ECSA

ENGINEERING COUNCIL OF SOUTH AFRICA

An Effective Regulator Assuring Engineering Excellence

Process for Training Engineering Candidates Towards Specified Category

R-11-PRO-SC

REVISION 3: 23 October 2024

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DEFINITIONS

Applicant: A person applying to the ECSA for registration in a specified category.

Candidate: A person who is registered with the ECSA in a candidate category of registration.

Commitment: The expressed resolve on the part of employers and mentors as an indication of their alignment with and substantive support for one of the ideals of the profession, namely that every possible opportunity, support and guidance should be afforded to specified category candidates during their period of training and practitioner development.

Competency Standard: Statement of competency required for a defined purpose.

Continuing Professional Development (CPD): The systematic, accountable maintenance, improvement and broadening of knowledge and skills, and the development of personal qualities necessary for the execution of work throughout an engineering practitioner's career.

Engineering Practitioner: Engineers before or after professional registration in general are referred to as practitioners of engineering who invent, design, analyse, build and test the equipment's / machines, complex systems, structures, components and material to fulfil the functional objective and requirements while considering the limitations imposed by practicality, regulation, safety and cost.

Engineering Problem: A problematic situation that is amenable to analysis and solution using engineering sciences and methods.

Engineering Science: A body of knowledge based on the natural sciences and using mathematical formulation where necessary that extends knowledge and develops models and methods to support its application, to solve problems and to provide the knowledge base for engineering specialisations.

Initial Professional Development (IPD): Systematic participation in the activities typical of CPD but carried out prior to registration.

Integrated Performance: An overall satisfactory outcome of an activity requires several outcomes to be satisfactorily attained, for example, a design requires analysis, synthesis, analysis of impacts, checking of regulatory conformance and judgement in decisions.

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Level descriptor: A measure of performance demands at which outcomes must be demonstrated in accordance with degree of responsibilities. Level descriptors are applicable to the registration category defined within *specifically defined* engineering work/activities/tasks/projects.

Mentee: A person who is under the guidance of a mentor.

Mentor: A professionally registered person who guides the competence development of an applicant / mentee in an appropriate category.

Outcome: A statement of the performance that a person must demonstrate to be judged competent at the professional level.

Professional Development: The continuing education and career training after a person has entered the workforce to help them develop new skills, stay up-to-date on current trends, and advance their career.

Supervisor: A person who oversees and controls engineering work performed by an applicant.

Undertaking: Employers' and mentors' expressed resolve to give effect to their commitment to the best of their ability.

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ABBREVIATIONS

C&U	Commitment and Undertaking
CPD	Continuous Professional Development
DoR	Degrees of Responsibilities
ECSA	Engineering Council of South Africa
EPA	Engineering Profession Act, 46 of 2000
IPD	Initial Professional Development
SC	Specified Category
RPSC	Research, Policy and Standards Committee
TER	Training and Experience Report

APPLICABLE DOCUMENTS

R-01-POL-SC	Policy on Registration of Practitioners in Specified Categories
R-02-STA-SC	Competency Standard for Registration in a Specified Category
R-03-PRO-SC	Process for Processing of Application in Specified Category
R-08-CS-GUIDE-SC	Guide to Competency Standards for Registration in Specified Category

DOCUMENT CUSTODIAN

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BACKGROUND

The illustration below defines the documents that comprise the Engineering Council of South Africa (ECSA) system for registration in specified categories. The illustration also locates the current document.

