- An assessment of the current CRM system functionality to ascertain whether it can be reused, migrated or integrated with the modernized ICT Product in order to achieve some of the requirements identified in this document.

1.6 ASSUMPTIONS AND DEPENDENCIES

The following assumptions have been identified:

- A preferred partner will be selected based on the strength of their submission according to the identified evaluation criteria.
- Service Level Agreement(s) that will guide the working relationship between ECSA and the selected partner will be concluded to formalize the appointment of the partner.
- The business and process requirements described in this document are not exhaustive, but indicative of our envisaged product requirements and capabilities.

1.7 EVALUATION CRITERIA

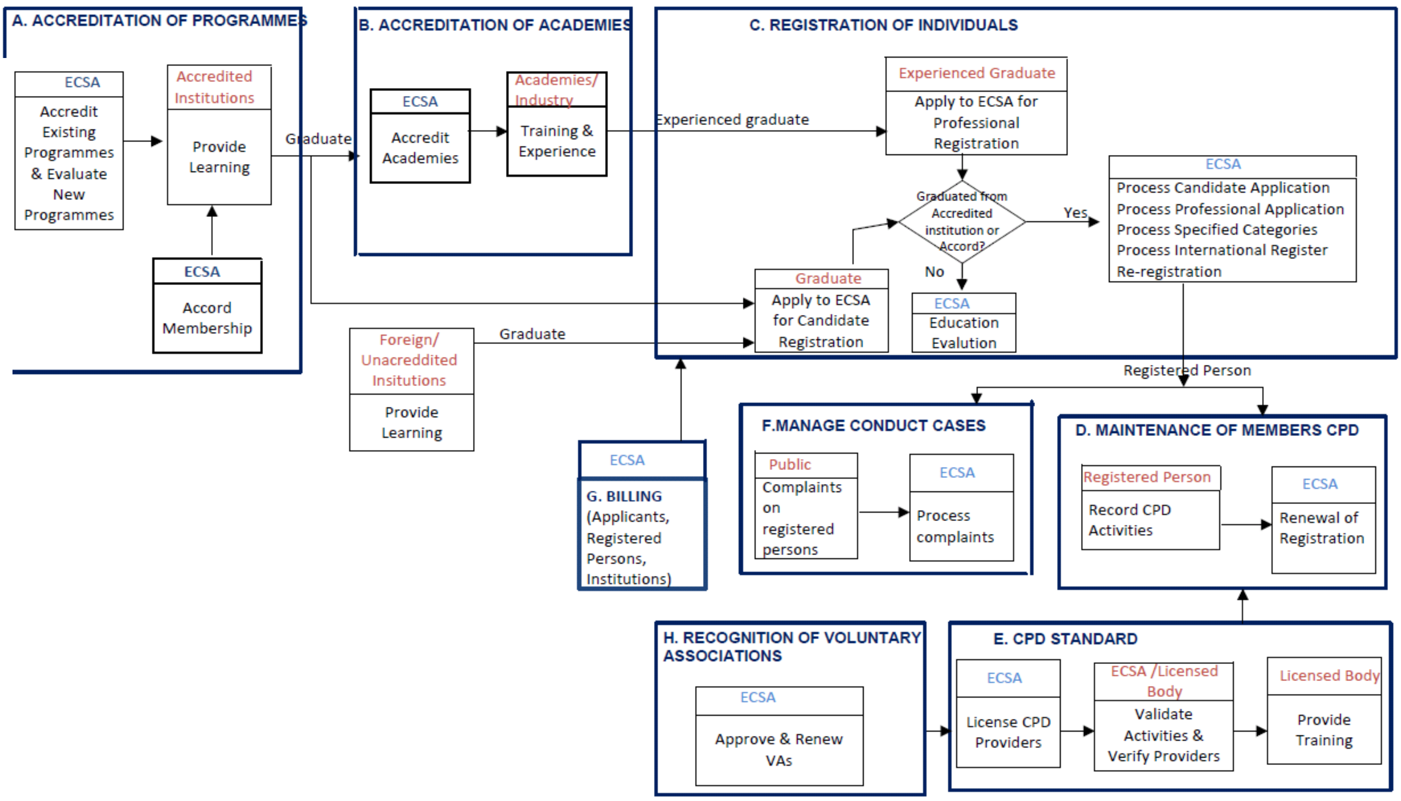
ıubmitted proposals will be evaluated against the criteria defined on the table below. More details are rovided under Compulsory Submissions.

ıREA	CRITERIA	POINTS
. Financial	1.1 Rates of the bidding team	100 points
	1.2 Risk sharing and Guarantees	100 points
:. Technical	2.1 Understanding of the brief	100 points
	2.2 Overarching and digital solution/philosophy	100 points
	2.3 Integration capacity with existing infrastructure (ICT)	100 points
	2.4 Project team credentials	300 points
	2.5 Past experience with ECSA	100 points
	2.6 Past similar experience elsewhere	100 points
:. Digital solutions for each unctional area	3.1 Accreditation of Eng. Programmes	200 points
	3.2 Accreditation of ECSA recognized training and development academies	200 points
	3.3 Registration of individual in various categories	500 points
	3.4 Digitalisation of the Continuing Professional Development (CPD) System	300 points
	3.5 Management system of conduct cases of registered persons	300 points
	3.6 Digitalisation of billing of registered practitioners	300 points

2 BUSINESS REQUIREMENTS OVERVIEW

The business requirements described in this document are grouped into several functional areas based on the structure of ECSA's business units. It should however be noted that the digitalisation project must ensure that operations are not performed in silos and information flows adequately throughout the different processes without the need for manual intervention or workarounds. An overview of the functional areas is below.

Figure 1: Overview of the functional areas

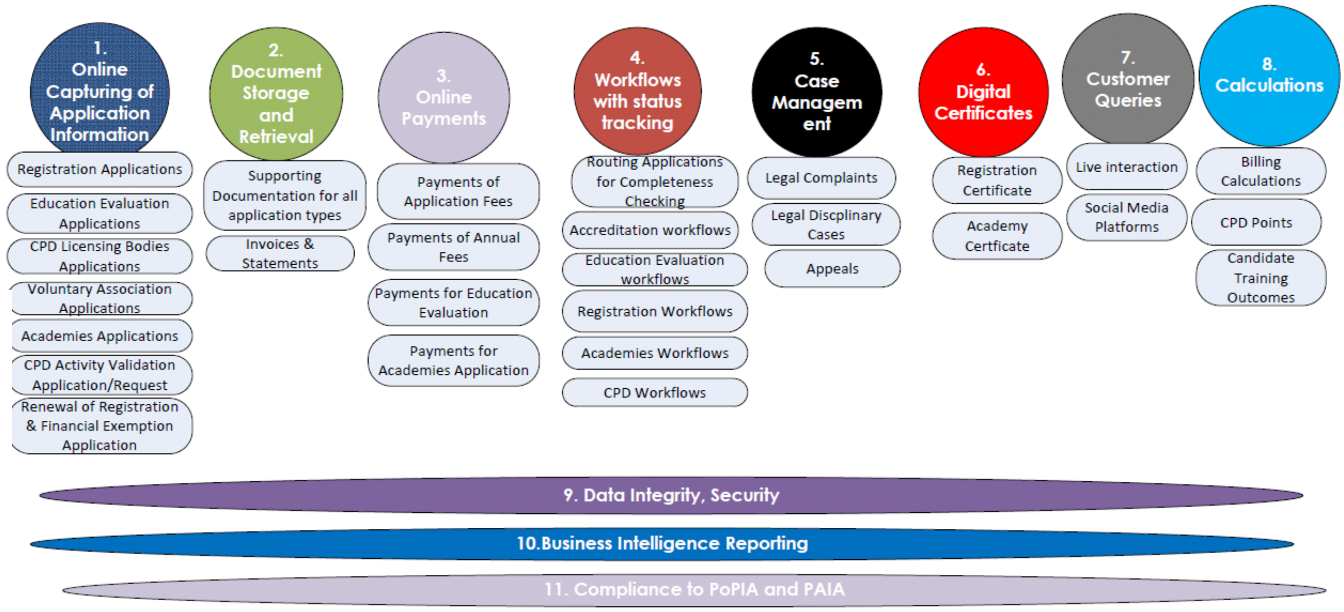


'he business requirement categories/functional areas are listed below and are detailed in the next ection of the document. (Click to view details).

