

**COMPETENCE ASSESSMENT
REFERENCE GUIDE
(CARG)**

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1. INTRODUCTION

This reference guide is intended to assist you in preparing your portfolio of evidence for competence assessment for one or more of the IPENZ competence-based quality marks.

Competence is “artful doing” – as a candidate you want to show that you are able to comprehend and apply high levels of knowledge in performing your engineering activities. Assessors will be looking for evidence that shows your:

- ability to perform individual tasks to a specified standard repeatedly
- ability to manage a number of different tasks within the job repeatedly
- ability to respond to irregularities and breakdowns in routine
- ability to deal with the responsibilities and expectations of the work environment, including working with others
- ability to continue to learn in rapidly changing work environments.

Competence is **not** based on:

1. Specific qualifications – there is no requirement to hold a specific qualification. Qualifications that you hold are not a proxy for competence but are “good evidence” to submit. However, their “weight” in terms of evidence will reduce over time.
2. A set period of work experience – there is no minimum time required performing engineering work (or study) before applying for assessment of competence.

2. IPENZ COMPETENCY-BASED QUALITY MARKS

IPENZ administers the following competence-based quality marks:

Engineering Role	Professional Engineer (PE)	Engineering Technologist (ET)	Engineering Technician (ETn)
Current competence Registers	Chartered Professional Engineer (CPEng)	Engineering Technology Practitioner (ETPract)	Certified Engineering Technician (CertETn)
International registers	International Professional Engineer (IntPE)	International Engineering Technologist (IntET)	(No international register at present)
IPENZ Membership Classes	Professional Member of IPENZ (MIPENZ)	Technical Member of IPENZ (TIPENZ)	Associate Member of IPENZ (AIPENZ)

The quality marks you apply for will depend on the nature and complexity of your engineering activities. The qualifications you hold may also be a guide. The links above will take you to the relevant page on the IPENZ website for more information.

2.1 GLOSSARY OF TERMS

This guide uses the following terms and acronyms:

AFA	means “Assessment for Admission” to one or more of the competence-based quality marks
CRA	means “Continued Registration Assessment”, and is required at intervals of no more than 5 years to remain on any current competence register
Previously assessed	means AFA candidates who have previously demonstrated competence at the level of the current competence register(s) being applied for
Quality marks	include all current-competence registers and IPENZ competence-based Membership classes

3. APPLICATION DOCUMENTATION

A series of forms have been developed to assist you in providing the required information in a standardised format (see section 3.1). You must use the CA01 (or CA02) form as you are required to sign mandatory declarations contained in the form. You are encouraged to use the other forms but in some cases you are given alternatives which may be more convenient to you – as long as you provide the information requested in the relevant form.

You must submit **three copies** of the documents listed in the tables below (except for the payment details for your assessment fee). Collate these into **three separate bundles** containing one of each of the required forms and send all three of these to the IPENZ National Office at the address listed at the back of the CA01 or CA02 form.

You will need to provide an extra set of application documents (four in total) if you are likely to require a Knowledge Assessment (see Appendix One for details).

3.1 REQUIRED DOCUMENTATION

Use the checklist below to ensure that you have provided all the necessary information. The links in the table below take you to the relevant section of this guide.

Assessment for Admission *	Tick	Continued Registration	Tick
AFA: Competence Assessment for Admission Form (CA01)	<input type="checkbox"/>	CRA: Submission for Continued Registration Form (CA02)	<input type="checkbox"/>
Certified copy of academic qualifications/professional memberships (if not already supplied to IPENZ)	<input type="checkbox"/>	Certified copy of academic qualifications/professional memberships gained since last competence assessment	<input type="checkbox"/>

Assessment for Admission *	Tick	Continued Registration	Tick
Competence Self-review (Form CA03)	<input type="checkbox"/>	CRA Competence Self-review (Form CA13) since last competence assessment (unless practice area changed materially – then fill in CA03)	<input type="checkbox"/>
Work History Summary (Form CA04), annotated CV or web-based records	<input type="checkbox"/>	Work History Summary (Form CA04) or annotated CV since last competence assessment	<input type="checkbox"/>
Documentation of continuing professional development activities (Form CA05) or web-based records	<input type="checkbox"/>	Documentation of continuing professional development activities (Form CA05) or web-based records since last competence assessment	<input type="checkbox"/>
We strongly recommend that you provide evidence in the form of work samples to back up the information you provide in the competence self-review form CA03 (Recommendations on the number of work samples to submit are provided on Form CA03)	<input type="checkbox"/>	You do not need to provide any detailed work samples , but work samples are helpful to the panel and the assessment panel may request them from you	<input type="checkbox"/>
<p>Referee statements. If you are an IPENZ Member, you should use the online referee request system This enables your referees to complete their statements online and send their reports directly to the assessment panel</p> <p>If you are not an IPENZ Member, you must supply your referees with a Referee Declaration and Evaluation (Form CA06) and your completed Form CA03 Referees must forward the completed forms directly to IPENZ National Office</p>	<input type="checkbox"/>	<p>Referee statements. If you are an IPENZ Member, you should use the online referee request system This enables your referees to complete their statements online and send their reports directly to the assessment panel</p> <p>If you are not an IPENZ Member, you must supply your referees with a Referee Declaration and Evaluation (Form CA06) and your completed self-review Form CA13 Referees must forward the completed forms directly to IPENZ National Office</p>	<input type="checkbox"/>
Assessment fee (only provide one copy of payment details form)	<input type="checkbox"/>	No fee required when submitting a portfolio of evidence for a CRA	

* If you are **ONLY** applying for IPENZ Membership via credit schedule (see guidelines at www.ipenz.org.nz/IPENZ/Forms/pdfs/Credit_for_Registrants_from_other_Jurisdictions.pdf) you only need to:

- complete the [CA01](#) form
- include contact details for two referees and
- provide **ONE** copy of this to the IPENZ National Office along with certified copies of your qualifications and memberships/licenses. You do **not** need to pay an application fee.

If you are applying for CPEng:

- via the **Trans Tasman Mutual Recognition Agreement (TTMRA)** or
- because you hold **non-New Zealand IntPE registration** AND you were assessed for IntPE **within the last five years**

then you need only demonstrate “occupational equivalence”. This means that you only need to demonstrate competence in the New Zealand-specific “good practice” related to your practice area. Do this by completing the above forms for element 2 and element 11 (to the extent that CPD is relevant to New Zealand-specific good practice) of the Competence Standard, as your RPEQ or IntPE is taken as having demonstrated competence to the required level.

Refer to the [credit schedule](#) for further information.

4. PREPARING YOUR APPLICATION

For easy reference, the sections of this guide follow the corresponding sections of each form of your portfolio of evidence. IPENZ has also developed an [online tutorial](#) as further support for engineers preparing their portfolios of evidence for assessment – you can access the tutorial at www.ipenz.org.nz/ipenz/Forms/pdfs/Making_an_Application_For_Competence_Assessment_tutorial.pdf

We recommend the following steps:

- Familiarise yourself with the competence standard – and the associated performance indicators – that you will be assessed against:
 - [Professional Engineer](#) (PDF 49kb) (PE)
 - [Engineering Technologist](#) (PDF 70kb) (ET), or
 - [Engineering Technician](#) (PDF 71kb) (ETn)
- Update your CV, Work History Summary (Form [CA04](#)) or online work history and competence records. Provide details of your key job roles/responsibilities, projects or engineering activities and achievements with a focus on the last five years.

Note: company time recording or billing records may help to remind you about key projects.

- Update your Continuing Professional Development Activities (Form [CA05](#)) to include CPD activities over the last five years (or the period since last assessment if a CRA). IPENZ Members recording their CPD online in the IPENZ Members’ Area need only submit a copy of those records instead.

Note: HR appraisal records may assist you to fill in any gaps.

For key learning activities take time to reflect on the learning outcomes that enhanced your ability to practice and contributed to demonstrating competence against any of the competence elements.

- Work through the appropriate Competence Self-review Form ([CA03](#) or [CA13](#)), using the performance indicators as a prompt to identify suitable projects or activities from your CV, work history records or CPD records to demonstrate competence against each element. The questions in the competence self-review form are merely prompts based on the performance indicators and are intended to assist you identify “good evidence” to submit. If you have been recording examples of competence in the online Work History and Competence Recording tool, you are able to generate a draft CA03 or CA13 to work on electronically.

- Cross-reference any additional information relevant to these examples if documented elsewhere in your portfolio – such as in your CPD Activities or Work History Summary. A good cross-referencing system will help the assessors find critical evidence in your portfolio.
- AFA applicants are recommended to back up examples in your Competence Self Review with work samples – and cross-reference them accordingly.
- Remember you are responsible for providing your best evidence of competence for assessment – don't rely on assessors to ask you to submit further information.

5. TRIGGERS FOR ASSESSORS

A poorly prepared portfolio of evidence will alert assessors to a potentially “weak” candidate who may either be required to submit more evidence and/or may end up with a negative recommendation. Being aware of these triggers should help you in providing a well-prepared portfolio of evidence and reduce the risk of such outcomes.

The negative triggers for Assessors include:

- application is not completed correctly and/or there is missing material
- lack of clarity of evidence in portfolio and documentation e.g. structure, order, lack of cross-referencing or cross-referencing that is difficult to follow
- insufficient detailing
- limited interpersonal and communication skills
- limited knowledge of the regulatory environment
- gaps in the “competence story”
- lack of applied knowledge
- drawings and information are chaotic
- candidate's inability to reflect on his or her own practice
- unclear perceptions of own limitations
- little or no evidence of up-skilling.

