

## BOARD NOTICE 177 OF 2009



## CONSULTATIVE FRAMEWORK FOR DETERMINATION OF 'ECSA PROFESSIONAL FEES' GUIDELINE

Engineering Profession Act No. 46 Of 2000

### 1. INTRODUCTION AND BACKGROUND

#### 1.1 Legal requirements

In terms of Section 34 of the Engineering Profession Act of 2000, the Engineering Council of South Africa (ECSA) is required to publish guideline professional fees as laid down in Section 4 of the Council for the Built Environment Act, 2000.

Section 34(2) of the Act also requires ECSA to review the guideline tariff of fees on an annual basis and to publish these reviews in the Government Gazette. The reviewed set of guideline tariff of fees, together with guidelines on the definition of the associated scope of work, are published annually by ECSA and are applicable from the first of January of the year until the 31<sup>st</sup> December of that year. These published guidelines are referred to as the "Gazetted tariffs" further in this document.

Clause 8 of Annexure "A" of the '**Policy Framework for the Determination and Review of Guideline Professional Fees for Built Environment Professions**' (CBE Guideline on Professional Fees) requires that "Councils for the Professions shall post a consultation paper on their websites ..... (which) must outline issues likely to be relevant and influence guideline professional fees and take into consideration the principles laid down in this policy framework as part of the determination process". This forms the basis for the Council for the Built Environment to review guideline professional fees published by ECSA in terms of subsection 4 [r] of the Council for the Built Environment Act, 2000 and section 34(3) of the Professions Act.

#### 1.2 Purpose

The purpose of this framework is to describe the basis on which guideline professional fees are established and to set down a method for the annual review of the guidelines. This framework shows how a set of tariffs is developed to serve as a guideline for determining the fees to be paid for engineering services that is fair and equitable to all parties.

#### 1.3 Principles

The guideline tariffs are based on the **Cost of the Works** as defined and assume that the location, size, character, form and function of the works has been defined through previous studies and investigations that have either formed part of the client's normal business practices or have been the subject of separate appointments paid for on a time and cost basis. Guideline hourly rates for such time and cost appointments are also published in the Gazetted tariffs.

The client and consulting engineer may use the guideline tariffs to come to a mutually acceptable agreement on the appropriate fee by taking the following into account:

- The technical factors listed in Section 4 of the Gazetted Tariffs.

- Ensuring that a clear description of the Scope of Services is provided using the comprehensive descriptions in Section 3 of the Gazetted Tariffs as a basis.
- Ensuring that the Scope of the Works involved in the project is clearly defined and documented.

The client and consulting engineer should then agree on commercial terms that set out the timing of deliverables and related payments as well as the method of payment. A balance must be sought between service provider cash flow and client risk.

ECSA uses the opportunity provided by the mandatory annual review of the tariff of fees to regularly simplify and clarify the guidelines thus enabling the client and consulting engineer to negotiate equitable fees on an equal footing and informed understanding of the guidelines.

An example of this is the inclusion of a graph in section 4.2 of the Gazetted Tariffs to provide a convenient way to express the fee payable if the scope of work is uncertain, which is to use a percentage fee based on the Cost of the Works. The typical range of percentage fees applicable to different size projects and services provided are shown in a graphical illustration.

#### **1.4 Inclusivity**

ECSA Council has established a fees committee that comprises representatives of all the parties that regularly use the Gazetted Tariffs. The committee meets several times per year to discuss amendments to the Gazetted Tariffs and to update the guidelines to accommodate industry trends and inflation. This committee includes people from the public and private sectors, client bodies, service provider associations and related industry bodies. The Fees Committee does not have executive authority and provides Council with advice and recommendations.

## **2. GUIDELINE PROFESSIONAL FEES**

The following guiding principles taken from the CBE Policy Framework on Professional Fees have been considered in the determination and review of the Engineering Council of SA (ECSA) guideline on professional fees.

### **2.1 Principle 1: Simplicity of Guideline Professional Fee Structure**

In configuring the Gazetted Tariffs, ECSA has promoted

- efficient market competition, the entry of new competitors and investment and innovation,
- the longer term interests of the public, and
- simplicity of the tariff structure while maintaining the guidelines as a useful source to all users.