A. Accreditation of Engineering Programs
B. Accreditation of ECSA recognized training and development academies
C. Registration of individuals in various categories
D. Maintenance of Members CPD
E. CPD Standard
F. Management of Conduct Cases of Registered Persons
G. Billing of Applications and Registered Persons
H. Recognition of Voluntary Associations

The required system functionalities are summarized in figure 2 below:

Figure 2: Summary of Required Functions



A full list of all business requirements is listed below:

REF	Category	Business Requirement	Process Map?	Classification
BR01	**Accreditation of Engineering Programs**	1.1 Accreditation of Existing Programs	**Yes**	Must have
		1.2 Evaluation of New Programs	**Yes**	Must have
		1.3 Education Evaluation	**Yes**	Must have
BR02	**Accreditation of ECSA recognized Training and Development Academies**	1.1 Establish Training Academy	**Yes**	Must have
		1.2 Manage Candidate Training and Engineering Reports	No	Must have
		1.3 Registration of Candidates from Academies	No	Must have
		1.4 Certification of Academies	No	Must have
		1.5 Training of Assessors for Academy Training	No	Must have
BR03	**Registration of individuals in various categories**	1.1 Process applications for registration in five candidacy categories	**Yes**	Must have
		1.2 Process applications for registrations in four professional categories	**Yes**	Must have
		1.3 Process applications for registration in five specified categories	No	Must have
		1.4 Process applications for registration in four International registers	No	Must have
		1.5. Process re-registration applications in all registration categories	No	Must have
		1.6 Cancellation of Registration	No	Must have

BR04	**Maintenance of Members' CPD**	1.1 Record CPD Portfolio	**Yes**	Must have
		1.2 Renewal of Registration	No	Must have
		1.3 CPD Exemption	No	Must have
		1.4 Cancel Registration due to Non-compliance to CPD	No	Must have
BR05	**CPD Standard**	1.1 Recognition of Licensed Body	No	Must have
		1.2 Monitor and Audit a Licensed Body	No	Must have
		1.3 Verify a CPD Service Provider	No	Must have
		1.4. Validate a CPD Activity	No	Must have
		1.5 Monitor and Audit a CPD Service Provider	No	Must have
		1.6 Register an Appeal	No	Must have
BR06	**Recognition of Voluntary Associations**	1.1 Approve Voluntary Associations	**Yes**	Must have
		1.2 Audit and Monitor Associations	**Yes**	Must have
		1.3 Renewal of VA Recognition	No	Must have
BR07	**Management of Conduct Cases**	1.1 Manage Complaints	**Yes**	Must have
		1.2 Manage Disciplinary Hearings	No	Must have
		1.3 Manage Appeals	No	Must have
		1.4 Process Criminal Cases	No	Must have
BR08	**Billing of Applications and Registered Persons**	1.1 Perform Billing	No	Must have
		1.2 Process Exemptions and Extensions	No	Must have
		1.3 Process Re-Instatements	No	Must have
		1.4 Facilitate Online Payments	No	Must have
		1.5 Generate Invoices and Statements	No	Must have
BR09	**Customer Queries and Complaints**	Manage Customer Queries and Complaints	**Yes**	Must have
BR10	**Reports Dashboard**	Provide Reports and Dashboards	No	Must have

A full list of technical and non-functional requirements is listed below. Details are provided on the Detailed Technical Requirements section.

REF	Technical Requirement	Classification
TR01	ChatBot Technology for External Customer Interaction	Must have
TR02	Ensure Data Integrity	Must have
TR03	Digital Signature Technology	Must have
TR04	Integrate with Document Management System	Must have
TR05	Integrate with Pastel Evolution	Must have
TR06	Integrate with Payment Gateway	Must have
TR07	Integrate with ECSA Website	Must have
TR08	Integrate with SMS, WhatsApp and Email	Must have
TR09	Integrate with Social Media Platforms	Must have
TR010	Compliance to PoPIA and PAIA	Must have
TR011	Data migration from existing systems	Must have
TR012	System availability with failover capabilities	Must have
TR013	Cloud Hosting with disaster recovery	Must have
TR014	System Performance	Must have
TR015	System Security	Must have
TR016	Browser Compatibility	Must have
TR017	Self-Service Business Intelligence Reporting	Must have
TR018	Integrate with Telephone System	Should have
TR019	Integrate with Quality Management System	Must have

3 DETAILED BUSINESS REQUIREMENTS

3.1 ACCREDITATION OF ENGINEERING PROGRAMMES

Accreditation of Engineering is a formal recognition awarded to an Education or Training Programme through a quality assurance procedure that ensured it met the criteria laid down for the type of programme.

The following business requirements should be implemented:

REF	Category	Business Requirement	Process Flow?	Classification
BR01	**Accreditation of Engineering Programs**	1.1 Accreditation of Existing Programs	Yes	Must have
		1.2 Evaluation of New Programs	Yes	Must have
		1.3 Evaluation of Education Qualifications	Yes	Must have

3.1.1 Accreditation of Existing Programmes

A formal recognition awarded to an Education or Training Programme through a quality assurance procedure that ensured it met the criteria laid down for the type of programme.
The system must automate the following accreditation sub-processes:

- Pre-Accreditation Activities
- Post Accreditation Activities
- EC Meeting Activities

The system must be able to:

- Perform **Pre-Accreditation** activities as follows:
  - a) Allow ECSA Education BU to upload accreditation schedule (Oct/Nov previous year, this involves the automation of the E-20-P lists)
  - b) Allow ECSA Education BU to upload accreditation schedule (Oct/Nov previous year, this involves the automation of the E-20-P lists)
  - c) Send reminders for accreditation
  - d) Schedule and confirm invitations for training and accreditation
  - e) Conduct online optional training for faculty members to be accredited (training will be conducted through Microsoft teams) however attendance registers should be kept on the system.
  - f) Upload of accreditation documentation and verification of completeness of documents
  - g) Allow Education Manager to upload attendance registers
  - h) Allow for the scheduling and inviting of the accreditations teams to the accreditation
  - i) Conduct online training for accreditation team
  - j) Allow the creation of an accreditation timetable (as per e-11-p)
  - k) Allow for editing of the timetable
  - l) Allow for confirmation of the timetable by institution and ECSA

- Perform **Post-Accreditation** Activities as follows:
  - m) Allow Education Manager to upload of draft accreditation reports
  - n) Draft reports can be edited outside of the system and the system must allow the Education Manager to reload the documents.
- Perform **EC Meeting** activities as follows:
  - o) Enable Education Manager to send EC invites to Dean and Accreditation Leaders
  - p) Receive accepted or declined notifications
  - q) Enable Education Manager to send a decision letter to Vice-Chancellor (VC). Cc to Dean and Council of Higher Education(CHE)
  - r) Enable Education Manager to update list of accredited degrees
  - s) If required, Enable Education Manager to update schedule of visits for interim evaluation
  - t) Enable Education Manager to update register of evaluators

NB: Timelines are associated to above activities

Process Maps: Pre-Accreditation Activities, Post-Accreditation and EC Meeting Activities
Business Rules: To be supplied during implementation

3.1.2 Evaluation of New Programmes

The accreditation policy provides two mechanisms to accommodate face-to-face, blended and fully online programmes that are newly designed and programmes that are already producing graduates and are presented for accreditation for the first time.

