REGISTRATION AUTHORITY
FOR CHARTERED PROFESSIONAL ENGINEERS

Maintaining your CPEng registration

Guide to reassessments

December 2022

Contents

Maintaining your CPEng Status

To maintain your Chartered Professional Engineer status, you need to demonstrate current competence within your area of practice. This means you must be reassessed at least every six years to demonstrate you meet the minimum standard for continued registration. This will require you to:

» demonstrate that you are still able to practice competently in your current practice area to the standard of a reasonable professional engineer, and

» show that you have taken reasonable steps to maintain your engineering knowledge and skills within your current practice area. You should be able to demonstrate an ongoing programme of continuing professional development consistent with our CPD Guidelines.

Assessors will be looking for:

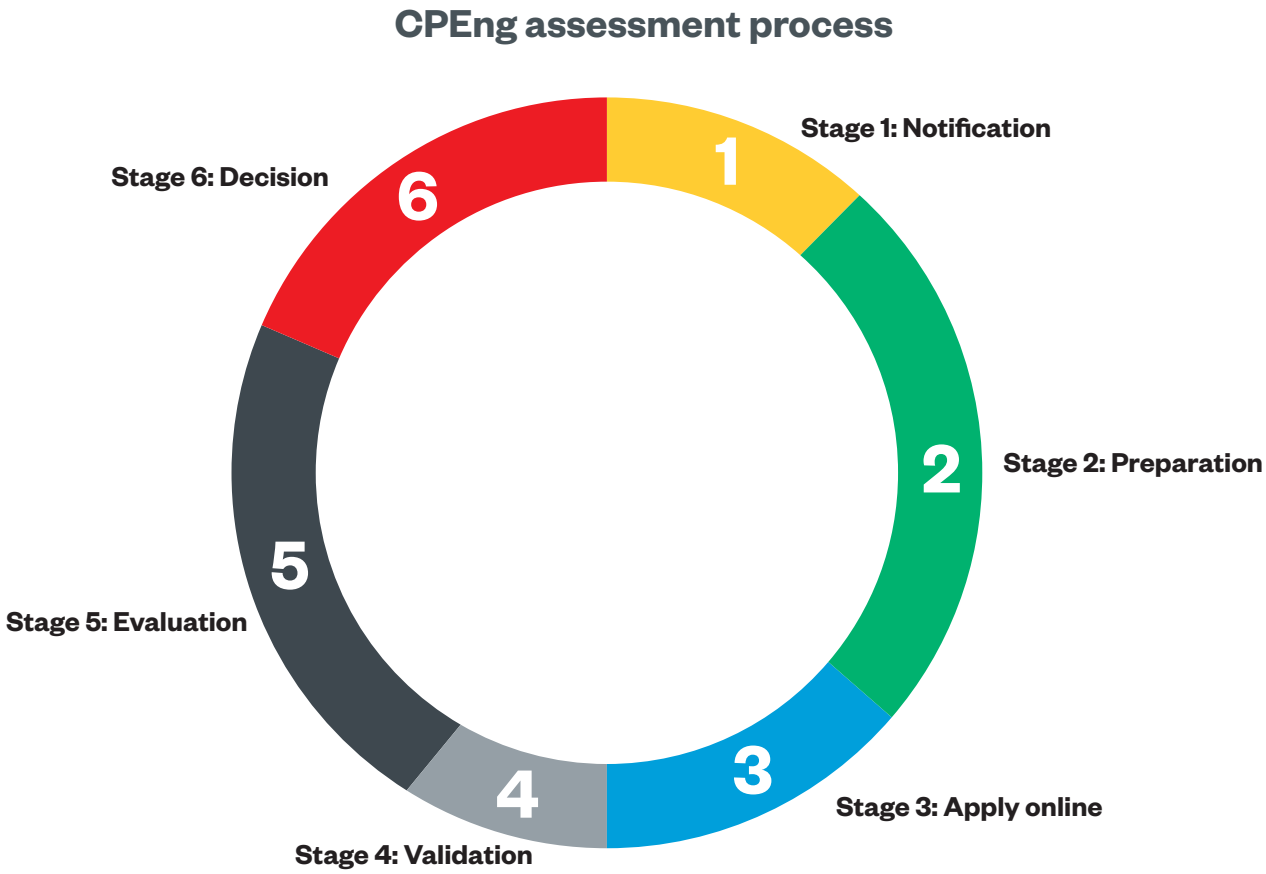
» The technological, regulatory and good practice changes within your practice area since your last assessment or over the last six years, and what actions you've taken to stay up to date with these changes.

» How your work records show the complexity and application of this new knowledge to your engineering work.

» A copy of your current CV.

