Continuous Professional Development

A Brochure that explains the CPD Framework and the process to maintain your CPD progress.

Supported by Africa Catalyst Project 2– Part 4

Sierra Leone Institution of Engineers

Funded by the Royal Academy of Engineering

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Supported by Engineers for Change SL (UK)

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List of Abbreviations

- CPD -Continuous Professional Development
- SLIE Sierra Leone Institution of Engineers
- PERC Professional Engineers Registration Council
- EfCSL UK Engineers for Change Sierra Leone (UK)
- RAE Royal Academy of Engineering
- PDU Professional Development Unit
- PDH Professional Development Hours

No Work is insignificant. All labor that uplifts humanity has dignity and worth and should be pursued with respect for excellence.

Martin. L
 King Jr.

Acknowledgements

Sierra Leone Institution of Engineers

The Sierra Leone Institution of Engineers has piloted this continuous professional development framework since 2016. The institution looks forward to the successful dissemination and implementation of the whole CPD framework.

Professional Engineers Registration Council

The Professional Engineers Registration Council setup by an act of Parliament is the regulatory body that registers and certifies engineers by class. The PERC is responsible for handling the license and permits to practice as an engineer. Therefore, the PERC council is the body that handles examinations, certifications and directly involved with CPD. In partnership with SLIE, the council will further in the introduction and maintenance of membership through CPD.

Engineers for Change SL (UK)

The Engineers for Change SL UK is in partnership with SLIE and PERC to implement the CPD framework, curriculum and online CPD platform for registered engineers of SLIE. Their support is highly appreciated.

Royal Academy of Engineering

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CPD Sub-Committee Louise Chaytor, Lead Part 4 February 20, 2021

1. What is CPD?

Continuous Professional Development (CPD) is the ongoing process of developing, maintaining and documenting your professional skills¹, knowledge and experience that you gain both formally and informally as you work, beyond any initial training. It's a record of what you experience, learn and then apply.²

The Engineering Council of South Africa (ECSA) has defined CPD as:

"the 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."

1.1 Why the need for CPD?

Continuous Professional Development is a means by which professionals can keep up with the latest industry standards. New knowledge creation requires re-skilling. Relevance and competitiveness of engineering practice demands constant updating of knowledge. Market demands force the need for Continuous Professional Development (CPD) by professionals who want to maintain their technical competence.³ It enables professionals to keep their knowledge, skills and experiences in their field of discipline relevant and up to date with the latest technology, techniques and innovation in their field. In addition to maintaining their own competence, professionals should strive to contribute to the advancement of the body of knowledge with which they practice, and to the profession in general.

1.2 How can I benefit from CPD?

There are lots of benefits from CPD.

¹ What is Continuous Professional Development, <u>Continuous Professional Development (CPD)</u> <u>| SkillsYouNeed</u>

² What does continuing mean, <u>What does continuing professional development mean?</u> (definitions.net)

³ Continuing Professional Development (CPD) : A pre-requisite for the renewal of professional engineers registration, SLIE-PERC Presentation, AGM 2017, by Ing. Prof. Redwood-Sawyerr

SLIE and PERC have developed a CPD Framework that will benefit both the professional engineer and the industry, company or institution.

For Professional Engineers

- Well-rounded engineer Engineers can become well-rounded in their field of discipline while learning from experiences of professionals in other parts of the world and in the country.
- ii. More marketable Engineers will have greater career potential and progression.
- iii. **International Accreditation** Engineers can gain international accreditation through affiliate institutions like ICE, IMech, IStructE, IET.
- iv. **Networking** Engineers can exchange ideas, techniques and methodologies with peers and professionals
- v. Career progression and Credibility SLIE/PERC certification of professional engineers through CPD will enable professional engineers to benefit from career progression within their institutions or other institutions and will lend credibility to their technical expertise locally and internationally. It will determine those who can be considered experts in their field of engineering.