A provider wishing to present a programme in one of the above categories must apply to the ECSA for an evaluation. On receipt of approval of the type of evaluation, a self-study in accordance with the policy in document E-12-P that is appropriate to the type of evaluation must be submitted as specified in Table 1 of document E-12-P.

The system must automate the following accreditation sub-processes:

- Endorsement/Initial Evaluation: This is an electronic evaluation of a proposed programme based on comprehensive planning information. Available to education providers that do not have programmes accredited by the ECSA for at least one cycle.
- Desktop Evaluation: It is a comprehensive electronic evaluation of an existing unaccredited programme that produces graduates. May be required as a precondition to

an accreditation accreditation in the case of education providers that do not have programmes accredited by the ECSA but have completed one accreditation cycle

The system must be able to:

a) Request for evaluation received
b) Reply to the institution indicating the submission requirement
c) Receive documentation submitted by the institution
d) Appoint the evaluation teams
e) Send the documentation to the evaluation teams
f) Send the appointment letters to the evaluations teams
g) Teams able to evaluate the documentation
h) Feedback received from the teams
i) Feedback sent to the institution
j) If feedback is negative, institution will resubmit and repeat from point “e” until final outcome

Process Map: Evaluation of New Programs
Business Rules: To be supplied during implementation

3.1.3 Education Evaluation

Education evaluation is a process of recognition of educational qualifications and the assessment of the level of educational achievement of applicants in candidate categories.

The system must be able to:

- Perform **Initial assessment** activities as follows:

a) Enable applications to capture applications and upload documentation
b) Validate application fields and store documents
c) Application documentation will be sent to Evaluators from the system
d) Evaluators will have 5 days in which to assess the files
e) Evaluators will have to send all their comments within 4 days to Team leader for Team Leader to consolidate comments
f) Signed and returned to Education Officer on the 5th day.
g) On receipt of feedback, the Education Officer will send feedback to the applicant

In case the submitted documentation is not sufficient for the assessors to make a determination and interview with the applicant will be required for clarification.

The system must be able to:

- Perform **Interview assessment** activities as follows:

h) Education Officer will invite Evaluators and Applicant to an online interview
i) Education Officer will be present during the interview and observer in order to and provide technical assistance if required.
j) Once interview is completed the Interviewing Team must submit a signed electronic form with recommendation to the education officer.

The system must be able to:

- Perform **Post Interview assessment** activities as follows:

k) Once recommendation have been received the education officer will send the final outcome letter
l) Assign the application to the Assistant Manager: Education
m) Assistant Manager to capture the outcome
n) Assistant Manager to assign after capturing outcome to Registration

Process Maps: Initial Assessment Activities and Interview Assessment
Business Rules: To be supplied during implementation

3.2 ACCREDITATION/MANAGEMENT OF ECSA RECOGNIZED TRAINING AND DEVELOPMENT ACADEMIES

ECSA has initiated a process to establish and manage training academies to enable employers and institutions procuring engineering services to have adequate training, development and mentoring programs. The programs are aimed at providing support and exposure to aspirant engineering professionals to equip them for professional registration with ECSA.
Click on this link to view the overall process map.

The following business requirements should be implemented:

REF	Category	Business Requirement	Process Flow?	Classification
BR02	**Management of Training Academies**	3.1 Establish Training Academy	Yes	Must have
		3.2 Manage Candidate Training and Engineering Reports	No	Must have
		3.3 Registration of Candidates from Academies	No	Must have
		3.4 Certification of Academies	No	Must have
		3.5 Training of Assessors for Academy Training	No	Must have

3.2.1 Establish Training Academy

The process to establish training academies involves submission of an application to ECSA by organizations that wish to establish an academy. The organization's company registration number is used to identify the application/academy. Once application is submitted with a fee, ECSA performs an assessment of the organization's ability to establish the academy by looking at their infrastructure, training programs, projects, mentors etc. The assessment is called Desktop Evaluation and is performed by ECSA through Education Committee, Assessors that form an Evaluation Team, CPD Manager and Executive. If the assessment is successful the organization is endorsed, given a certificate and added to a list for certificate visit. Different statuses should be set for each step of the process for easy tracking of the application process.

For pilot academies with organization identified by ECSA, an MoU is signed by ECSA and the organization without following the application process.

The system must be able to:

a) Facilitate the application process
b) Validate fields and store supporting documents onto Document Management System
c) Facilitate Online Payments
d) Enable different role players inside and outside ECSA to log onto the system and perform Desktop Evaluation
e) Publish a list of endorsed training academies

Process Maps: Establishment of Training Activities
: Desktop Evaluation

Business Rules: To be provided during implementation

3.2.2 Manage Candidate Training and Engineering Reports

Candidates from Training Academies are required to submit training reports on a yearly basis to work towards meeting the eleven registration outcomes prescribed by ECSA. This is referred to as incremental logging. The yearly training reports are approved the academy's training assessors. The reports are monitored by the ECSA CPD Manager.
The candidate must indicate the level of responsibility for each outcome they are reporting on as well as supporting evidence. Each reporting year has a minimum target to be reached e,g. for year one they must have a minimum of 10%, for year 2 is 40% year 3 is not less than 90%. The CPD Manager should be getting the reports and monitor if the candidates are achieving the minimum percentage. If they are lagging, the CPD Manager can discuss with the academy Formative assessments are done during the year and are managed by the training academies. After three years, the candidates should submit the Engineering report.

The system must be able to:

a) Allow CPD/Academies Manager to upload a list of Candidates for each certified/endorsed Academy
b) Enable Candidates to submit training reports as part of the incremental logging onto the system
c) Enable CPD/Academies Manager to receive notification if the candidate has not reached the minimum target.
d) Enable CPD/Academies Manager to receive notification if the candidate has not submitted the yearly report
e) Enable CPD/Academies Manager to make comments about Candidates training reports
f) Enable Candidates to submit Engineering report after three years.
g) Send notification to Candidate to apply for ECSA Professional Registration after they have successfully met all the training requirements.

Process Maps: To be provided during implementation
Business Rules: To be provided during implementation

3.2.3 Registration of Candidates from Academies

After successfully completing training from Academies, candidates can apply for professional registration at ECSA.
The system must be able to:

a) Allow Candidate to apply for ECSA Professional Registration, their details must be displayed for the candidate if they are still up to date or not so they can update their details
b) Attach all the Candidate qualifications and Training Reports to the Application
c) Allow Candidate to make payment
d) Follow the Registration Process for a Professional as defined under Registration of Individuals section.

3.2.4 Certification of Academies

Certification of Academies signifies formal recognition by ECSA, through a quality assurance procedure, that a training programme meets the certification criteria. Training programmes are judged to satisfy a prescribed criteria and that they are able to continue to produce candidates who meet the competency outcome criteria for a defined period of up to four [4] years. Should a training programme not satisfy all criteria but evidence exists of commitment and capacity on the part of the organization to achieve full compliance within a stated time, the training programme may be certified for a period not exceeding two [2] years.