6. COMPLETING APPLICATION FORM (CA01 OR CA02)

AFA candidates should complete the “AFA: Competence Assessment for Admission ([CA01](#) Form)”. If you wish to apply for Design Verifier or Recognised Engineer and you are not yet CPEng registered, you must use this form. You can apply for one or more of the registers as well as IPENZ Membership with one application.

If you are currently registered on a current competence-based register (such as CPEng, IntPE(NZ), ETPract, IntET(NZ) or CertETn) and are required to be assessed to remain on the register(s), you should complete the “CRA: Submission for Continued Registration ([CA02](#) Form)”. If you are already CPEng registered and wish to apply to be a Design Verifier or a Recognised Engineer, then you should use the CA02 form. Competence for these quality marks will be assessed along with your assessment for continued CPEng registration.

IPENZ, as the Registration Authority, is required to notify registrants who are due for a continued registration assessment, giving a minimum period of three months notice for submission of evidence.

6.1 SECTION 1 – APPLICANT DETAILS

Provide your full name and your IPENZ identity record number, if you know it, and your date of birth. Please make sure you repeat this information on all of the other application forms.

6.2 SECTION 2 – SELECT WHAT YOU ARE APPLYING FOR

If you are unsure which is the right quality mark for you to apply for, review the links in the [quality marks table](#) for more information. You should refer to the relevant guidelines on the IPENZ website (refer to Practice Field Guidelines on page 35) if you wish to apply for Recognised Engineer or Design Verifier.

6.3 SECTION 3 – CONTACT DETAILS

Please provide your home and business address. If you consent to your contact details being listed on a register and you are successfully registered, your business address will be displayed on the publicly accessible and searchable online register(s). You may withhold consent to have your contact details listed on the register – but if you give consent, IPENZ must list the details.

6.4 SECTION 4 – QUALIFICATIONS

List your qualifications in chronological order with the most recent first. Please include the duration of study for the qualification on the form.

You need to provide [certified copies](#) of your qualifications with your application (unless these have been submitted with a previous application for IPENZ Membership). If you are undertaking an assessment for continued registration you should only provide copies of qualifications which you have received since last assessment.

The knowledge benchmark for Professional Engineers is the four-year Washington Accord degree; for Engineering Technologists the three-year Sydney Accord degree; and for Engineering Technicians a two-year certificate or diploma, recognised under the Dublin Accord.

If your qualifications are not recognised under these Accords, you will need to provide additional evidence to show that you are able to “comprehend and apply” the accepted principles that underpin good practice in engineering. If you wish to apply for CPEng and/or MIPENZ and you do not have a **Washington Accord or equivalent degree** you should **assume** you will be required to undertake a [knowledge assessment](#) (see Appendix One). The Assessment Panel will make the final decision on the need for a knowledge assessment. If you have a significant level of postgraduate study in the relevant field of engineering, backed up by good evidence of applying this knowledge, the panel may decide a knowledge assessment is not required.

Certified Copies of Qualifications

You should provide **certified copies** of your qualifications and professional memberships with your application. This means that the **original** copies of your academic qualifications or memberships must be sighted and the **copy** signed by one of the following to verify it is a **true copy of the original**:

- an AIPENZ, TIPENZ, MIPENZ or FIPENZ Member (they must also state their Membership number)
- Justice of the Peace
- IPENZ National Office staff member

Whoever certifies the qualifications needs to print their name, and state, where applicable, their registration or Membership number, sign the copy of the qualification certificates after the words “*I certify this to be a true copy*”.

If you are currently an IPENZ Member, you do not need to submit certified copies of your qualifications unless requested to, as records of your qualifications should be held on file. However, if you have obtained further qualifications since your last assessment, then include certified copies of these as outlined above.

6.5 SECTION 5 – PROFESSIONAL MEMBERSHIPS/REGISTRATIONS/LICENSES

List memberships of overseas engineering bodies and/or registrations or licences to practice which you have held or currently hold.

If you are a member of recognised overseas professional bodies and are applying for CPEng or IPENZ Membership, you may be given “credit” for previous competence assessments, thus being able to submit less documentation for assessment. You should refer to the [Credit Schedule](#) to ascertain the extent to which credit can be given.

Overseas-based Applicants

There is nothing in the CPEng Rules or IPENZ Regulations that requires an applicant to reside or practice in New Zealand. However, if you reside outside New Zealand, you will be required to demonstrate that you are able to “comprehend and apply” knowledge of good engineering practice that is specific to New Zealand to meet the requirements of element 2 of the competence standard for the current competence-based registers (CPEng, ETPract or CertETn) and how you keep up-to-date with New Zealand-specific good practice (element 11).

If your practice area requires limited New Zealand-specific engineering knowledge (such as for software engineering) because engineering practice is based largely on international standards and codes, then evidence of competence in your local jurisdiction with a statement on how that matches New Zealand-specific good practice is all that is required. If, however, your practice area demands a high level of New Zealand-specific engineering knowledge (such as seismic engineering), evidence will be required to show that you are “able to practice competently” in the New Zealand context, through activities such as:

- a) performing engineering work for New Zealand-based clients
- b) working in an international company which has New Zealand offices, where you participate in New Zealand-based activities
- c) working in an environment where design codes, standards etc are based on New Zealand standards and codes. In such a situation, you would need to show how you keep up to date and apply these in the context of the New Zealand regulatory environment (e.g. application of the New Zealand *Building Code*)
- d) CPD includes development and/or training on New Zealand-specific practice. This CPD would normally be evidence in addition to one or more of (a) through (c) above. Note that passive CPD (e.g. private reading) alone

is unlikely to provide sufficient evidence to satisfy the requirements for this element.

It is also important to demonstrate that as an overseas CRA candidate you have maintained your competence for element 2 through relevant CPD. The extent of CPD required will be dependent on the extent to which New Zealand-specific practice in your practice area has changed.

In areas of engineering which experience significant changes (for example, due to changes in the regulatory environment, changes in “good practice” or changes due to technological change), candidates will be expected to demonstrate a higher level of New Zealand-specific CPD than in areas of practice where change has not been so great.

6.6 SECTION 6.1 – PRACTICE AREA

All candidates are required to demonstrate competence in their practice area, which is defined as:

- (a) the area within which you have engineering knowledge and skills; and
- (b) the nature of your professional engineering activities.

Your practice area is a combination of the area in which you hold specialised engineering knowledge/skill and the nature of the activities you perform – the things that you do. One or both of these are likely to change over the course of your engineering career.

Assessment panels are required to assess whether your practice area description is a reasonable summary of your practice area (based on the evidence you have presented) and then they will assess your competence within that practice area.

You are required to describe your practice area as a series of succinct statements -15–25 words in total. See the [Example Table](#) below.

Practice Area Description – Examples

The following examples have been compiled to assist you in describing your practice area and aligning with a practice field(s) – refer to “Section 6.3 – Practice Field(s)” on page 12.

Applicant/ Candidate	Practice Area Description	Practice field(s)*
Engineer 1	<ul style="list-style-type: none"> • Coastal and marine engineering including floating structures • dredging reclamation projects • jetties, breakwater construction • submarine pipeline construction 	Civil
Engineer 2	<ul style="list-style-type: none"> • Highway design and construction • Sewerage reticulation and treatment facilities • Water supply engineering • Stormwater drainage and flood control • Environmental impact assessments 	Civil, Environmental

Applicant/ Candidate	Practice Area Description	Practice field(s)*
Engineer 3	<ul style="list-style-type: none"> Teaching in process control and thermodynamics Postgraduate student supervision Research and consultancy in biomass energy and biofuels 	Chemical, Bio
Engineer 4	<ul style="list-style-type: none"> Precast concrete construction of industrial and commercial buildings Design and construction of steel-framed industrial buildings and plant structures 	Structural

*Note: since the IPENZ Board withdrew the privilege of using extended postnominals in 2008, the practice field information is **now only used** for the selection of assessors. Assessment panels will continue to only assess candidates in their practice area.

Poor Practice Area Descriptions

Some examples of poor practice area descriptions include:

1. "I have specialised in management and have over 30 years' experience as an engineer, currently leading multidisciplinary teams consisting of engineers, architects, IT specialists and planners located in New Zealand, Thailand, Singapore and Malaysia advising on the facilitation of key strategic infrastructure projects valued at up to NZ\$500 million."
2. Structural
3. Project management; Procurement; Contracts management

The reason why these practice area descriptions are poor is that they do not identify the engineer's knowledge base and the nature of his/her engineering activities.

- Description 1 gives no indication of any engineering involvement in the projects – is it transportation, energy management, water supply or wastewater management? Engineering management is acceptable but the practice area description needs to show how engineering is involved – the candidate has to provide clear evidence that he/she analyses and solves complex engineering management problems and manages complex engineering management activities in his or her practice area.
- Description 2 lacks specific detail – is the engineer claiming to be competent across all aspects of structural engineering? Additional information – such as "Design of reinforced concrete structures: dams, bridges and related structures" – is required.
- Description 3 – like description 1 – lacks any indication of the engineering involvement. Additional information is required to show the engineer's engineering involvement – such as "Project management of design and construction of industrial plant".