Our process

Your application for continued registration will go through the following stages of our process:



Stage 1: Notification

Each year, Engineering New Zealand reassesses over 500 CPEng registrants. To ensure these are processed as efficiently as possible, reassessments are grouped into cohorts with specific due dates throughout the year. You will be notified of your upcoming reassessment at least three months in advance of your due date.

It is important you provide your completed application by the due date specified in the notification sent to you. The Chartered Professional Engineers of New Zealand Rules (No 2) 2002 (the CPEng Rules) (Rule 24(2)) require us to proceed with your reassessment based on the information that you have provided by the due date. This means that if you fail to submit on time, the Competence Assessment Board (CAB) may propose suspending your CPEng registration.

Stage 2: Preparation

Defining the standard

If your practice area has not changed materially since your last assessment:

To meet the minimum standard for continued registration, you must demonstrate:

» You are still able to practice competently in your current practice area to the standard of a reasonable professional engineer; and

» You have taken reasonable steps to maintain the currency of your professional engineering knowledge and skills within your current practice area since your last assessment.

If your practice area has changed materially since your last assessment:

You will need to demonstrate that you meet the minimum standard for registration within your current practice area. This will require you to go through a more detailed application process to demonstrate your engineering knowledge in your new practice area. A Mutual Recognition assessment will be opened for you. There is a separate charge for this as it requires more work for the Assessment Panel to evaluate. Please contact us so we can open the correct assessment for you[1].

» Minor changes to your practice area are acceptable and do not constitute a material change; for example, if you are a structural engineer who is still working in the same practice area but are now in a more management-focused role.

» Materially different changes to practice areas include:
  – Changing to a fundamentally different engineering discipline, for example from an electrical to a structural field;
  – Changing to a new specialisation within your field (for example, dam safety, design verification, heavy vehicle certification).

How to prepare

KEEP TRACK OF YOUR WORK AND CPD

If you're a member of Engineering New Zealand, it's easy to keep track of your development by regularly recording your work and CPD in our member area online. If you're not a member, you'll need to ensure you save relevant work and CPD records and have them ready to use for your reassessment.

ATTEND AN INFO SESSION

Throughout the year, Engineering New Zealand hosts information sessions for engineers preparing for their CPEng reassessment. Keep an eye on the Engineering New Zealand website – or if you're a member, sign up to our fortnightly newsletter, *Discover*, to make sure you don't miss out.

READ THROUGH THE APPLICATION FORM

Appendix 4 provides you with an offline version of the online application, to help you prepare. This will help ensure there are no surprises when you start completing your application online.

1 We can also assist you if you need to add a practice field to your registration before your next reassessment.

Stage 3: Apply online

The information that must be provided to demonstrate current competence is set out in the CPEng Rules (Rule 23). The online application portal will guide you through all the information you need to provide, as detailed below.

a) Profile

Check your personal details and contact information and ensure these are up to date. If you have completed any new relevant qualifications or have any new registrations on other professional engineering registers since your last assessment, please save these to your profile.

b) Chartership and practice details

In this section you'll choose the membership and registrations you want to be assessed for, describe your practice area, and select your practice field. Recognised Engineer (dam safety) registration will be added in early 2023.

c) Practice Area and Practice Fields

CPEng rules define practice area as follows:

"practice area means an engineer's area of practice, as determined by— the area within which he or she has engineering knowledge and skills; and the nature of his or her professional engineering activities."

This is the area that we'll assess your competence for. A short description helps us assign the right Assessment Panel to your application.

PRACTICE AREA DESCRIPTION (PAD)

Your practice area description is used to guide our assessment but is not published on the online CPEng register as it is not intended to represent a full scope of your engineering practice or competence. You can practice in other areas or fields of engineering if you are undertaking work that you can complete successfully within your competence, as governed through self-regulation and your annual commitment to the Code of Ethical Conduct.

Describe the area you have engineering knowledge and skills in. Focus on your core current practice area. Your PAD should not exceed 15 words. Avoid using personal pronouns such as 'I' or 'me', job titles or project names, company names, and any engineering activities that are not evidenced within your assessment.

Use the format: **[Nature or actions] of/for/in [engineering knowledge or skills].**

Some successful examples are:

- **Design and construction monitoring of water and wastewater systems.**
- **Process engineering, operation and training for wastewater treatment plants.**
- **Structural design and construction monitoring of low and medium rise structures.**

PRACTICE FIELD

Engineering practice fields are more broadly defined terms and are used as an indication of the nature of engineering work carried out by engineers in a certain field.

Selecting your practice field will also help us assign the right Assessment Panel to your application. Choose the one that best aligns with your practice area. You may choose an additional field if your practice is across more than one. See Appendix 2 for practice field descriptions.