In particular, ECSA has considered the following sub-principles in developing its guideline professional fee structure:

- The need to rationalise the Gazetted Tariffs structure for each discipline within the Engineering profession.
- Linking the professional fee structure with the productivity of capital employed, manpower resources and quality of services so as to protect the interests of the consumers
- Unique characteristics of the professions and the ruling economic climate;
- Discourage "market powers" that may force professional fees lower than is appropriate;
- Focus on promoting efficiency and effectiveness in the professions; and recognition of a reasonable cost base of service providers and reasonable rate of return on:
  - investment,
  - intellectual capital,

- effort and,
- most importantly, risk.

In determining the Gazetted Tariffs ECSA has a responsibility to ensure that the public interest is served. The Gazetted Tariffs must not be excessive but must provide for fair and reasonable remuneration for the providers of professional services. Clients should be provided with services not only at a fair, market related cost, but also at a cost which reflects adequate compensation to enable service providers to render a good quality service.

The Gazetted Tariffs must also take into account the great variety of nature, size and complexity of engineering projects. The basic tariffs thus assume a project with an average (or normal) degree of complexity with some repetitive content. Adjustment factors are provided to make provision for different types of work, or work requiring a greater or lesser effort on the part of the service provider. The tariffs also reflect the size of the project and recognise that because of scale, a proportionately greater effort is required to provide an acceptable level of service on a smaller project when compared with a large project.

Finally, different tariffs must be applied to engineering projects where the consulting engineer is the sole or principal agent of the Client and to building projects where the consulting engineer is part of an overall professional team.

ECSA has included the following two predominant engineering fee structuring methods in its Guidelines on Scope of Services and Professional Fees:

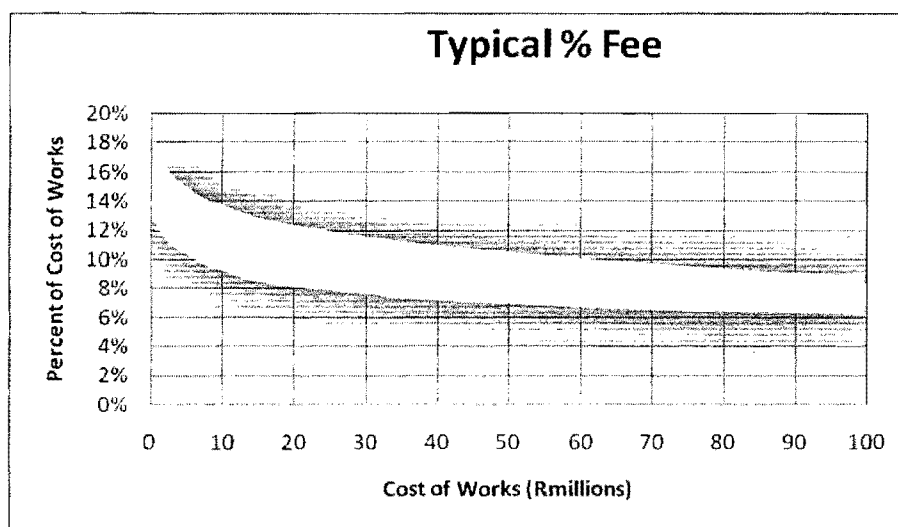
#### **2.1.1 Percentage fees**

The Gazetted Tariffs provide tables showing guideline percentage fees based on the Cost of the Works and show a guideline split per project stage taking into consideration the value of professional services in proportion to the stage of services rendered and associated risks.

These percentage fee scales were developed and have been used in South Africa over a period of many years and are reflected in broad terms on the graph below. These guideline percentage fee scales are adjusted annually by increasing the Cost of Works bands set for each percentage using typical inflation rates experienced in the industry. The system is designed to be self-explanatory and quick and simple to use

There are arguments that the percentage fee system does not encourage cost savings by engineers as a higher Cost of Works will result in a higher fee. However, the client is a party to the project development cycle and should be capacitated to approve project size as the work progresses. For informed clients this is seldom a problem.

Experience has shown that on small projects a simple percentage fee does not provide fair compensation. This is because, regardless of project size, the service provider will always incur certain fixed basic costs such as completion of professional services agreement, first site inspection, attendance at briefing meeting, tender adjudication and award, conclusion of final account, etc. On larger projects, these costs can be absorbed as part of the overall duties of the service provider, but on very small projects, the value of these costs is high in relation to the total fee. In order to overcome this problem, the fee on all projects below a pre-determined value will be agreed upon between the parties as a lump sum or paid on a time and cost basis.