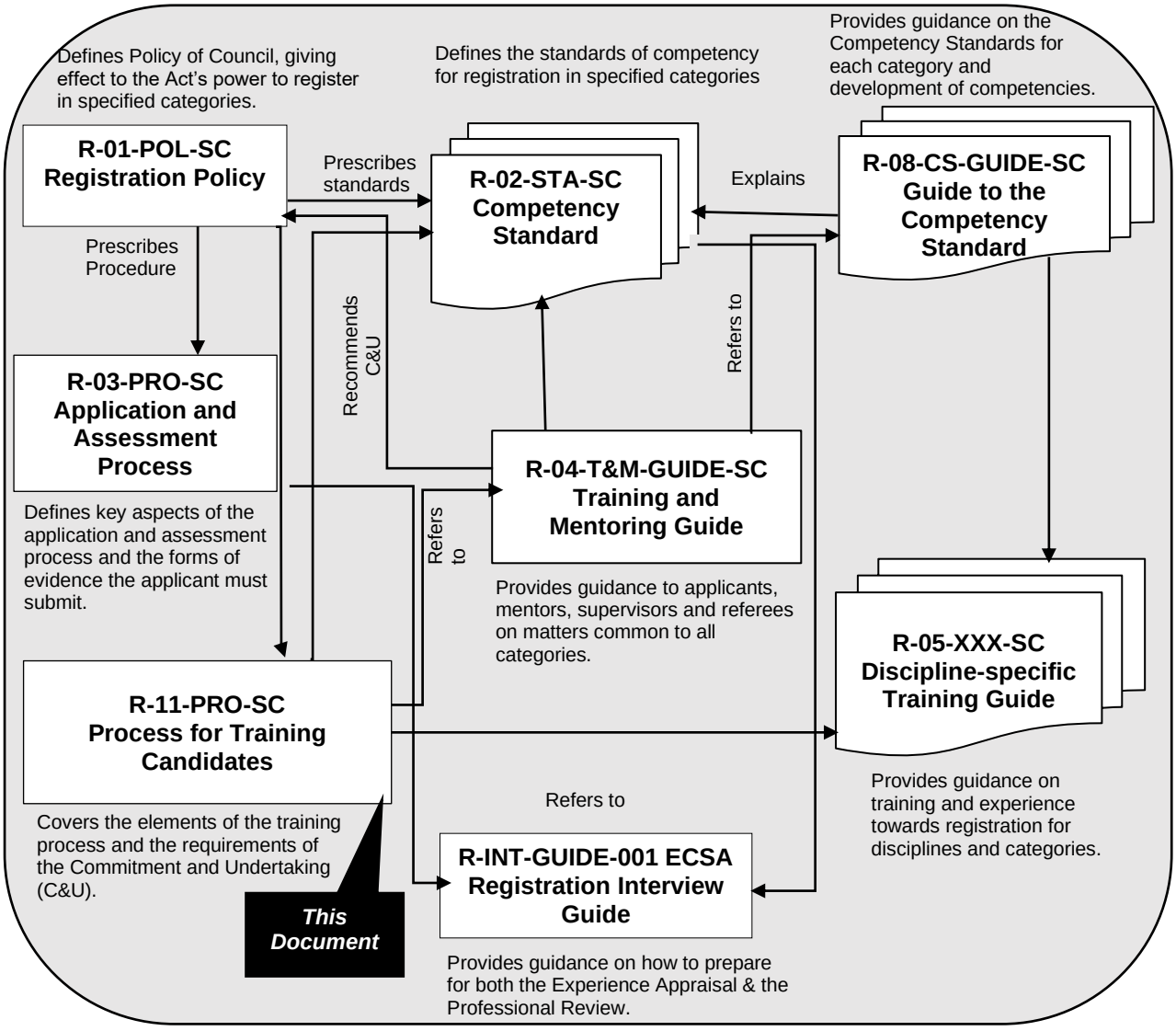

Figure 1: Documents defining the ECSA registration system for specified categories

1. PURPOSE OF THIS DOCUMENT

To ensure candidates achieve the level of competence required for specified category practitioner registration in as short a time as possible, employers should provide candidates with appropriate training and experience and should provide for regular interaction between candidates and their mentors to plan and monitor progress. The level of commitment on the part of the candidate, mentor and employer towards achieving the required competencies generally determines the rate of progress towards specified category registration. To this end, it is expected that employers and mentors sign a Commitment and Undertaking (C&U) with ECSA as an expression of their intent to train candidates towards registration in an optimum manner. The elements of the training process and the requirements of the C&U are covered in this document.

2. ROLES AND RESPONSIBILITIES

At outlined in document **R-04-T&M-GUIDE-SC**, the goal of the training process is to allow candidates to develop their competency to the point of being able to demonstrate the outcomes at the required level on a sustained basis and to take responsibility for the work performed. Supervisors and mentors are key players in the training of candidates. The roles outlined below are described in terms of roles because an individual may perform more than one player's function.

2.1 Candidate

Candidates should appreciate that the onus rests on them to ensure that the training received will culminate in the competency defined in the standards. Council prefers that they follow a training programme under a C&U that has been registered by Council and which has, as is required, at least one mentor registered in terms of the C&U. Should candidates experience difficulties with their training, they should attempt to resolve them through the normal channels, for example, with the mentors responsible for their guidance

2.2 Supervisor

The supervisor directs and controls the candidate's engineering work and takes responsibility for the work in terms of section 18(4) of the Engineering Profession Act, 46 of 2000 (EPA). The supervisor should preferably be a registered specified category practitioner but, if not registered,

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must be of adequate engineering competence. Supervision may not be direct but must be performed on an adequately informed base. Intermediaries between the candidate and the supervisor should preferably be registered but, if not registered, must also be of adequate engineering competence. The supervisor is expected, together with the mentor and candidate, to plan the workplace experience, task by task, to develop the candidate's competence and to review the achievements of each task.

2.3 Mentor

The mentor must be ECSA registered in an applicable specified category and subdiscipline, or another category if specifically agreed to by Council in the particular case. The mentor's role is to guide and facilitate the candidate's development.

Where opportunities for training and experience are inadequate, the mentor should alert management to remedy the situation. Challenges could include inadequate facilities or resources, work experiences not being sufficiently complex or demanding, or a suitable variety of experience not being available within a particular department or the organisation as a whole.

Should the services of a mentor internal to the organisation be unavailable to an employer, the employer may use the services of an external mentor. Mentors thus appointed should be sensitive to any limitations the employer may wish to set in any given situation.