Your practice field will appear on our online CPEng Register to provide members of the public or users of engineering services with an indication of the type of engineering work you do. However, you should not use your practice field as part of your CPEng postnominal. Your postnominal is CPEng (not "CPEng Structural" for example).

d) Referees

You will need to nominate two referees to complete your application to become a Chartered Professional Engineer. Your nominated referees will be sent an invitation to provide a reference for you. If they accept the invitation, they'll be asked to provide information about your technical competence and professionalism. If a referee declines your request, you will be notified and you will need to provide another person.

DEFINING ACCEPTABLE REFEREES

Both referees need to be current Chartered Professional Engineers (CPEng), or equivalent2. Your referees must be familiar with your technical and professional capabilities and be able to confidently provide a reference. They should also be competent in the practice area for which you applying and familiar with your technical skills.

- ✓ Two referees provided. In accordance with the Rules, these must be CPEng registered engineers or equivalent.
- ✓ Ideally at least one referee who does not work within the same company as you.
- ✓ The referee could be someone who has peer reviewed work samples or been involved in a collaborative project with you.

- ✗ A referee who is not familiar with your technical skills
- ✗ Referees who are conflicted; in that they have a close personal relationship with you or have a financial interest in the outcome of the assessment.

Tip: finding referees can be a particular challenge for people in small companies. We recommend you consider who may act as your referee well in advance of any application for CPEng reassessment, and ensure this person has sufficient familiarity with your work. We encourage you to develop your professional network by actively engaging with your local Engineering New Zealand branch and/or relevant technical interest groups.

Guidance for referees can be found on the Engineering New Zealand website. Referees will be asked the following questions:

GENERAL

Please provide details of your relationship to the applicant. Please also confirm that you can provide a reference based on an understanding of the applicant's work within their practice area. If you're unable to provide a technical reference in the practice field of the applicant, please decline this request for a reference.

ENGINEERING COMPETENCY

Please comment on the technical engineering competence (specifically in analysis and design/problem solving) of the applicant to practice within their practice area. Do you consider the engineer to be competent in the engineering work that they do? Do you think they demonstrate knowledge and application of current practice in their field and an ability to develop safe and effective engineering solutions? Why or why not?

PROFESSIONAL

What aspects of professionalism do you believe the applicant brings to their work? Please include detail of their relationships with stakeholders, compliance with legislation, and health and safety compliance, where appropriate. Is there anything about the practice of the applicant that would raise a potential concern? Do you support their registration as a Chartered Professional Engineer?

2 CPEng equivalence means a qualification or title that the Registration Authority determines requires the holder to: (a) have demonstrated competence at least equivalent to the minimum standard for registration under these rules; and (b) be bound by a code of ethical conduct that is substantially equivalent to the code of ethical conduct under these rules. Examples of CPEng equivalence, therefore, include: A Chartered Member of Engineering New Zealand (CMEngNZ) who is not classified as an Engineering Technician (CMEngNZ (Engineering Technician)) or an Engineering Technologist (CMEngNZ (Engineering Technologist)); a Chartered Engineer (CEng) registered with the Engineering Council in the UK.

e) Continued Professional Development (CPD)

Continued Professional Development (CPD) must be completed to show evidence that you have taken reasonable steps to maintain the currency of your professional engineering knowledge and skills since your last assessment.

DEFINING ACCEPTABLE CPD

You need to have done at least 40 hours of CPD per year since your last assessment. If you are applying across more than one practice field (or field of specialised practice), you will need an additional 15 hours per year of CPD for each additional practice field.

- ✓ Evidence of learning linked to the application of contemporary knowledge of the engineer's practice area
- ✓ CPD activities across different categories (we recommend at least 15 hours related to each of your practice fields or field of specialised practice, a few hours addressing risk management and business processes, courses on professional ethics and then activities aligned with your career direction/aspirations)
- ✓ CPD can be tertiary courses, short courses, workshops, seminars, discussion groups, conferences, technical inspections, and technical meetings that are non-routine and contribute to your development as an engineering professional. Private study and service to the engineering profession can also be counted towards CPD.
- ✓ Where applicable, relevant seminars hosted by a Collaborating Technical Society (CTS)

- ✗ 40 hours of 'on the job reading'
- ✗ 40 hours of 'mentoring'

If you've been on a career break that we need to know about, please make this clear in the self-assessment area of your application.

WHAT IS AN EXAMPLE OF GOOD CPD?