To assist the client and its engineers to determine an appropriate fee the Gazetted Tariffs offer advice on how to deal with the following issues:

- Differentiation of the type of project under consideration ,e.g. building vs. civil
- Nature of the asset in the life cycle e.g. green field project, remodeled project
- The timing of asset creation, e.g. phased construction projects
- Repetitive design (site adaptation of previous designs to reduce the scope of services) or prototype
- Where projects involve a substantial amount of expensive equipment that may be easy to accommodate with less design or project management effort
- Economies and diseconomies of scale resulting from the size of projects
- Complexity of the project.

### 2.1.2 Time based fees

On projects involving normal services together with a well-defined scope of services, it is accepted practice for fees for professional services to be calculated on the basis of a percentage of the Cost of the Works for which the service provider is responsible as described above. In other cases, where the scope of services is ill-defined, or on small projects, or where the work is of an unusual or specialised nature, it is more appropriate to use a time-based fee where the service provider is compensated for services rendered on the basis of hourly rates.

The tariff for professional services rendered on a time basis is based on the total annual cost of remuneration of the person employed on the service.

The data and parameters used to determine time based fees were developed over a long period of time using the results of various studies and surveys of overhead costs and time allocations in the industry and are considered to be fair and equitable. Provision is made for a realistic profit margin.

The method is consistent with the Draft Guideline on Fees for Consultants, which has been developed by the Department of Public Service and Administration

Time based fees suggest hourly rates for persons in each category of registration, position in the firm or responsibility in the project team. In this case the guideline on fees takes into consideration factors such as professional status, level of experience and responsibility on the project team. The method of calculating applicable hourly rates is based on clearly specified

parameters which encourage investment and employment consistent with labor economic factors and accommodate the following factors:

- cost structure of the professional practice,
- cost of educating and training professionals,
- cost and value of intellectual capital,
- scarcity value of professionals,
- exposure to professional and business risks and maintaining integrity,
- cost of developing and maintaining the technology, and
- reasonable return on investment or profit.

Guidance is given on the circumstances where the above examples of fee structuring may not be suitable. For example, time based fees may reflect billable hours rather than the value of work to the consumers while cost-based fees may not reflect or encourage an economic use of resources.

## **2.2 Principle 2: Scope of Services and alignment of fees with product development cycles or project stages**

The ECSA Gazetted Tariffs refer to a generic Scope of Services for engineering, in which the relevant project stages or product development cycles are defined. There are cases where the professional services provided do not follow typical project stages or product development cycles. In such cases this principle may be relaxed.

Guideline professional fees based on the Cost of the Works must indicate how professional fees due per project stage are determined according to the level of effort required and taking into account the professional services still to be provided to complete the assignment.

The fact that built environment projects and services often go through generic project stages or product development cycle enables a common structure of the fee regime to be used for the various Built Environment Professions.

The merit of using project stages or product development cycles for determination of guideline professional fees is that the involvement of one or more built environment profession over the same stage, though in different project times in some cases, can be identified and where there are gaps or overlaps of functions, adjustment should be easy to accommodate.

The following fundamentals form the basis for considering project stages or product development cycles (where applicable) as the basis for establishing guideline fees:

- The generic project stages or product development cycles are accepted as a principal reference for most built environment professions.
- The level of involvement in the project is determined by the scope of services provided by the respective professional and is a commercial matter between the professional service provider and the client.
- The nature of the project will dictate which parties are involved in the project and consequently the professional services required from them.

## **2.3 Principle 3: Ensuring that Guideline Professional Fees reflect market related costs**

ECSA has taken the following criteria into consideration when determining the guidelines on professional fees:

- clear description of the Scope of Services to be provided,
- the unique characteristics of the engineering profession and current economic environment within which engineering operates,
- discourage market powers which may reduce professional fees,

- encourage registered persons to produce goods and services efficiently and price them competitively,
- fees reflect an efficient cost base and a reasonable rate of return,
- provide a reliable base for updating fees and accommodating qualitative and quantitative changes such as those arising from new technology, new services, techniques, etc.,
- structural and productivity changes affecting the way registered persons practice or perform services,
- commercial risk,
- allowance for profit.