6.7 SECTION 6.2 – DESIGN VERIFIER APPLICATIONS

Design Verifiers must identify one or more of the three types of equipment prescribed in regulations that they wish to perform design verifications for – Pressure Equipment, Cranes or Passenger Ropeways.

6.8 SECTION 6.3 – PRACTICE FIELD(S)

You are now asked to identify the practice field(s) you consider your practice area is most closely aligned with. Your practice area may partly lie within two or more practice fields, but IPENZ asks that you select no more than two practice fields when completing the application form. The 17 practice fields are:

- Aerospace
- Bio
- Building Services
- Chemical
- Civil
- Electrical
- Environmental
- Fire
- Geotechnical
- Industrial
- Information
- Management
- Mechanical
- Mining
- Petroleum
- Structural
- Transportation

Apart from Management, these are the fields adopted by the APEC Engineer Agreement.

6.9 SECTION 6.4 – ASSESSMENT CENTRES

Interactive interviews for AFA candidates are normally carried out in Auckland, Wellington or Christchurch. However, if there are sufficient applicants from other centres where there are a number of locally based assessors available, then assessments may be arranged in that centre with the agreement of all parties involved. In the past, a limited number of interactive assessments have been held in Hamilton for example.

UK Assessments

Applicants practising in the UK who have a Washington Accord-accredited degree (or recognised equivalent) may apply for assessment for MIPENZ and/or CPEng in the UK. However, such applicants are warned that completing the assessment may take longer and cost more than assessments carried out in New Zealand. Arrangements will be made on a case-by-case basis.

6.10 SECTION 7 – REFEREES

Please record the names and contact details of your two independent referees who meet the eligibility criteria (see page 21 for full details).

6.11 SECTION 8 – IPENZ COMMUNICATIONS AND PRIVACY REQUIREMENTS

Fill out this section

- if you are applying for IPENZ Membership or if you are already a Member but wish to be promoted to another class of Membership (e.g. from GIPENZ to MIPENZ, or TIPENZ to MIPENZ). Your response will determine the level of IPENZ communications you will receive in future – Section 8.1
- to indicate whether you want IPENZ to return your work samples – Section 8.2

- to give your consent to your business contact details being shown on registers – Section 8.3.

6.12 SECTION 9 – DECLARATIONS

All candidates must fill in sections 9.1 and 9.4, and at least one part of section 9.2; complete section 9.3 only if it is relevant to your application. If you leave section 9.1 or a relevant section blank, your application will not be processed until all information has been received.

6.13 SECTION 9.1 – CONVICTIONS

Declare any convictions that are punishable by a term of six months imprisonment. If any convictions are declared, the matter will be referred to the Competency Assessment Board for advice on the relevance and weight to be given to the convictions by the assessment panel when conducting the assessment.

6.14 SECTION 9.2 – DECLARATIONS AND AUTHORISATIONS FOR MEMBERSHIP AND/OR REGISTRATION

There is an obligation on all registrants and IPENZ Members to comply with the relevant rules of registration or Membership. In this section you are asked to sign statements that you understand and accept this obligation, Note you do **not** have to be an IPENZ Member to be registered on any register.

Codes of Ethics and Regulations for Competence Registers

There are separate ethical codes for IPENZ Members, CPEng registrants and registrants on the registers covered by the IPENZ Regulations. The codes require the identical ethical behaviour but differ only in the terminology used when referring to the person with ethical obligations (“Member”, “Chartered Professional Engineer” or “Registrant” respectively).

The IPENZ Code of Ethics is located at www.ipenz.org.nz/ipenz/who_we_are/ethics_inc.cfm.

The CPEng Code of Ethical Conduct can be found at [CPEng Code of Ethical Conduct](#) (PDF 23kb).

The code of Ethical Conduct for all other current competence registers can be found at [Code of Ethical Conduct for Competence Registers](#) (PDF 50kb)

6.15 SECTION 9.3 – TTMRA APPLICANTS, APPLICANTS WITH NPER, CPENG(AUST) AND NON-NEW ZEALAND INTPE

- If you are applying for CPEng via Trans-Tasman Mutual Recognition Agreement (TTMRA) or via recent registration on one of the engineering registers recognised in the [credit schedule](#), you will need to provide the relevant registration details. You will also need to sign a declaration regarding your standing with the relevant overseas register – whether or not you are subject to any disciplinary action or conditions on practice in the “home” jurisdiction of that register. Your assessment will not require a full assessment but will be an assessment of “[occupational equivalence](#)” – see page 19 for details.

6.16 SECTION 10 – COMPETENCE ASSESSMENT CHECKLIST

Use this checklist to ensure that you have included all the required information in your portfolio of evidence. If you are expecting to undertake a knowledge assessment, you should submit four copies of your portfolio of evidence – otherwise only three copies are required. Applicants seeking IPENZ Membership only via the credit schedule need only submit one copy.

6.17 SECTION 11 – GRADUATES OF NATIONAL DIPLOMA IN CIVIL ENGINEERING (APPLIED)

Your portfolio of evidence is largely based on your workbook as assessed by InfraTrain, so the evidence you need to submit is different to that of the normal candidate. Check your portfolio of evidence against this check list.

6.18 SECTION 12 – COMPETENCE ASSESSMENT FEE

The fee for an Assessment for Admission (AFA) is payable on submission of the application and portfolio of evidence. The table on the form can be used to calculate the likely fee which you can then pay either by cheque or credit card. A refund will be given if the assessment is completed without needing to use all the assessment tools you paid for. Applicants who have not previously successfully demonstrated competence to a level equivalent to that applied for (i.e. a “not previously assessed” candidate) are normally required to undertake an interactive assessment.

If an AFA applicant has previously demonstrated competence to an equivalent level to that applied for (referred to as a “previously assessed” candidate), IPENZ considers that competence may be demonstrated through a “desktop” assessment only. Accordingly, payment for the interactive is not required at the time of application. However, if the assessment panel decide that an interactive is required, you will be asked to pay the fee for an interactive.

The cost of a “desktop” assessment for Continued Registration Assessments (CRA) is covered by the annual fees so no fee is payable when you submit your portfolio of evidence. However, if the assessment panel subsequently requires an interactive assessment to complete the assessment, you will be advised as you will need to pay a further fee (as listed on the CA02 form) before the panel can complete the assessment.

7. COMPETENCE SELF-REVIEW FORM (CA03 OR CA13)

The competence self-review form is a key part of your portfolio of evidence, as it provides panels with examples that show how you are able to do each of the things required to meet the relevant competence standard.

If you are applying for an **Application for Admission (AFA)**:

- use Form [CA03](#).

If you are **currently registered** and preparing your portfolio of evidence for a **continued registration assessment (CRA)**, and you have:

- had no material change to your practice area, then use Form [CA13](#)
- moved into an engineering management role, then use Form [CA13](#)
- had a substantive change to your practice area involving the requirement to develop new knowledge of underpinning engineering principles, then use Form [CA03](#)

If you have been recording examples of competence in the online Work History and Competence Recording tool, the on-line system can generate a draft CA03 or CA13 which you can work on electronically.

The respective self-review forms include guidance on the number of examples to provide and the nature of the information to be provided. However in general you should:

- cross reference your examples to work samples, work history form or CPD records
- if using the same piece of work for a number of elements, make sure you provide clear information when first referencing it. As a guide you should provide for each job/activity/project:
 - the name and significance (e.g. size, cost and/or number of employees involved)
 - your role and responsibilities
 - your achievements and outcomes
- specify the factors contributing to complexity of the engineering involved, noting the definitions provided at the rear of the competence self-review form. State how you believe these examples meet the level of complexity required for the quality marks you are applying for. See section on “Complexity of Engineering” on page 16 for more details.

Referencing Performance Indicators

You are encouraged to reference the performance indicators in your competence self review to show how you meet the requirements of the standard. For example, the standard and the performance indicators for element 11 are:

<p>11 Maintain the currency of his or her professional engineering knowledge and skills</p> <ul style="list-style-type: none">• Demonstrates a commitment to extending and developing knowledge and skills• Participates in education, training, mentoring or other programmes contributing to his/her professional development• Adapts and updates knowledge base in the course of professional practice• Demonstrates collaborative involvement with professional engineers (New Zealand engineers for CPEng assessments)

The following is an example of how you can reinforce your evidence in your competence self-review form for element 11 (references to the performance indicators underlined):

I have attended various seminars on [list topics] and am active in local Branch and engenerate activities. I arranged for management support of a Graduate Peer Mentoring Group at work for five graduates and their mentors to meet once a month. Usually we have a senior engineer give a presentation on one of the projects currently in progress. Each graduate gives a progress report on their work and raises any problems they have encountered and would like to discuss, and share any achievements of note. We finish with drinks and finger food and general discussion, which is always very helpful. I believe this shows good participation in education.

training, mentoring and other programmes contributing to my professional development, and is evidence of a collaborative involvement with professional engineers. My CPD record (as summarised in the CA05 form) shows my commitment to extending and developing my engineering knowledge and skills.

Implied Evidence

Assessment panels cannot rely on “implied evidence” – they can only use evidence which clearly shows you are able to do the things required by the competence element. For this reason it is important to identify specific examples that best demonstrate your competence. For example, for an assessment for admission, it is not acceptable to record (for element 10) something like “I am a senior executive and must be able to communicate clearly to perform my job”. You must give specific examples of your communication requirements – such as chairing client meetings, managing contractors, dealing with regulations, reporting to senior management etc.