A good mix of CPD is a requirement. Your CPD activities must demonstrate your new learnings in your practice area. The table below sets out the ideal mix of CPD for CPEng applications:

CPD Areas	Recommended hours
Technical » Attending recognised technical group meetings, external or internal technical training courses and/or technical conference papers » Developing new technical standards or revising technical codes » Preparing and presenting papers at conferences, and presenting technical training courses	No upper limit on number of hours Minimum 15 hours of technical CPD activities per practice field
Professionalism eg courses on professional ethics, cultural competency, climate, sustainability and others.	Minimum 2 hours (5% of total)
Business/Leadership eg Commercial Training Project Management, 3910 Contracts, business management skills, managerial training	Maximum 20 hours (no more than 50% of your total)
Professional engineering engagement/contribution to the profession eg mentoring, guiding, assessment of others, service on branch committees, accreditation panels	Maximum 8 hours (no more than 20% of total)
Training courses in Health and Safety including requirements of the Act, First Aid, Site Safe, restricted access training. Delivering such courses. Development of Health and Safety procedures	Maximum 5 hours (no more than 13% of total)

WHAT COUNTS TOWARDS MY CPD?

CPD can be tertiary courses, short courses, workshops, seminars, discussion groups, conferences, technical inspections, and non-routine technical meetings that contribute to your development as an engineering professional.

Self-learning, which could comprise a mixture of self-reading, self-research, watching technical informative videos, can also be counted towards CPD – but this should be no more than 50% of your total CPD for each year.

WHAT ARE ASSESSORS LOOKING FOR?

CPD review questions

- ◯ Is there evidence of a planned approach to continuing professional development?
- ◯ Has the engineer completed 40 hours of CPD each year? Are the CPD records provided diverse and broad?
- ◯ Is the CPD relevant to the engineer's practice area?
- ◯ Is the CPD considered sufficient for the engineer to have maintained currency of knowledge?
- ◯ Have all areas in CPD records been completed? (ie learning outcomes have been populated)

f) Work history (CV)

Your work history must be provided in the form of an up-to-date CV.

DEFINING ACCEPTABLE WORK HISTORY

Where possible, your CV should be no more than three pages and should allow an assessor to see your area of practice since your last assessment.

- ✓ Provide the name, location and contact details of employing organisations, as well as the dates and duration of employment, the title of your position, details of your role and how your work demonstrates your competency as a professional engineer.
- ✓ Provide sufficient work history to demonstrate the broad scope of competency required for your practice area.
- ✓ Clearly describe projects you were involved in, and your role in the team, with a particular focus on the period since your last assessment

- ✗ A list of projects you have worked on with no information on your roles and responsibilities

WHAT IS AN EXAMPLE OF A GOOD CV?

Appendix 3 includes CV templates that you can use to document your work history.

WHAT ARE ASSESSORS LOOKING FOR?

Work history review questions

- ◯ Has the engineer provided work history for the period since their last assessment?
- ◯ Does their work history align with their practice area?
- ◯ Does the work history detail the projects they have been involved with?
- ◯ Does the work history detail their role and responsibilities in each project?
- ◯ Does their work history demonstrate successful completion of complex engineering work in their practice area?
- ◯ Does their work history demonstrate ongoing involvement in the profession?

g) Self-assessment

In this section, you need to provide a statement detailing how you are maintaining the currency of your professional engineering knowledge and skills and keeping up with good practice in your practice area. Please reference your work samples to provide examples. Aim for approximately 500 words.

WHAT ARE ASSESSORS LOOKING FOR?

Assessors are seeking evidence of your competencies and professional engineering experience, which means that they need to understand the complexity of the engineering work you personally undertook as opposed to the overall project complexities. Assessors require clarity as to the work you personally were responsible for, how you incorporated new learnings and good practice into the solutions you developed and how you addressed matters of complexity.

When writing your self-assessment, write about how you identify, define, investigate, and analyse complex engineering problems in line with good practice for professional engineering and how you design or develop solutions to complex engineering problems in line with good practice for professional engineering.

h) Evidence: Work samples

This part of your application is key to demonstrating your current technical competence. You'll be able to choose from your existing work and CPD records or add new ones. For each record you choose, you'll need to explain how that record supports your assessment application. When applying for CPEng, an assessor needs to confirm that the provided work samples clearly demonstrate your current professional competency in relation to your practice area.

You will need to provide sufficient evidence to demonstrate current competence in your practice area. You must provide us with two or more work samples from recent engineering activities with annotations explaining how the samples demonstrate that you meet the minimum standard for continued registration.

We recommend providing quality over quantity. If evidence is missing, incomplete, or can't be clearly interpreted by an assessor, you'll be advised and further information will be requested.

DEFINING ACCEPTABLE WORK SAMPLES

Work samples should be clear and professionally presented in such a way that an assessor can clearly confirm your current competence. Your work samples must demonstrate:

- How you have maintained your skills as a professional engineer since your last assessment
- Evidence that you are still able to practice competently in your current practice area to the standard of a reasonable professional engineer; and
- How you have addressed and applied any New Zealand-specific regulatory, technological and good practice changes in your field since your last assessment.

WHAT IS AN EXAMPLE OF A GOOD WORK SAMPLE?

Works samples should be clear and professionally presented in such a way that an assessor can clearly confirm you are competent.