The system must be able to:

a) Send reminders on upcoming date of certification visits 5 months prior to academies, based on a certification schedule.

b) Enable contact person to upload required documents onto the system
c) Facilitate the appointment of the certification team
d) Allow CPD/Academies Manager to capture certification visit report onto the system
e) Allow CPD/Academies Manager to capture decision from the Central Registration Committee
f) Generate certificate if outcome is certificate.
g) Update and publish list of certified academies

Process Map: To be developed later.
Business Rules: To be supplied during implementation

3.2.5 Training of Assessors for Academy Certification

The process of certification of academies required certification teams that comprise individuals who are listed as training academy assessors. ECSA's Regulatory Functions Division is required to maintain a list of training academy assessors for all training programmes.
The system must be able to:

a) Allow the CPD/Academies Manager to send out the training schedules and invitations
b) Allow the CPD/Academies Manager to upload training material and attendance registers.

Process Map: Not applicable

3.3 REGISTRATION OF INDIVIDUALS IN VARIOUS CATEGORIES

'he purpose of a registration system is to process candidacy, professional and specified categories pplications of engineering practitioners in line with the Regulations of the Engineering Profession Act 46 of 2000).

'he engineering Council of South Africa is per section 18 of the EPA mandated to register the following ategories:

- **Professional**: There are **FIVE** professional categories, namely, Professional Engineers, Professional Engineering Technologists, Professional Certificated Engineers and Professional Engineering Technicians.

- **Candidate:** There are **FIVE** candidacy categories, namely, Candidate Engineer, Candidate Engineering Technologist, Candidate Engineering Technician, Candidate Certificated Engineer, and Candidate in Specified Categories.

- **Specified categories prescribed by the Council:** There are **FIVE** specified categories, namely, Lifting Machinery Inspectors, Additional scope for Lifting Machinery Inspectors, Lift Inspectors, Civil Laboratory Technical Controllers and Fire Protection Systems Practitioners.

- **International Registers:** There are **FOUR** international registers, namely, International Register for Professional Engineers, International Register for Professional engineering technologists, International Register for Professional engineering technicians and International to international Register across all categories

The following business requirements should be implemented:

REF	Category	Business Requirement	Process Flow?	Classification
BR03	**Registration of individuals in various categories**	1.1 Process applications for registration in five candidacy categories	Yes	Must have
		1.2 Process applications for registrations in four professional categories	Yes	Must have
		1.3 Process applications for registration in five specified categories	No	Must have
		1.4 Process applications for registration in four International registers	No	Must have
		1.5. Process re-registration applications in all registration categories	No	Must have
		1.6 Cancellation of Registration	No	Must have

3.3.1 Process applications for registration in five candidacy categories

The process involves an applicant submitting an application to ECSA. Once the application is submitted, then it is vetted, assigned for finalization where the electronic ECSA certificate is generated.

The system must be able to do the following:

c) Facilitate the application process
d) Applicants must be able to submit applications for registration and upload required documents across all categories of registration, process their application payment on the portal and the system must generate a profile number which will be sent to the applicant post applicant via automated email notification.
e) Validate fields and store supporting documents onto Document Management System
f) Facilitate Online Payments
g) The system must generate automated emails to applicant for updates on every stage of the process.
h) Escalation emails if application has taken more than the prescribed timelines in any stage of the process.
i) Enable Registration Manager to log onto the system, select the relevant outcomes, automated notification of the outcome and generate an electronic ECSA certificate.
j) Publish a list of registered persons etc.

Process Map: [Application for Registration in Five Candidacy Categories](#).
Business Rules: To be supplied during implementation

3.3.2 Process applications for registrations in four professional categories

The system must be able to do the following:

a) Facilitate the application process

b) Applicants must be able to submit applications for registration and upload required documents across all categories of registration, process their application payment on the portal and the system must generate a profile number which will be sent to the applicant post applicant via automated email notification.

c) The referees must be able to receive notification and log into the portal to submit their referee reports for an application.

d) Validate fields and store supporting documents onto Document Management System

e) Facilitate Online Payments

f) The system must generate automated emails to applicant for updates on every stage of the process.

g) Escalation emails if application has taken more than the prescribed timelines in any stage of the process.

h) Assessors, Reviewers and Moderators must be able log into the portal and access applications for assessment.

i) Portal has to automate emails with link to assessors, reviewers and moderators to access application for assessment.

j) Automated emails to officers on completed assessments and responses back from the Assessors, Reviewers and Moderators.

k) The system must provide fields to compose teams of Assessors, Reviewers and Moderators for each application to be assessed.

l) Enable Registration Manager to log onto the system, select the relevant outcomes, automated notification of the outcome and generate an electronic ECSA certificate.

m) Publish a list of registered persons etc.

Process Map: Application for Registration in Four Professional Categories.
Business Rules: To be supplied during implementation

3.3.3 Process applications for registration in five specified categories

The requirements and the process are the similar to “Process applications for registration in four specified categories described above.

3.3.4 Process applications for registration in four international registers

The requirements and the process are the similar to “Process applications for registration in four specified categories described above.

3.3.5 Process re-registration applications in all registration categories

The system must be able to do the following:

a) Facilitate the application process

b) Applicants must be able to submit applications for registration and upload required documents across all categories of registration, process their application payment on the portal and the system must generate a profile number which will be sent to the applicant post applicant via automated email notification. The referees must be able to receive notification and log into the portal to submit their referee reports for an application.

d) Validate fields and store supporting documents onto Document Management System

e) Facilitate Online Payments

f) The system must generate automated emails to applicant for updates on every stage of the process.
g) Escalation emails if application has taken more than the prescribed timelines in any stage of the process.
h) Assessors, Reviewers and Moderators must be able log into the portal and access applications for assessment.
i) Portal has to automate emails with link to assessors, reviewers and moderators to access application for assessment.
j) Automated emails to officers on completed assessments and responses back from the Assessors, Reviewers and Moderators.
k) The system must provide fields to compose teams of Assessors, Reviewers and Moderators for each application to be assessed.
l) The system must generate a registration/refusal number at the end of each application for registration process.
m) The system must send an automated email to applicant with registration/ refusal number
o) Upon registration the system must generate an electronic ECSA registration certificate.
p) The system must send a link of the electronic certificate must be sent to the applicant/ registered person.
q) The system must generate a registration letter and send to the applicant/ registered person.
r) The system must keep database of the Assessors, Reviewers, and Moderators.
s) The system must keep record of the database of register/ refused/ closed/ in process applications.
t) Enable Registration Manager to log onto the system, select the relevant outcomes, automated notification of the outcome
u) Generate an electronic ECSA certificate.
v) Retrievable reports/ lists of registered persons/ cancelled/ refused/ etc.

Process Map: To be developed later
Business Rules: To be supplied during implementation

3.3.6 Cancellation of Registration

The system must be able to facilitate cancellation of registration of registration due to non-payment of fees or non-compliance of CPD.

3.4 MAINTENANCE OF MEMBERS' CPD

Section 22(1) of the Engineering Profession Act, 2000 (Act 46 of 2000) requires that a registered person has to renew his or her Registration and has to "apply, in the prescribed manner, to the Council for the renewal of his or her Registration". The Renewal of Registration is linked with Continuing Professional Development (CPD). CPD can be defined as a systematic maintenance, improvement and broadening of knowledge and skills, and the development of personal qualities necessary for the execution of professional and technical duties throughout a person's engineering career.

