



employer link

AN IPENZ NEWSLETTER FOR PROFESSIONAL DEVELOPMENT PARTNERS SEPTEMBER 2009

Why We Did It. What PDP Status Is *Actually* All About

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Markplan Consulting Ltd team

MARKPLAN
Consulting Ltd

*Specialist Civil &
Structural Engineering*

Markplan Consulting Ltd, a small-to medium-sized enterprise, has a big vision – to provide a place of work for a service-driven team of positive, enthusiastic, thinking engineers who share a love of structures and what they do. We achieve this by providing an environment where professional

development and continual improvement in knowledge, skill and positive personal qualities are not only essential, but an integral part of our culture.

Markplan has been doing this for 15 years now with programmes that were never formally accredited. With the introduction of the Professional Development Partner (PDP) programme, we saw acceptance as a PDP by IPENZ as formal recognition by our peers and the industry that we are committed to the professional development of all our engineers throughout their careers. The application was therefore a case of putting into a formal document what was currently being actively practised, rather than the other way round.

Markplan reinforces with its engineers that professional development is not just an activity that is relevant to Membership status but something

that enhances and benefits one's daily tasks, relationships and seniority in the practice and with peers in the engineering community as a whole. It is an essential part of professional life, not an optional extra, and a regular amount of time should be invested in it. Since becoming a PDP, we have found the individual's focus on his or her career tends to be front-of-mind now and the desire to gain recognition for their engineering competence through the appropriate competence-based Membership class and register is greater.

Applying to become a PDP gave the opportunity to assess career development opportunities and systems in the practice, and ask, "How does this achieve the individual's goals as well as Markplan's goals?". We took an in-depth look at what we had been doing in the area of career development over the years and were pleased that no radical changes to any of the current development programmes or systems had to be made. The process did however allow us to improve further by establishing better recording systems, which will, in turn, yield a more robust PDP programme for the future.

Because continuing development in skill and knowledge as an engineering practitioner is not only of benefit to the engineer, but must also closely align with the long-term goals of the organisation and its clients, and be of benefit to the engineering profession as a whole, Markplan chose to develop a "roadmap" that essentially forms the basis of the PDP programme. Each of Markplan's engineers follow the same development programme defined by the roadmap, which identifies current skill level and responsibility in any particular role. As the engineer progresses along the roadmap with exposure to various work experience, responsibility, and skill development, the 12 IPENZ competencies are tracked and developed in as balanced a way as is practically possible. Although all engineers are in the same programme, each engineer's roadmap is different, based on their current position and career aspirations.

The aim of the programme is to monitor and provide direction for each participant's work experience, mentoring and level of responsibility, and develop all 12 IPENZ competencies in order for the engineer to become well-rounded and balanced in their role as a practitioner.

All team members within the PDP programme are offered access to the work and learning opportunities (both on and off the job) they need to acquire the competencies and skills expected of engineers. This "well-rounded engineer" and "whole career" approach provides ongoing support and guidance to develop, demonstrate and maintain these competencies and skills, which are expected of engineering practitioners.

The PDP programme, including the roadmaps, has been easily adapted to include BE, B.Eng Tech and other technical qualifications. This allows for engineering technologists and technicians to achieve recognition in the appropriate Membership class and go on to apply for Chartered Professional status in line with the IPENZ competence-based policy now in place. A very important aspect of the PDP is the setting of what we believe are realistic timeframes to reach eligibility for Membership in each class. Experience has also taught us that the time an engineer takes to achieve the appropriate quality mark is often based on personality, drive and ambition, rather than the professional development programme alone, and this needs to be taken into consideration when defining goals and timelines.

Continuing professional development is an integral part of running a sustainable engineering practice. All the engineers in Markplan have the opportunity to participate in all aspects of the practice and as a result become engineers with business and people skills beyond the 12 engineering competencies. The PDP programme has helped us to do this in a planned and managed way.

