

## ENGINEERING COUNCIL OF SOUTH AFRICA STRATEGIC PLAN 2020-2025



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# FOREWORD

In the past quinquennium [2015-2020], the Engineering Council of South Africa (ECSA) has made big strides in turning the engineering profession into a fairly well-coordinated and functioning Council. We placed a lot of emphasis in putting structures and frameworks to guide the operations of the engineering profession. This earned us our jealously guarded position in the international community to remain one of the countries whose engineering standards are comparable to the world's best. Our performance levels as an organization have seen a sustained improvement and we are making even more strides in ensuring a collaborative effort with our endeared stakeholders.

It is on the strength of these solid gains, that we are fortified in our resolution to create an even better ECSA in the next quinquennium [2020-2025] which is the focus of this strategic plan. In the ensuing term, we have resolved to become an even more effective regulator seeking to assure engineering excellence. We will achieve this vision by ensuring that our engineering standards continue to be pegged at the level of international standards while our regulatory interventions are geared towards quality, effectiveness, efficiency and a more outward looking focus towards public protection.

We are determined to reorient our systems, people and processes towards customer orientation and customer-centric approach. To this end, we will create levers for harnessing relations with our esteemed stakeholders seeking to engage with them as we improve our processes.

It is also imperative that the effectiveness of ECSA as a regulator must be underpinned by revised legislative, regulatory and policy frameworks to assure a robust regulatory approach. The legislative amendments which must be driven as part of this new strategy must give effect to an ECSA that is able to maintain necessary discipline in compliance with professional and ethical standards. As we pursue all of these initiatives, we will seek to establish an ECSA that is not only lean and efficient but one that is supported by modern and efficient technology for its processes as well as staff that are driven by impeccable performance standards.

It is our desire to see to it that the long outstanding business of identification of work is also finalized during this term.

Above all, we intend to ensure that ECSA continues to be financially viable and sustainable so as to effectively discharge its regulatory mandate. I invite you to join us in this exciting journey and I am pleased to present this strategic plan for 2020-2025 for our collective roll-out and implementation.

MR C V GAMEDE PRESIDENT

## ECSA STRATEGY 2020-2025

### 1. VISION

An effective regulator assuring engineering excellence.

#### 2. MISSION

ECSA seeks to achieve this vision through:

- Determining engineering standards for education, accreditation and registration;
- □ Registration of eEngineering practitioners;
- Developing and sustaining a relevant, transformed, competent and internationally recognized engineering profession as well as practice standards;
- □ Enforcing compliance with education, training, registration, continuing education and professional practice standards;
- Maintaining a competent workforce, efficient and adequate governance structures and systems;
- □ Educating the public on expected engineering quality standards and protecting the interests of the public against sub-standard quality of engineering work;
- Regulatory efforts to ensure environmental protection; and
- Engaging with Government to support national priorities including transformation of the engineering profession;
- Instituting collaborative efforts with ECSA stakeholders with a view to enhancing ECSA offerings.

#### 3. VALUES

- □ **Professional** Conduct beyond reproach to the highest ethical standards underpinned by integrity, quality, timeliness, trust and respect.
- □ Accountable Doing what we commit to do in an environment of trust and respect and being answerable for our failures to meet our committed obligations.
- **Collaborative** Working as a team to achieve exceptional results.
- □ **Transparent** Honest and open communication and sharing of information between stakeholders.
- □ Innovation utilizing creative energies in collaboration with ECSA stakeholders to identify improved, enhanced and more cost-efficient engineering practice solutions.

## 4. ENGINEERING COUNCIL OF SOUTH AFRICA

The Engineering Council of South Africa (ECSA) is a statutory regulatory body established in terms of section 2 of the Engineering Profession of South Africa Act, 2000.

## 5. CONTEXT OF THIS STRATEGIC DOCUMENT

The new term of Council of ECSA commences in July 2020 and terminates in June 2025. In keeping with good corporate governance and legislative requirements, ECSA is required to develop and adopt a strategic framework to guide its operations for the five year term. This document outlines the strategic path that ECSA seeks to follow during the term 2020-2025.

## 6. REFLECTIONS ON PAST PERFORMANCE

In order to appropriately contextualize the strategic framework, it was important to reflect on the past term's highlights and lowlights. This section identifies those areas where ECSA performed well as well as those areas where its performance was less than ideal. It is necessary to reflect on these in order to optimize on the past positive performance and strengthen the sub-optimal performance areas.

