



ENSURING THE EXPERTISE TO GROW SOUTH AFRICA

Skills Transfer and Retention Framework

STR-FRA-ECSA-003

REVISION No 0. 09 February 2022

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DEFINITIONS

Registered person: means a person registered under one of the categories referred to in Section 18 of the Engineering Profession Act, 46 of 2000.

Expert: means a professional person who is very knowledgeable about specific functions of ECSA.

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ABBREVIATIONS

BU	Business Unit
ECSA	Engineering Council of South Africa
EPA	Engineering Profession Act, 46 of 2000
HEI	Higher Education Institution
PFMA	Public Finance Management Act, 1 of 1999
IT	Information Technology
ICT BU	Information Communication Technology Business Unit

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1. BACKGROUND

The Engineering Council of South Africa (ECSA) is a statutory council, established in terms of the Engineering Profession Act, 46 of 2000 (the Act), with a mandate to, among others, accredit engineering programmes at Higher Education Institutions (HEIs), register persons in the prescribed categories of registration and regulate the professional conduct of registered persons. The ECSA business model requires sourcing expertise from the stakeholders to assist with its mandate within the broader parameters of the ECSA legislative framework, rules and strategic direction.


Its legislative mandate empowers ECSA to perform the following duties:

- Develop standards for engineering education and professional competency.
- Register engineering practitioners in approved categories of registration who demonstrate competency against set standards and maintain a national register of accredited engineering practitioners.
- Develop and enforce the code of conduct for the registered practitioners.
- Develop the specified categories of registration.
- Conduct accreditation visits to evaluate engineering education programmes at tertiary institutions.
- Investigate complaints of improper conduct against registered persons.
- Recognise Voluntary Associations (VAs).
- Enter into international agreements for the recognition of engineering educational programmes and registration.
- Recommend to the Council for the Built Environment (CBE) the identification of the type of work performed by engineering practitioners.
- Determine conditions relating to continuing education and training/continuing professional development (CPD).
- Annually publish guideline professional fees and scope of work.

ECSA, like many other organisations around the world, is rapidly approaching a crisis in its registered persons database triggered by the growing number of aging registered persons who assist ECSA in conducting its business. The aging population is a global trend that necessitate

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the need for a skills retention framework. The exact way to achieve this differs from organisation to organisation.

In 2018, ECSA conducted a mid-term review of its 2015–2020 Strategy where one of the threats for business continuity was heavy reliance on volunteers in conducting business. ECSA then developed an ECSA Framework for Stakeholder Contribution with the assistance of some VAs. The latter was published on the ECSA website for comments to ensure involvement of all stakeholders and ECSA approved it in 2019. Although the ECSA Framework for Stakeholder Contribution includes engagement of registered persons, it does not deal with skills transfer and retention; this framework therefore focuses on this aspect.

Registered persons since time immemorial have been directly involved in supporting business as volunteers. Their involvement has never been structured resulting in overburdening of a few individuals with ECSA business activities. Heavy reliance on volunteers has also been identified as an organisational risk since all core activities are carried out with the assistance of registered persons or experts, as necessitated by the task.

2. PURPOSE OF SKILLS TRANSFER AND RETENTION FRAMEWORK


This framework aims to create a clear approach to skills transfer and retention in terms of conducting ECSA's activities and to ensure that any staff members and registered persons or experts involved are competent. The framework further supports ECSA's vision to provide engineering excellence to transform the nation and to ensure that ECSA provides fair, accessible, credible, transparent and globally accepted services to all registered persons within the parameters of national legislative framework and standards as well as international standards and rules. The framework supplements the document **SKH-C-FRA-ECSA-002: Stakeholder Contribution Framework** and must be read in conjunction with it.

3. OBJECTIVE OF SKILLS TRANSFER AND RETENTION FRAMEWORK

The framework's objective is to ensure the transfer and retention of knowledge and skills of registered persons or experts who assist ECSA in conducting its day-to-day business is managed. It seeks to put measures in place that will grow the pool of registered persons who assist ECSA in delivering on its mandate, both now and in future. The current ECSA business

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model relies heavily on volunteers, which poses a risk that was articulated in the 2015–2020 ECSA Strategy mid-term review as one of the current organisational risks.

The framework defines the relevant aspects associated with continuous training of registered persons for capacity building. It should also help attract new registered person or experts to participate in ECSA activities.

The database of the registered persons or experts who will share their knowledge and experience both in the short and long term will be developed. It will assist by offering relief to individuals who are burdened with several ECSA activities at the same time.