Complexity of Engineering

The level of complexity involved in your engineering activities is crucial and assessment panels will be looking for evidence that demonstrates you are able to perform engineering at the required level of complexity. Your evidence will be more robust if you specify the attributes that contribute to the complexity of your engineering problems and activities.

The definitions are included as part of the competence standard and are summarised at the rear of the CA03 and CA13 competence self-review forms. The CPEng standard contains the following definitions of “complex engineering”:

<p>ii Complex engineering activities Complex engineering activities means engineering activities or projects that have some or all of the following characteristics:</p> <ul style="list-style-type: none">• Involve the use of diverse resources (and, for this purpose, resources includes people, money, equipment, materials and technologies);• Require resolution of critical problems arising from interactions between wide-ranging technical, engineering and other issues;• Have significant consequences in a range of contexts;• Involve the use of new materials, techniques, or processes or the use of existing materials, techniques, or processes in innovative ways.
<p>iii Complex engineering problems Complex engineering problems have some or all of the following characteristics:</p> <ul style="list-style-type: none">• Involve wide-ranging or conflicting technical, engineering, and other issues;• Have no obvious solution and require originality in analysis;• Involve infrequently encountered issues;• Are outside problems encompassed by standards and codes of practice for professional engineering;• Involve diverse groups of stakeholders with widely varying needs;• Have significant consequences in a range of contexts;• Cannot be resolved without in-depth engineering knowledge.

An example of how you can incorporate these attributes into your competence self-review form is given below:

“The design of foundations for the HiRise building, which was located in a geothermal area, involved complex problems because there was very limited information available. It was outside problems encompassed by standards and codes of practice for professional engineering and there was no obvious solution and I had to research the literature (such as *Journal of Geotechnical Engineering* – ASCE, *Canadian Journal of Civil Engineering*, the *Proceedings of Institution of Civil Engineering*) and apply originality in my analysis. My solution involved [describe]”

Some Useful Tips When Writing a Competence Self Review

Exercise judgement over the level of detail provided with different examples. Less detail may be needed for substantial, obviously complex projects or activities than for smaller scale projects where the complexities may not be immediately apparent to the assessment panel. The objective is to supply sufficient information to enable straightforward verification of your evidence by the panel, and not to leave the panel with substantive questions or information gaps that require further investigation.

Always write in the first person. Use “I” or “me” as opposed to “we” or “us” – even if you were working as part of a group. It is important to identify your personal contribution and those things for which you took responsibility. You should also identify any parts of the project for which you did **not** have personal responsibility.

Check if there is a practice field guideline relevant to you – refer to the [Practice Field Guidelines](#) in Appendix Two on page 35.

7.1 ELEMENT 1 – ENGINEERING KNOWLEDGE

The standard and performance indicators for this element are:

1 Comprehend, and apply knowledge of, accepted principles underpinning widely applied good practice for professional engineering

- Has a Washington Accord degree or recognised equivalent qualification or has demonstrated equivalent knowledge and is able to:
 - identify, comprehend and apply appropriate engineering knowledge
 - work from first principles to make reliable predictions of outcomes
 - seek advice, where necessary, to supplement own knowledge and experience
 - read literature, comprehend, evaluate and apply new knowledge.

The mere fact you have a degree is not in itself adequate evidence you meet the requirements of element 1 – similarly, the fact you do not have a Washington Accord degree is no barrier to you making application. However, to meet the standard you must provide evidence that you can apply knowledge to an equivalent level of a Washington Accord degree! For example:

“Prior to any detailed design being carried out, I undertook a detailed building load calculation to determine peak cooling and heating loads.

Total building sensible and latent loads comprises of direct and solar radiation (through windows) heat conductions (through walls and roof), ventilation/infiltration loads and internal loads (e.g. lighting, equipment and people loads). Applying the laws of heat transfer and solar radiation the total building loads were estimated based on the target indoor temperature and humidity, peak summer and winter conditions.

Although this is an approximate method, it gives an acceptable result for selecting and sizing air conditioning plant.

(Refer to Work Sample 3 – the Intensive Care Block at the St Henry’s Hospital and Work Sample 6 – The Big City Cinema Block).

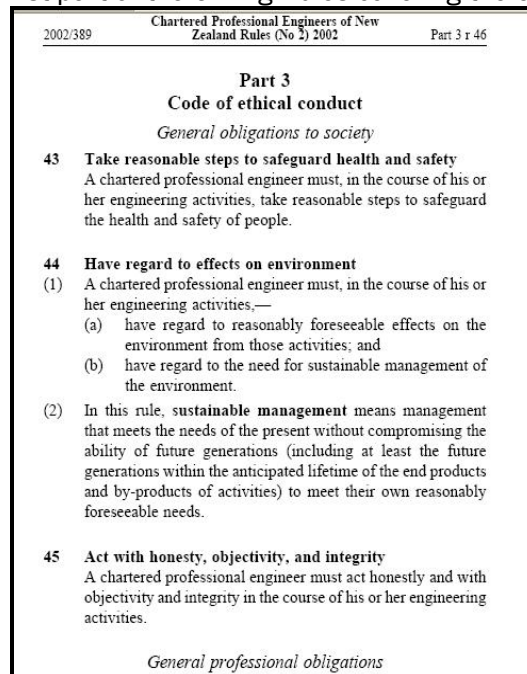
7.2 ENGINEERING MANAGERS – ELEMENTS 3 AND 4

Element 3 concerns the analysis and investigation of complex problems, whereas element 4 requires the complex problem to have a **solution or a design outcome**. Thus the engineering problems you provide as examples for element 4 must have an outcome – a solution or a design.

These elements require evidence of your ability to analyse, investigate and develop solutions to (or design) complex engineering problems. If your practice area description involved engineering management or project management, then the “complex engineering problems” could be “complex engineering management problems”. Panels commonly encounter candidates in an engineering management role who provide evidence of competently analysing, investigating and developing solutions to complex engineering (management) problems but with little or no engineering design. This is not a reason for an assessment panel to automatically decline an assessment, but the assessment panel will need to consider the evidence in terms of the practice area description – and this may involve some amendment to the practice area description.

7.3 ELEMENT 8 (ETHICS)

The Code of Ethical Conduct for CPEng is prescribed in Rules 43 to 53 inclusive and by IPENZ Regulations by Regulations 44 to 54 inclusive for the other registers. The screen shot below shows the first part of the CPEng Rules covering the ethical code of conduct.



Assessors will be looking for positive evidence of ethical behaviour. To say something like “I have been in practice for 25 years and never had an insurance claim or complaint made against me” is not positive evidence of ethical conduct. The following examples illustrate how positive evidence can be presented.

Act with honesty and integrity (Rule 45)

On the DownTown project one of my staff made a simple error that caused considerable inconvenience to our client – although it had minimal impact on our operations. As soon as I became aware of the error, I contacted the client and advised him of the oversight, and offered to assist in getting the project “back on track”. I also realised that our QA systems should have picked up this error before the work left our office, which was also in my area of

responsibility. I informed my manager and suggested changes that were required at a corporate level to minimise the likelihood of repeating such an error. While I was very embarrassed by the incident, I acted with honesty and integrity – and the outcome was very positive. Our company introduced more rigour into the QA system (which gave both staff and clients greater confidence in outputs) and the client provided positive feedback saying that we showed a genuine interest in his organisation and that they were more than “just another client”.

Inform others of consequences of not following advice (Rule 48)

I was asked to review some aspects of the electrical system of a commercial building in Wellington where the owner was considering renovations to some floors of the building. Due to the operations of some tenants (safety of life services), the building had a standby generator plant. I noticed that there were some serious issues with the existing facilities, and recommended that the client contract engineers to carry out a more extensive review of the current system – irrespective of the proposed renovations. This was outside my brief, but I could see that the reliability of the standby plant was at risk, and if nothing was done, there was the potential for some serious consequences if there was a power failure during an emergency situation. I advised the client accordingly, noting the benefits of a full review.

Not promise, give or accept inducements (Rule 49)

While I was Project Manager on the Alpine Hotel Resort Upgrade project, there were very tight deadlines for completing the upgrade so that facilities would be ready in time for the winter tourist season. Our team worked day and night to meet the deadlines for every milestone (which we did successfully) and I was offered significant gifts by our client each time. While I appreciated the thought, I declined these and advised my manager as I considered accepting these gifts could compromise my role. (At the end of the project the client held a special function for the whole team, which I considered more appropriate recognition of the team’s work).

7.4 ELEMENT 11 (MAINTAINING COMPETENCE)

CAB advice to assessment panels when assessing element 11 is that formal classroom-type training is not the only acceptable form of CPD. The question assessment panels will ask when considering a CPD activity is “How does this activity contribute to the engineer’s competence in his or her practice area?”. Valid CPD activities may include mentoring, conducting assessments, contributions to developing “good professional engineering practice” or standards, networking with other professional engineers, papers to publications or presentations at “learned society” events (conferences, seminars etc). The critical thing is the examples you provide in your competence self-review should show how you have applied learning outcomes from CPD to enhance competence in your practice area.