#### 7. HIGHLIGHTS

- Membership increase of the register particularly of the Historically Disadvantaged Individuals
- □ Taking full charge of the registration process
- Enhanced maturity levels in terms of regulatory business process and internalization of the application of those processes
- □ Improvement of processes and systems e.g. more consistency in decision-making
- Increased national footprint
- Improved sensitivity to the needs of the profession
- Enhanced demographic profile of council structures and enhanced institutions in council structures
- □ Improvement in Governance
- Broad view
- □ Introduction of Research
- Overall improvement of the organization
- Revenue collection
- Quality of skilled and accountable staff

- Leading voice in profession transformation
- □ Stability

#### 8. LOWLIGHTS

- Low customer care
- □ Inability to optimize relations with Voluntary Associations (VAs)
- Lack of progress in Legislation review
- □ Uncertainty regarding the question of Public Finance Management Act (PFMA) compliance
- □ Inability to optimize Technology
- □ Not fully recognized as the voice of the Industry
- Blurring of lines with the authority of the regulation
- □ Low staff morale and customer care
- □ High volume of work versus capacity and professionals not being responsive
- **D** Engagement with the practitioners not efficient
- Lack of trust, common purpose and alignment within the organization
- □ Cost inefficiency in ECSA processes
- Ongoing tension between statutory regulation and self-regulation of the profession
- □ Recognition of prior learning (amorphous)
- □ No full grasp of operational Typology
- Stakeholder management is suboptimal. Not fully engaging the 4P's of Marketing:
  - o Place
  - o Product
  - o Price
  - Promotion
- Lack of value chain analysis
- □ Limitations of legislation and CBE legislative framework. Some elements of the legislation are confusing and misaligned e.g. funding

- Absence of dead-lock breaking mechanism on Identification of Work
- Inadequate succession planning

### 9. UNPARALLELED VALUE PROPOSITION OF ECSA

#### The ineffective or inefficient ECSA might lead to the following:

- Dependence of the profession for public safety
- □ Inability to build competent professionals and practitioners
- □ Lack of standard setting and quality assurance in terms of education and training centers.
- □ No clearly defined standards
- □ High risk on health and safety
- □ Lack of quality standards in education and engineering profession interventions/programs

### 10. APPLICABLE LEGISLATION

ECSA is a statutory body operating in the public sphere to execute a regulatory safety mandate and therefore subject to various pieces of legislation and regulatory frameworks. To mention but a few and this list not being exhaustive, ECSA is governed and/or influenced by the following pieces of legislation and/or codes:

- □ Constitution of the Republic of South Africa
- **D** Engineering Professions Act
- Companies Act
- D Public Finance Management Act
- Municipal Finance Management Act
- Council for the Built Environment Act
- □ King Code of Good Corporate Governance
- Dependence of Just Administrative Action Act
- Protection of Private Information Act
- Labour Relations Act
- Employment Equity Act
- Skills Development Act
- Protected Disclosures Act
- Occupational Health and Safety Act and its Regulations
- □ Mine Health and Safety Act
- Basic Conditions of Employment Act, etc

#### 11. REGULATORY PHILOSOPHY

Best practice regulatory approaches dictate that an effective Regulator should, inter alia, be guided by the development and implementation of quality standards in whatever regulatory area in order to provide reasonable and not necessarily absolute assurance that the public or consumers of services are adequately protected. In driving its regulatory agenda, any Regulator must be informed and influenced by the highest possible standards of efficiency and effectiveness. The diagram below depicts this philosophy:



#### Fig.1: The Regulatory Philosophy Pillars

The core focus of the Engineering Council of South Africa is to provide and implement a framework for the assurance of quality standards in education, training and professional conduct and/or practices of the engineering profession. In pursuing this mandate, ECSA must fully exhibit the following characteristics which define an impeccable Regulator:

- □ Efficiency
- Effectiveness
- □ Independence
- □ Sustainability
- Customer Orientation



#### Fig.2 – Descriptors for an Effective Regulator

An independent Regulator exercises its regulatory authority without fear, favour or prejudice. Its regulatory decisions are consistent and based on objective and independent criteria which are underlined by the Constitutional values of transparency, adherence to the rule of law, fairness and justice. To this end, ECSA shall strive to ensure that its education and training standards are underpinned by quality, objectivity and best practices in the global sphere of engineering professions. Additionally, ECSA shall make determinations on registrability of candidates based on objectively set criteria for registration of engineering professionals, while ensuring that professional practice codes are enforced on the basis of predetermined and objectively ascertainable criteria. The figure below outlines key focus areas for ECSA:

### Quality Standards - in:

- Education & Training
- Accreditation of educational and training programs
- Registration
- Professional and Ethical Practice Standards

#### **Public Protection**

- •Competent Engineering Practitioners
- •Code of Conduct
- •Professional Practice Code
- ·Enforcement of compliance with Standards in all spheres

#### Independence

- Regulatory authority
- •Free from undue influence [impartiality]
- •Sustainability
- Consistency
- Objectivity

#### Fig.3 – Regulatory Functions and Attributes

## 12. REGULATORY PHILOSOPHY DESCRIPTORS

#### 12.1 Independence – shall mean an ECSA that:

- a. Exercises impartial judgement and applies justice with fairness and without fear, favor or prejudice in the determination and maintenance of standards.
- b. Is financially sustainable and viable
- c. Is consistent and objective

#### 12.2 Quality

Although premised on ISO 9001 definition of quality, Council will approach quality and its measurement in its broadest sense and diverse dimensions to include the following considerations:

- a. Developed practitioners and mechanisms through which they are developed must be fit for purpose particularly as regards education and training standards;
- Practitioners qualified and registered with Council must also be fit for purpose and be able to execute their professional mandate as they should in line with best engineering practices;
- c. Fit for purpose governance structures and support staff (administration) driven by quality, efficiency and effectiveness; and
- d. Fit for purpose infrastructure and systems to enable smooth operations of the Regulator.

#### 12.3 Effectiveness

- a. A regulatory body that is able to assert its authority and position by enforcing its policy and regulatory frameworks.
- b. Consistency in decision making and upholding the ethic of the profession.
- c. Able to drive its processes in a manner that gives rise to desired outcomes.

#### 12.4 Efficient

- a. Unparalleled customer care in the entire value chain of ECSA activities and processes and also looking into how to meet the expectations of the stakeholders. This must include a concerted effort by the Council to enhance government and other stakeholder relations and interaction seeking to heighten governmental interest in ECSA programs and initiatives.
- b. Modern and efficient technology to support operations.

c. Speedy resolution of issues and quick turn-around times for decisions.

## 13. REGULATORY MODELS

The figure below depicts different models in the regulatory approach which may be applied independently of other considerations or in certain instances, with some level of integration of the styles.



Fig.4 - Regulatory Models

ECSA currently uses a hybrid model which combines the in-house and outsourced model of regulation where certain regulatory functions are handled in-house while the other functions are delegated to external panels which are constituted to assess, moderate and professionally review engineering professionals seeking registration with Council. There is merit in pursuing and maintaining this approach due to inadequate internal capacity to perform these functions solely within ECSA. If these functions are to be carried out internally, then ECSA would need to create a permanent structure within the staff administration to see to the execution of these functions. The existing model still provides for accountability in that the external panels are still accountable to ECSA governance structures.

To this end, the regulatory model to be followed by ECSA shall be based on the following principles:

- a. ECSA shall pursue a philosophy of self-regulation where the profession sets and enforces its own education, training, quality, and practice standards in an objective manner geared to protect the public from harm while ensuring its standards are comparable to the world's best.
- b. Some of the regulatory functions may be outsourced [delegated] to appropriate individuals or group of individuals/committees as and when deemed necessary but the Council shall not be divested of those powers.

It is considered prudent not to create internal permanent capacity to evaluate or assess professionals for registration as this function needs to be premised upon independent peer review considerations. The creation of a permanent capacity within ECSA to evaluate or assess professionals for registration may lead to unintended consequences where power is centralized to one and the same individuals which might impair objectivity.

Best practice in this regard is that the principle of peer review is maintained where independent peers and/or structures evaluate and assess proficiency of their colleagues for registration purposes. In line with continuous improvement principles, ECSA will continue to explore more efficient mechanisms for enhancing its registration model while maintaining the principle of independent peer review processes.

#### 14. **PESTEL ANALYSIS**

#### 14.1 Political Environment

Uncertainty with new leadership in government. However there is excitement for the upcoming programs and a lot of opportunities. The advent of fairly new leadership might present an opportunity for a fresh approach to ECSA issues.

#### 14.2 Economic Environment

Stressful economic environment, which has an impact on the registration fees. Priorities of the government may have an impact on the public as well as the regulatory regime, however there are opportunities to leverage other income generating avenues such as CPD. ECSA needs to explore all possible avenues to generate alternative income.

