

IPENZ

**PROFESSIONAL DEVELOPMENT
PARTNER POLICY**

July 2009

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1. INTRODUCTION

IPENZ and Professional Development Partners (PDPs) jointly recognise the importance of professional development for engineering professionals. IPENZ and PDPs share the same vision for professional development and commit themselves through a partnership relationship to support the professional and competence development of engineering professionals at all stages of their career.

Professional development is defined as:

“the systematic development, maintenance, improvement and broadening of knowledge and skill and the development of personal qualities necessary for the competent execution of professional and technical duties”.

The PDP Programme seeks to build a community of organisations committed to the professional development of engineering professionals. The PDP programme is an important tool in the challenge to attract, engage and retain engineering professionals, particularly in times of sustained demand for engineering talent. The PDP programme can make a significant contribution to building the quality of engineering human capital and help sustain organisational success.

2. WHAT IS AN ENGINEERING PROFESSIONAL?

Engineering is involved in every aspect of human life – food and accommodation, transportation and infrastructure, medicine, communication and entertainment to name a few. There are three engineering occupational groups within the wider engineering profession: professional engineers, engineering technologists, and engineering technicians. Further information is available via the IPENZ website http://www.ipenz.org.nz/ipenz/forms/pdfs/engineering_edge.pdf

3. SCOPE

The PDP’s professional development programme is inclusive of all engineering professionals employed by a PDP. It is expected that engineering professionals will be, or will be encouraged to become IPENZ Members and have their current competence recognised through registration on the appropriate current competence register (refer to the Glossary of Terms – Appendix 1).

4. OBJECTIVE

The main objective of the IPENZ Professional Development Partner Programme is to identify organisations which support the objectives of IPENZ and in which engineering professionals are given support and guidance in developing, demonstrating and maintaining the competencies (skills, knowledge and personal qualities) expected of engineering practitioners.

IPENZ PDPs are expected to have systems and strategies in place which provide evidence that they acknowledge their responsibility to invest in the career and professional development of their engineering staff for the benefit of the individual but also for the long-term benefit of the organisation and the engineering profession as a whole.

- Specific objectives of IPENZ PDP Programme are to help engineering professionals to select potential employers who:
 - act as good employers to engineering professionals
 - have an organisational culture and human resource development system that embrace career and professional development
 - benchmark their engineering standards to the IPENZ competence standards and quality marks
 - operate competence development and continuing professional development systems for staff that are endorsed by IPENZ and aligned with IPENZ requirements for competence assessment
- Formally acknowledge organisations that have systems and strategies in place to:
 - support the development and maintenance of standards in the engineering profession
 - ensure Graduate Members of IPENZ get access to the work experience and learning opportunities (both on- and off-job), needed to acquire the competencies expected of engineering professionals. Graduate Members will then be able to provide sufficient evidence to IPENZ that they meet the IPENZ competence standard for the appropriate competence-based Membership class and register, normally within four to five years of post-graduate professional experience
 - encourage experienced engineering professionals to actively engage with the engineering profession and gain recognition of their engineering competence through the appropriate competence-based Membership class and register
 - support engineering professionals to maintain and develop their professional competence in order to satisfy requirements for continued registration
 - Formalise a mutually beneficial relationship between IPENZ and employing organisations based on a commitment to career and professional development, professional registration and professional engagement.

5. CRITERIA

A PDP is expected to meet the criteria as listed below.

General

- 5.1 Acts as a good employer to all engineering professionals and applies the principles of the IPENZ Code of Ethics within its engineering business
- 5.2 Promotes and supports the engineering profession and the self-regulation of the profession in New Zealand. Evidence of this is likely to include:
- championing IPENZ Membership and registration quality marks, as appropriate, through its recruitment practices, its relationship with stakeholders and its quality branding/positioning of the company
 - actively seeking to maintain sufficient senior staff with the skills and knowledge to guide and mentor engineering staff, model professional practice and internally critique Membership/registration applications
 - supporting IPENZ Competence Assessment processes by encouraging senior staff to be involved as Staff and/or Practice Area Assessors

- establishing a set of goals and objectives for the ongoing development and professional recognition of its engineering workforce

Graduate Development

- 5.3 Has systems and strategies in place to support all graduate engineering professionals to join IPENZ as Graduate Members (GIPENZ) so that they can better engage with the profession and have access to the information and services in the IPENZ member-only area of the IPENZ website.
- 5.4 Provides graduate engineering staff with a structured programme of professional development that culminates in IPENZ Membership/registration. This should include effective systems and strategies for:
- providing the range of work experience necessary to develop the professional competencies required for IPENZ Membership/registration
 - ensuring that an appropriate and ongoing mentoring relationship is in place.