The supervisor may also fulfil the function of the mentor described above.

3. THE ENGINEERING SPECIFIED CATEGORY PRACTITIONER DEVELOPMENT PROCESS

As outlined in **R-04-T&M-GUIDE-SC**, there are three stages in the development of an engineering practitioner. Stage 2 refers to the **Candidacy Phase**, which is a programme of training and experience in the workplace that builds on the higher education qualification to develop the competencies required for registration.

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QM-TEM-001 Rev 2 – ECSA Policy/Procedure

Document **R-04-T&M-GUIDE-SC** draws the distinction between training and experience as follows:

- *Training* is a process of learning specific practical knowledge, skills, attitudes and values under the direction of competent persons. Training may be supported by formal courses and other learning activities. The majority of training time is spent on engineering work.
- *Experience* is a process of gaining competence by active involvement in the work environment.

3.1 A candidacy programme

A candidacy programme, as outlined in document **R-01-POL-SC**, is a framework for employers to plan and execute training towards registration in a specified category. A candidacy programme is one means of implementing a C&U. A candidacy programme has the following components:

- The candidate is employed in a candidacy programme by the employer who provides the training and experience. The objective of the programme is for the candidate to become registered with ECSA in the appropriate subdiscipline.
- The competency standards generated by ECSA are used as workplace standards. They define the outcomes of the training programme; the employer must define the process to build up competence to the required level. The employer must make specific reference to the workplace standards in its workplace skills plan. In addition, context-specific subdiscipline-specific training guides (**R-05-XXX-SC**) generated by the sector may be used. These must not conflict with the generic competencies but rather provide amplification in the particular work context.
- If not already registered, the trainee should register in the appropriate candidate category with ECSA as early as possible in the training period.
- The employer provides supervisors internal to the company and a mentor who should preferably be internal but may be external. While supervisor and mentor may change from time to time, employers must ensure continuity of supervision and mentoring.
- Structured work experience is provided by the employer to the candidate. This work is managed using a standard format training record. The candidate's progress is assessed on an ongoing basis by supervisors and mentors, also using the training and experience report for documentation.

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- When candidates are considered to be ready for registration, they apply to ECSA for registration. Evidence of competence is provided as required by ECSA, including the training record. ECSA performs the summative assessment of competence.
- Success in attaining registration is considered to be evidence of the quality of the training programme. The workplace learning programme is not subject to formal quality assurance.

3.2 Overview of competency standards

The competency standards for specified category practitioners as outlined in document **R-02-STA-SC** are defined as 11 outcomes clustered into 5 groups. As summarised in document **R-04-T&M-GUIDE-SC**, candidates must be competent to demonstrate the following:

Group A: Engineering problem solving

- **Outcome 1:** Define, investigate and analyse *specifically defined* engineering problems (tasks).
- **Outcome 2:** Design, develop, plan or practise solutions to *specifically defined* engineering problems (tasks).
- **Outcome 3:** Comprehend and apply knowledge embodied in established specific engineering practices and knowledge specific to the field and scope in which they practise.

Group B: Manage engineering activities

- **Outcome 4:** Manage part or all of one or more *specifically defined engineering activities.*
- **Outcome 5:** Communicate clearly with others in the course of their engineering activities.

Group C: Impacts of engineering activity

- **Outcome 6:** Recognise the foreseeable social, cultural, environmental and sustainability effects of *specifically defined* engineering activities generally.
- **Outcome 7:** Meet all legal and regulatory requirements, protect the health and safety of persons and adhere to sustainable practices during their specifically defined engineering activities.

Group D: Act ethically, exercise judgement and take responsibility

- **Outcome 8:** Conduct engineering activities ethically.

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- **Outcome 9:** Exercise sound judgement in the course of *specifically defined engineering activities.*
- **Outcome 10:** Be responsible for making decisions on part or all of one or more *specifically defined* engineering activities.

Group E: Continuing Professional Development

- **Outcome 11:** Undertake independent learning activities sufficient to maintain and extend their competence,

Outcomes 1 and 2 require a level descriptor for the level of *problem solving*. This descriptor takes into account the knowledge required for analysis and design or development of solutions, the degree to which the problem is defined, factors that may make the solution difficult and the uncertainty and consequences of the problem and solution.

Outcomes 4, 6, 7, 9 and 10 require a level descriptor for the demands of *engineering activities* for a specified category. The level descriptor is defined for the specified category in the competency standard **R-02-STA-SC**.

Candidates should also be familiar with the content of the appropriate subdiscipline-specific training guideline (**R-05-nXXX-SC**) for appropriate engineering activities and approaches to workplace training. Competence in meeting the subdiscipline specific training requirements is important.