The following business requirements should be implemented:

REF	Category	Business Requirement	Process Flow?	Classification
BR04	**Maintenance of Members' CPD**	1.1 Record CPD Portfolio	Yes	Must have
		1.2 Renewal of Registration	No	Must have
		1.3 CPD Exemption	No	Must have
		1.4 Cancel Registration due to Non-compliance to CPD	No	Must have
		1.5 Search for Validated Activities	No	Must have

3.4.1 Record CPD Portfolio

This process allows persons registered in professional categories to record their CPD Portfolio under Category 1 or 2 or 3. Category 1 should be validated activities that exist on the system. Non-validated activities should be validated through the process that involves CPD Officer/Manager and CPD Committee.
CPD Portfolios are recorded for a specific year within 5 year cycle. Registered persons should log onto the system to record CPD portfolio. Anyone/Public should be able to search for validated activities without logging onto the system. The following business requirements should be implemented:

The system must be able to:

a) Allow logged on registered persons to capture their CPD portfolio which is made of up of activities that are grouped into Category 1 - Developmental Activities, Category 2 – Work based Activities, and Category 3 - Individual Activities.
b) With regard to Category 1 the registered person does not enter an activity; the system picks it up by searching from a list of existing/validated activities.
c) Save the captured information and calculate relevant points/credits. CPD portfolio is captured for a specified cycle. A cycle is made up of 5 years. Registered persons can capture their CPD portfolio at any time.

Additional Requirement: There is a requirement to use a Mobile App and scanning of QR codes to capture/record attendance of CPD activities. The requirement will be described at a later stage

Process Map: Manage CPD Portfolio.
Business Rules:

- A registered person must have a total of twenty five credits over a 5 year period i.e. a cycle
- Five of the twenty five credits must be from Category 1
- A minimum of three credits must be obtained in two of the three categories per year
- The types of activities, as well as required maximum and minimum credits for each Category will be provided.

3.4.2 Renewal of Registration

The CPD system notifies registered persons due for renewal of registration that the application for renewal must be made by a stated date. The registered person updates his/her personal, employer, and contact information online. The registered person download, signs a declaration and uploads it to the system.
Various outcomes are shown, for example: refer to committee; audit or complied with the requirements in terms of the rules.
A person who is registered in more than one professional/specified category, the date applicable to the category in which such person first registered with the council will be recorded as the date on which such a person's five-year cycle commence, and which constituted the expiry date.

System requirements:

a) The system must notify registered persons by email and sms that they are due for renewal of registration by a certain date. This date is unique to each registered person.
b) The system must send email and sms reminders to the members due for renewal of registration at regular intervals as determine by the rules and CPD (refer to CPD process flow).
c) The system checks to see if the required CPD credits have been accumulated or the registered person has obtained exemption. If these criteria are not met the member cannot continue with the renewal.
d) If not registered person cannot be renewed -- apply for exemption or follow the noncompliance method (section 13 of the rules).
e) The registered person updated his/her personal, employer, contact information online.
f) The registered person should be able to print the declaration form so that he/she can have it commissioned.
g) After the required signatures have been obtained the registered person should be able to upload the document to his portfolio for the respective CPD cycle.
h) The system notifies the CPD Business Unit that there is a renewal awaiting approval.
i) As a CPD Business Unit I want to see all renewals awaiting approval on my dashboard.
j) As a CPD manager I want to be able to see all renewals that have passed the renewal date so that I can expedite them.
k) As a CPD Business Unit I want to be able to see all the details of the renewals assigned to me so that I can take the appropriate action.
l) As the CPD Business Unit I want to be able to enter the outcome of the renewal into the system.
m) The system notifies the CPD manager that there is a renewal awaiting approval.
n) The system must notify the registered person as to the outcome via email and sms.
o) On finalization of the renewal process the system should create a new blank 5-year cycle (page) for credits to be recorded on.

Process Map: To be developed later
Business Rules: To be supplied during implementation

3.4.3 CPD Exemption

A registered person may apply for exemption from having to meet the CPD requirements for part or all of the periods in a cycle due to various reasons (see section 8 of the Rules on CPD and Renewal of Registration).
System should be able to identify when a registered person was marked retired and then automatically calculate/indicate the credits outstanding.
Evidence in regard to the request should be uploaded against the system.

System requirements:

a) The system must route the application for exemption to the appropriate CPD Business Unit's dashboard.
b) As a CPD Business Unit I want to view the application for exemption so that I can take appropriate action.
c) As a CPD Business Unit I want to be able to route the application to the appropriate member of the committee for consideration.
d) The system must notify the committee member via email that there is an application awaiting consideration.
e) As a committee member I want to be able to see all exemption applications assigned to me.
f) As a committee member I want to see all the details pertaining to the application so that I can make a decision.
g) As a CPD Business Unit I want to be able to see all applications and to which committee members they have been assigned.
h) The system must send reminder emails to committee members at regular intervals that they have outstanding applications.
i) As a CPD manager I want to be able to see late applications that have been assigned to committee members so that I can follow up.
j) As a committee member I want to be able to register my decision against the application. Exempt /Not exempt and provide a reason
k) As a committee member I want to be able to route the application back to the CPD Business Unit so that the appropriate action can be taken.
l) CPD Manager - should approve or decline exemption outcome
m) As a CPD Business Unit I want to be able to notify the applicant of the outcome and reason for non-exemption if applicable. This is to be done via a system generated email.
n) The system must inform the CPD Business Unit of the decision on the officer's dashboard.
o) The system must inform the applicant via email of the outcome and the reason for non-exemption.
p) As a registered person I want see if I have been granted exemption from the qualifying criteria for a given year.
q) As a CPD Business Unit I want to be able to see if the registered person has been granted exemption for a given year.

Process Map: To be developed later
Business Rules: To be supplied during implementation

3.4.4 Cancel Registration due to Non-Compliance to CPD

Regular notification must be sent out by the CPD system notifying registered persons that they are required to update the CPD portfolio or that they have to renew their registrations. Noncompliance for a particular period or cycle should be communicated to the registered persons after the period's expiry date
Should the registered person fail to comply with the requirements of the rules at the end of the 5 years the system should:

- record this fact in the applicable register; and
- inform the non-compliant applicant of this fact and afford such applicant an opportunity to rectify the situation in a prescribed period of time.

Should the registered person still not comply with requirements after the prescribed period indicated above, then Council should refer the matter to the Central Registration Committee of the Council to consider whether or not renewal of such person's registration should be refused or not.

The refusal or deregistration should be actioned and the reason for deregistration should be displayed on the ECSA's website.

Process Map: To be developed later
Business Rules: To be supplied during implementation

3.4.5 Search for Validated Activities

This is a public search facility where any person can search the CPD Database to locate and view the details of validated CPD activities in Category 1: Developmental Activities.
The user must be able to search by Activity name or a section thereof, Activity number or the Provider. The user should also be able to limit the returns by selecting certain criteria for example licensed body or year etc.
The public search facility should provide a direct link to the provider's website were the registered person will be able to locate the registration form, payment details etc.

Process Map: To be developed later

3.5 CPD STANDARD

The standard designates the ECSA as the sole custodian of CPD, with other role players such as Voluntary Associations, Higher Education Institutions (private and public) and CPD Service Providers. The standard intends to provide authority to Voluntary Associations (VAs) and Higher Education Institutions to verify CPD Service Providers and validate CPD Activities on its behalf through a process called CPD licensing. The function performed by verified CPD Service Providers is to offer appropriate learning in respect of Category 1 CPD validated activities.