For Business / Industry

- i. **Better Productivity** CPD can lead to better productivity for industry with wellequipped and trained engineers.
- Staff Retention CPD can encourage greater commitment from staff and thus retention of staff engaging in interesting career development. Your staff will gain greater confidence in their work as well as greater credibility.
- Skilled staff members CPD will create a well-rounded skilled workforce for your business or industry. Your staff can become experts in their fields of discipline as they gain better skill sets and certificates.
- iv. **Better results and efficiency** CPD will enable your industry or business to achieve its mission and vision through better results and increased efficiency.

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2. What is the CPD Framework?

Objective of the CPD Framework

- The CPD Framework is a guideline for the progression and renewal of membership of registered professional engineers.
- As part of the CPD Scheme, professional engineers are required to have Professional Development Hours (PDH) mapped to Professional Development Units (PDU) each year in a four-year cycle.
- Purpose of the Framework is to:
 - ensure, through the creation of a culture of CPD, that all registered persons maintain their competence throughout their period of registration.
 - meet the requirements of the PERC Act in terms of currency of engineering knowledge.
 - be the acceptable means for renewal of registration.
 - ensure that all registered engineers of Corporate status and above meet the requirements for their continued international registration.

When does the CPD Framework come into effect?

- It comes into effect in 2021
- Information about the CPD framework will be disseminated through various media platforms, through this brochure and from the SLIE/PERC Secretariat

What is the main requirement of the CPD Renewal of

Membership?

Starting this year 2021, all professional engineers will be required to fulfill their CPD requirements as part of their renewal of membership. In the past professional engineers simply paid their annual fees to renew membership but as of 2021, CPD requirements will be considered as part of the renewal process.

| Engineering Occupational Groups | | Annual Professional Development Units (PDUs) |
|------------------------------------|-------------|---|
| Professional Engineers | Fellows (F) | 4 |

| | Corporate Engineer (CE) | 4 |
|--------------------|-------------------------|---|
| Graduate Engineers | Graduate Engineer (GE) | 6 |
| | | |

How do Professional Development Hours map to Professional Development Units?

- It varies depending on the particular activity of CPD.
- CPD activities are organized into 3 main categories from which specific PDUs are obtained
- In some cases, 10 professional development hours map to 1 professional development unit
- In some cases, 100 professional development hours map to 1 professional development
 unit

Role of Employers of Registered Engineering Persons

- Employers are responsible for creating a suitable work environment, which supports and promotes the participation of registered persons in activities that maintain their competence.
- Employers also share a responsibility to maintain a work environment in which the continued development of registered persons is assured.
- SLIE and PERC should work with employers in ensuring compliance with CPD requirements of their engineers
- The CPD annual PDU should be connected to performance appraisals and evaluations

Role of registered engineering persons

Registered Engineering persons should take ownership of the planning and maintenance of their CPD. This should include:

- Identifying learning needs.
- What the person needs to do to achieve this.
- Likely resources and support required.
- How success would be evaluated.
- Deadlines for meeting targets.





Get your copy of this booklet today. Access the website platform to get a copy or update your CPD activities online.

3. How Does the CPD Process Work?

Annual Renewal of Membership

Each registered professional engineer must demonstrate compliance with the minimum or exceed the minimum requirements of annual professional development units based on their class of membership. The engineer must submit proof of their compliance in the number of professional development units earned each year. The membership/CPD committee of PERC/SLIE will review their submission and approve or disapprove of the fulfillment of the requirements.

Professional Development Units

- During each cycle of four years every registered person must accumulate a minimum of 16 units in order to qualify for renewal of his/her registration.
- A registered person may not accumulate **less than 3 units per annum** in **at least two** of the categories of activities referred to below, which **must include category 1** activities.
- A registered engineer may accumulate **additional units each year up to a maximum number of units** as prescribed for each activity listed in column 3 of the table below

Keeping Record of your PD Units

In recording of CPD, Registered Engineering Persons are encouraged to record evaluation of the activity completed. This should include the following:

- Key Learning Points of activity completed
- Key Benefits/Value added
- Success of learning

Forms for record keeping are available at the Appendix of this brochure.