3.3 Evidence required for competent performance

As outlined in document **R-04-T&M-GUIDE-SC**, while competence is specified by 11 outcomes to be demonstrated at a particular level, applicants for registration must demonstrate **integrated performance against outcomes**. This reflects the reality that an engineering task or function is unlikely to require only one outcome, for example, problem analysis seldom stands alone; it requires the use of knowledge, the analysis of impacts and must lead seamlessly into the solution phase. In addition, the subdiscipline specific requirements form part of performance required.

Different engineering functions and activities have different mixes of demand. An applicant for registration is expected to provide evidence of working at the required level of problem-solving in engineering activities at the specified level of demand as part of the application for registration.

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QM-TEM-001 Rev 2 – ECSA Policy/Procedure

As outlined in document **R-04-T&M-GUIDE-SC**, the applicant for registration must document evidence for the registration applications and must undergo interactive documentary assessment by registered specified category practitioners who judge the demonstrated competency against the defined standards. Details of evidence required to demonstrate outcomes achieved are specified in **R-03-PRO-SC**.

Elements of a candidacy programme as outlined above are expanded in sections 7 to 10.

4. DEVELOPING PROCESS OF TRAINING AND EXPERIENCE

Candidates are required to gain structured workplace training and experience with the support of a registered mentor at an employer over a period of usually 3–5 years against ECSA-prescribed competency standards, as outlined in document **R-02-STA-SC** and summarised in section **5** of this document. Attention must be given to incorporating the subdiscipline-specific requirements into the structured workplace training.

The focus of candidacy programmes is not on attending courses but on gaining work experience in a team delivering engineering solutions. As outlined in document **R-04-T&M-GUIDE-SC**, candidates should engage in a sequence of activities that may be the completion of a particular aspect of training or unit of work as shown as a development phase in **Figure 2**.

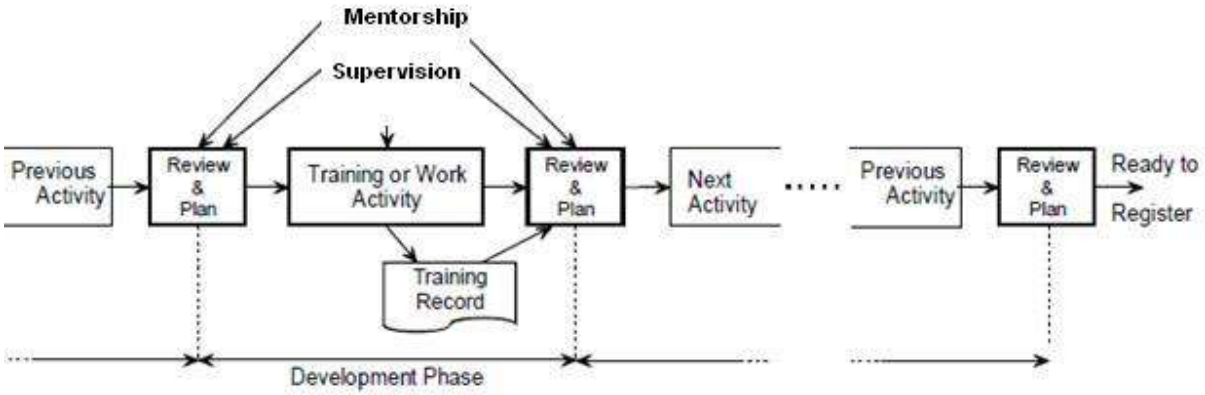

Figure 2: Main elements of practitioner development process through a candidacy programme

Each of the development phases consists of the following sequenced activities:

- Planning
- Working in a team (including training)

- Recording and reporting
- Reviewing and assessing.

The training process is governed by standards, policies and procedures. For each of the development phases, the candidate, working with the supervisor and mentor, sets and documents the competency development objectives of the phase. At the end of the phase, they review the achievements of the just-completed phase against the objectives set for the phase. Objectives are then set for the next phase.

4.1 Planning principles

When selecting engineering activities and agreeing on activities for candidates to work on during each phase, the three principles, as outlined in document **R-04-T&M-GUIDE-SC** must be considered:

1. The activities must focus on the **competencies** to be developed.
2. A **variety of work activities** is necessary for the proper development of a candidate. The object of having a variety of work is to broaden the experience of the candidate and to ensure that all aspects of competency are developed and ultimately assessed. Variety may be obtained in different ways, singly or in combination:
    - The suggested **variety of engineering work** as outlined in document **R-02-STA-SC** includes but is not limited to design; planning; investigation and problem resolution; improvement of materials, components, systems or processes; implementation, manufacture or construction; engineering operations; maintenance; closure or disposal; project management, research, development and commercialisation
    - Document **R-04-T&M-GUIDE-SC** makes further suggestions in relation to the **lifecycle of an engineering activity** such as involvement in conceptualisation, planning, design, construction/implementation, operation and withdrawal and specific functions including commissioning, testing, improving and troubleshooting. The candidate should experience several stages in the lifecycle of an engineering project or projects.
    - Variety may also involve **different aspects of a discipline** (or cross-disciplinary fields)

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3. **Increasing responsibility and accountability** within the organisation must be imposed on and accepted by candidates until they are capable of accepting specified category practitioner responsibility in making and executing decisions at the exit level. The descriptors defined in Table 4 of **R-04-T&M-GUIDE-SC** should be used to ensure increased levels of responsibility.