7.5 OCCUPATIONAL EQUIVALENCE

If you are applying for CPEng via Trans-Tasman Mutual Recognition Agreement (TTMRA) or via recent registration on one of the engineering registers recognised in the [credit schedule](#), you will only need to demonstrate “occupational equivalence” – that is, competence in engineering practice that is specific to New Zealand. This requires submitting evidence for elements 2 and 11 (to show how you have maintained currency

with New Zealand engineering practice), as competence in the other elements is deemed to have been met by your current overseas registration/membership.

Once you have gained admission to the CPEng register, your term to next assessment will normally be based on the date of your recent overseas assessment. This may mean that you will be required to undertake a full continued registration assessment in a relatively short period of time. If your overseas registration was four years ago, you may wish to undertake a full assessment now and use your overseas registration as part of your portfolio of evidence rather than undertake a full continued registration assessment in 12 months time.

8. WORK HISTORY SUMMARY FORM (CA04) OR ANNOTATED CV

A work history summary should show that you are working within your practice area and show your major achievements, key projects, and activities in your work.

If you have a detailed CV which clearly shows your engineering work history it is acceptable to provide this instead of Form [CA04](#). CVs should relate to engineering work history only. However, if sending in a CV you should ensure that you reference clearly your major responsibilities and achievements and that these relate to your practice area description.

If you have been using the web-based recording tools to record your work history, you can print these off and use them in place of the Form [CA04](#).

Your work history should show that you have developed your competence to a level where you consistently meet the relevant standard in a range of contexts. Experience has shown that graduates with relevant Accord-recognised qualifications who have participated in a recognised graduate development programme – (either the IPENZ graduate development programme, or a graduate programme run by a [Professional Development Partner](#)) – usually take about four years of postgraduate work experience to reach this level. (Note the time-specific requirements that apply for the International Registers – see the website for information on [IntPE requirements](#) and [IntET requirements](#)). Graduates not on a recognised graduate development programme as above usually need more time – possibly a further 12 months work experience. Applicants without the relevant Accord-recognised qualifications usually need a much longer period of experiential learning (typically 8 to 10 years) before being able to demonstrate they meet the competence standard.

9. CONTINUING PROFESSIONAL DEVELOPMENT SUMMARY FORM (CA05)

All IPENZ Competence Assessments require you to provide a summary of your professional development activities over the last five years, and any relevant professional development activities that occurred outside of this time and impacted substantively on the development of your professional engineering competence.

You are also required to demonstrate that you have “taken reasonable steps to maintain the currency of” your professional knowledge and skills. IPENZ encourages members to have a professional development plan in place, and details of your plan would be good evidence to include in the competence self review form.

Taken as a whole the CPD you present should show how you have taken reasonable steps to maintain your competence in your practice area, taking account of the full range of competence elements. To meet this requirement would normally require a minimum of 50 hours per year, but achievement is assessed on the learning and its application, NOT the total hours spent. The emphasis is on the relevance of CPD, rather than the

quantity of it and for this reason applicants are asked to comment on the learning or benefits of key CPD activities to their engineering practice.

If you are currently an IPENZ member you may have been using the web-based system for recording your CPD activities, in which case you may use a printed version of your records instead of the [CA05](#) form.

When completing the CA05 form, there are two columns that are very important from the assessment panel's point of view:

1. The column titled "What did you learn? What are the benefits to your practice?"; and
2. the column titled "Tick the relevant areas of general learning (as appropriate)", which actually has 12 sub-columns.

As a guide, the comments on the learning outcomes (in the first of the columns identified above) should align to the sub-columns ticked under the second column identified above. Thus, if all 12 sub-columns are ticked, a comprehensive description would be expected in column on learning outcomes. If candidates fail to tick any sub-columns or tick all 12 sub-columns and have little to no detail in the learning outcomes column, the assessment panel is likely to ask you to provide more evidence on your CPD.

The value to candidates in completing this information is the benefit of self-reflection. Rather than seeing this as a "form-filling" exercise and a "bureaucratic process", thinking candidates would see this as an opportunity to review the usefulness of their CPD to date, and identify the strengths and weaknesses of their CPD. With reflection, candidates may wish to change their approach looking forward to ensure that areas of weakness are addressed with future CPD.

10. REFEREE DECLARATION AND EVALUATION FORM (FORM CA06)

10.1 WHO IS ELIGIBLE TO BE A REFEREE?

The requirements for referees are that they (i) have successfully undertaken a competence assessment to at least the same level of competence as you are applying for, and (ii) are "independent".

To meet requirement (i), referees should either have been assessed in the last five years, or be members of a recognised professional engineering body which has an ethical obligation on its members to maintain their professional competence. The list of recognised bodies is at www.ipenz.org.nz/ipenz/join/credit_for_registrants.cfm

Referees must also be independent. "Independent" is not defined in the Rules or Regulations, but is taken to mean they should have no vested interest in the outcome of the assessment. Referees within your organisation are generally acceptable – but if you are employed by a small practice where your referee is an owner of the business, it is recommended that your other referee is from outside your immediate workplace. If you have any doubts about the degree of 'independence' of your referee, you should consider having an additional referee from outside your organisation.

Ideally referees will have sufficient first-hand experience of your **recent** engineering activities to be able to evaluate your competence against the quality mark(s) for which you are applying. Generally speaking, your referees are likely to be a current or former manager/supervisor, engineering colleague or client – as long as they are able to confidently assess your competence as an engineer and attest to your ethical behaviour. Referees do not need to be in the same field of engineering as yourself.

If you are unsure if one or both of the engineers you wish to select as referees meet the eligibility criteria – they may not be sufficiently independent or they may not have demonstrated competence to the required level - you could get another referee and use them as a third (or fourth) referee after identifying two referees who clearly comply with the eligibility criteria.

Referees for CPEng Applicants

Referees must either be CPEng registered or have CPEng equivalence. “CPEng-equivalent” is not defined in the Rules, but for the purposes of being a CPEng referee the Registrar applies the following interpretation.

“CPEng equivalence”, for the purposes of being a referee, means a qualification or title requiring the same level of competence to that required of a Chartered Professional Engineer.

It requires

- (i) attainment of competence to the CPEng standard; and
- (ii) reasonable evidence that the competence is current.

As the rule is currently interpreted, to demonstrate CPEng equivalence a person must:

1. have undergone a competence assessment to the same standard as CPEng, as evidenced by either of:
 - a. being registered on the International Professional Engineers Register in any jurisdiction
 - b. Professional Membership of IPENZ or a recognised equivalent professional body; or registration which requires competence assessment meeting the standard implied by the Engineers Mobility Forum and APEC Engineers agreement.
2. provide evidence of currency in the form of proof of either:
 - a. having undergone a competence assessment as described above in the last five years
 - b. membership of a professional body or registration which has an ethical obligation to maintain competence, and proscribes practicing beyond one’s current competence; and being actively engaged in professional engineering activities.

The acceptance of CPEng equivalence will be determined by the Registrar on a case-by-case basis.

Referees from Outside New Zealand

Referees need not work in the same field of engineering as the applicant, but (especially for CPEng) should have a sound knowledge of good professional engineering practice specific to New Zealand. This does not require that they currently reside or practise in New Zealand, but if they are currently overseas, they should comment on the extent to which they can make an evaluation of your competence for element 2.

If a referee with membership or registration from another jurisdiction is normally resident outside New Zealand, he/she should also submit a copy of his or her CV to help the assessors make a judgement on the referee’s knowledge of good engineering practice specific to New Zealand.

Providing Referee Information

Referees provide their inputs to the panel by completing the Referee Declaration and Evaluation Form ([CA06](#)) after having referenced your competence self-review form. The method of delivery depends on how you initiate the process.

If you are an IPENZ Member, you should use the [online “Referee request” system](#). Once you start this process, you will be asked to:

- submit your practice area description (as entered onto the CA01 or CA02 form)
- upload your competence self-review form
- specify the date that you will be submitting your portfolio of evidence
- enter your referees’ contact details (one referee at a time).

After entering your referees’ email contact details, they will be able to complete the referee report (using Form [CA06](#)) online and submit it directly to the assessment panel. You will receive an email once a referee has submitted his/her report so that you can follow up as appropriate if reports have not been submitted.

Currently, if you are not an IPENZ Member, you will have to send your referees a copy of the [CA06](#) form, with your practice area description included (copied from your [CA01](#) or [CA02](#) form) along with your competence self-review form attached. You need to ask your referees to complete it then send it (by fax or email as a scanned version) directly to the IPENZ National Office by the date you are submitting your portfolio of evidence. It is your responsibility to follow up with referees to ensure they submit their reports to IPENZ by the due date.

11. WORK SAMPLES

If you are applying for Assessment for Admission (AFA) in particular, you are strongly encouraged to submit evidence in the form of work samples supporting key examples cited in your Competence Self Review. For example, one sample might show your risk identification and management skills, while another could demonstrate your engineering analysis and problem-solving skills. Ideally work samples will support competence in several elements.

Applicants for Continued Registration Assessment (CRA) are not expected to present work samples with their initial submission; however, a recent example of your work could make it easier for the assessment panel to recognise your current competence.

If you work as part of a group, it is important to identify in the work samples the parts of the work for which you took responsibility and your personal contribution to the work overall. You should also identify any part for which you did **not** have personal responsibility.

Your work samples should assist the assessment panel verify your competence. Choose your examples carefully. The choice of samples is also important as it can help demonstrate that your decision making and sound engineering judgment. An outline at the start of each work sample summarising why you have chosen each sample is recommended.