Note: Mentors must be experienced engineering professionals with an understanding of the engineering practice standards set by IPENZ or comparable standards set by other recognised professional engineering institutions. Mentors should belong to an appropriate class of IPENZ Membership or the equivalent within another recognised engineering institution. Mentors are expected to meet regularly with their mentee (at least every three months) and time spent mentoring should be recognised by the organisation as valuable professional development – for both mentor and mentee.

- appraising staff performance that identify future experiential and learning needs
- recording of CPD, work history, competence development and mentoring activity (IPENZ provides web-based recording systems)
- reviewing all applications for IPENZ Membership/registration prior to submission to IPENZ. Ideally such reviews will be independent of the mentoring process and by an experienced engineer with a good knowledge of the assessment process and a sound understanding of the standards expected

Ongoing professional development and competence recognition

- 5.5 Encourages experienced engineering professionals to actively engage with the engineering profession and successfully seek recognition of their engineering competence through the appropriate competence-based Membership class and register.
- 5.6 Supports engineering professionals to maintain and develop their competence and satisfy regular reassessment requirements for ongoing registration where they continue to work in an engineering or engineering management role. This may include specific programmes for engineering technicians and technologists.
- 5.7 Encourages all registrants to maintain records of their work history and professional development to support future reassessments.

Quality Management

- 5.8 Operates a quality management system that ensures that relevant systems and strategies are adhered to and evaluated from time-to-time.

Note: This normally requires an organisation to have a senior engineer and if appropriate, a senior Human Resource representative who is prepared to champion the organisation's commitment to the objectives of the PDP programme. If an organisation has designated Human Resource Staff, then they may have considerable oversight of the competence development programme and ongoing professional development for engineering staff. It is still expected, however, that one or more senior engineering professionals in the organisation will have some form of "ownership" of the systems and strategies that underpin the programme.

- 5.9 Monitors the effectiveness of the programme against Key Performance Indicators (refer section 9).

6. IPENZ COMMITMENT TO THE PARTNERSHIP

IPENZ will endeavour to provide each PDP with tailored ongoing support which will contribute to the development of organisational strategies specifically relating to the recruitment, retention and the professional recognition of engineering staff.

7. BENEFITS

This section details benefits that can accrue from the successful implementation of the Professional Development Partner programme.

FOR THE ENGINEERING PROFESSION

- A growing body of employers and employees committed to the maintenance of professional standards and self regulation of the profession.
- Strong professional development systems leading to enhanced professional standards that serves to strengthen the profession.

FOR THE PROFESSIONAL DEVELOPMENT PARTNER ORGANISATIONS

- A successful professional development programme sustained over time, is likely to provide the PDP with a significant competitive advantage in attracting, engaging and retaining engineering professionals.
- An effective professional development programme actively supports and contributes to the professional and competence development of an organisation's engineering staff.
- Use of the IPENZ PDP quality mark to promote their PDP status as part of their strategy to attract, retain and motivate talent.
- The ability to draw on a range of professional advice from IPENZ National office for assistance with developing their PD programmes.

- Access to information on significant activities and trends relating to professional development programmes, including comment on professional development benchmarks and best practices will be available to PDPs.

FOR ENGINEERING PROFESSIONALS

- Assurance that, if employed by an IPENZ PDP, they will be given the opportunity, through on and off-job learning, to acquire the competencies that are expected of competent engineering practitioners and required to gain entry into one of the IPENZ competence-based Membership classes and associated registers.
- Structured support for the development of professional competencies within a shorter timeframe, boosting career prospects and the opportunity to have a satisfying work experience.

FOR IPENZ

- Recognition of and engagement with registrants that encourage IPENZ Membership and support IPENZ Members to develop and maintain the competencies expected of competent engineering practitioners.
- Greater representation, enhancing credibility as the body representing the engineering profession in New Zealand.
- Greater use of the IPENZ competence development systems and services and an increasing number of individual engineering professionals and employing organisations benchmarking their engineering standards to the IPENZ quality marks for competent engineering practitioners.
- Support for IPENZ Members in developing and maintaining the competencies expected of engineering professionals.
- A way of identifying and acknowledging organisations that invests in professional development which ensures the standards of the engineering profession are maintained and continue to meet internationally benchmarked standards.