The training process may involve structured activities including induction and training courses on specific skills or technologies. The requirements of the specific subdiscipline must be observed. The candidate should also participate in self-initiated development activities, termed initial professional development (IPD) activities.

When the candidate has achieved the exit level, the mentor and candidate may determine that sufficient evidence of competence has been accumulated to apply for registration, provided that the 3-year minimum period has elapsed. The candidate then prepares and submits an application for registration, setting out evidence of competency.

4.2 Transfers or secondments

Depending on where the candidate is employed, there may be situations where opportunities within the department or organisation are insufficiently diverse to develop all the competencies required. In such cases, candidates should be transferred to other departments or units that can support their training and experience requirements. Where opportunities within the organisation are inadequate, secondment to another employer should be considered.

4.3 Increasing levels of responsibility

As outlined in document **R-04-T&M-GUIDE-SC**, the main learning process is through working with competent engineering personnel. Considering **Table 1**, the candidate would first *assist* with engineering work, doing defined tasks under close supervision. The candidate progresses to making contributions individually and as a team member to the work. By the end of the training period, the candidate must perform individually and as a team member at the level of problem solving and engineering activity required for registration and exhibit the exit degree of responsibility E.

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This level of work provides evidence of competency against the standards. Over time, the emphasis on *training*, which is learning through inputs of others, gives way to learning by doing engineering work and reflecting on observations and achievements, which is *experience.*

Table 1: Progression through the candidacy period

Degree of responsibility	Nature of work: the candidate	Responsibility of candidate to supervisor	Extent of supervisor/ mentor support
A: Being Exposed	Undergoes induction, observes processes, work of competent practitioners	No responsibility, except to pay attention	Mentor explains challenges and forms of solution
B: Assisting	Performs specific processes under close direct supervision of the mentor	Limited responsibility for work output, but mentor is accountable.	Supervisor/Mentor coaches, offers feedback
C: Participating	Performs specific processes as directed with limited supervision by the mentor but under close direct observation of the mentor.	Full responsibility for supervised work, but the mentor accountable	Supervisor progressively reduces support but remains under the close direct supervision of the mentor.
D: Contributing	Performs specific work with detailed approval of work outputs under the close direct observation of the mentor.	Full responsibility to supervisor for immediate quality of work, but mentor is accountable.	Candidate articulates own reasoning and compares it with those of supervisor and mentor.
E: Performing	Works in team without supervision, under the direct observation of the mentor.	Level of responsibility to supervisor is appropriate to a registered person, i.e., they are responsible but not accountable.	Candidate takes on problem solving without support, at most limited guidance.

As outlined in document **R-04-T&M-GUIDE-SC**, the requirement that candidates demonstrate that they are able to take responsibility for the engineering work performed, with particular attention paid to meeting the subdiscipline specific requirements, requires careful management by the supervisor. Within the training process, it is necessary to manage the conflicting requirements between candidates not being allowed to take responsibility but nevertheless being

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required to show that they can perform engineering work and take responsibility at a practitioner level.

It is helpful to identify two aspects of responsibility:

- Taking *due care* to ensure that the objectives of engineering work are achieved and that impacts and risks are addressed.
- Being *accountable* for the work, in particular that due care was taken to deal with risks.

Supervisors and mentors must implement strategies to ensure that candidates can demonstrate the ability to exercise due care without having to make decisions that require accountability; the supervisor must be accountable. Taking due care requires candidates to exercise the defined competencies: problem solving, management, impact identification and mitigation, ethical behaviour, acting responsibly and applying judgement. Working within the limits of those competencies and the requirements specific to the subdiscipline, is a clear requirement. In such as a mode of working, the candidate would be required by the supervisor to express judgements and propose decisions and recommendations; these may be at the level that a registered person would normally perform. The candidate, while not carrying any legal accountability, is responsible internally within the employer organisation. The supervisor must check the judgements, decisions and recommendations as the supervisor bears ultimate accountability for the work

4.4 Documenting Training and Experience

Phase-by-phase planning and review of the candidates' training must be supported by documentation, both for the immediate purpose of managing training and for compiling evidence when the candidate comes to apply for registration.

Training and experience are generally arranged in discrete activities, tasks or phases. Each phase of activity is designed to develop specific aspects of competency (outcomes) at an agreed level of problem solving and engineering activity with an appropriate degree of responsibility. Such a unit typically ranges from several weeks to several months in duration. For each task or phase, the candidate, together with the supervisor and mentor, should use a suitable format for recording the planned outcomes and level to be achieved and the results of the previous phase. Suitable templates are the Training and Experience Report (**R-03-TER-SC**) forms included in the application forms for specified category applicants, and the Subdiscipline-specific Requirement

Report (**R-05-XXX-SC**). These forms allow particular aspects of competency to be identified as being amenable to development in this task or phase. In addition, the level at which competency is to be demonstrated is identified as well as the nature of the candidate's responsibility.