- ✓ Evidence statements clearly state how files provided are relevant to the assessment, and which competency group they relate to.
- ✓ New Zealand-specific examples provided/knowledge of the New Zealand context demonstrated.
- ✓ Explanations as to how the work samples demonstrate complex work.
- ✓ The work samples provided clearly show this as being the engineer's work.

- ✗ Drawings or calculations only, with no supporting documentation.
- ✗ Pages of printed spreadsheets, with unclear calculations or derivations.

Tips for success

- When writing up your submission, remember to talk about yourself using 'I', 'me' or 'my'. The assessors don't want to know what the team did as part of the project; they are only interested in your involvement.
- Record your work samples as you go – you don't want to have to go looking for work you did years ago.
- Exercise judgement and submit your best evidence, not everything you think might be relevant. The assessors will always come back to you if they find any gaps in your evidence and will give you the opportunity to provide further evidence.
- Remember, it is up to you to demonstrate you are competent – it is not up to the assessors to interrogate you to ascertain your competency.

WHAT ARE ASSESSORS LOOKING FOR?

- ◯ Has the engineer provided at least two work records?
- ◯ Do evidence statements clearly state how files provided are relevant to the assessment, and how they demonstrate continued competence?
- ◯ Evidence that the engineer has a clear understanding of the bounds of their competence, seeks professional advice and support as needed and has sound processes in place to assure the quality of their work
- ◯ Is the engineer applying contemporary knowledge and skills in their work?
- ◯ Is the engineer clearly operating within any applicable regulatory frameworks?
- ◯ How has the engineer addressed any concerns raised by their previous Assessment Panel?
- ◯ Have New Zealand-specific examples been provided/knowledge of the New Zealand context mentioned?
- ◯ Has the engineer explained how the work samples demonstrate complex work? (See Appendix 1)

i) Declarations and commitment to professionalism

Before you submit your application, you will be asked to:

» Declare any convictions for an offence punishable by imprisonment for a term of 6 months or more.
» Declare your commitment to the Code of Ethical Conduct.
» Declare any disciplinary proceedings
» Declare any declined applications
» Give consent for your name to be published on the Engineering New Zealand website for up to 21 days, allowing the public to provide evidence on whether you met the minimum standard for continued registration.
» Declare that all the information in your application is true and correct.

Stage 4: Validation

When your application is complete, submit it to our team for validation. One of our Competence Assessment Advisors will look after your application from start to finish. Your Advisor will check the information you've provided and will aim to give you feedback within 10 working days. They'll let you know if you need to make any changes before your application is sent to an Assessment Panel.

If an Advisor does require you to make changes, you will be given up to 2 weeks after your initially provided due date to provide this information. If you exceed the due date provided, we must proceed with processing your application based on the information you have provided. When going through your application, Competence Assessment Advisors go through the following validation check-list:

VALIDATION ITEMS

- ◯ All personal details are completed
- ◯ This includes employer, submission date, location, technical group membership
- ◯ Practice area statement is clear and concise
- ◯ Has there been a material change to the practice area since the last assessment?
- ◯ Were any concerns raised at the last assessment?
- ◯ Work samples have been provided and are acceptable
- ◯ Evidence statements clearly state how files provided are relevant to the assessment, .
- ◯ Are the work samples provided from overseas? If so, does the application demonstrate knowledge of the New Zealand context?
- ◯ CPD requirements have been met (minimum 40 hours per year; broad and diverse)
- ◯ Acceptable referees have been provided
- ◯ Have any concerns been raised with Engineering New Zealand by a third party?
- ◯ Is there a disciplinary order or pending complaint against the candidate?

Note: our advisors are checking the completeness of your application and are not qualified to evaluate the content of the information you provide. Therefore, you may still be asked to submit additional information by your Assessment Panel at the next stage of your assessment (evaluation). Please note that you must provide any additional requested information by the due date specified by your Assessment Panel. Failing to provide the information by the specified due date will result in your application being processed based on only the information you have provided.

Stage 5: Evaluation

Once your application has been submitted, an Assessment Panel will be assigned to you. The Assessment Panel will be comprised of at least 1 assessor who has knowledge or experience relevant to your practice area. They'll review your application over 8–10 weeks and, as part of this, will meet with you to discuss it as well. This is called an 'interactive assessment' and is normally held via video chat.

The Panel will use the evidence you submit and the information from your interactive assessment to complete a report and recommendations on your application. They might also ask you to supply further evidence to support your application.

Once they've got all the information they need, the Panel will make a recommendation to the Competency Assessment Board (CAB) on your continued registration.