8. INITIAL APPLICATION

Organisations looking to become an IPENZ Professional Development Partner need to complete the IPENZ PDP Application Form to self-certify that systems and strategies are in place to meet the criteria as set out in Section 5. Supporting documentation providing evidence of relevant policies, standards and procedures should accompany the application. The Application Form should be signed by the CEO, or equivalent, as well as a senior Human Resources representative.

The application is assessed in two stages.

Stage 1 is intended to provide a succinct self review against the criteria set out in Section 5.

Supporting documentation should be kept to a minimum, and give evidence of frameworks, support mechanisms and programmes, rather than specific information on the content.

If any questions arise as a result of the submission, questions will be posed via e-mail and/or telephone conversations between IPENZ and the employer.

Stage 2 takes the information provided by the employer and seeks to add substance to the application by speaking with employees.

This stage involves a visit to the PDP and discussions with graduates, a mentor, HR lead, and engineering champion and questions posed on how the employer supports the development of its staff.

Finally, the findings of the reviewer are formulated into a report that is submitted to the IPENZ Standards and Accreditation Board for decision, and the employer is notified thereafter.

Once an application has been approved the organisation can then advertise their IPENZ PDP status, and use the IPENZ PDP logo on company stationery and in any advertising material.

Organisations seeking recognition as a PDP are expected to evidence the existence of systems and strategies (with approved policies and procedures, as necessary) to address the criteria set out in Section 5. Any systems that may have only recently been put into place must be accompanied by plans for full implementation. Where systems are already well established, evidence of effective implementation should be provided. The extent to which there is evidence of full implementation of systems will be a key factor in setting the timeframe to the next review.

Possible outcomes of the decision-making process will be to:

- confer IPENZ PDP status for a period of three years; or
- confer IPENZ PDP status for a lesser period with a recommendation that action is taken by the organisation to address issues raised in the report before the review taking place at the end of the initial award period; or
- continue the evaluation period for a period for up to 12 months to give the applicant the opportunity to address the outstanding criteria; or
- decline the application.

An organisation can appeal to the IPENZ Governing Board any decisions made by the Standards and Accreditation Board provided their appeal is made in writing and outlines reasons for the appeal. This must be done within 3 months of receiving notification of the decision.

9. REVIEWS

When awarded the PDP quality mark, the period of time until the first review provides an opportunity for PDPs to further develop, implement and monitor the effectiveness of their programmes.

The PDP may request a review at an earlier time in the cycle if they wish. This may be because of significant organisational change impacting the programme; or because the PDP has made a significant change to the programme – such as adding a new stage. In circumstances of significant change it makes sense to review the programme to ensure that it remains capable of delivering against its objectives.

IPENZ also reserves the right to initiate a review if it becomes aware of significant changes or events within the PDP that suggest that the ability of the PDP programme to deliver against the objectives could be compromised.

The key objective of the review is to affirm ongoing implementation of relevant systems and strategies and to evaluate the effectiveness of those systems in meeting the following KPI's and other targets identified by the PDP. IPENZ is likely to visit the organisation as part of the review to speak with key personnel who have responsibility for professional development and evidence how they are achieving the criteria as set out in Section 5.

PDPs will be required to provide a brief self review against the criteria and report on performance against KPIs and any internal targets.

The review process will seek to triangulate information provided by the organisation, using data available from within IPENZ databases and discussions with the PDP's HR staff, PDP champion and engineering staff. Some evidence of compliance across regional offices will also be sought as necessary.

Key performance indicators assessed at the time of review:

- 60% of graduate engineering professionals are actively engaged on the PDP's professional development partner programme and apply for Membership and/or registration between 5-7 years post-graduation
- PDP applicants are expected to meet the current 90% - 95% success rate being achieved by applicants for competence based Membership and /or registration. This applies equally to first-time applicants and applicants for continued registration.
- PDPs will be able to show that they are supporting and encouraging 60% of all their engineering staff to engage with the wider engineering profession. IPENZ Membership would be a good indicator of this as would involvement with industry, technical groups, or other professional body affiliations.
- All engineering professionals who are currently registered (as CPEng, ETPract or CertETn) will be engaged on the PDP's professional development programme to support them to maintain their registration while they continue to practice in engineering or engineering management

IPENZ will assess the information from the PDP and prepare a report and a recommendation that will be submitted to the IPENZ Standards and Accreditation Board (SAB) for their consideration.

Recommendations for ongoing recognition will be based on an assessment of compliance with PDP criteria and an holistic assessment of the effectiveness of systems and strategies. Failure to satisfy one or more of the KPI's is not in itself grounds for revoking PDP status, however organisations are expected to be able to show positive progress towards achieving KPI's and plans to address any shortfall.