Examples of Types of Work Samples

Work samples could relate to:

- an engineering problem requiring a physical solution – for instance your work may have involved the investigation and/or design and implementation of a structure, a product, a transmission system or other physical subject
- an engineering problem requiring an abstract solution involving software engineering, information technology, chemical or some other type of process
- an engineering research project, provided that the work has taken you from investigation and design through to implementation.

For more specific guidelines relating to different practice fields, please refer to the [Practice Field Guidelines](#) in Appendix Two.

12. PREPARING FOR INTERACTIVE ASSESSMENTS

All candidates should assume that they might be required to undertake an interactive assessment. Previously assessed AFA candidates (i.e. those who have previously demonstrated competence to the same level of competence as that applied for) are not asked to pay for an interactive on application as most candidates are likely to demonstrate the required standard of competence without an interactive – and it also avoids the administrative overhead of issuing refunds to large numbers of candidates. However, this should not be taken as a presumption that the assessment panel cannot request an interactive assessment – the rules require a panel to perform an interactive unless it has good evidence of competence from other inputs.

12.1 USEFUL TIPS FOR INTERACTIVE

Be Prepared – Anticipate Questions

The interactive assessment is usually run in the style of a professional conversation, where you are given the opportunity to lead the conversation and explain how you consider your evidence shows you meet the required standard of competence. The conversation is designed to empower and enable you to demonstrate the way you believe you meet the competence standard. Assessors expect you to be able to speak to your evidence and will, after a brief period of introduction (where they may outline the areas where you should focus – or could skip – based on the strength of evidence already provided), offer you the opportunity to lead the panel through your portfolio of evidence. This does not mean you have to bring a PowerPoint presentation – but you should be prepared to summarise why you selected activities as evidence, the factors you considered contributed to the required level of complexity and your responsibilities in achieving outcomes (and achievements).

Anticipate assessors probing you on your portfolio of evidence – be prepared to answer questions such as:

- Why did you choose this project¹?
- What factors contributed to the complexity of this project?
- What were the major challenges for you?
- How do you know the project was successful?
- What sorts of quality assurance processes did you use in this project?
- What risk-management approach did you apply? What were the risks associated with this project?

¹ The term 'project' is used loosely – it covers any engineering work or activity that might be given as an competence self-review example or supporting work-sample.

- What sorts of resources did you require to complete the project process?
- How did you organise and manage these resources?
- What sorts of environmental and social impacts did you have to consider on this project?
- How did you go about working with consultants and contractors?
- How did you build and maintain relationships with the client?
- How did you know the clients' requirements were met?
- What sorts of conflicts did you come across during the project and how did you deal with these?
- What contract documentation were you personally responsible for?

13. FAQs ABOUT APPLICATIONS

For frequently asked questions about applications please visit www.ipenz.org.nz/ipenz/join/faq.cfm

13.1 THE ASSESSMENT PROCESS

- **What does competence assessment involve?** To apply for a competence assessment, you must submit a portfolio of evidence which shows that you meet the relevant competence standard. Your portfolio includes your work history summary, CPD activities, competence self-review and work samples. Assessors will also have access to the referee inputs as well.

Remember: Actual performance is the **only** determinant of competence. The evidence you present must show that you are able to do the things required by each of the competence elements. As the applicant, it is your responsibility to select and present your best evidence of competence.

Once your application has been received, IPENZ will convene an assessment panel of at least two assessors to assess your application. Assessors are required to use the following **assessment tools** *unless* they decide they are unnecessary.

- **“Desktop” assessment** – This involves the panel reviewing your portfolio of evidence.
- **Interactive assessment** – This is usually but not necessarily a face-to-face meeting with the assessment panel. It is an opportunity for you to present your best evidence to the assessment panel in a one-on-one situation. Accordingly, you should make sure you are well-prepared prior to the meeting. All candidates who have not previously been successfully assessed at the competence level applied for should expect to undertake an interactive assessment.
- **Controlled written assignment** – The assessment panel will use the written assignment as further evidence for the assessment. If your portfolio of evidence provides strong evidence of competence, the assessors may exempt you from this assignment. However, if your qualifications are *not* recognised as equivalent to the relevant Accord qualification you will not normally be exempt from a written assignment.

The assessment panel will normally decide the nature and topic of your written assignment after completion of the interactive assessment. In the past this has often been conducted in the afternoon on the day of an interactive assessment,

however, assessment panels may decide to set you other written work that is carried out as an ‘open book’ exercise at a later date. For example, the assessment panel may set an assignment you are expected to complete in your normal work environment, with the topic title being emailed to you, say, at 9.00am in the morning with a deadline of 5.00pm for you to email your written assignment back to the assessors. The assessors may also ask you to submit a declaration naming the sources of any material or advice you used in completing the written work.

- **Knowledge assessment** – The knowledge assessment is an assessment tool to assist in determining the extent to which you meet element 1 of the competence standard. The performance indicators for element 1 require you to demonstrate that you:
 - (i) have acquired the level of engineering knowledge equivalent to a relevant Accord qualification, and are able to:
 - (ii) apply this knowledge in working from first principles; or
 - (iii) read literature, comprehend, evaluate and apply new knowledge.

Knowledge assessments are most likely if you do **not** have a Washington, Sydney, or Dublin Accord qualification. You can apply for a knowledge assessment separately from applying for Membership or registration. For further information see [Appendix One](#).

- **Request for further information** – If the assessment panel requires further information to establish competence, it will specify the relevant elements of the standard for which additional evidence is required and will specify a date by which you must supply the information. If it does not receive the information it requests, then progress on your application will proceed without it, and it is likely the lack of evidence will restrict the panel’s ability to make a positive recommendation. The assessment panel may approach you or your referees for further information to help assess whether you meet the competence standard.
- **Additional referees** – The panel may also require you to provide extra independent referees if it feels it is necessary.

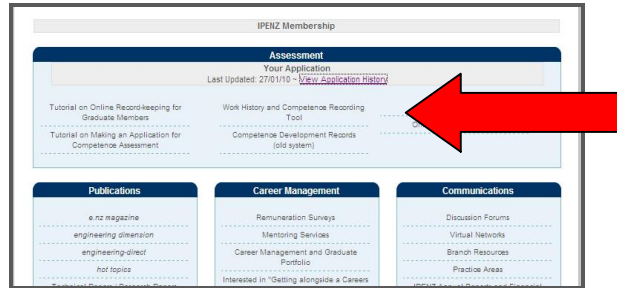
Assessment panels are required to consider not only those registers for which an applicant has applied, but also other registers for which the applicant may qualify – these are referred to as the “relevant registers”. For example, an applicant for CPEng may also be considered for IntPE.

All competence assessment recommendations made by assessment panels are presented to the IPENZ Competence Assessment Board for final approval as a quality-assurance measure. If the Board proposes to decline your application, you will be notified of the proposed decision along with the reasons, and you will be invited to make a written submission within a specified time. The Board is then required to consider your submission before making its final decision on your application.

13.2 TRACKING PROGRESS OF YOUR ASSESSMENT

An online system allows candidates to check the progress of their assessment at their convenience by accessing the Members’ Area of the IPENZ website.

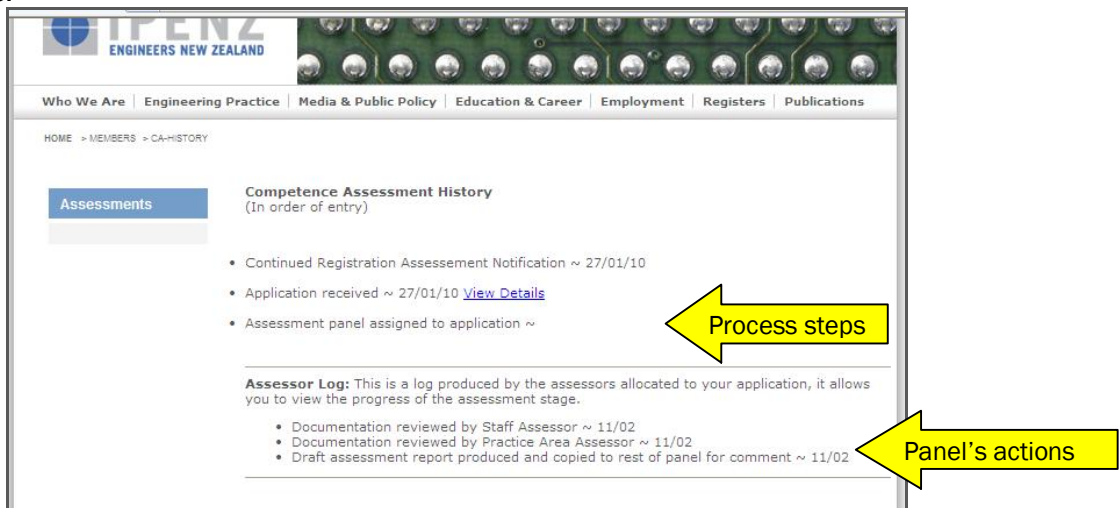
As soon as you lodge documents for a competence assessment for any register or Membership class with IPENZ, a link will be automatically generated in the entry page to the Members’ Area under the heading “Competence Assessment”. The date the record was last updated is shown, reflecting the last action taken in regard to your assessment.