How to prepare for the interactive assessment

The interactive assessment is usually done via videoconference and provides your Assessment Panel with the opportunity to find out more about the projects you have been involved with since your last assessment. The interactive assessment is a professional conversation – rather than an interrogation. It is an opportunity to demonstrate your understanding of the engineering behind the examples of competence that you submitted in your application. Be ready to talk your Panel through the work samples you've provided in relation to your practice area, and think about how you might answer questions around the following:

- outline of the project (what was involved, when was it done; who was involved);
- how the project demonstrates your work on complex engineering problems and activities;
- challenges you faced;
- lessons you learned; and
- ethical dilemmas/issues you dealt with.

Stage 6: Decision

The CAB will consider the Assessment Panel's recommendation and make a decision on your continued registration at its monthly meeting (the CAB meets every second Thursday of the month). Occasionally the CAB asks for additional information. Your Advisor will let you know if that happens.

If your continued registration is approved, you will receive an email informing you of this. The date your next reassessment is due will be updated on our 'Find an engineer' search online which is available publicly.

If your application is unsuccessful or the CAB made an alternative decision, you will have the opportunity to respond. The Registrar will be in contact with you to discuss your options.

Appendix 1: How we define complexity

Depending on the type of Chartership you're applying for, you'll need to show you can carry out engineering work at a particular level of complexity.

Problem	Activity
Chartered Member and CPEng	
Complex engineering problems Problems that include some or all of the following: » Wide-ranging or conflicting technical, engineering, and other related issues » No obvious solution, which means an original method of analysis is needed. » Can't be resolved without in-depth engineering knowledge » Issues not often experienced » Aren't covered by the standards and codes of practice for professional engineering » Diverse groups of stakeholders with a wide range of needs » Significant consequences in a range of contexts	**Complex engineering activities** Activities or projects that include some or all of the following: » Diverse resources, eg people, money, equipment, materials and technologies » Resolving critical problems that occur when a variety of technical, engineering and other related issues interact » New materials, techniques or processes, or the innovative use of existing materials, techniques, or processes » Significant consequences in a range of contexts
Chartered Member (Engineering Technologist)	
Broadly-defined engineering problems Problems that include some or all of the following: » A variety of factors that may create conflicting constraints » Can be solved by applying proven analysis techniques » Knowledge of principles and applied procedures or methods » Belong to groups of familiar problems that are solved in well-accepted ways » May be partly outside problems covered by standards or codes of practice » Several groups of stakeholders with differing needs that occasionally conflict » Consequences that are important locally but may have wider implications » Are parts of, or systems within, complex engineering problems	**Broadly-defined engineering activities** Activities or projects that include some or all of the following: » A variety of resources, eg people, money, equipment, materials, information and technologies » Resolving occasional interactions between limited technical, engineering and other related issues where only a few conflict » Using new materials, techniques or processes in innovative ways » Consequences that are very important locally, but may have wider implications » Knowledge of normal operating procedures and processes
Chartered Member (Engineering Technician)	
Well-defined engineering problems Problems that include some or all of the following: » Several issues, but only a few that result in conflicting constraints » Can be solved using a systematic approach » Resolved with limited theory but extensive practical knowledge » Frequently experienced and so familiar to most practitioners in the practice area » Covered by standards and/or documented codes of practice » Limited range of stakeholders with differing needs » Consequences that are important locally but aren't far-reaching » Discrete components of engineering systems	**Well-defined engineering activities** Activities or projects that include some or all of the following: » Limited range of resources, eg people, money, equipment, materials, information and technologies » Resolving interactions between limited technical and engineering issues where wider issues have little or no impact » Using existing materials, techniques or processes in new ways » Consequences that are important locally but aren't far-reaching » Knowledge of practical procedures and practices for widely applied operations and processes

Chartered Member (PEngGeol)	
Complex engineering geological problems Problems that include some or all of the following: » Wide-ranging or conflicting engineering, engineering geological and other related issues » Not easily recognised, understood or solved, which means an original method of analysis is needed » A wide range of issues that might be in an unfamiliar setting » Aren't covered by guidelines, standards and codes of practice for professional engineering geology » Diverse groups of stakeholders with a wide range of needs » Significant consequences in a range of contexts	**Complex engineering geological activities** Activities or projects that include some or all of the following: » Diverse resources, eg people, money, equipment, materials and technologies » Recognising, understanding and resolving significant problems when wide-ranging or conflicting engineering, engineering geology and/or other related issues interact » New techniques or processes, or the innovative use of existing techniques or processes

Appendix 2: Practice field descriptions

Engineering practice fields are loosely defined terms and are used as an indication of the nature of engineering work carried out by engineers in a certain field.

AEROSPACE ENGINEERING

Aerospace engineering is the design, development, and production of aircraft (aeronautical engineering), spacecraft (astronautical engineering) and related systems. Aerospace engineers may specialise in aerodynamics, avionics, structures, control systems or propulsion systems. It may involve planning maintenance programmes, designing repairs and modifications and exercising strict safety and quality controls to ensure airworthy operations.