Becoming a PDP has increased our own and all of our teams' interaction and involvement with IPENZ and its continuing improvement of Members benefits, one of the most important being professional development. We enjoy working with Paul Gardner and the Professional Development Team at IPENZ who have helped make our PDP programme great, proving that the size of the organisation does not matter when it comes to providing professional development and enhancing careers.

To find out more about the fantastic team at Markplan, please feel free to visit our web site at www.markplan.co.nz

Revamped PDP Policy

Greater clarity and support for Professional Development Partners.

With a growing number of organisations joining the PDP programme, we decided it was the time to revamp of our PDP policy in order to provide better guidance to existing and prospective PDPs in a more reader-friendly way.

One notable improvement is the clearer requirements for first-time applicants. The policy also spells out what the different decision outcomes are and what's expected from those organisations that are due for a review. The underlying message for organisations is that the PDP programme is both achievable and worthwhile.

New to the policy is IPENZ's commitment to provide PDPs with tailored ongoing support. There are many ways in which this assistance can be offered or sought: regular monitoring and reporting on staff progression towards professional registration, in-house employer-led competence assessment workshops and one-on-one support for individual staff.

If you want to find out more about the many benefits of becoming a PDP, please consult the policy at www.ipenz.org.nz/ipenz/pdp/documents.cfm



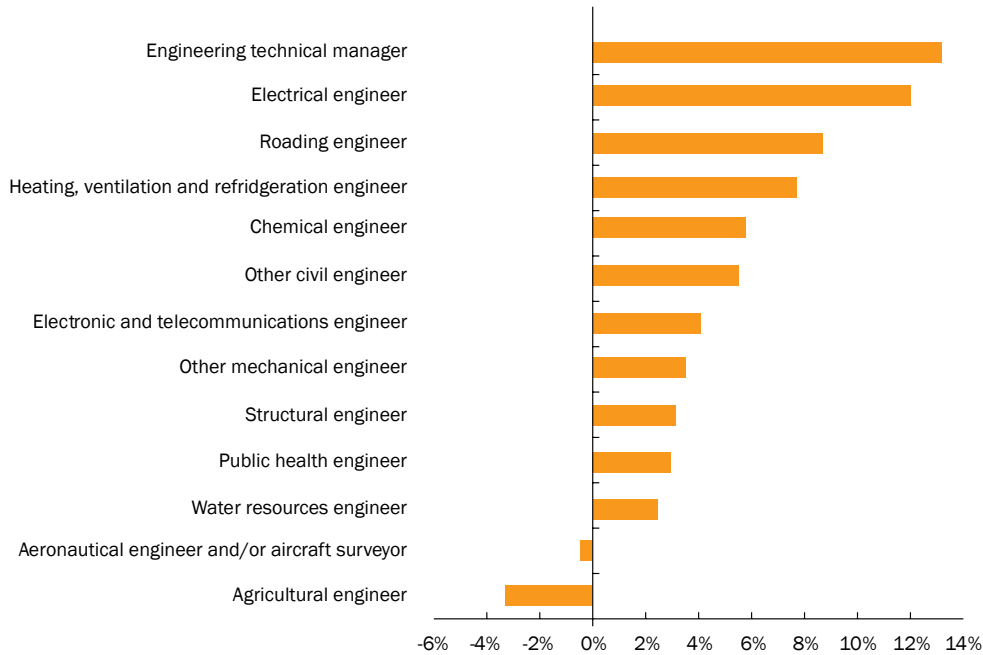
Reach Engineers through *engineering direct*

Advertising opportunities are available in *engineering direct*, the electronic newsletter for IPENZ Members. *engineering direct* is sent by email to more than 7,500 Members each Thursday with a short time-out over the Christmas and New Year break. *engineering direct* has a

notices section, an events section, and a very well-supported situations vacant section which is linked to the JobHunt web site. For more information please contact Chris Burr, phone 04 474 8947, or fax 04 474 8933, or send an email to sales@ipenz.org.nz

Engineers – Will We Have Enough?

This article follows on from the last issue of Employer Link in which the characteristics of New Zealand's engineering workforce were presented. This article presents demand and supply data from a study undertaken in conjunction with the Department of Labour (DOL) and the Association of Consulting Engineers (ACENZ).