#### 14.3 Social Environment

ECSA operates in a socially diverse environment. There is an issue with regards to the relevance of the profession to the public in terms of knowing and understanding the organization. Social mobilization is required in order create awareness of the engineering profession and attendant transformation principles that should characterize ECSA and what it stands for.

#### 14.4 Technological Environment

ECSA is playing catch up and must get the full grasp and understanding of the 4<sup>th</sup> Industrial Revolution and what it would mean for ECSA. Technology is not fully optimized in ECSA processes resulting in a number of manual, outdated, inefficient and risky processes and systems. A model customized Enterprise Resource Plan is required in order to enhance efficiencies of ECSA and create an image of regulatory effectiveness. This will also create top end IT skills within ECSA and provide a framework for IT disaster recovery capacity.

#### 14.5 Environmental

South Africa is a developing country and as a result there are massive engineering and infrastructure development activities that have an impact on the destruction of the environment. There are positive initiatives aimed towards the exploitation of renewable energy.

There is a need for the development of an integrated framework for uniformity in approach when dealing with climate change across the board to bring a balance in engineering practices and development initiatives.

A regulatory approach to environmental issues and enforcement needs to be developed so that engineering practices are informed by considerations of environmental safety and quality standards as underpinned by ISO 9001.

#### 14.5.1 Legal

The mandate of ECSA in terms of the founding Act, is clear, however it has aspects which are vague and that will ordinarily impact operations. For example, the regulation would state that a person that is supposed to sign off a drawing is a suitably qualified person but does not identify in what respect suitability is defined.

A number of legal gaps leading to ineffective regulatory approaches and decisions are quite prevalent within ECSA. The inadequacy of the legal framework or inadequate exploitation of the enabling legal provisions to force everyone into a net of registration while also ensuring that professional practices are linked to the scope of training and experience, are critical gaps in the environment, currently. These gaps require urgent legislative and regulatory reforms.

## 15. STAKEHOLDER ANALYSIS

ECSA conducted a stakeholder analysis to identify not only the critical stakeholders with whom it ought to interact but also the expectations of those stakeholders from ECSA. Some of the key ECSA stakeholders are depicted below:



Fig.5 – ECSA Primary Stakeholders

STAKEHOLDER	EXPECTATION FROM ECSA
Registered persons	Protection of their working environment, protection of scope, value for money, equitable accessibility, constant communication, transparency in business dealings, CPD regime that is accessible and affordable and an efficient system.
Consumers (public)	<ul><li>Safety and quality engineering standards.</li><li>Competent Engineers.</li></ul>
The State/Government	Advancement of public policies in terms of transformation and access to the profession as well as public safety. Transformation outlook of the engineering profession which

	takes root and is driven from the Transformation Plan.	
Media	Information.	
Higher Education	Accreditation and registration of their engineering programs	
Institutions and Academies	and endorsement of their programs.	
International Organizations	Uniformity of standards with regards to registration. They	
	also expect development, capacity building and integration	
	of systems of equivalence or mutual recognition.	
Voluntary Associations	For ECSA to protect and advance their interests in order for	
	the profession to grow and remain sustainable. They also	
	expect consultation and for their members to receive	
	discounts on annual fees as well as participation in ECSA	
	committee work i.e. registration etc.	
Council for the Built	Reporting	
Council	Performance and efficient, professional administration	
Staff	Personal development	
	<ul> <li>Systems to accelerate efficiency</li> </ul>	
	<ul> <li>Open communication</li> </ul>	
	<ul> <li>Recognition and rewards</li> </ul>	
	◦ direction	
Employer Bodies	o Information	
	<ul> <li>Connecting Mentees to Mentors</li> </ul>	
	<ul> <li>Quality assurance of competent engineers</li> </ul>	

## 16. THE REGULATORY MANDATE

The ECSA mandate is given and pre-defined in the Engineering Professions Act. It includes the following key domains as depicted in the diagram below:



Fig.6 – Focus Areas of ECSA Regulatory Mandate

## 17. PROGRAMME 1: EDUCATION & TRAINING STANDARDS

## STRATEGIC GOAL: Quality engineering education and training programs

BASELINE	ECSA has determin	ed the education polic	cies and standards that are
	globally competitive	that are aligned to the	ne International Engineering
	Alliance (IEA) and h	as accredited 222 eng	pineering programs as at 31
	March 2018. Below is a comparison of the baseline status and mid-term		
	review of the current	strategy.	
	Programme	Previous baseline	Current baseline
		(31/03/2015)	(31/03/2018)
	B. Eng/ BSc (Eng)	50	50
	BTech	93	94
	National Diploma	79	78
	Total	222	222
	ECSA managed to	maintain its internation	nal standing by retaining its
	signatory status to th	ree educational accord	s and increased signatory to
	competency agreem	ent as follows:	
	Accord/Agreemen	t Previous baseline	Current baseline
		(31/03/2015)	(31/03/2018)
	VVashington Accord	Yes	Yes
	Sydney Accord	Yes	Yes
	Dublin Accord	Yes	Yes
		Yes	Yes
	Engineers		
	Agreement (IPEA)		
	latera d'an al		No.
		res	res
	Engineering		
	Agreement (IETA)	of No	Vee
	Agreement		res
	Engineering		
		ssioned a research of	udy in 2018 to explore the
	possibility of introduc	solution a research st	education that is aligned to
	alobally competitive	education standards for	
	giobally competitive t		Universal / 100035.

KEY PERFORMANCE AREA	ACTION PLAN	KEY PERFORMANCE INDICATORS/TARGETS
Determination of education standards	i. research and introduce globally competitive education standards in engineering professions	i. globally competitive education standards that are recognized internationally
	ii. formulate core engineering pillars for the curriculum and exit competencies in various categories	ii. clear exit competencies on core domains
	ii. research impact of 4 <sup>th</sup> Industrial Revolution on new career or professional pathways and emerging fields	ii. appropriate framework in place to accommodate future and innovative developments such as the 4 <sup>th</sup> Industrial Revolution developments
Accreditation of educational programs	<ul> <li>set and/or maintain accreditation criteria, for institutions and create a pathway for TVET Colleges, Academies and programs for seamless integration into mainstream engineering qualification disciplines.</li> </ul>	i. accreditation criteria in place with strict monitoring for adherence to set accreditation standards
	ii. accredit educational programs that meet criteria	ii. pathway for seamless integration of TVET Colleges, Academies and programs with engineering disciplines, created
	ii. withdraw accreditation where educational programs do not meet set criteria	iii. withdrawal or administration of non- compliant programs
	iv. publish list of accredited programs	v. list of accredited and compliant programs
	v. ensure legislative framework prohibits education and training which is unaccredited by ECSA or grants legal authority to disregard such training for purposes of registration	v. authority to disregard unaccredited education is established in terms of the law

	vi.	facilitate training of candidate engineers either internally or through a system of accredited providers	vi.	framework for training candidate engineers is developed and approved.
Monitoring of compliance with accreditation of standards	i.	conduct regular assessments of compliance with accreditation standards	i.	every 4 years, normal accreditation reviews and for programs that are struggling with compliance, on such regular basis as may be deemed appropriate

## 18. PROGRAMME 2: REGISTRATION OF CANDIDATES AND COMPETENT ENGINEERING PROFESSIONALS

**STRATEGIC GOAL:** Registration of all professionals in the engineering profession who practice in the field of engineering

**BASELINE** The recently approved new registration system in 2017 has reduced the registration turn-around times from 18-24 months to 4 months. The electronic registration system was launched during 2018 but presents with challenges such as migrating and data from the legacy system to the new system and the challenges around issuing of registration certificates on the new platform. ECSA has during 2018 increased its national footprint and established 4 pilot sites in Durban, Cape Town, Bloemfontein and East London. 52 557 engineering practitioners are registered with ECSA as at the 31 March 2018. Council is of the opinion that there are more practising engineers who are not registered but there is no empirical evidence to support the view.

KEY PERFORMANCE AREA	ACTION PLAN	KEY PERFORMANCE INDICATORS/TARGETS
Determination of	i. continuously improve	i. appraisal to Council on
Registration	registration model for maximum	the effectiveness and
Pathway	efficiencies while monitoring the	maturity level of the current
	strengths and weaknesses of the	registration model as part of
	current model	ongoing process and quality
		improvement reviews