Possible outcomes of the review will be to:

- Continue IPENZ PDP status for a further three years; or
- Continue IPENZ PDP status for a restricted period (i.e. less than three years) outlining certain requirements that would need to be met within that timeframe; or
- Defer making a decision until the following SAB meeting so as to give the IPENZ PDP the opportunity to clarify or provide further information requested by the SAB; or
- Revoke IPENZ PDP status stating reasons for that revocation

An organisation can appeal to the IPENZ governing Board any review decisions made by the Standards and Accreditation Board provided their appeal is made in writing and outlines reasons for the appeal. This must be done within 3 months of receiving notification of the decision.

10. REVOCATION OF PDP STATUS

Over and above the review process IPENZ reserves the right to revoke the PDP status of an organisation at any time if IPENZ is of the view that the expectations and requirements set out in this policy are clearly not being met or the professional standards of the organisation are not consistent with the IPENZ Competence Standard, which include the standards outlined in the Chartered Professional Engineering professionals Rules 2002 and IPENZ Register Regulations.

Equally a PDP can choose to leave the programme at any time for whatever reason, by giving notice in writing to IPENZ.

For further information please contact the IPENZ Professional Development Manager at:

IPENZ National Office
Ground Floor, 158 The Terrace
P O Box 12 241, Wellington
Telephone: 04 473 9444
Email: profdevmanager@ipenz.org.nz or via the website <http://www.ipenz.org.nz>

APPENDIX ONE

GLOSSARY OF TERMS

engineering professional

any person who is employed in engineering work as either a Professional Engineer, Engineering Technician or Engineering Technologist.

competence standard

The standards of competence against which Professional Engineers, Engineering Technologists and Engineering Technicians are assessed to demonstrate competence for independent practice. Each competence standard is made up of 12 core competencies.

These standards can be downloaded from the IPENZ website – www.ipenz.org.nz

Registers

The registers of current competence for each of the three engineering roles. Please see the definitions of Engineering Technician, Engineering Technologist and Professional Engineer for a breakdown of these registers.

IPENZ Membership

There are several different classes of IPENZ Membership, which fall under the broad headings of competence based and non-competence based. Competence based Membership requires an assessment and demonstration of competence against the relevant standard (see 'competence standard')

Competence based Membership classes include:

Professional Member (MIPENZ), Technical Member (TIPENZ), Associate Member (AIPENZ), Fellow (FIPENZ) and Distinguished Fellow (DistFIPENZ).

Non competence based Membership classes include:

Graduate Member (GIPENZ), Companion Member (CompIPENZ), Student Member and Affiliate Member. The last two membership classes have no associated post nominal.

Information on Membership classes can be downloaded from the IPENZ website: –

http://www.ipenz.org.nz/ipenz/forms/pdfs/engineering_edge.pdf

Engineering Technician

Engineering technicians have some theoretical knowledge combined with practical knowledge. They solve well-defined engineering problems using a combination of practical know-how and basic analytical techniques. Many engineering technicians hold a two-year Diploma in Engineering (DipE) from a polytechnic, or its predecessor, the New Zealand Certificate in Engineering (NZCE).

Register of current competence for engineering technicians:

- Certified Engineering Technician - CertETn

Competence based membership class for engineering technicians

- Associate Member - AIPENZ

Engineering Technologist

Engineering technologists have a smaller body of theoretical knowledge than professional engineering professionals, but sufficient to enable them to solve broadly-defined engineering problems using knowledge of physical processes and standard mathematical analysis techniques. Increasing numbers of engineering technologists hold three-year Bachelor of Engineering Technology (BEngTech) degrees from a university or polytechnic.

Registers of current competence for engineering technologists:

- Engineering Technology Practitioner - ETPract
- International Engineering Technologist - IntET(NZ)

Competence based membership class for engineering technologists

- Technical Member - TIPENZ

Professional Engineer

Professional engineers work in areas requiring specialist engineering knowledge – analysing, solving and managing complex engineering problems. They take responsibility for the largest engineering projects, sometimes worth hundreds of millions of dollars. Most professional engineering professionals hold four-year Bachelor of Engineering (BE) university degrees.

Registers of current competence for professional engineers:

- Chartered Professional Engineer - CPEng. This is the only statutory-backed register for professional engineers in New Zealand.
- International Professional Engineer – IntPE(NZ) (Lists people who have met the internationally benchmarked competence standard)

Competence based membership classes for professional engineers:

- Professional Member – MIPENZ
- Fellow – FIPENZ
- Distinguished Fellow - DistFIPENZ