The Licensed Bodies ensure that the quality of the CPD Activity is of an appropriate standard for the target audience. The target audience refers to the category (e.g. Professional Engineer, Professional Engineering Technologist, Professional Engineering Technician and Specified Categories). The CPD Licensed Bodies ensure the quality of CPD Activities by monitoring and auditing the CPD Service Providers on a regular basis.

The ECSA monitors and audits the CPD Licensed Body to ensure that the CPD Activities that are offered by the CPD Licensed Body are of an appropriate standard and quality for the target audience.

REF	Category	Business Requirement	Process Flow?	Classification
BR05	**CPD Standard**	1.1 Recognising Licensed Body	No	Must have
		1.2 Monitor and Audit a Licensed Body	No	Must have
		1.3 Verify a CPD Service Provider	No	Must have
		1.4. Validate a CPD Activity	No	Must have
		1.5 Monitor and Audit a CPD Service Provider	No	Must have
		1.6 Register an Appeal	No	Must have

3.5.1 Recognition of Licensed Body

The process involves an application submitted to ECSA by a VA or Higher Education Institution (HEI). ECSA makes an assessment of the application. Successful applicants are referred to as licensed body and are granted licenses identified by a unique number. Reapplication is every three years.

The business requirements are as follows:

The system must be able to:

a) Enable VAs and HEI to submit applications as licensed body via an online portal
b) Validate application against recognized VA database and accredited HEI database.
c) Integrate with a Document Management System to store documents uploaded as supporting documents to the application
d) Generate acknowledgement notification and provide unique Reference Number
e) Allow applicants track progress of their applications
f) Enable CPD Manager to login to the system to verify completeness of documents and send notification if there are missing documents.
g) Enable selected CPD Committee members to log onto the system to assess the application
h) Generate a digital license certificate for approved licensed body
i) Licensed body to update any changes recorded in the original application
j) Enable CPD Manager to login to the system to verify changes and confirm acceptance
k) Send out reminder notifications at specific intervals to inform VA's and HEI's of their upcoming renewal

Process Map: To be developed later.
Business Rules: To be supplied during implementation

3.5.2 Monitor and Audit a Licensed Body

Every three years or as and when necessary, ECSA monitors and audits licensed body by inspecting their premises or requesting for documentation.

The system must be able to:

a) Allow CPD Manager to log onto the system to initiate a monitoring/auditing process for a selected licensing body and entering date of audit or inspection
b) Capture outcome of the inspection visit
c) Send a request for specified documentation to the licensing bodies including due dates for submission.
d) Enable licensing body to upload requested documentation onto the system and store it onto Document Management System
e) Enable the CPD Manager to capture the outcome of the audit and the system should notify the licensing body of the status.
f) Enable CPD Manager to capture corrective actions and deficiency
g) Allow CPD Manager to change the licensing status of the licensing body if it is revoked and the system to send notification all relevant stakeholders.
h) Disable/Invalidate the license certificate if license is revoked.

Process Map: To be developed later.
Business Rules: To be supplied during implementation

3.5.3 Verify a CPD Service Provider

Even though ECSA delegates the powers of this function to licensed body, ECSA can also choose to verify CPD Service Provider. In particular, a licensed Body that wish to be CPD Service Provider are verified by ECSA.

The system will facilitate this function by ECSA only. The Licensed Body will use their systems to verify service provider and upload a list of the providers that they have verified onto the ECSA system by a daily upload or real-time integration onto their systems.

The system must be able to:

a) Enable licensed body to submit an application to be considered as CPD Service Provider via an online portal to ECSA
b) Provide the same functions as described under function “Register a Licensed Body” above starting from point number (b) to number (j)
c) Enable licensed body to upload list of CPD providers that they verified onto the system by a daily upload or real-time integration onto their systems.

Process Map: To be developed later.
Business Rules: To be supplied during implementation

3.5.4 Validate a CPD Activity

Even though ECSA delegates the powers of this function to licensing bodies, ECSA can also choose to Validate CPD Activities. A licensing body, if registered as a CPD Service Provider will validate their own activities.

The system will facilitate this function by ECSA only. The Licensed Body will use their systems to validate CPD activities and record the information of the activities that they have validated onto the ECSA system. An approval process will take place before the information is recorded on the system.

The system must be able to:

a) Enable CPD Providers to submit activities that they require validation for
b) Validate fields captured according to validation rules as well prevent duplication of applications for the same activity
c) Integrate with a Document Management System to store documents uploaded as supporting documents to the application
d) Generate Invoice on the Finance System and allow the CPD Providers to view the invoice
e) Facilitate online payment of the invoice by the CPD Provider
f) Allow applicants track progress of their applications and update applications at certain limited stages of the application
g) Enable CPD Manager to login to the system to verify completeness of documents and send notification if there are missing documents.
h) Enable selected CPD Committee members to log onto the system to asses/validate the activities
i) Send approved/declined outcome to the CPD Provider with Validation Number
j) Enable licensed body to log into the system to upload their activities or real-time integration onto their systems.

Process Map: To be developed later.
Business Rules: To be supplied during implementation

3.5.5 Monitor and audit CPD Service Providers

After three years or as and when necessary, ECSA monitors and audits service providers by inspecting their premises or requesting for documentation. The process is similar to the monitoring and auditing of licensed body.

Process Map: To be developed later.
Business Rules: To be supplied during implementation

3.5.6 Register an Appeal

The system must facilitate a process to register an Appeal.

3.6 RECOGNITION OF VOLUNTARY ASSOCIATIONS

ECSA is mandated to recognize Voluntary Associations that meet the requirements as set out in the Voluntary Association Framework.

The process involves an application submitted to ECSA by an association that is seeking to be become a Voluntary Association of ECSA. ECSA makes an assessment of the application against the VA Framework requirements. The Framework makes provision for Two Categories of Recognition; Category A and B.

VAs applying for Category A have to meet the criteria reflected in section 3 of the Framework which include, but not limited to the fact that the association must least 100 voting members in good standing with the Association majority of whom must be registered persons in good standing with ECSA (Fees and CPD).

VAs applying for Category B have to meet the criteria reflected in section 4 of the Framework which include, but not limited to the fact that the association must least have at least 10 corporate members who are in good standing with the Association.

Both Category A and B applicants must be governed by a formally accepted constitution which does not contradict that of the country and furthermore an Association must in writing commit to promote registration with ECSA.

Successful applicants are referred to as Voluntary Association and are recognised should they meet all the requirements for a period of five years after which the VA needs to reapply.

The business requirements are as follows:

REF	Category	Business Requirement	Process Flow?	Classification
BR06	**Recognition of Voluntary Associations**	1.1 Approve Voluntary Associations	Yes	Must have
		1.2 Audit and Monitor Associations	Yes	Must have
		1.3 Renewal of VA Recognition	No	Must have

3.6.1 Approve Voluntary Associations

The system must be able to:

l) Enable associations to submit applications for Voluntary Association Recognition on an online portal

m) Validate fields captured according to recognition requirements as well prevent duplication of applications for the association
n) Integrate with a Document Management System to store documents uploaded as supporting documents to the application
o) Generate unique application Reference Number
p) Allow applicants track progress of their applications and update applications at certain limited stages of the application
q) Enable the Stakeholder Relations and Marketing Manager to login to the system to verify completeness of documents and send notification if there are missing documents
r) Generate a digital VA Recognition certificate for successful applications
s) Enable unsuccessful applicants to submit an appeal should they wish
t) Enable Stakeholder Relations and Marketing Manager and Strategic Services Executive to process an appeal.