Employment of engineers: average annual growth rates 2003–08

Source: Department of Labour Employment Estimates

Demand for engineers

Historically, demand for engineers has been very strong. The figure above shows employment growth for selected engineering occupations. Between 2003 and 2008 the employment growth rate for all engineering occupations was close to five per cent per year – well above the overall rate for all occupations in the economy.

Future growth is expected for engineers – partly due to the need to replace those who leave the profession (to retire for example) and due to increased demand for engineers.

The joint IPENZ-DOL-ACENZ report shows that an additional 500 professional engineers and engineering technicians are needed each year to replace those leaving the profession.

In addition, an additional 1,200 to 1,300 engineers will be needed per year for the next five years (from 2008 to 2013) to respond to the increasing demand for engineers. Note that as the IPENZ-DOL-ACENZ report was prepared in 2008 it does not completely consider the effects of the current economic recession.

Nevertheless, a significant number of engineers will be required.

Supply of engineers

Engineers join the New Zealand workforce through two doors – as a graduate or as a migrant.

Over the past five years, an average of 1,300 people graduated with professional engineering qualifications and a further 500 people graduated with diploma-level qualifications in engineering.

Unfortunately, not all of these graduates will have joined the New Zealand workforce. Anecdotally, retaining graduates in New Zealand is a problem, with approximately 30 per cent of engineering graduates leaving New Zealand within a year of graduating.

As noted, migrants provide a further source of engineers. In 2008, New Zealand received a net gain of people through migration. However, as with graduates, not all qualified migrant engineers will join the New Zealand workforce as engineers and it is difficult to quantify how many migrants become engineers in New Zealand.

Will we have enough engineers?

The joint IPENZ-DOL-ACENZ report notes that there may be too few engineers to meet future demands. However, the report also notes that there are several unknowns, including:

- how the recession will affect the profession
- how many graduates actually enter the profession
- how many migrants actually enter the engineering profession.

Further work

IPENZ is collaborating with all major participants and stakeholders in the New Zealand engineering education sector to deliver the National Engineering Education Plan project. This project includes the following work streams.

- Development of career progression models for graduates of technician, technologist and professional engineer qualifications and for people with trades qualifications.
- Review of the qualifications for the professional engineers, technologists and technicians, including:
 - o consultation regarding the base qualification for professional registration
 - o the development of minimum levels of achievement that lead to a reasonable chance of success in studying for engineering qualifications
 - o consideration of a unified diploma system.
- The Ministry of Education reviewing the subject groupings in the School Technology Curriculum for Years 11–13 to provide clearer pathways into engineering and related careers.
- Study of the factors affecting the success of minority groups in engineering (women, Māori, Pasifika).

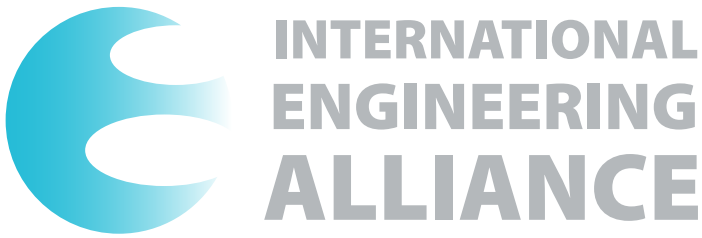
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New Members of International Engineering Agreements

In June 2009, IPENZ, as the organisation representing New Zealand's engineering interests overseas, attended the International Engineering Alliance meetings in Kyoto, Japan.



The week-long series of meetings dealt with a number of matters including the acceptance of new members and signatories into the various agreements that form the Alliance.