When the task or phase is complete, the candidate, supervisor and mentor must assess the level of competence learned and displayed. Level descriptors for problem solving and the demands of engineering work should be consulted to determine progress to the exit level. Such achievement (or shortfall) may influence the planning for subsequent tasks or phases. The assessment at the end of one phase should form an input to the planning of the next and/or future phases.

The process continues until the candidate is working at the level required for registration in each outcome and as a whole.

Each activity is described in company and generic terms. Company terms include the names of specific plants, processes, sites, etc. while generic descriptions would include terms such as design, trouble shooting, construction or commissioning.

5. EMPLOYER COMMITMENT AND UNDERTAKING

It is clear from the above that considerable onus rests on the employer to provide all the elements required to support candidates with training and experience towards specified category practitioner registration. As outlined in policy **R-01-POL-SC**, employers should enter into a C&U with ECSA. Under a C&U, the employer commits to training candidates to the standard required for registration in an identified specified category and subdiscipline. In entering a C&U, the employer signifies the intent to:

- structure and execute training of candidates in accordance with the competency statements, policies and guidelines laid down by ECSA for the specified category and subdiscipline of registration
- ensure adequate supervision of candidates by registered persons
- register mentors with ECSA and ensure adequate mentoring of candidates
- provide regular guidance to the candidates through competent supervisors and mentors.

The Employer C&U agreement is included in **Appendix A** for reference. Employers should complete the separate C&U agreement available from ECSA and published on www.ecsa.co.za.

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Employers should include their logo in the top left block. In signing these agreements, employers should note the following:

5.1 Signatories

- ECSA requires an employer's Chief Executive Officer (CEO) to register the C&U. Since ECSA views these 'expressions of intent' in a very serious light, it must be satisfied that they not only represent corporate policy but also that top management assumes ultimate responsibility for the proper implementation of this policy. It will accordingly be expected that CEOs issue the necessary directives to those charged with this responsibility.
- Details of the mentor champion and human resource personnel responsible for coordinating candidate training and experience should also be recorded.
- Signed mentor C&Us must be submitted as part of the employer C&U.

5.2 Duration

An employer C&U is valid for 5 years from the date of signing.

5.3 Registration number

Once signed, each C&U is allocated a registration number that should be quoted by all persons when applying for registration as specified category practitioners.

5.4 Training programmes

Employers are encouraged to draw up detailed training programmes appropriate to their own circumstances as these represent an internal management tool to achieve the outcomes.

5.5 Deregistration

The credibility of employers' C&Us is measured through an ongoing verification process where the quality of applicants' training and experience and the level of their professionalism is assessed. The reward is normally that candidates can submit their application for registration in the shortest possible time after obtaining the required qualification (i.e., 3–4 years). In the case of an employer's consistent failure or inability to honour its C&U, the situation can arise where ECSA may have no alternative but to deregister the employer's C&U. Prior to deregistration of

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an employer, ECSA must give reasonable notice of its intention to do so and must give the employer reasonable time to rectify any deficiencies.

6. MENTOR COMMITMENT AND UNDERTAKING

As outlined in document **R-04-T&M-GUIDE-SC**, a mentor, in agreeing to assist a candidate, must commit to the following duties:

1. The mentor must participate in the planning and advise on the suitability of the programme of work and experience for the candidate's development. Training tasks or phases must be planned to ensure that the candidate develops toward the competency required for registration and the requirements for the applicable subdiscipline.
2. Ensure that the candidate is exposed to increasing demands in problem solving, management, impact assessment and mitigation, consideration of ethical issues, judgement and responsibility.
3. Ensure that the candidate completes the agreed training
4. If the mentor is not the candidate's supervisor, to liaise with the supervisor to ensure that the work assigned to the candidate is consistent with the training objectives.
5. On the completion of each agreed task or phase, the mentor must receive a report from the candidate and review the outcomes achieved in the light of the objectives.
6. The mentor must assist the candidate to decide when he or she is ready to apply for registration and assist with the actual application (as part of the mentorship and without asking for compensation to assist in filling in and completing the application form).

The mentor C&U agreement is included in Appendix B. The mentor C&U for each mentor should be signed and submitted to the employer for submission with the employer C&U.

6.1 Duration

The mentor C&U for the stated employer is valid for 5 years from the date of signing.

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6.2 Multiple employers

Mentors acting as external mentors for more than one employer should sign a separate C&U for each employer with whom they have contracted.

6.3 Multiple categories

The mentor must be registered in the appropriate category and subdiscipline to mentor the candidate. (A mentor registered for a chain block scope cannot mentor the candidate should the candidate wish to apply for the scope of Mobile Cranes.)