Types of Activities that attract PD Units

Members may earn Professional Development units by the following methods:

- Attending Conferences, Seminars, Workshop, Training, Courses, Symposium, Presentations, study tours.
- > Study a Course at an accredited training tertiary institution or online.

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- > Participate in industry, professional body activities and volunteer on committees
- > Coaching and Mentoring young professionals
- > Present papers at conferences and Seminars
- Peer Review
- Secondment
- Write articles for journals, conferences, magazines, professional proceedings and newspapers
- > Write a book
- Research Publication
- Large group workshops
- Obtain a Patent
- Courses, refresher courses
- Self-Study/ self-directed learning
- In-house skills training of staff and career guidance
- > Engage in non-engineering related activities (participate in community activities etc.)

Types of Activities

Professional Development Units must be accumulated in at least two of the categories below and must include category 1.

| Categories | Activities | Maximum Units pa | Hours |
|------------|---|------------------|-------------------------|
| Category 1 | Developmental Activities | 3 units | 30 hours (10hrs/unit) |
| Category 2 | Work-based Activities:Engineering Work | 2 units | 600 hours (300hrs/unit) |
| | Mentoring of candidate practitioners | 1 unit | 50 hours (50hrs/unit) |
| | | | |

| Categories | Activities | Maximum Units pa | Hours |
|------------|--|------------------|-----------------------|
| Category 3 | Individual Activities Membership of a recognised <i>voluntary association</i> Other activities | 2 units | (not linked to hours) |
| | | 3 units | 30 hours (10hrs/unit) |

Breakdown of PD Hours and Units

| Source of CPD | Period | Equivalent PDH | Equivalent | Comments |
|--------------------------|----------------------|-------------------------|-----------------------------|------------------------------|
| | Attended | for Participants | PDH for | |
| | | | Presenters/ | |
| | | | Leaders/ | |
| | | | Instructors | |
| Category 1 – Developn | nental Activities | I | | |
| Attendance of structured | d educational/dev | elopmental meetings v | l vill be aligned with c | ne PD unit per 10 hours of |
| attendance. A full day a | ctivity will be rega | arded as being for 10 h | ours and a half-day | activity will be regarded as |
| 5 hours and hence a ha | lf a PD unit. A ma | aximum of 3 PD units (| (30 hours) may be a | ccumulated annually under |
| this category. | | | | |
| Conferences, | 1 Day | 10 hours | 20 hours | Note: The course, |
| Symposiums, | | | | Technical presentations, |
| Webinars, Seminars, | | (1 unit) | | training will have to be |
| Workshops, | ½ Day | 5 hours | 10 hours | approved by the CPD |
| Technical | | | | Committee as |
| Presentations, | | (½ unit) | (1 unit) | contributing to CPD and |
| Training, Tertiary | | | | signed off by a senior |
| Level Courses | | | | engineer. |
| Study Tour | 1 Day | 8 hours | 10 hours | Note: The study tour will |
| | ½ Day | 4 hours | 5 hours | have to be approved by |
| | 72 Day | 4 110013 | 5 110015 | the CPD Committee as |
| | | | | contributing to CPD and |
| | | | | signed off by a Senior |
| | | | | engineer. |
| | | | | |
| | | | | |