The Washington Accord, signed in 1989, is an international agreement among bodies responsible for accrediting engineering degree programmes. It recognises the substantial equivalency of programmes accredited by those bodies and recommends that graduates of programmes accredited by any of the signatory bodies be recognised by the other bodies as having met the academic requirements for entry to the practice of engineering. At the meeting, Malaysia, represented by the Board of Engineers, became the 13th full signatory to the Washington Accord. Other full signatories to the agreement are Australia, Canada, Chinese Taipei, Hong Kong China, Ireland, Japan, Korea, New Zealand, Singapore, South Africa, the United Kingdom and the United States. New Zealand employers can be confident that a graduate from an engineering programme accredited by another signatory to the Washington Accord has a level of professional engineering education substantially equivalent to an IPENZ-accredited Bachelor of Engineering from a New Zealand tertiary institution.

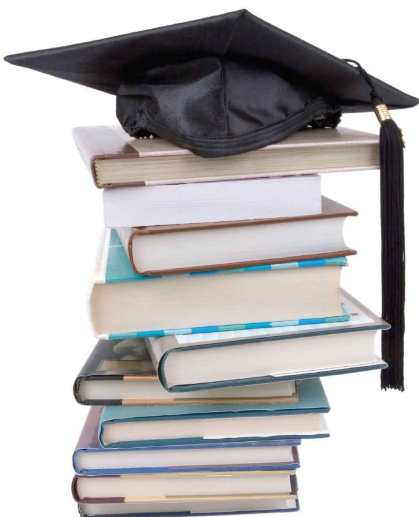
The Engineers Mobility Forum agreement is a multi-national agreement which creates the framework for the establishment of an international standard of competence for professional engineering, and then empowers each member organisation to establish a section of the International Professional Engineers Register. India and Chinese Taipei, represented by the Institute of Engineers India and the Chinese Institute of Engineers, became full members of the EMF in Kyoto, bringing the total number of members to 15. Other member jurisdictions are: Australia, Canada, Hong Kong China, Ireland, Japan, Korea, Malaysia, New Zealand, Singapore, South Africa, Sri Lanka,

the United Kingdom and the United States. Engineers who have achieved IntPE registration in one of the EMF member jurisdictions have demonstrated competence for independent practice to a level substantially equivalent to that expected in New Zealand. Any such engineer seeking Chartered Professional Engineer registration in New Zealand only has to demonstrate the currency of their engineering knowledge and skill, and the ability to practice in the New Zealand context. In some cases, IPENZ also recognises the substantial equivalence of national registration or licensing processes applied by EMF members and a full list of the credit given for IPENZ Membership and registration can be found at www.ipenz.org.nz/ipenz/forms/pdfs/credit_for_registrants_from_other_jurisdictions.pdf

Information on all of the agreements covered by the International Engineering Alliance can be found at www.ieagrements.com

IPENZ Supports Graduate Progression

Tailored support is available through IPENZ for your graduate staff.



As part of the IPENZ commitment to the PDP partnership we have undertaken to identify those engineers who have IPENZ Graduate Member status and are potentially ready to make an application for a competence-based assessment.

A detailed list will be sent out to each employer and a subsequent email will be sent to each individual. Following this we are happy to work with you in the progression of these graduates.

Individuals will find invaluable resources to assist in preparing their application on the Members' Area of the IPENZ web site. The work history recording tool is particularly useful and we have developed a step-by-step tutorial on how to use the tool, which is also available on the web site.

We are also pleased to advise that once Members have committed to submitting their application by registering on a competence assessment round, we are able to offer one-on-one support, if required, to encourage applicants over the finish line!

Similarly if there is a group of engineers who commit to a competence assessment round we can provide support in the form of in-house workshops facilitated by IPENZ to discuss any particular aspects of the application process.

We urge you to take advantage of these services and give your employees the best opportunity to take the next step in their careers.

For further information please contact Rachel Kenny on rkenny@ipenz.org.nz or 04 474 8982.

IPENZ Centre for Professional Development

Check the Engineering Calendar for events in your region and contact cpd@ipenz.org.nz to express your interest.