6.4 Conflict of interest

Every effort must be made to ensure that there is no conflict of professional interest. Should the mentor act as an assessor, moderator or reviewer for ECSA, the mentor should declare a conflict of interest as soon as an application is received from one of the mentor's candidates to assess, moderate or review.

6.5 Termination

Mentors should advise ECSA should they cease to be a mentor for an employer. Mentors must cease offering mentoring services should their ECSA registration lapse or be withdrawn for whatever reason.

7. ECSA'S COMMITMENT

In calling on employers and mentors to commit to developing specified category practitioners, ECSA commits to keeping policies, standards and guidelines relevant and up to date and offering advice and a range of support as outlined in the employer C&U.

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REVISION HISTORY

Revision number	Revision date	Revision details	Approved by
Rev 1 Ver A	8 February 2016	Original document drafted from R-11-P	JIC Working Document
Rev 1 Ver B	11 April 2016	Corrections recommended by Dr Lawless incorporated. To be submitted to TC and Council	JIC Amended and Approved
Rev 1 Ver B	25 April 2016	No amendments	Approved by TC
Rev 1 Ver B	25 August 2016	No amendments	Approved by Council
Rev 2	16 July 2020	Alignment to the Policy and Standards Framework on ECSA Policies.	RPSC Members
Rev 3 Draft A	23 Sept 2024	The document have been revied to ensure alignment with changes on R-02-STA-SC and R-01-POL-SC, R-04-T&M-GUIDE-SC, R-08-CS-GUIDE-SC and to ensure consistency and seamless training.	Working group
Rev 3 Draft B	25 Sept 2024	Document sent to Registration BU for inputs and comments	Registration BU
Rev 3 Draft C	01 Oct 2024	Document reviewed with WG and RI BU.	RI BU and WG
Rev 3 Draft D	11 Oct 2024	Reviewed and checked.	Executive: RPSC
Rev 3	23 Oct 2024	Approval.	RPSC

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The Process for:

Training Engineering Candidates Towards Specified Category Registration

Revision 3 dated 23 October 2024 and consisting 24 pages reviewed for adequacy by the Business Unit Manager and is approved by the Executive: Regulatory Services & International Relations (**ERSIR**).

.....

Business Unit Manager

2 December 2024

Date

.....

Executive: **RSIR**

2024/12/02

Date

This definitive version of this policy is available on our website

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ANNEXURE A – EMPLOYER COMMITMENT AND UNDERTAKING

1. Parties

This Commitment and Undertaking (C&U) is made between

The Employer/Company name: _____

Postal Address: _____

Email: _____

Telephone: _____

and

ECSA: Engineering Council of South Africa (ECSA)

Postal Address: Private Bag X691, BRUMA, 2026

Email: engineer@ecsa.co.za

Telephone: 011 607 9500

2. Scope

ECSA regulates the engineering profession by ensuring that only competent, accountable persons are registered to perform identified engineering work at the appropriate level. ECSA therefore calls on employers to commit to train candidates to the standard required for registration in a specified category and sub discipline, in accordance with the ECSA's requirements.

3. Duration

This Commitment and Undertaking is valid for 5 years from the date of signing.

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4. Responsibilities

4.1 The Employer

*The **Employer** hereby confirms that it is its expressed intention, in so far as it is able, to*:

- Implement a candidacy programme as outlined in document **R-01-POL-SC**, the *Training and Mentoring Guidelines* outlined in **R-04-T&M-GUIDE-SC**, the **R-05-nXXX-SC** Subdiscipline-specific Training Guidelines for the subdiscipline concerned and **R-11-PRO-SC**.
- Ensure that specified category graduates (**E-07-PN** or equivalent) **register** as specified category candidates in the appropriate subdiscipline.
- Provide structured training and experience against ECSA competency standards as defined in **R-02-STA-SC** and outlined in the applicable **R-05-nXXX- SC** subdiscipline-specific training guideline as supported by the mentors attached to this agreement.
- Provide a variety of engineering activities (including rotation/secondment where necessary) and ensure that candidates' levels of responsibility increase over time.
- Ensure that candidates plan for and are able to participate in IPD activities.
- Allocate suitably competent persons to take responsibility for the work in terms of section 18(4) of the Engineering Profession Act, 46 of 2000.
- Allocate/appoint ECSA-registered internal or external mentors (preferably for the duration of the candidacy programme to ensure continuity) referred to in Annexure B.
- Ensure that mentors sign the Mentor C&U and attach it to this C&U.
- Maintain a register of mentors and update ECSA of any changes.
- Ensure that mentors are conversant with ECSA's policies, standards and guidelines.
- Ensure that candidates document evidence of planning, training and experience, mentor meetings and assessment per developmental phase.
- Ensure that candidate progress is assessed on an ongoing basis by supervisors and mentors and that they sign off reports as required.
- Assist candidates to decide when they are ready to apply for registration and advise on the preparation of the actual applications.
- Create the opportunity and an environment conducive to effective liaison between candidates and their mentors.