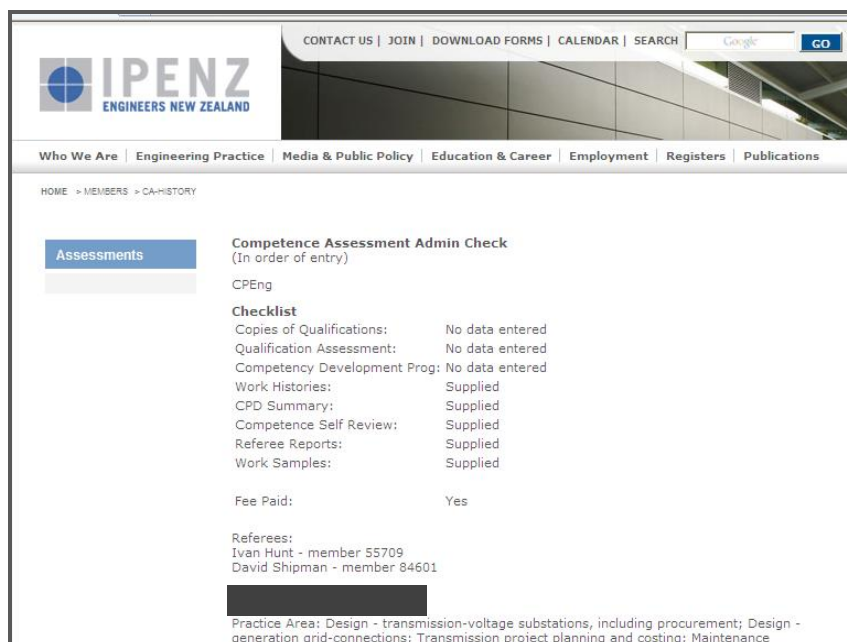
This takes you to a screen where there are two lists:

- The first shows the process steps taken to date.
- The second shows the steps the assessment panel have taken, and is more detailed.

All continued registration assessments will have “CRA Notification” as the first line in the process.



The link “View Details” in the “Application received” line (above) takes you to a page listing the documents (and dates) received as your portfolio of evidence and other details such as fees paid, practice area description, practice fields, referee names and referee reports received.

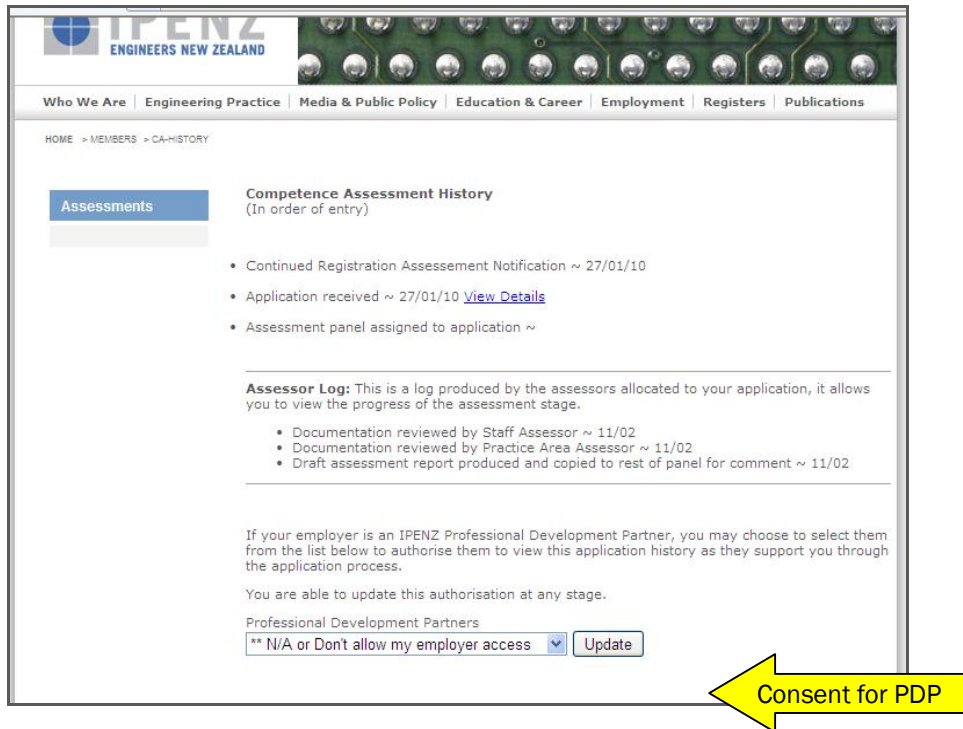


Once an assessment is completed, the above information is removed from the web site.

Members are encouraged to regularly check on progress of their assessments by accessing the Members' Area. If, after checking the website, you still have questions about the progress of your assessment, either email or telephone the Competence Assessment Administration team in IPENZ National Office at assessmentenquiries@ipenz.org.nz or 04 473 9444.

13.3 ALLOWING PDP EMPLOYER TO MONITOR PROGRESS

If you are employed by an IPENZ Professional Development Partner, you can use the online system to give consent for your employer to monitor the progress of your assessment. When accessing the screen to monitor progress (see section "Tracking progress of your assessment" on page 26), there is provision for you to give consent for your employer (as long as you are employed by a PDP) to also monitor progress of your assessment. Select the appropriate employer name from the drop-down box at the bottom of the screen and click on "Update".



13.4 NOTIFICATION OF ASSESSMENT OUTCOMES

If the assessment panel finds that a desktop assessment alone is sufficient to determine competence, you will normally be advised in writing of the assessment result approximately 12 weeks after IPENZ receives your documentation.

If an interactive assessment is required, you will normally be advised of the assessment result six to eight weeks after the interactive assessment.

14. APPEALS AND PROCEDURAL REVIEWS

14.1 APPLICANTS FOR INTPE(NZ), ETPRACT, INTET(NZ) AND CERTETN

Provision is made for either a process review or a review of the evidence and the final decision on registration under Regulation 32 of the IPENZ Regulations for Competence Registers:

*(1) A person may, in accordance with this clause, apply to the Institution for a review of a **registration decision** on only one of the two following grounds:*

- (a) that the assessment was not carried out in accordance with the procedures set out in these Regulations, or*
- (b) that the decision reached by the Competency Assessment Board is manifestly at odds with the evidence presented in the application.*

(2) The application must be—

- (a) made in writing within 14 days after the applicant is notified of the assessment decision; and*
- (b) accompanied by—*

(i) a statement of how the applicant considers that the assessment was not carried out in accordance with the procedures set out in these regulations and/or the decision reached by the Competency Assessment Board is manifestly at odds with the evidence presented with the application; and

(ii) any evidence that the applicant wishes to be considered in the review; and

(c) accompanied by the charge for reviews set out in Schedule 2.

(3) A person may apply only once under this clause for review of a particular registration decision, and the decision made under these Regulations in respect of the application shall be final and binding on both the Institution and the person concerned.

The charge for such a review of decision procedures is \$750 (refer to Schedule 2 of the IPENZ Regulations for Competence Registers).

14.2 APPLICANTS FOR CPENG

CPEng applicants have the choice of making an appeal to the Chartered Professional Engineers Council or requesting a procedural review by the Registration Authority. There is nothing stopping an applicant seeking both a procedural review and making an appeal – except he/she must lodge the appropriate documents with the appropriate authority within the times specified. Applicants seeking a procedural review should apply to the Chartered Professional Engineers Council within the appeal time period requesting an extension of deadline if they wish to await the outcome of the procedural review before lodging an appeal.

Under Rule 31 of the CPEng Rules:

(1) A person may, in accordance with this rule, apply to the Registration Authority for a review on the ground that the assessment was not carried out in accordance with the procedures set out in the Act or these rules.

(2) The application must be—

(a) made in writing within 14 days after the applicant is notified of the assessment decision; and

(b) accompanied by—

(i) a statement of how the applicant considers that the assessment was not carried out in accordance with the procedures set out in the Act or these rules; and

(ii) any evidence that the applicant wishes to be considered in the review; and

(c) accompanied by the charge for reviews set out in Schedule 2.

The charge for a procedural review is \$750 (refer to Schedule 2 of the CPEng Rules).