BIOENGINEERING

Bioengineering draws heavily on the Chemical engineering discipline and involves the engineered development of raw materials to produce higher value products, using biological systems (biological catalysts). The description also encompasses the general application of engineering to biological systems to develop new products or solve problems in existing production processes. As examples, bioengineers are found in medical research, genetic science, fermentation industries and industries treating biological wastes.

BUILDING SERVICES

Building Services engineering is the application of mechanical or electrical engineering principles, and an understanding of building structure, to enhance all aspects of the built environment from air conditioning and mechanical ventilation, electrical light and power, fire services (e.g. sprinklers and alarms), water and waste services, data and communications, security and access control, vertical transportation, acoustics and energy management.

CHEMICAL ENGINEERING

Chemical engineering is concerned with the ways in which raw materials are changed into useful and commercial end products such as food, petrol, plastics, paints, paper, ceramics, minerals and metals. Often these processes are carried out at large scale plants. Research of raw materials and their properties, design and development of equipment and the evaluation of operating processes are all part of chemical engineering.

CIVIL ENGINEERING

Civil engineering is a broad field of engineering concerned with the, design, construction, operation and maintenance of structures (buildings, bridges, dams, ports) and infrastructure assets (road, rail, water, sewerage). The Civil engineering discipline underpins several engineering fields such as Structural, Mining, Geotechnical and Transportation engineering, in which civil engineers often specialise. General Civil engineers are likely to be competent to undertake work that relates to one or more of these areas.

CONSTRUCTION ENGINEERING

Construction engineering is a specialty field of civil engineering concerned with the oversight and management of large-scale infrastructure and building projects. Construction engineers coordinate design, plan, schedule and apply cost control oversight to complex projects to ensure environmentally sound, safe and efficient construction.

ELECTRICAL ENGINEERING

Electrical engineering is the field of engineering which deals with the practical application of electricity. It deals with the aspects of planning, design, operation and maintenance of electricity generation and distribution, and use of electricity as a source of energy within major buildings, industrial processing complexes, facilities and transport systems. It includes the associated networks and the equipment involved such as switchboards, cabling, overhead lines/catenaries, earthing, control and instrumentation systems.

Areas of specialisation within the wider electrical engineering discipline, such as electronics and telecommunications are usually concerned with using electricity to transmit information rather than energy. For this reason, electronics and radiocommunications/telecommunications are captured under the field of Information engineering.

ENGINEERING ACADEMIC

The Academic practice field is defined for engineering academic staff members from tertiary education including engineering researchers.

In tertiary education, academic staff members may be involved in engineering activities in various roles, from building engineering prototypes, to contributing to knowledge in engineering. Engineering academic staff members may not be directly involved in the engineering design process but undertaking cutting edge engineering research to lead and enhance engineering activities. Examples of work samples of engineering academic staff members may be their authored quality assurance publications in engineering disciplines, and/or their authored quality assurance engineering reports at NZQA level 7, 8, 9 or 10 (gradate or postgraduate level). Academic staff members who are teaching an engineering programme without quality assurance publications in engineering disciplines or quality assurance engineering reports, may not qualify for academic practice field.

ENGINEERING MANAGEMENT

Engineering Management is a field of practice where engineers from any technical engineering background exercise engineering judgement in making decisions on the application and optimisation of physical, human and financial resources to achieve engineering outcomes in related processes or business activities. Engineering Managers may not be directly involved in the engineering design process.

General management – where engineering knowledge is of benefit or essential and covering many engineering disciplines.

» Qualifies as Management practice field.

» Example: Chief Executive or Director of an engineering or construction company.

Engineering management of a multi-disciplinary team where engineering knowledge is essential but specific discipline knowledge is not essential.

» Qualifies as Management practice field.

» Example: Engineering manager of a local authority or manufacturing company. A judgement may be necessary, but err towards including the management field – the candidate is appropriate for both management and discipline fields. (Note: an example grey area is the general manager of a lines company where electrical engineering knowledge may be essential for the role).

Management or leadership of a team, however large, where the candidate must have engineering knowledge to do the job competently. This management is part of the skills and knowledge of the discipline.

» Would not normally qualify as Management practice field.

» Example: Chief structural engineer of a large consultancy or compliance authority. A judgement may be necessary but err towards including the management field if management activities are beginning to dominate – the candidate may be appropriate for both management and discipline fields.

Part time management of a small practice or branch of a consulting practice managing budgets and staff and clients while carrying out frontline engineering or being the responsible person signing off compliance certificates.