4. SCOPE OF WORK

Experts are sourced individually or within the committee or working group to assist ECSA to execute its mandate consistent with the Council approved annual performance plans and strategic plans. Therefore, this document provides a framework to guide the training and participation of registered engineering professionals and retain their skills and knowledge. This framework therefore allows for the establishment of a common database (pool) of registered persons/experts to conduct work in the following ECSA functions:

- Research
- Policy development and review
- Accreditation of engineering programmes in HEIs
- Evaluation of educational background qualification of non-accredited qualifications
- Certification of engineering training academies and certification of candidacy training programmes
- Registration of professionals and candidates
- Investigations of improper conduct / misconduct
- Regulation of professional conduct
- Acting in the interests of the public
- Engaging government.

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5. APPLICABLE LEGISLATIVE FRAMEWORK

The relevant legislation includes, among others, the following Acts, as amended, and policy directives as determined from time-to-time by the Minister of Public Works as the shareholder on behalf of the South African government.

- Engineering Profession Act, 46 of 2000
- Council for Built Environment Act, 43 of 2000
- Promotion of Access to Information Act, 2 of 2000
- Promotion of Administrative Justice Act, 3 of 2000
- Electronic Communications and Transactions Act, 25 of 2002
- Protection of Personal Information Act, 4 of 2013
- Skills Development Act, 97 of 1998.

6. CRITERIA FOR PARTICIPATION IN TRAINING

The terms and requirements for participating in training (to form part of the database pool) are explained below.

- (a) Registered persons must be in good standing with ECSA, meaning that registration status must be active.
- (b) Registered persons must be in a registration category and discipline relevant to the task.
- (c) Experts must be an academic with specific expertise required for the task.
- (d) Experts must have legal expertise relating to the task.
- (e) Retired registered persons/experts with vast knowledge relating to the task.
- (f) Experts must have relevant educational level for the task.


Registered persons or experts must have:

- undergone ECSA training relevant to the task
- been positively rated after participation in any ECSA activity.

Note: No persons whose registration has been cancelled or have been found guilty of improper conduct or misconduct may be in the database.

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7. TRAINING NOTICE

Training of the above experts remains the responsibility of ECSA's Business Units (BUs). The Business Units will send a notice for training via the office of the Executive at the beginning of the financial year according to approved budgets.

The office of the Executive will collate information from the BUs in consultation with those BUs.

In cases of common dates of training within the Division, affected parties must communicate (this is important for ensuring that no persons are appointed to more than one task at a time).

All Divisional training plans should be submitted to the Executive which is a custodian of the database.

BU Managers are responsible for ensuring that the training notice is sent out timeously to the ICT Business Unit (ICT BU) and invitees as per BU needs.

8. TRAINING SUPPORT BY THE IT BUSINESS UNIT

The ICT BU will send a training notice from the database.


During the training, the ICT BU will provide an online Attendance Registration Form for training participants to complete that is directly linked to the database, including development and updates. The Attendance Registration Form will contain information that provides all the details the database requires.

The database should be linked to Microsoft Bookings to enable different BUs to keep track of active registered persons / experts to avoid double booking.

Staff will need to be trained on how to operate Microsoft bookings.

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9. KEY TRAINING AREAS

The respective BUs, taking into consideration the different BU activities, will determine the training content. Generic training activities will focus on the following activities:

- Research
- Policy, Standard and Procedures development and review
- Accreditation of engineering programmes in HEIs
- Evaluation of educational background qualification of non-accredited qualifications;
- Certification of engineering training academies and certification of candidacy training programmes
- Qualification evaluation
- Registration of professionals and candidates
- Investigations
- Enforcement of compliance.

10. INFORMATION ON THE DATABASE


Information on the database should be linked to the Attendance Registration Form that must be completed during the training. It is the training organiser's responsibility to communicate the importance of completing the form and/or even allocating a dedicated time slot for registration in the training programme.

The details required are as follows:

- BU responsible for training
- Intention for training (document development, accreditations, registrations, conducting research, investigations or any business needs, for example)
- Name of the training participant
- Registration category
- Discipline
- Secondary/dual registration, if any
- Email address
- Office telephone number

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- Cell phone number
- Province
- Place of residence/work
- Career profile (to enable ECSA to identify required skills for appointment to the working group)

During the training, participants will be requested to give insights on the following questions to ensure that experienced experts share their knowledge and skills properly.