Auckland	
Relationship Management and Effective Communication	24 September
Engineers and Consultation: "Current Practice and Lessons Learnt"	28 September
Contract Management for Engineers	7 October
Risk Management Techniques for Engineers	7 October
Finance for Engineers	14 October
Resource Management Act for Engineers	21 October
Risk Analysis for Engineers	4 November
Effective Report Writing for Engineers	11 November
Wellington	
Contract Management for Engineers	6 October
Risk Management Techniques for Engineers	14 October
Resource Management Act for Engineers	5 November
Risk Analysis for Engineers	27 November
Christchurch	
Engineers and Consultation: "Current Practice and Lessons Learnt"	14 October
Legal Issues for Professional Engineers	27 October
Contract Management for Engineers	4 November
Specification Practice	9 November
Resource Management Act for Engineers	17 November
Northland – Whangarei	
Effective Report Writing for Engineers	20 October
Taranaki – New Plymouth	
Risk Management Techniques for Engineers	23 September
Hawkes Bay – Napier	
Specification Practice	22 September
Waikato – Rotorua	
Resource Management Act for Professional Engineers	27 October
Engineers and Consultation: "Current Practice and Lessons Learnt"	11 November
Nelson	
Resource Management Act for Engineers	18 November
Engineers and Consultation: "Current Practice and Lessons Learnt"	24 November

Click on each course title for more information

Cost for IPENZ Short Courses (incl GST)

\$520 – IPENZ Members

\$540 – Technical Group members

\$605 – non-members

Want to Know More?

Contact us on cpd@ipenz.org.nz or call 04 495 1643 or visit the engineering calendar at www.ipenz.org.nz/ipenz/nzecal for a full list of events taking place around the country.

2010 Inaugural Professional Development Partners Forum

IPENZ has been getting underway with planning for the first Professional Development Partners Forum planned to take place in early 2010.

To demonstrate our commitment to the partnership we are bringing together a range of industry and government experts to deliver a series of papers and discuss key issues around staff retention, development and recruitment in these tough economic times.

Planning is underway with the Department of Labour, New Zealand Immigration and the Ministry of Education to host discussions and working groups covering Change Management, Qualifications and Equivalency, and Immigration and Migration.

This will be a great opportunity to network, share ideas and celebrate achievement. Dates are soon to be confirmed, at which time, formal invitations will be sent to each Professional Development Partner.

If you have any questions please contact Rachel Kenny on rkenny@ipenz.org.nz or 04 474 8982.

PDPs Have Got Talent!



IPENZ is looking for an outgoing female engineer based in Wellington who has recently been successful in her competence assessment.

The ability to sing and dance is not a requirement! What we need is a passionate, articulate engineer who is willing to tell us about her job, career, and aspirations for the future on camera.

The glamour doesn't end there though! We want to use the footage to create a video that we hope will inspire and motivate our Graduate Members into taking the next step in their career.

This is a great opportunity for a young engineer to engage with her profession and participate in a fun and rewarding continuing professional development activity.

If this sounds like one of your employees please contact Rachel Kenny on 04 474 8982 rkenny@ipenz.org.nz to find out more.

IPENZ PDP Workshops

We can help your employees get the recognition they deserve.

This year, several Professional Development Partners have responded to offers from IPENZ National Office to deliver in-house workshops on IPENZ quality marks and the competence assessment process. As a result, workshops have been delivered at a number of PDPs, including Aurecon, Metrowater, New Zealand Transport Agency, North Shore City Council, Transfield Worley Ltd and Watercare Services Ltd.

We welcome the opportunity to support organisations to promote graduate progression and the professional recognition of their engineering staff in this way. In doing so we aim to ensure that staff have up to date information about what is involved with the competence assessment process and the support that is available to them through IPENZ.

Sessions can be tailored to meet particular employer needs. For example, a recent seminar at Aurecon focused specifically on using the online tools for recording professional development activities, work history and mentoring activities. Alternatively, they may focus on the needs of specific groups of engineers. These might include recent graduates getting started towards competence assessment, experienced engineers looking to have their competence recognised through registration, or engineering technologists or technicians who may not be familiar with the IPENZ membership and registration options that are available to them.

If you would like to arrange an in-house seminar, please contact Rachel Kenny, Learning & Assessment Co-ordinator on phone 04 474 8982 or email rkenny@ipenz.org.nz



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