KEY	ACTION PLAN	KEY PERFORMANCE
AREA		INDICATORS/TARGETS
	ii. framework for training candidate engineers is developed and approved.	ii. cost-efficient and effective registration model embedded.
	iii. adopt most cost-efficient system which has minimal subjectivity and free from unnecessary bureaucracy	iii continuous improvement of the registration system per annual targets
Registration of professionals assessed and/or certified as competent	i. Create an obligation for registration with Council for any person wishing to practice in or perform any act relating to any of the engineering disciplines and programs as accredited by Council.	i. Publish overarching Rules in the Gazette terms of Section 36 (1) of the EPA with clear consequences for failure to register with Council while practicing a profession in the engineering discipline or fields.
	ii. create a seamless and efficient registration system for all professionals certified as competent to be registered	<ul><li>ii. fit for purpose and efficient technology deployed to support registration</li></ul>
	iii. register professionals who meet set criteria	<ul> <li>iii. professionals who meet set criteria for registration are registered within a period determined in the annual targets</li> </ul>
	iv. give effect to prohibition of any person performing acts pertaining to the engineering profession without registration with ECSA	iv. enforcement model in place to deal with unregistered persons performing engineering acts (Section 36 Rule)
	v. Fast-track Identification Of Work (IDOW) process with CBE in terms of Section 26 of EPA.	v. enforcement model in place to ensure that registered persons practice in the category of their registration and professional competence

#### Footnote: Identification of work

Identification of Work – defined as a process where acts specifically relating to the engineering profession are identified with the scope limits regulating the type, duration and extent of training required to perform such acts and limits of authority imposed on those who do not have the

## 19. PROGRAMME 3: ASSURING ONGOING PROFESSIONAL COMPETENCE

**STRATEGIC GOAL**: Registered professionals maintain their levels of competence through ongoing and continuing professional development programs and initiatives.

**BASELINE**CPD policy, guidelines and procedures and implementation model<br/>are in place. ECSA currently does not have database of accredited<br/>service providers as the responsibility was previously devolved to the<br/>Voluntary Associations. The Council is in the process of overhauling<br/>the delivery model with the view to conduct accreditations in-house.<br/>The CPD compliance rate as at 31 March 2018 was at 52.29% which<br/>is a slight decline from 54.5% as at 31 March 2017.

KEY PERFORMANCE AREA	ACTION PLAN	KEY PERFORMANCE INDICATORS/TARGETS
CPD Model and Program	i. institute and maintain a CPD model and program	<ul> <li>CPD model and program in place with enhanced accessibility even to remote professionals</li> </ul>
Accreditation of CPD Providers	<ul> <li>Accredit suitable CPD providers and programs based on set criteria</li> </ul>	<ul> <li>List of accredited CPD providers/programs</li> <li>accessible to professionals in all provinces</li> </ul>
Monitoring of Compliance with CPD	iii. Create a system for processing of CPD Portfolios and integrating with registration system	iii. Efficient technology to receive and process CPD portfolios with in-built flags for non-compliant practitioners

## 20. PROGRAMME 4: PROFESSIONAL PRACTICE

## STRATEGIC GOAL: Quality and safe engineering practices

BASELINE	The code of conduct for the registered persons is in place		
	and was reviewed during 2018. Administration is in the		
	process of finalising the framework for the development of		
	the code of practice. The Identification of Work for		
	engineering practitioners previously submitted to CBE was		
	rejected by the Competition Commission.		

KEY PERFORMANCE	ACTION PLAN	KEY PERFORMANCE
AREA		INDICATORS/TARGETS
Quality driven professional practice standards	i. set and/or adopt professional practice standards (Code of Practice)	i. professional practice standards in place with clear demarcations of scope of work per professional category based on education and training exit competencies (Section 26 of the EPA)
	ii. clearly define engineering work	ii. engineering Work clearly defined for the purposes of demarcating scope of Engineering Professionals ["practice of professional engineering" means any act of planning, designing, composing, evaluating, advising, reporting, directing or supervising that requires the application of engineering principles and concerns the safeguarding of life, health, property, economic interests, the public welfare or the environment, or the managing of any such act.
	ii. create a mechanism for transition (grandfather clause) to recognize prior performance versus identified scope of work and exit competencies.	iii. transition mechanism in place to accommodate existing practices

KEY PERFORMANCE	ACTION PLAN	KEY PERFORMANCE
AREA		INDICATORS/TARGETS
	iv. align legislation to professional categorization and regulate circumstances under which identified work in terms of Section 26(3) of EPA, may be performed under supervision or direction of a registered person as provided for in Section 26(4) of EPA.	v. up-to-date and enhanced legislation to provide for efficiencies in the professional conduct management system
Ethical professionals and	i. set and maintain	i. Code of conduct in place
exhibiting good	professional code of conduct	and maintained
professional behaviour		
Effective Regulator	i. enforce compliance	i. deviations from code of
ensuring compliance with	with the Code of practice	practice and conduct
the Code of practice and	and Code of Conduct	enforced through
conduct		transparent, efficient and effective system.
	ii. Review professional	ii. mechanism for
	conduct model to ensure	enforcement in place
	efficiency and effectiveness	where it is deemed
		possible to create an
		enforcement framework
		without awaiting
	ii. explore mechanisms	iii. amend legislation for a
	for enforcement within	more efficient and less
	current legislative framework	cumbersome professional
	without naving to await	conduct management
		inter alia to streamline
		processing of complaints
		and remove cumbersome
		appeal procedures.