Process Map: Recognition of Voluntary Association.
Business Rules: To be supplied during implementation

3.6.2 Audit and Monitor Associations

Prior to recognising an Association, the Council may conduct an audit to verify information submitted. Post-recognition Audit - The audits will focus on the performance of the recognised VAs against pre- determined performance targets. This exercise aims at establishing if the VAs are complying with the rules. VAs to be visited will be informed prior the visit.

The system must be able to:

i) Allow Stakeholder Relations and Marketing Manager to log onto the system to initiate an auditing process for a selected Voluntary Association and entering date of audit or inspection
j) Capture outcome of the inspection visit
k) Send a request for specified documentation to the Voluntary Associations including due dates for submission.
l) Enable Voluntary Association to upload requested documentation onto the system and store it onto Document Management System
m) Enable the CPD Manager to capture the outcome of the audit and the system should notify the licensing body of the status.
n) Enable Stakeholder Relations and Marketing Manager to capture corrective actions and deficiency
o) Allow Stakeholder Relations and Marketing Manager to change the Recognition status of the Voluntary Association if it is revoked and the system to send notification all relevant stakeholders.
p) Disable/Invalidate the Voluntary Association Recognition certificate if it is revoked.

Process Map: Audit and Monitor Voluntary Association
Business Rules: To be supplied during implementation

3.6.3 Renewal of VA Recognition

VAs applying for Category A have to meet the criteria reflected in section 3 of the Framework which include, but not limited to the fact that the association must least 100 voting members in good standing with the Association majority of whom must be registered persons in good standing with ECSA (Fees and CPD); they must be governed by a formally accepted constitution which does not contradict that of the country and furthermore an Association must in writing commit to promote registration with ECSA. VAs applying for Category B have to meet the criteria reflected in section 4 of the Framework which include, but not limited to the fact that the association must least have at least 10 corporate members who are in good standing with the Association.
The system must be able to:

a) Allow previously recognised Voluntary Associations to capture their new applications and supporting documentation
b) Validate fields captured according to recognition requirements as well prevent duplication of applications for the association
c) Integrate with a Document Management System to store documents uploaded as supporting documents to the application
d) Generate unique application Reference Number
e) Allow applicants track progress of their applications and update applications at certain limited stages of the application
f) Enable the Stakeholder Relations and Marketing Manager to login to the system to verify completeness of documents and send notification if there are missing documents
g) Generate a digital VA Recognition certificate for successful applications
h) Enable unsuccessful applicants to submit an appeal should they wish
i) Enable Stakeholder Relations and Marketing Manager and Strategic Services Executive to process an appeal.

Process Map: To be developed later.
Business Rules: To be supplied during implementation

3.7 MANAGEMENT OF CONDUCT CASES OF REGISTERED PERSONS

The following business requirements should be implemented:

REF	Category	Business Requirement	Process Map?	Classification
LEG0001	**Management of Conduct Cases of Registered Persons**	1.1 Manage Complaints	No	Must have
		1.2 Manage Disciplinary Hearings	No	Must have
		1.3 Manage Appeals	No	Must have
		1.4 Process Criminal Cases	No	Must have
		1.5 Provide Reports and Dashboard	No	Must have

3.7.1 Manage Complaints

The system must be able to perform the following:
Note: There are two types of people that can lodge a complaint

a) Allow complainant/respondent and Legal BU to view/track the status of the complaints using case number.
b) The system must send regular automatic reminders and status updates to the different role players of the process.
c) Generate weekly status reports and statistics re compliance with turnaround times.
d) Indicate who performed which action on it and the date for such action.
e) The system must provide for different access rights.
f) Receive and record queries arising from this process under each case/reference number and their status captured/updated by LA.

<u>Complaints against registered persons and complaints re unlawful use of ECSA's registration designations/misrepresentation cases :The system must enable the following sequential processes to take place.</u>

g) Provide field for the completion of a complaint affidavit and attachment of supporting documents.
h) The system generates a reference number and sends an email notification of the new complaint to LSU.
i) The system verifies the registration status of the engineer/respondent.
j) If not registered the system generates an automated email to the complainant stating that ECSA does not have jurisdiction over non-registered persons and the complaint will be closed. In the case of misrepresentation this step will be followed by step 6 below.
k) If the respondent is registered an email is sent to LA to refer the complaint to the LP for further vetting and categorization (ethical/technical).
l) If the vetting is successful (prima facie case) the LA tells the system to generate a case number.
m) If vetting is unsuccessful the LA communicates the shortcomings to the complainant and updates the system.
n) LM appoints an investigator.
o) The LA captures the name of the investigator and date of investigator appointment on the system. From this point onwards, the system starts calculating the turnaround times.
p) The system sends an email to the complainant with the case number and investigator name and informs them that the case is under investigation.
q) The LA sends a letter (signed by LM) to the respondent re the case number, the investigation and their rights. The LA updates the system that a letter has been sent.
r) The system generates an email to the investigator advising on the due date of the investigation report.
s) A week before the due date the system sends a reminder email to the investigator to submit an investigation report.
t) If there is a request for a postponement of the date for submitting the investigator report, the LA captures the new due date and reasons for such postponement. A week before the new due date a reminder is sent to the investigator to submit the investigation report. The system must have a limit on the number of postponements that are processed by LA and require LM authorization after the second postponement.
u) Once the investigation is complete, LP vets the investigation report.
v) The LA tells the system that the investigation has been completed and uploads the investigation report on the system.
w) The system generates an email to complainant and respondent that the investigation report has been received and will be tabled before the next IC meeting.
x) After the IC has ruled on a case, the LA captures the decision on the system.
y) LM signs a letter re the outcome of the IC and LA sends the letter and updates the system.
z) Refer misrepresentation case to the SAPS after the IC ruling.

Third Party Investigations

a) A complaint is registered by the LA
b) The LA tells the system to generate a case number.
c) The LM appoints an investigator.
d) The LA captures the name of the investigator and date of investigator appointment on the system. From this point onwards, the system starts calculating the turnaround times.
e) The system generates an email to the investigator advising on the due date of the investigation report.
f) A week before the due date the system sends a reminder email to the investigator to submit an investigation report. If there is a request for a postponement of the date for submitting the investigator report, the LA captures the new due date and reasons for such postponement. A week before the system must have a limit on the number of postponements that are processed by LA and require LM authorization after the second postponement.

g) If it is at any point during the investigation, it is confirmed that a registered person is involved. The LA sends a letter (signed by LM) to the registered person stating the case number, the basis of the investigation and their rights. The LA updates the system that a letter has been sent.
h) Once the investigation is completed, LP vets the investigation report.
i) The LA tells the system that the investigation has been completed and uploads the investigation report on the system.
j) The system generates an email to the respondent that the investigation report has been received and will be tabled before the next IC meeting.
k) After the IC has ruled on the case, the LA captures the decision on the system.
l) LM signs a letter re the outcome of the IC and the LA send the letter to all parties and updates the system.

3.7.2 Manage Disciplinary Hearings

Section 31 and 32 of the EPA

a) Once the IC has ruled that charges must be issued.
b) LA updates the system accordingly.
c) The charges are drafted and sent to the respondent together with the notice of set down and disciplinary bundle.
d) The disciplinary hearing is heard.
e) LA receives the outcome of the disciplinary hearing, uploads it on the system, and updates the system.
f) The system sends the outcome to the relevant parties.