CPEng applicants who are dissatisfied with the outcome of the review (or the Registration Authority decision on their application) may lodge an appeal to the CPEng Council. Note that appeal rights are not affected in any way by a decision to seek (or not

to seek) a procedural review of the Registration Authority's decision. Further information on how to lodge an appeal can be obtained from:

The CPEng Council
Level 4
32 The Terrace
PO Box 3058
Wellington

The Chartered Professional Engineers Council website is www.cpec.org.nz/index.htm

15. APPENDIX ONE – KNOWLEDGE ASSESSMENTS

15.1 KNOWLEDGE ASSESSMENTS AS PART OF COMPETENCE ASSESSMENT PROCESS

The general process for those needing a knowledge assessment is as follows:

- a. IPENZ identify those applicants who need a knowledge assessment and a knowledge assessor is appointed to the assessment panel. The knowledge assessor is someone with a background in both engineering education and professional engineering in industry.
- b. There is no prescribed process for how the knowledge assessment is to be conducted, however, the common practice is that the knowledge assessor reviews your portfolio of evidence to evaluate your prior learning and to decide what, if any, additional information is required.
- c. You are then normally contacted by the knowledge assessor, usually first by telephone and then by email. This assessor introduces him/herself and summarises the next steps. Typically the knowledge assessor is looking for evidence of:
 - **Review of Study and Learning**
 - Transcripts and grades for papers studied at school/college/polytechnic/university in all areas (not just engineering).
 - A few words on post-school papers/units taken to describe the subject material (more than is provided in a transcript).
 - A note on any major topics studied, either by formal learning, CPD and other learning in or outside of work.
 - Notes on what you consider to be the key new developments and critical issues in your practice field.
 - **Modelling and Application**
 - Brief notes on the key mathematical, physical or conceptual models that you have used to predict engineering outcomes.
 - A list of the tools (especially software tools) you have used for analysis, simulation, visualisation, synthesis, design.
 - Brief notes on your views of the accuracy and limitations of these tools and how you know they give reliable, usable results.
 - **Handling Information, Experimental Methods**
 - A list of laboratory procedures that you are familiar with.
 - Brief notes on: the sources of research information that you use at work; your methods for drawing conclusions; some experiments that you have designed/conducted including your assessment of experimental error; any construction and test of components/sub-systems that you have carried out.
- d. If this information has not already been provided with your initial application (for example on the [CA03](#) form, and by way of extra documentation), you will probably be asked to provide further information - and will be given a deadline for submitting it.
- e. Once the requested information has been supplied, a meeting is arranged between you and the knowledge assessor. Where possible, this has been face-to-face at your workplace, but in some cases it has been carried out by telephone.

- f. During this interactive assessment the assessor will discuss the following with you:
 - o The extent of your knowledge across a broad spectrum of mathematics, engineering and management topics.
 - o The design process that you use in your engineering activities.
 - o Modelling and application examples you have supplied.
 - o Your application of research or new knowledge.
- g. After the interview, the assessor documents the assessment findings and provides a report to the other panel members.
- h. Finally, the full assessment panel will make its recommendation to the Competency Assessment Board after taking into account your portfolio of evidence, the knowledge assessment, the interactive assessment, referee inputs and your written assignment (if required).

15.2 FAQs ABOUT KNOWLEDGE ASSESSMENTS

Q. What is the profile of a typical candidate for knowledge assessment?

A. Cases differ in many ways and so there is not a single profile. However, some typical examples include:

- People who have completed NZCE (or similar qualifications overseas) and worked for several years in organisations which value on-the-job learning and career development.
- Those who have degrees in subjects allied to engineering (Geology, Physics, Earth Sciences etc.) followed by further study in engineering (say at Masters level) or in other areas.
- Those who have completed non-Washington Accord engineering degrees overseas.

Experience to-date has shown that the majority of knowledge assessment applicants have university qualifications – but in non-engineering disciplines. These include architecture, chemistry, geography, geology, management, mathematics, physics, science and surveying. In reality, it is not the profile that is important; it is the candidates' quest for knowledge and the way in which they apply it.

Q. Why do you need such detailed information on my education including my time at school?

A. This information helps to build up an educational profile of the candidate. In many cases, subjects studied at school have relevance to engineering. Examples of this would include mathematics, physics, chemistry, engineering drawing. Also by being asked for a complete list of subjects, candidates have revealed a large amount of relevant information that has not been disclosed in the initial application to IPENZ. In one case a successfully completed year of relevant study at university was identified which would not normally have been disclosed using the normal portfolio of evidence forms.

Q. As a candidate, how can I make the knowledge assessment as painless for myself as possible?

A. The IPENZ processes are competence-based. This means that the assessment panels are not there to “test” the candidate or to “trip them up”. Rather they are there to gather sufficient valid and reliable evidence that shows that the candidate meets the elements of the competence standard. For the knowledge assessment, it is helpful if candidates provide as much information as possible on:

1. Learning undertaken;
2. The range and type of engineering literature normally read;
3. How they acquire, test and validate their understanding of new knowledge; and
4. Examples of their application of new knowledge.

16. APPENDIX TWO – PRACTICE FIELD GUIDELINES

These guidelines are still being prepared and will be included when they are finalised.

Currently guidelines have been written for:

16.1 ACADEMICS

www.ipenz.org.nz/ipenz/join/documents/Guidance-Notes-for-Engineering-Academics-October-2007.pdf

16.2 TRANSPORTATION ENGINEERING

www.ipenz.org.nz/ipenz/forms/pdfs/IPENZ%20Transportation%20Assessment%20Guidelines%20-%20May%202007.pdf

16.3 STRUCTURAL ENGINEERING

www.ipenz.org.nz/ipenz/forms/pdfs/Practice_Field_Guidelines-Structural_Final_version.pdf

16.4 FIRE ENGINEERING

<http://www.ipenz.org.nz/ipenz/forms/pdfs/Practice-Area-Guidelines-Fire-Engineering.pdf>

16.5 RECOGNISED ENGINEERS

www.ipenz.org.nz/ipenz/Forms/pdfs/Guidelines_for_assessment_of_recognised_engineer.pdf

16.6 DESIGN VERIFIERS

www.ipenz.org.nz/ipenz/forms/pdfs/Design_Verifier_Guidelines.doc

17. APPENDIX 3 - USEFUL LINKS

The IPENZ “Credit Schedule”

[www.ipenz.org.nz/ipenz/forms/pdfs/Credit for Registrants from other Jurisdictions.pdf](http://www.ipenz.org.nz/ipenz/forms/pdfs/Credit%20for%20Registrants%20from%20other%20Jurisdictions.pdf)

The online tutorial on how to complete the forms

[www.ipenz.org.nz/ipenz/Forms/pdfs/Making an Application For Competence Assessment tutorial.pdf](http://www.ipenz.org.nz/ipenz/Forms/pdfs/Making_an_Application_For_Competence_Assessment_tutorial.pdf)

CA01 – Application form for **assessment for admission** to a register

[www.ipenz.org.nz/ipenz/forms/pdfs/CA01_AFA Competence Assessment for Admission Form.doc](http://www.ipenz.org.nz/ipenz/forms/pdfs/CA01_AFA_Competence_Assessment_for_Admission_Form.doc)

CA02 – Submission for **continued registration** assessment:

[www.ipenz.org.nz/ipenz/forms/pdfs/CA02 CRA Submission for Continued Registration Assessment Form.doc](http://www.ipenz.org.nz/ipenz/forms/pdfs/CA02_CRA_Submission_for_Continued_Registration_Assessment_Form.doc)

CA03 – Competence self-review for **assessments for admission**

[www.ipenz.org.nz/ipenz/forms/pdfs/CA03 Competence Self Review Form.doc](http://www.ipenz.org.nz/ipenz/forms/pdfs/CA03_Competence_Self_Review_Form.doc)

CA04 – Work history summary form

[www.ipenz.org.nz/ipenz/forms/pdfs/CA04 Work History Summary.doc](http://www.ipenz.org.nz/ipenz/forms/pdfs/CA04_Work_History_Summary.doc)

CA05 – CPD summary form

[www.ipenz.org.nz/ipenz/forms/pdfs/CA05 Continued Professional Development Activities.doc](http://www.ipenz.org.nz/ipenz/forms/pdfs/CA05_Continued_Professional_Development_Activities.doc)

CA06 – Referee declaration and evaluation form:

[www.ipenz.org.nz/ipenz/forms/pdfs/CA06 Referee Declaration Evaluation Form.doc](http://www.ipenz.org.nz/ipenz/forms/pdfs/CA06_Referee_Declaration_Evaluation_Form.doc)

CA13 – Competence self-review for **continued registration assessments** at

[www.ipenz.org.nz/ipenz/forms/pdfs/CA13 CRA Competence Self Review Form.doc](http://www.ipenz.org.nz/ipenz/forms/pdfs/CA13_CRA_Competence_Self_Review_Form.doc)

CA08 – Form to resign from a register

[www.ipenz.org.nz/ipenz/forms/pdfs/CA08 Abeyance Removal Register.doc](http://www.ipenz.org.nz/ipenz/forms/pdfs/CA08_Abeyance_Removal_Register.doc)

CPEng competence standard

www.ipenz.org.nz/IPENZ/Forms/pdfs/CPEng-Competence-Standard.doc

The standard for engineering technologists

www.ipenz.org.nz/ipenz/forms/pdfs/Competence%20Standard%20for%20Engineering%20Technologists.pdf

The standard for engineering technicians

www.ipenz.org.nz/ipenz/forms/pdfs/Competence%20Standard%20for%20Engineering%20Technicians.pdf

The *Engineering Edge* publication

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

The CPEng Act

www.ipenz.org.nz/ipenz/forms/pdfs/CPEngAct.pdf

The CPEng Rules and amendments

www.ipenz.org.nz/ipenz/forms/pdfs/CPEngRules.pdf with amendments at [www.ipenz.org.nz/ipenz/forms/pdfs/CPEng Rule changes 2004.pdf](http://www.ipenz.org.nz/ipenz/forms/pdfs/CPEng_Rule_changes_2004.pdf) and [www.ipenz.org.nz/ipenz/forms/pdfs/CPEng Rule changes 2005.pdf](http://www.ipenz.org.nz/ipenz/forms/pdfs/CPEng_Rule_changes_2005.pdf) respectively.

The IPENZ Regulations for other registers

www.ipenz.org.nz/ipenz/forms/pdfs/IPENZ_Compentence_register_regulations_Final_April_2007.pdf

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