| Source of CPD | Period | Equivalent PDH | Equivalent | Comments |
|-----------------------------|-----------------------|------------------------------------|------------------------------------|---------------------------|
| | Attended | for Participants | PDH for | |
| | | | Presenters/ | |
| | | | Leaders/ | |
| | | | Instructors | |
| Category 2 – Work- Bas | sed Activities | | | |
| Since registered persons | also improve their | knowledge and com | petence by performi | ng their day-to-day |
| engineering responsibiliti | es, a weighting of c | one unit for every 30 | 0 hours per year for | engineering related work |
| (including management) | is awarded for this | category. A maximu | m of two units for 60 | 0 hours per year may be |
| earned in respect of this | activity. | | | |
| In addition, the mentoring | g of candidate perso | ons in the workplace | will be recognised a | s CPD with a maximum of |
| I unit for 50 hours of men | toring per year. In- | house skills training | sessions organised l | by an |
| employer/engineering co | •••• | - | - | - |
| category. | | | , , | |
| Coaching and | | | | Before start of the |
| Mentoring of engineers | | | 50 hours per | coaching or mentoring, |
| 5 5 | Variable | N/A | candidate | the CPD committee |
| | | | (1 unit) | needs to see and |
| | | | (1 unit) | approve the activity. |
| Category 3 – Individual | Activities | | | |
| Membership of a recogni | sed voluntary asso | ciation (engineering | society/institution or | institute, IET, I Mech E, |
| ICE,etc) will result in a m | aximum of 2 units p | per annum. | - | |
| | | 6 H | | |
| Other activities include a | nd will be credited a | as follows: | | |
| Annual General | | 5 hours | 5 hours | |
| Meeting of SLIE | ½ Day | (½ unit) | (½ unit) | |
| | | (, , , , , , , , , , , , , , , , , | (, , , , , , , , , , , , , , , , , | |
| Professional Body | | | 20 hours | |
| Activities (Activities or | | 10 hours | (2 units) | |
| Committees of | Variable | | | |
| SLIE/PERC) | | (1 unit) | For heads of | |
| | | | committees | |
| | | | | |

| Source of CPD | Period | Equivalent PDH | Equivalent | Comments |
|---------------------------|----------|------------------|--------------------|--------------------------|
| | Attended | for Participants | PDH for | |
| | | | Presenters/ | |
| | | | Leaders/ | |
| | | | Instructors | |
| Part-time lecturing to | | | | Must be approved by the |
| undergraduate and | | | | CPD committee and a |
| postgraduate students. | | | | senior engineer |
| | | Each 10 hours | Each 10 hours | /professor. |
| | Variable | (1 upit) | (1 upit) | |
| Oral examinations of | | (1 unit) | (1 unit) | |
| final year and | | | | |
| postgraduate students | | | | Must be approved by the |
| Evaluation of | | | | CPD committee and a |
| educational | | Each 10 hours | Each 10 hours | senior engineer |
| programmes at | Variable | | | /professor. |
| Universities/Institutes | | (1 unit) | (1 unit) | |
| for accreditation | | | | |
| | | | | |
| Participation in | | | | |
| statutory, professional, | | | | |
| institutional, technical | | | | |
| or non-technical | | | | |
| committees or task | | Each 10 hours | Each 10 hours | |
| groups. | Variable | | | |
| Self-study which | | (1 unit) | (1 unit) | |
| includes, but is not | | | | |
| restricted to studying of | | | | |
| journals or electronic or | | | | |
| computerized material | | | | |
| Obtaining a Patent, | | | | Patent copy or peer- |
| Research publication | | 10 to 40 hours | 20 to 40 hours for | reviewed patent |
| of Technical article | Variable | | Lead | publication submitted to |
| | | (1- 4 units) | (2 1 unite) | PERC for review and |
| | | | (2 – 4 units) | approval for CPD. |
| | | | | |

| Source of CPD Relevant additional qualifications (these are exceptional allocations): A completed postgraduate qualification | Period Attended Variable | Equivalent PDH for Participants 5 units | Equivalent PDH for Presenters/ Leaders/ Instructors | Comments Some proof of the post graduate qualification with an accredited institution should be shown as proof. |
|--|--------------------------------|---|---|---|
| Service to Educational Institutions Supervision of students undertaking postgraduate studies Evaluation of Master's dissertations and PhD theses by external examiners | Variable | 10 hours (1 unit) | 10 hours (1 unit) | For supervision, the effort must be clearly defined and articulated and approved by the institution or faculty. Some proof of the evaluation of the thesis must be provided. |
| Publication of research in peer reviewed journals (Single author) | Variable | N/A | 20 hours (2 units per publication) | Copies of the peer reviewed journal must be shown as proof of publication. |
| Publication of research in peer reviewed journals (multiple authors) | Variable | N/A | 10 hours (1 unit per publication per author) | Copies of the peer reviewed journal must be shown as proof of publication. |
| Non-engineering related activities | Variable | 5 hours (½ unit) | N/A | Before start of the non- engineering related activity, the CPD committee needs to see and approve the activity. |

Which locations can I go to for CPD Approved training?