4.2 ECSA

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ECSA hereby confirms its expressed intention, in so far as it is able, to:

- provide training & mentoring guidelines
- provide standardised reporting tools
- streamline the application process for registration through an effective paper based and future online system
- encourage Voluntary Associations (VAs) to provide mentor training and external mentors where required
- recognise mentoring as a CPD activity for registered professionals
- provide a registration support helpline
- provide registration presentations on request
- provide guidelines on recommended practitioner development activities
- issue a certificate of recognition to companies entering into a C&U agreement
- publish details of companies who have signed a C&U agreement
- lobby support from government and SETAs to provide funding towards candidacy programmes.

This list is not exhaustive and may be expanded from time to time to offer any additional support as required.

5. Deregistration

ECSA has the discretion to deregister this C&U should the training and experience provided by the employer not satisfy ECSA's requirements, provided that ECSA has given reasonable notice of its intention to do so and has given reasonable time in which any deficiencies should be rectified.

6. Changes in mentoring

The employer must advise ECSA of changes in mentors and provide the names of any replacements on the template in Annexure B, together with associated Mentor C&U agreements.

Signed at _____ Signed at _____

on this day of 20 on this day of 20

For ECSA: **For the Employer**:

SIGNATURE: SIGNATURE:

NAME: NAME:

POSITION: POSITION

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ANNEXURE B – DETAILS OF REGISTERED PRACTITIONERS WHO HAVE SIGNED THE MENTOR C&U

Employer/Company name: _____

Contact/C&U Champion/Chief Mentor: _____

Position: _____ Email: _____

Telephone: _____ Cell: _____

Contact/HR/Training Manager (if applicable): _____

Position: _____ Email: _____

Telephone: _____ Cell: _____

The table below contains a list of registered practitioners who have signed the Mentor C&U and are willing and able to act as mentors to specified category candidates. The latest copy of each signed Mentor C&U is attached to this agreement.

Full names	ECSA Registration Number	Category *	Discipline and Sub Discipline **	Internal/ External (I/E)

* Pr Eng, Pr Tech Eng, Pr Techni Eng, Pr Cert Eng, Specified Category.

** Aeronautical, agricultural, chemical, civil, electrical, industrial, mechanical, metallurgy, mining **and** Lift Inspector, LMI, FPSI, MEM, Lab Technician, Building Inspector, etc.

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+ Add more rows as required. Kindly repeat the Employer/Company name on the top of each continuation page.

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ANNEXURE C – MENTOR COMMITMENT AND UNDERTAKING

I, the undersigned,___,_____in my capacity as

_____Mentor of_____hereby wish to register my

Internal/External *Employer name*

commitment and undertaking to mentor candidates in accordance with the requirements of ECSA's standards, policies and guidelines, for Specified Category registration in the____ _____subdiscipline (e.g., Lift Inspector, LMI, FPSI, MEM, Lab Technician, Building Inspector, etc.).

I hereby confirm that it is my expressed intention, in so far as I am able, to:

- be conversant with ECSA's requirements for a candidacy programme as **R-01-POL-SC**, the Training and Mentoring Guidelines outlined in **R-04-T&M-GUIDE-SC**, the **R-05-XXX-SC** Subdiscipline-specific Training Guidelines and **R-11-SC**
- ensure that specified category graduates (**E-07-PN** or equivalent) **register** as specified category candidates
- participate in the planning and advise on the suitability of the programme of work and experience for candidate development; training tasks or phases must be planned to ensure that the candidate develops toward the competency required for registration in a specified category according to **R-02-STA-SC** and **R-05-XXX-SC**
- ensure that candidates are exposed to increasing demands in problem solving, management, impact assessment and mitigation, consideration of ethical issues, judgement and responsibility
- ensure that the candidate completes the agreed training
- ensure that candidates plan for and are able to participate in IPD activities
- liaise with supervisors to ensure that the work assigned to candidates is consistent with the training objectives if the mentor is not the candidate's supervisor
- ensure that candidates document evidence of planning, training and experience, mentor meetings and assessments per developmental phase
- allocate time to review and comment on reports received on completion of each task or phase

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- meet with candidates and their supervisors on a regular basis (preferably quarterly or at least four monthly) to review progress, assess the outcomes achieved and agree on new activities and outcomes to be worked on
- report progress to management and alert management to situations where training is inadequate for registration
- offer support as required – ongoing engagement may be a combination of one-to-one sessions, telephonic and electronic communication
- assist candidates to decide when they are ready to apply for registration, advise on the preparation of the actual applications and serve as a referee if requested to do so.

I will advise ECSA should I cease to be a mentor for the above employer. I understand that I may not offer mentoring services should my registration lapse or be withdrawn for whatever reason. I acknowledge that I may not serve as an ECSA assessor for any candidates I have mentored.

Signed at_____on this_day of_____20_____

_____	_____	_____
Signature:	Email address:	Registration number:
_____	_____	_____
Tel. number (home):	Tel. number (work):	Cell number:

_____

Physical Address

_____

Postal Address