#### Footnote: Code of Practice

<u>Code of Practice</u> refers to a catalogue of requirements and principles that are designed to regulate how persons registered with ECSA conduct their professional practices in terms of inter alia, competencies they should hold, engineering standards to which they must adhere, quality considerations to underpin their performance.

#### Footnote: Code of Conduct

<u>Code of Conduct</u> refers to a catalogue of principles that guide the behaviour of engineering professionals to be consistent with the highest possible standards of ethics, integrity and professionalism.

## 21. PROGRAMME 5: COMPETENT, EFFICIENT AND EFFECTIVE DELIVERY/ SUPPORT STRUCTURE

**STRATEGIC GOAL**: Delivery and Support Structure provide efficiencies to execution of ECSA mandate.

BASELINE	ECSA consistently collects on average 7% of its revenue above
	budget and is able to meet its obligations when due. Assessment of
	the reserves shows that the organisation is not sustainable as there
	is a need to increase its reserves by R26 835 533 to bring ECSA to a
	sustainability status (6 months of operating costs). The current
	reserves are enough to cover 2 months of the operating costs.
	Governance structures were restructured and reduced from 44 to 8
	committees. The quality management system is in place and has
	met the requirements for ISO certification. All physical files are
	scanned and stored electronically.
	The 2015-2020 strategy was the second ECSA strategy since its
	inception and the Annual Performance Plans were developed since
	2015. Performance management information shows that ECSA's
	performance was recorded at 62% in 2015/16 FY, 66% in 2016/17
	FY and 92% in 2017/18 FY.
	The Mid-term review of the 2015-2020 strategy shows that ECSA
	has not been very aggressive in stakeholder engagement however a
	stakeholder management plan is in place.

KEY PERFORMANCE	ACTION PLAN		KE	YPERFORMANCE
AREA			IND	DICATORS/TARGETS
Recruit and maintain	i.	determine appropriate	i.	appropriately
competent staff		structure to support		designed and
		delivery of strategy		capacitated structure
	ii.	redesign jobs as	ii.	appropriately
		appropriate		redesigned jobs and
				structure

KEY PERFORMANCE	ACTION PLAN	KEYPERFORMANCE	
AREA		INDICATORS/TARGETS	
	iii. populate structure as per the redesigned model	iii. positive improvement of staff morale	
	iv. institute change management interventions	iv. culture of enhanced performance	
		v. rewards and sanction system in place	
		vi. >85% productivity and meeting of performance targets	
Modern and efficient technology tools	i. design work flows and processes in line with new model	<ul> <li>IT System designed and deployed in a manner that is fit for purpose and supports efficient execution of ECSA business processes.</li> </ul>	
	ii. identify and deploy appropriate technologies to support ECSA processes	<ul> <li>a fully digitized ECSA appropriately positioned for the 4<sup>th</sup> Industrial Revolution with modern disaster recovery capability.</li> </ul>	
Viable and sustainable revenue collection system	<ul> <li>i. design efficient and effective revenue collection mechanism</li> <li>ii. create levers for sustainability</li> </ul>	<ul> <li>ECSA is financially viable [able to meet its present and future obligations with six (6) months reserves provision]</li> </ul>	
Good corporate governance	<ul> <li>institute and maintain policy frameworks to align ECSA processes with best practices in good corporate governance</li> </ul>	i. up-to-date policies that align with best practices in good corporate governance	

KEY PERFORMANCE	ACTION PLAN	KEYPERFORMANCE
AREA		INDICATORS/TARGETS
	<ul> <li>set up governance structures to monitor independent performance of functions by ECSA administration</li> </ul>	<ul> <li>Council oversight committees established with clear terms of reference in line with the strategy</li> </ul>
	iii. monitor compliance with ISO 9001 Standards	iii. retain ISO 9001 certification
	iv. create compliance universe [legal et al]	iv. ECSA complies with legislative and other policy requirements
Stakeholder Management	i. institute and maintain a stakeholder management and communication plan	i. viable communications and stakeholder management plan
	ii. recreate brand positioning of ECSA	ii. recreated brand positioning of ECSA
	iii. provide regular feedback to relevant stakeholders	iii. regular feedback to relevant stakeholders.
	iv. maintain international collaboration and standards for mutual collaboration.	iv. international standing of ECSA and networks established