Authorizations of Providers

- I. The PERC Council or SLIE/PERC CPD Committee will review and if appropriate, approve the providers of the PDH and PD units.
- II. Certain providers are considered to be pre-authorized providers without any further approval needed by the PERC Council or SLIE/PERC CPD Committee:
 - a. National accredited academic tertiary institutions
 - b. International or National engineering professional or technical societies or organizations recognized by PERC Council; (Example, ICE, IET, IMech, IEEE, NASBE, etc)
 - c. International Association for Continuing Education and Training;
 - d. Other entities that may be approved by PERC Council

Approval of Providers

- The individuals or entities that are not considered to be pre-approved providers, including, but not limited to, professional firms conducting in-house presentations, may be approved to become authorized providers upon application and approval by the Council. An application fee may be charged to cover administrative cost as approved by PERC Council.
- 2) During the application process, the Council's committee on Membership will evaluate the suitability of the provider to serve as an Approved Provider.
- 3) The provider shall submit general information that will enable the committee to evaluate the provider's qualifications. At a minimum, the PERC Council requires the following information to be submitted with each application for approval:
 - a) The types and descriptions of proposed or existing activity intended to be offered
 - b) The identity and qualifications of the course instructors.
 - c) The sample course outlines detailing the content of activity to be offered.
 - d) The course should be SMART (S- Specific, M-Measurable, A Achievable, R Relevant, T Timely)
 - e) The Approved Provider's credential shall be valid for a two-year period. Upon expiration, the provider shall reapply for Approved Provider status by going through the application process and providing updated information on their activities since their last approval.
 - f) The Council may suspend or revoke authorization as a provider if, in the judgment of the Council, the provider does not meet the expectations of the beneficiaries.

g) An individual or organization whose provider's privilege has been suspended or revoked may appeal to the Council for a hearing, within 30 days after notification of the action by the Council.

h) The Council may require approved providers to document the CPD activities for audit by the Council at any time within the 2-year period. Documentation shall include registration and attendance records, methodology, stated purpose, content, presentation, time and length of the activity, and participants' evaluations.

4) The Council shall maintain and make available to members, as often as it considers appropriate, a roster of Approved Providers.

Who Monitors my CPD Progress?

The professional engineer registered with the PERC is responsible for monitoring their own CPD progress and keeping a record of their professional development hours and units.

The professional engineer should use the forms provided in the Appendix at the end of this brochure to record and maintain a log of their activities. You can also use the online CPD platform at https://cpd.slie-sl.org to record and maintain your CPD progress, search for courses being offered and update your CPD information on the website.

See Appendix for details.

Periodically, a member of the Membership or CPD Committee will do a random audit of your CPD records online or may request for them to evaluate your CPD activities for compliance.



How can I keep records of my CPD Activities?

The professional engineer should use the forms provided in the Appendix at the end of this brochure to record and maintain a log of their activities. They can also use the online CPD platform when made available to record and maintain their CPD progress, search for courses being offered and update their CPD information on the website.

See Appendix for details.

The engineer should record the following:

- Key Learning Points of activity completed
- Key Benefits/Value added
- Success of learning



What if I do not complete the number of professional development units for the year?

In the event a member fails to comply with the CPD requirements set forth in this framework, the Council, may refuse to renew their license to practice for one year. During this period, it is expected that the engineer will take steps to reinstate their license.

How does the Membership committee evaluate my annual professional development activities?

Each professional engineer should maintain a record of their CPD activities on a regular basis so that at any time an Auditor designated by the Membership committee of Council can review their activities and verify their compliance with the required professional development units for their membership level.

The engineer is expected to keep an offline record see attached record forms in Appendix A and an online record through the CPD online platform.

The activities and professional development hours claimed will be evaluated against the professional development units for the number of hours claimed and the activities verified where possible.

The auditor will be able to make comments and recommendations through the online platform that can be viewed by the professional engineer under review.

Can I appeal or object to a Committee decision?

