERVICES</u>

4.1 Prevention is Better than Cure!

The best way to avoid problems is to do things correctly, starting with the appointment

of the engineer. Here are some guidelines:

a) Make sure the engineer is registered with ECSA. This can be determined by

visiting www.ecsa.co.za. Remember, ECSA cannot take action against an

unregistered person except in particular circumstances.

b) Request references from previous clients.

c) Use standard forms of agreement and put all agreements in writing from the

start. This way, everybody knows where they stand.

d) Clearly define the scope of services required to avoid duplication and omission.

If detailed supervision of the work is required, this should be specified.

e) Agree on the basis of payment for the services and the payment schedule.

Typical bases of payment include fixed price, time and cost, or percentage of

contract value. Guidance tariffs are available on ECSA's web site.

4.2 Potential Courses of Action

If a client or any other person is dissatisfied with the services rendered by a registered

engineering professional, there are three main avenues of recourse:

a) Lodging a complaint with the Engineering Council of South Africa;

b) Pursuing the remedies laid down in the contract between the parties (if any); or

c) Legal action against the engineer.

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Where a client has entered into contract with a company rather than an individual, legal action would normally be taken against the company. ECSA does not concern itself with the actions of companies but will investigate complaints about the professional conduct of any registered engineering professional involved, irrespective of whether they work for a company or as individuals.

4.3 Complaint to ECSA

Where a client has concluded a contract with a firm of engineering professionals, whether it be a partnership, a company or a close corporation, the legal position is that ECSA has no jurisdiction over such legal entities, but only over registered persons. A complaint of professional conduct must therefore be lodged against the particular registered person. Such registered person will then be the subject of an investigation as set out hereunder.

The Engineering Council of South Africa has a formal procedure of dealing with complaints of professional misconduct. In essence, the following procedure is followed:

a) The complainant completes and signs an affidavit giving details of the conduct, together with any supporting evidence and sends this to ECSA. A pro forma for the affidavit is given on www.ecsa.co.za in the documents section of the web site.

b) The complaint is referred to ECSA's Investigating Committee for preliminary investigation. The Investigating Committee may recommend the appointment of an expert to look into the circumstances of the complaint.

c) Should it be found that there is prima facie evidence of improper conduct; the registered person is given the opportunity to respond to the complaint and provide further evidence.

d) Based on the outcome of their investigation, the Investigating Committee may recommend (a) that the case be dismissed, (b) that the registered professional be cautioned in writing or by peer counselling or (c) that a charge of professional misconduct be laid for a hearing by a disciplinary tribunal.

e) Should the matter proceed to a disciplinary hearing, ECSA will appoint a proforma complainant to present the case before the tribunal. The respondent will be given the opportunity to present his or her case before the tribunal. The

tribunal may find the respondent guilty or not guilty of improper conduct and, in

the case of a guilty finding, impose an appropriate sanction in accordance with

the provisions of the Engineering Profession Act.

The disciplinary hearing is not a civil case where the complainant must present his or

her case. Nevertheless, the complainant may be requested to testify, should it be

required.

It should be noted that the role of the Engineering Council is to investigate the

professional conduct of the registered person. The Engineering Council does not get

involved with the recovery of damages suffered by the complainant or provision of

advice regarding the resolution of the matter. The Engineering Council will also not

become involved in contractual disputes except where, and only to the extent that,

professional misconduct is involved.

Advice on lodging a complaint against a registered professional may be obtained from

the Legal Department of the Engineering Council of South Africa.

4.4 Contractual Remedies

Most of the standard forms of contract contain mechanisms for resolving disputes.

Frequently, these involve alternative dispute resolution procedures, mediation and / or

arbitration. The parties to the contract must follow the agreed procedures in such

cases.

4.5 Legal Action

Where a client has concluded a contract with a firm of engineering professionals,

whether it be a partnership, a company or a close corporation, the client will have to

sue the partnership, company or close corporation, as the case may be, as the

contracting party has caused the damage.

Except where alternative provisions are made in the contract, an aggrieved person

may sue the engineer for damages by means of a civil action. In most cases, it would,

however, be prudent to attempt to reach a mutually acceptable settlement with the

engineer or his/her insurers before resorting to costly litigation.

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A civil action would normally be between the contracting parties, e.g. between a client and the company or individual with whom the contract was concluded. Where either the plaintiff or the defendant are not contracting parties, the matter would be a delictual action. For example, a member of the public (i.e. not a contracting party) may be entitled to recover damage suffered as a result of the actions of an engineer by means of delictual action. Similarly, a client may be able to institute an action against an engineer in his or her personal capacity even where the contract was with the company that employed the engineer.