## SECTION C: BUSINESS PROCESSES, STRATEGY EXECUTION & STRUCTURE

## 22. BUSINESS PROCESSES

#### 22.1 Education Accreditation of Programmes



### Fig.8 – Business Process for Training Accreditation

22.3 Registration

#### **Current & Preferred Model**



#### Fig.9 – Registration Process

**Note:** Ongoing quality improvements on the registration process need to be applied in order to reach the highest possible standard of efficiency in registering all individuals who meet criteria for registration. Council however believes that although continuous improvements into future enhancement of a more efficient registration model is appropriate as part of ongoing process and quality improvement, the current model of registration must be given a chance to be embedded into our systems and take root in terms of maturity before consideration to change it may be entertained.

#### Continuing Professional Development (CPD) 22.4

The CPD process is outlined as per the diagram below:



#### 22.5 Professional Practice



#### Fig.11 – Professional Practice Process

#### 22.6 Improving the Professional Conduct Process

This process currently takes up to four years to conclude. It is recommended that the process be expedited by categorizing offences that could be finalized administratively through payment of administrative fines and only reserve more serious cases for harsher sanctions.

Even under more serious offences, streamline professional conduct regulations in such a way that there are stricter timelines imposed and provision for matters to be concluded expeditiously and sometimes without the practitioner if the latter frustrates the process.

Furthermore, it is recommended that an appeal to the Council should suffice, after which the aggrieved practitioner should be free to approach the relevant High Court for review. The current process involving Council and CBE in appeals before going to the High Court is laborious and unnecessary. Council to be properly advised of the legal and constitutional law implications on the right of appeals whilst considering a more streamlined mechanism to expedite the appeal processes to avoid inordinate delays in dispensing with disciplinary processes.

## 23. STRUCTURE TO DELIVER ON THE STRATEGY

a. The Act provides for a Council of about 50 members which in turn is empowered to constitute Committees as delegated by Council. To this end, ECSA has a number of High Impact Committees that operate on the basis of their Terms of Reference.

- b. In addition, the Act provides for the appointment of a Chief Executive Officer who in turn is empowered to appoint staff as part of the administrative support structure to Council.
- c. The schematic presentation of the structure would therefore be as per the diagram below:



23.1 Council

- a. As part of considerations for efficiency, the number of Council members needs to be revisited as management of a big structure such as Council could compromise efficiency and effectiveness while also contributing to an unnecessary cost burden.
- b. With the reduction of Council members, the principle of broader representativeness of all professional categories must however still be retained.
- c. It is recommended that a structure with up to 30 Council members could be more cost-efficient. Council supports the reduction provided all categories are represented.
- d. A study of a redesigned Council ought to therefore be undertaken in this regard.

#### 23.2 High Impact Committees

- a. High Impact Committees fulfil certain governance requirements and should therefore be encouraged.
- b. To this end, the following High Impact Committees are recommended:
  - (i) Audit and Risk Committee

- (ii) Finance and Staff Committee
- (iii) Education Committee
- (iv) Registration & CPD Committee
- (v) Research and Standards Committee
- (vi) EXCO
- (vii) Investigating Committee
- (viii) Stakeholder Relations Committee [possibly integrate its functions to EXCO]
- (ix) STC [Possibly integrate its functions to EXCO so that an ad hoc Committee is set up to work on development of strategy and then EXCO does monitoring of implementation during the term of Council] Council and administration structure needs further consideration during Council deliberations.
- (x) Council needs to look at the long term transformation trajectory of the engineering profession as well as its contribution into the socio-economic agenda of the country.
- (xi) Consider instituting a Social and Ethics Committee as recommended in King IV of Good Corporate Governance. The ambit of this Committee could include such items as transformation of the engineering profession, environmental issues as well as ethics issues.
- c. It is recommended that the functions of the STC be integrated into EXCO as well as Education Committee in instances of global networks.
- d. The role of the Stakeholder Relations Committee could also be integrated with that of EXCO assisted by the Administration.

## 24. ADMINISTRATION STRUCTURE

To be determined once Council strategy is approved and as part of the change management intervention.

Annexures:

- ✤ Annual Performance Plans
- Administration Structure

Signed:

PRESIDENT OF COUNCIL

[On behalf of Council]

CEO

[On behalf of Administration]