Right of Appeal

The person can appeal the decision made by the CPD committee in respect of a person who is aggrieved by a decision of *the council* to refuse renewal of a person's registration. The appeal should take place within 30 days of the notice of refusal.

How Does a Member Get Reinstated?

A member who wishes to reinstate a license after failing to complete the CPD requirements shall fulfil past due CPD requirements for the immediate, preceding CPD reporting periods.

Retired Status

An individual who elected to receive retired status license shall be exempt from the compliance with the CPD requirements. In the event such an individual elects to have the license reactivated, the individual shall fulfil at least one due CPD activity to ensure they are current in their discipline.

How do I maintain my CPD ?

As well as doing CPD, members are expected to keep a written record of their Continuing Professional Development online through **the SLIE Website** <u>https://www.slie-sl.org</u> or <u>https://cpd.slie-sl.org</u> and by a hard copy logbook and, on written request, submit a copy of their CPD Record to Council for annual renewal of membership. The written request may be via email or letter. Council reserves the right to randomly audit an engineer's CPD record. Each member should keep a record in a CPD logbook with signatures of a senior engineer to validate/corroborate the activities completed during the period.

Each professional engineer should begin to maintain their records online via the SLIE website as soon as the online CPD platform becomes live later this year 2021.

How many CPD units do I need to qualify for annual renewal of membership?

16 Professional Development Units per year.

Benefits of CPD (Prof Eng)



A well-rounded engineer



More marketable



International Accreditation



Networking



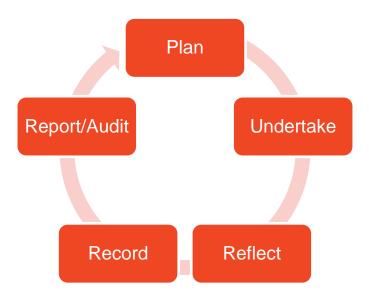
Career Progression and credibility

What Should I do to Manage my Continuous Development?

- 1. Start by Planning your learning activities monthly, quarterly or yearly.
- 2. Ensure you put aside the resources or plan on the resources and support to actually implement the learning activity. (For example, discuss with your supervisor, line manager or chief engineer).
- 3. Determine how success will be evaluated.
- 4. Undertake the learning activities and keep a log of the benefits of the learning activities
- 5. Reflect on your learning activity and record this in your CPD Reflection form.
- 6. Send a report of your CPD activities to Council for renewal of membership.

Continuous Professional Development

Cycle of Continuous Learning



Additional Information

CPD Units Earned in Other Countries

The Council will accept CPD units earned for activities completed in other jurisdictions, provided that the activities and programmes are consistent with and comply with the requisite criteria set forth in this document and the member otherwise fulfils all other applicable license renewal requirements of this document.

Periodic Review

A review of the CPD framework will be conducted after approval to ensure revision or new inclusions to the framework every five years or as and when emerging development necessitates.

Effective Date

This requirement shall come into full effect on 1st January, 2021.

Contact Information

The Secretariat Professional Engineers Registration Council Government Office Compound New England, Freetown

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Appendix A – Templates

PERSONAL DEVELOPMENT RECORD

Name: Department:

Period Covered:

| Date | Learning Activity | Learning Objectives | Outcome |
|------|-------------------|---------------------|---------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

.....

PERSONAL DEVELOPMENT ACTION PLAN

Name:

Department:

Period Covered:

| What do I want to learn? | What will I do to achieve it? | What resources/support do I need? | How will I know I have succeeded? | Target Date |
|-----------------------------|-------------------------------|---|---|-------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

CPD REFLECTION ON LEARNING

Learning Activity with date (for example attendance on course, reading relevant papers, articles etc, attendance at a conference/seminar, job shadowing, structured discussion)

What did I learn from this learning activity?

How does this learning activity develop me as an individual?

I am able to apply this learning in my workplace as follows:

I will need the following support to implement the learning

Reasons I am unable to apply this learning to the workplace

I have discussed this learning and resulting activity with my line manager Yes/No Outcomes of the discussion:

Signed

Date