3.7.3 Manage Appeals

The system must be able to perform the following:
Section 24 Appeals – appeals against registration/ education evaluation decisions.

a) The appellant complete the notice of appeal and uploads it on the system.
b) The appellant upload supporting documents and the proof of payment
c) If all the fields on the notice of appeal are completed and proof of payment is uploaded, the system forwards the application to the Legal administrator for further vetting.
d) If the vetting is successful, the legal administrator notifies the system that all supporting documents are in order and registers the appeal.
e) The system generates an acknowledgement of receipt.
f) The legal administrator forwards appeal to Registration/Education to provide further reports and submit panel members.
g) The system must send reminders to Registration/Education to provide reports and panel members.
h) ML appoints a presiding officer for the appeal.
i) Legal administrator receives the reports and panel members, allocates a date for the appeal, and updates the system accordingly.
j) LA circulates the notice of set down together with the appeal bundle and updates the system accordingly.
k) The appeal is heard and the outcome and report is uploaded on the system.
l) Once the appeal hearing is finalized, the system notifies the appellant of the outcome.

Section 33 Appeals – Council Appeals are conducted in accordance with the Council appeal procedure

a) The appellant completes the notice of appeal and uploads it on the system.
b) The appellant upload supporting documents and the proof of payment. If all the fields on the notice of appeal are completed and the proof of payment is uploaded, the system forwards the appeal application to LA for further vetting.
c) If the vetting is successful, LA notifies the system that all supporting documents are in order and registers the appeal.
d) The system generates an acknowledgement of receipt to the appellant.
e) LA circulates the notice of set down together with the appeal bundle and updates the system accordingly.
f) Council Appeals are conducted in accordance with the Council appeal procedure.
g) Once the appeal hearing is finalized, LA uploads the outcome of the appeal on the system and the system communicates it to the appellant.

Section 35 – CBE Appeals

a) The notice of intention to appeal is received from the CBE. ML appoints a legal representative for ECSA and prepares a legal brief.
b) LA uploads the notice of appeal and registers the appeal together with the date of receipt and the date when the notice of intention to oppose is due.
c) The Notice of intention to oppose is received from the ECSA legal representative and is uploaded on the system.
d) LA receives the notice of intention to oppose from the attorneys representing ECSA and uploads it on the system.
e) LA receives notification from CBE re the due date for the heads of arguments and captures the date on the system.
f) ECSA's representative is notified of the due date for the heads of arguments.
g) LA uploads the heads of arguments and the date of the appeal hearing.
h) LA receives the outcome of the appeal hearing and uploads it on the system.

3.7.4 Process Criminal Cases

The system must be able to perform the following:

a) Enable the Legal Administrator to capture a criminal case for a fraudulent certificate
b) Generate a case number
c) Enable a Legal Administrator to update the case with a SAPS number
d) Email Case Number to a person who reported it
e) Update the status of the Case

3.7.5 Provide Reports and Dashboards

The system must be able to produce the following reports:

a) How long it took to investigate
b) Areas where most cases appear
c) Reflect the outcome of the case:
    - Insufficient evidence - dismissed
    - Advisory letter - dismissed the case
    - No registered Person identified
    - Investigation Consultation
    - Preferred Charges

4.10 COMPLIANCE TO PROTECTION OF PERSONAL INFORMATION ACT (POPI ACT) AND PROMOTION OF ACCESS TO INFORMATION ACT (PAIA)

The system must be compliant to the POPIA and PAIA.

4.11 DATA MIGRATION FROM EXISTING SYSTEMS

The current data resides on CRM and documents on the Document Management System. Based on the outcome of assessment of the systems that the Service Provider will do, it will be required to migrate the data from these system, alternative to integrate with them. The system will be able to perform migration or integration.

4.12 SYSTEM AVAILABILITY WITH FAILOVER CAPABILITIES

The system must be available at all times and failover capabilities be provided.

4.13 CLOUD HOSTING WITH DISASTER RECOVERY

Hosting of the system should be on a Cloud Platform which should include disaster recovery.

4.14 SYSTEM PERFORMANCE

System performance expectation is less than 1 second on average from screen to screen not factoring in network lag.

4.15 SYSTEM SECURITY

System security should be implemented to prevent malware injections, data leaks and breaches.

4.16 BROWSER COMPATIBILITY

The system must be compliant with tablets, smartphones and or mobile phones, and web browsers.

4.17 SELF-SERVICE BUSINESS INTELLIGENCE REPORTING

The system must have business intelligence reporting functionality. Business users must be able to create reports on their own based on their requirements.

4.18 INTEGRATE WITH TELEPHONE SYSTEM

A future requirement is that the system should be able to integrate with the existing telephone system such that when an existing applicant/registered person calls then the system displays their details and their interaction is logged onto the system .

4.19 INTEGRATE WITH QUALITY MANAGEMENT SYSTEM

ECSA currently uses a Quality Management System called SHEQSys. The system must integrate with the Quality Management System for the management of complaints.

5 COMPULSORY SUBMISSIONS

Submissions from Service Providers must contain all the following documents:

1. Proposal document – This should describe the envisaged solution and how the Service Provider will fulfil ECSA's requirements. It should also include a delivery/implementation methodology.
2. Rates of the Project/Bidding Team
3. Resumes/CVs of the Project Team that will be dedicated to the project, with qualifications and competencies that demonstrate capacity to deliver. Certified copies of qualifications must be included.
4. Contact details of the Project Manager
5. Risk Sharing and Guarantees
6. Three contactable references of corporate clients, (listing contact name, address, telephone, fax and email address) where the Service Provider has rendered a service in the last 36 months (either as individuals, firms or as the bidding consortium).
7. Valid Tax Clearance Certificate and Company Profile

5.1 EVALUATION CRITERIA

The proposal evaluation will be in two stages. The first stage will entail the assessment of the below mentioned criteria i.e. Financial, Technical and Digital solutions for each functional area. The second stage will involve a demo and presentations of previously completed solutions that are similar to ECSA's requirements.

5.1.1 Financial Evaluation Criteria

Under the Financial Category, submissions from Service Providers will be evaluated on:

a) The rates of the bidding team. The Service Provider should provide a list of all resources that will be involved in the project and their hourly rates in South African Rands, VAT Inclusive. Envisaged future rate increases should also be included.
b) Risk sharing and Guarantees. A proposal of how the Service Provider will share risks with ECSA. This should include Guarantees or financial capacity.

5.1.2 Technical Evaluation Criteria

Under the Technical Category, submissions from Service Providers will be evaluated on:

a) Understanding of the brief
b) Overarching and digital solution/philosophy – The Service Provider should describe their understanding of the digital transformation and digital solutions/technologies that they have implemented.
c) Integration capacity with existing infrastructure (ICT) – The service provider will be evaluated on how well it meets the technical requirements specified under section Detailed Technical Requirements.
d) Project team credentials
e) Past experience with ECSA – To better understand the environment that ECSA operates on, it is believed that having past experience with ECSA would have benefits on the project implementation.
f) Past similar experience elsewhere

5.1.3 Digital solutions for each functional area – Evaluation Criteria

This category of will evaluate the Service Providers on the strength of their proposal to provide solutions to each functional area detailed under the Detailed Business Requirements section. Service Providers are expected to describe fully how they will achieve these requirements.

5.2 DELIVERABLES

Project deliverables are as follows:

a) Fully user tested system(s) deployed onto the production environment.
b) Detailed functional and technical specification documents including user requirements with use cases, flowcharts, database diagrams/entity relationship diagrams
c) Training documentation and system manuals
d) Provide training to all identified stakeholders
e) All source code.
f) Post implementation support proposal