The requirements for delictual actions are:

- a) Conduct: The starting point for a delictual action is whether the conduct of the engineer (i.e. something that they did or did not do) has given rise to the claim.
- b) Wrongfulness: For the action to succeed, the conduct must be legally wrongful.A breech of a moral obligation is not sufficient.
- c) Fault: For a delictual liability to exist, there must be fault on the part of the engineer, either by virtue of intent or negligence.
- d) Causation: There must be a causal connection between the conduct of the engineer and the damage that was suffered.
- e) Harm: For there to be delictual liability, legally recognised damage or harm must have been suffered.

Note that legal action must be initiated within three years of the date on which the damage was suffered and the respondent identified otherwise the claim will prescribe (lapse). Prescription is not halted by the making of a claim, only by the issue of a summons against the respondent.

Finally, in the event that the engineer had acted in a criminal manner, criminal charges may be laid. ECSA will pursue any criminal action reported to them arising from contravention of the Engineering Profession Act. Criminal actions arising from other causes should be reported to the South African Police Services.

4.6 Replacement of an Engineer

A client may terminate the services of an engineer and appoint another, or may request a second engineer to review the work of the first, provided the correct procedures are followed. Replacing an engineer amounts to termination of contract and conditions normally apply regarding the process to be followed and the rights of the parties.

Clients should be aware that, according to ECSA's Rules of Conduct for Registered Persons, one registered person is not permitted to knowingly attempt to supplant another on a particular project.

A registered person is also not permitted to review the work of another for a particular client except:

- (i) with the prior knowledge of the other registered person, who must be afforded a reasonable opportunity to submit comments to the client on the findings of the review; or
- (ii) after receipt of a notification in writing from the client that the engagement of the other registered person has been terminated; or
- (iii) where the review is intended for purposes of a court of law or other legal proceedings.

If an engineer appointed in terms of Regulation A19 of the National Building Regulations is replaced, the client is required to inform the local authority of such replacement and submit a new A19 form. If an engineer is appointed as competent person in terms of the Housing Consumers Protection Measures Act, the engineer is required to advise the NHBRC of the cancellation of his or her appointment.

5. PROFESSIONAL INDEMNITY AND OTHER INSURANCES

5.1 Professional Indemnity

Although many registered professionals, particularly those engaged in consulting activities, carry professional indemnity insurance, there is no legal obligation for a registered professional to do so. Such obligation may, however, arise as a result of specific conditions of contract or as a condition of membership of a professional body such as Consulting Engineers South Africa. It is advised that clients should enquire whether an engineer has professional indemnity cover and the extent of such cover, prior to appointment. In terms of the Code of Conduct, the engineer is obliged to supply this information.

If professional indemnity cover is included as a condition of contract, the limit of indemnity (insured amount) should be specified. Most such contracts also include a limit of liability (maximum amount payable by either party to the other) and a limit on

the duration of the liability (typically three years after completion). The limitation of

liability is set in many standard forms of agreement at twice the professional fees paid

or a mutually agreed amount.

The purpose of professional indemnity insurance is to provide the insured professional

with funding for the investigation, defence and settlement of claims arising from the

execution of their professional duties. Although this provides a measure of protection

to the client, the policy is the property of the insured professional. Under most

professional indemnity insurance policies, the sum insured covers the cost both of

defending and settling the claim. Thus, the amount available for compensation of

damages could be significantly less than the sum insured.

5.2 **Other Insurances**

Professional indemnity insurance excludes any claims which are not related to the

performance of the registered person's professional obligations. It is therefore prudent

to ensure that the contractor has a Contractors' All Risks insurance policy in place and

that both the contractor and the engineer carry Public Liability insurance.

6. **FURTHER READING**

The following documents may provide additional information:

a) ECSA Code of Conduct - Engineering Council of South Africa

(www.ecsa.co.za).

Rules on the Method of Inquiry into Alleged Improper Conduct - Engineering b)

Council of South Africa (www.ecsa.co.za).

Framework for determination of Professional Fees - Engineering Council of c)

South Africa (www.ecsa.co.za).

d) Guideline Scope of Services and Tariff of Fees for Persons Registered in

terms of the Engineering Profession Act, 2000 (Act 46 of 2000) and

Indicative Time Based Fee Rates - Engineering Council of South Africa

(www.ecsa.co.za).

Document source: H:\Alljobs\0023 ECSA\Advisory Notes\General Public RevC.doc

Document template: Letter_tem_Rev1_Jan10.dotx

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