- What knowledge, critical to ECSA's success, would registered persons like to share/retain?
- How would registered persons like this knowledge to be retained?
- What critical expertise would registered persons like to share before retirement?
- How would registered persons like this knowledge to be transferred to the next generation of registered persons?

ECSA personnel may ask registered persons/experts to share information they have identified to be critical.

11. FUNCTIONALITY OF THE DATABASE

The database will be linked to all scheduled training sessions so that it can be developed during the training and update itself during each training session.


The database will indicate the trained people, the kind of training received, previous ECSA activities and current activities. If the trained person is currently involved in any ECSA activity, the system will show and block the booking to manage double bookings; this will ensure that all individuals can only be used for minimum of one and a maximum of three activities at a time.

All bookings will be processed on the database to ensure equitable exposure for all trained experts.

Experienced experts' answers will be captured as additional information below their profiles to assist ECSA personnel retain those skills by organising further training and documenting knowledge that is pertinent for ECSA's institutional memory and sustainability.

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12. CRITERIA FOR INCLUSION IN THE DATABASE

The database will comprise experts who are listed in **section 6** above who have undergone relevant training according to ECSA's business requirements. The experts who are currently assisting may be requested to provide training to others as a way of transferring their skills.

The skills transfer and retention database is envisaged as illustrated in **Figure 1** below.




Figure: 1 Criteria for inclusion in the database

The delegates should be trained during the training sessions and through actual participation in ECSA activities by being on working groups/task teams and being members of committees that consist of experienced persons. It is the BUs' responsibility to ensure proper balance of experienced and less experienced members when establishing working groups/task teams.

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13. ASSESSMENT OF EFFECTIVENESS OF SERVICES RENDERED AND RECEIVED


The assessment of services rendered and received will be two-way in the sense that the BU will assess services rendered and experts will assess support received from the BU. Assessment must be conducted after each activity, using the relevant rating tool (see **Appendix A: Service Provider (Working Group) RDD&R Rating**). The BU will also be assessed by the person who rendered the service in terms of the support provided (see **Appendix B: RDD&R Service Provider Satisfaction Rating Tool**). The assessment should be done by relevant BUs where the work has been conducted.

14. CONCLUSION

This framework's effectiveness is dependent on the users. The framework is broad enough to cover all key, core dimensions of skills transfer and knowledge retention practice in line with ECSA's different functions. Ultimately, the framework is developed to lead to best practice.

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Revision number	Revision date	Revision details	Approved by
Rev. 0 Draft A	27 September 2021	First draft	RDD&R
Rev. 0 Draft B	27 October 2021	Revision of the first draft	RDD&R
Rev. 0 Draft C	07 November 2021	Consultation with Education, Registration, CPD, Legal, IT, Quality and Research Business Units for inputs	RDD&R
Rev. 0 Draft D	14 December 2021	Review and Recommendation for Approval	Executive RPS: EL Nxumalo
Rev. 0	09 February 2022	Approval	RPSC

The Framework for:

Skills Transfer and Retention


Revision 0 dated 09 February 2022 and consisting of 14 pages has been reviewed for adequacy by the Business Unit Manager and is approved by the Executive: Research Policy and Standards (RPS).


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Business Unit Manager

.....10/03/2022.....

Date


.....

Executive: RPS


.....2022/03/10.....

Date

This definitive version of this policy is available on our website.

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Appendix A: Service Provider (Working Group) RDD&R Rating)

Name & Surname:

Name of the Reviewed/Developed documents:

Questions	Service Provider Satisfaction Rating					Comment: Strength or Improvement
	Very Satisfied	Satisfied	Okay	Dis-satisfied	Very Dis-satisfied	
1 How satisfied are you with the way the BU resolved issues you encountered during the document review/development?						
2 How satisfied are you with the administrative support that was provided to you during the document review/development?						
3 How satisfied are you with the availability of resources you needed or that were provided by the RPS team.						
4 How could we improve your experience with the BU?						
Comments:						

Signature: _____ **Date:** _____

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Appendix B: RDD&R Service Provider Satisfaction Rating Tool

Document Name:								
No.				Service Rating				
	Name	Professional Category	Discipline / Subdiscipline	Very Satisfied	Satisfied	Okay	Dissatisfied	Very Dissatisfied
1.								
2.								

Document Name:								
No.				Service Rating				
	Name	Professional Category	Discipline / Subdiscipline	Very Satisfied	Satisfied	Okay	Dissatisfied	Very Dissatisfied
1.								
2.								
3.								

Comments:

Designation: _____ Signature: _____ Date: _____

Designation: _____ Signature: _____ Date: _____