

## Transformation at ECSA

The Engineering Council of South Africa (ECSA) has embarked on a journey of transformation in order to ensure maximum efficiency in the delivery of its core mandate and consequently improve its service to the engineering profession and the public at large.

In accordance with the Engineering Professions Act (Act 46 of 2000), ECSA has as its core mandates the accreditation of engineering programmes, registration of engineering professionals and ensuring that registered professionals adhere to the Code of Conduct.

The fact that South Africa is a developing economy places ECSA in a critical position as a key role player in providing well equipped engineering professionals to render the necessary skills. ECSA is aware of the salient challenges that are associated with its role in the national development agenda. Paramount among these is ensuring a critical mass of registered engineering professionals, whilst striving to meet the equity targets.

Currently, South Africa has 1 engineer for every 3100 people, compared to, Germany with 1 engineer for every 200 people. In countries like Japan, UK and USA, this ratio stands at about 1:310. Therefore South Africa needs to produce 10 times more engineers in order to compete favourably with developed economies.

In addition, according to the ECSA database, the current profile of registered engineering professionals is not balanced in terms of gender and race. There are approximately 34 000 registered professionals in the ECSA database of which more than 14 800 are registered professional engineers, i.e. engineering professionals with a degree from a recognised university. Of this total, females constitute only 3%, whilst blacks comprise less than 12%.

In order to efficiently and equitably deliver on its mandate, ECSA has to revisit its processes, systems, culture, infrastructure and even the legislation that governs it. While most of these interventions are already being addressed through the Joint Implementation Committee (JIC) and the Transformation Task Team (TTT), working together will ensure the achievement of these interventions.

### a) Processes

The depth and extent of processes that enable ECSA to perform are largely confined to the following dimensions:

- *Evaluation of foreign qualifications*

ECSA has witnessed an increasing number of applicants with qualifications from institutions that are not signatories of the existing international agreements. Whilst ECSA has a process in place that is dedicated to this purpose, it is currently undergoing improvements in order to efficiently deal with the large numbers.

- *Registration of candidates*

ECSA has realised the need to broaden its mandate beyond just registration, but to influence the rate at which registration takes place by communicating the need and benefits of registration to undergraduates and academics. ECSA will also use this avenue to understand and possibly address the low rate of conversion from candidate to professional status. If needs be, a dedicated research investigation may be mandatory in this regard, as there can be no sustainable solution without full comprehension of the problem.

- *Registration of professionals*

ECSA is aware that some applicants are not well informed of the registration requirements, which results in inadequate information being supplied by candidates during application for registration. This consequently leads to the rejection of the application; and resentment on the part of the applicant. ECSA has resolved to communicate more with the applicants so as to minimise this situation.

Furthermore, ECSA is exploring the possibility of establishing an Industry Forum that will enable better communication between ECSA and employers, with the objective of assisting during the training and application period.

- *Discipline, accreditation of engineering programmes and Continuing Professional Development (CPD)*

Although ECSA has identified these as critical processes, they are largely under control and any intervention will be aimed at improving the communication around these processes, rather than changing the current framework.

## **b) Systems**

ECSA is currently putting systems in place that are aimed at shortening the registration process, whilst making it more transparent to the applicant. This means the applicant will be able to interact directly with the system and know the extent of the registration process. The Information Technology (IT) framework is under reconstruction to deal specifically with this aspect.

In addition, ECSA has constituted a committee the objective of improve on the appeals procedure in event of rejected applications.

## **c) Culture**

Transformation in the organisation also extends to the internal workings of ECSA. ECSA is committed to communicating on issues that affect the engineering profession, as well as the state and its organs. Through improved communication and visibility, ECSA hopes to transform the organisation to one that serves all its publics.

## **d) Infrastructure**

ECSA has identified infrastructure as one of the key areas of focus, this should be understood in the context of the aforementioned *systems*. Consequently, infrastructure pertains mainly to full exploitation of existing technology, encompassing both hard- and software. We are therefore in the process of aligning our infrastructure with our information technology to ensure seamless processes.

**e) Legislation**

ECSA has embarked on a full participatory process with other engineering professions through the Council for the Built Environment (CBE) to bring the concept of Identification of Engineering Work (IDoEW) to fruition. The implications of this exercise are far reaching, as it would then be mandatory to be registered in order to perform engineering work.

ECSA has identified the urgent need for fundamental and comprehensive transformation and has moved accordingly to realise its objectives. Significant work has been done in this regard and it is hoped that the process is completed during the term of office of the current Council.