» Would not normally qualify for the Management practice field, as a certain amount of management is part of the engineering function, and is 'business as usual' for an engineer in this situation. (Note: Grey area accepted as to the boundary between 'business as usual' and the management becoming dominant. As an acid test, ask "could they give up their discipline practice field?". If not, then Management should not apply. If so, then in theory they need to go through a full review to justify the change in practice field/area description. A balanced decision may lead to having the two practice fields).

Full time engineering role where the applicant claims that they "do management", as well as advising clients, planning other workloads, training staff etc.

» Would not qualify for the Management practice field, as management is part of their normal engineering activity. This includes project management, unless it is dominant, in which case the practice field is still their engineering knowledge (discipline), and project management is written into the practice area description (ie they use their discipline skills to do project management).

ENVIRONMENTAL ENGINEERING

Environmental engineering draws on the Civil and Chemical engineering disciplines to provide healthy water, air and land to enhance human habitation. Environmental engineers devise, implement and manage solutions to protect and restore the environment, within an overall framework of sustainable development. The role of the environmental engineer embraces all of the air, water and soil environments, and the interactions between them.

FIRE ENGINEERING

Fire engineering draws on knowledge from the range of engineering disciplines to minimise the risk from fire to health and safety and damage to property through careful design and construction. It requires an understanding of the behaviour of fires and smoke, the behaviour of people exposed to fires and the performance of burning materials and structures, as well as the impact of fire protection systems including detection, alarm and extinguishing systems.

GEOTECHNICAL ENGINEERING

Geotechnical engineering involves application of knowledge of earth materials in the design of structures, such as foundations, retaining walls, tunnels, dams and embankments. Geotechnical engineers assess the properties and performance of earth materials such as their stability and strength, and the impact of groundwater.

INDUSTRIAL ENGINEERING

Industrial engineering is the application of mechanical and electrical engineering principles to the design and operation of production equipment, production lines and production processes for the efficient production of industrial goods. Industrial engineers understand plant and procedural design, the management of materials and energy, and human factors associated with worker integration with systems. Industrial engineers increasingly draw on specialised knowledge of robotics, mechatronics, and artificial intelligence.

INFORMATION ENGINEERING

Information engineering is based on the Electrical engineering discipline but also draws heavily from Computer Science. Three areas of further specialisation can be identified:

Software engineering – the development and operation of software-intensive systems that capture, store and process data.

Telecommunications engineering – the development and operation of systems that encode, transmit and decode data via cable systems (including fibre optics) and wireless systems (radiocommunications).

Electronics engineering – the design, development and testing of electronic circuits and networks that use the electrical and electromagnetic properties of electronic components integrated circuits and microprocessors to sense, measure and control processes and systems.

MECHANICAL ENGINEERING

Mechanical engineering involves the design, manufacture and maintenance of mechanical systems. Mechanical engineers work across a range of industries and are involved with the design and manufacture of a range of machines or mechanical systems, typically applying principles of hydraulics (fluid control), pneumatics (air pressure control) or thermodynamics (heat energy transfer). Mechanical engineers may specialise in the Building Services or Industrial engineering field.

MECHATRONICS ENGINEERING

Integrates specialist knowledge in mechanics, electronics and computer systems to design and develop integrated automated systems, such as chassis-stabilising systems, anti-lock brakes, engine control units, disk drives, cameras, service and surgical robots and medical devices. Often these systems are largely mechanical in nature but could not function without their essential electronic and computer control system components.

MINING ENGINEERING

Mining engineering involves extracting and processing minerals from the earth. This may involve investigations, design, construction and operation of mining, extraction and processing facilities.

PETROLEUM ENGINEERING

Petroleum engineering is a field of engineering relating to oil and gas exploration and production. Petroleum engineers typically combine knowledge of geology and earth sciences with specialised Chemical engineering skills, but may also draw on Mechanical engineering expertise to design extraction and production methods and equipment. Petroleum engineering activities are divided into two broad categories:

Upstream – locating oil and gas beneath the earth's surface and then developing methods to bring them out of the ground.

Downstream – the design and development of plant and infrastructure for the refinement and distribution of the mixture of oil, gas and water components that are extracted.

SOFTWARE ENGINEERING

Software engineers apply the process of analysing user needs and designing, constructing, and testing end user applications that will satisfy these needs through the use of software programming languages. A fundamental aspect is the application of engineering principals to software development. In contrast to simple programming, software engineering is used for longer and more complex software systems, which are used as critical systems for business and organisations.

STRUCTURAL ENGINEERING

Structural engineering is a specialised field within the broader Civil engineering discipline that is concerned with the design and construction of structures. Structures might include buildings, bridges, in-ground structures, footings, frameworks and space frames, including those for motor vehicles, space vehicles, ships, aeroplanes and cranes, composed of any structural material including composites and novel materials.

TRANSPORTATION ENGINEERING

Transportation engineering is a specialised field of practice in the civil engineering discipline relating to the movement of goods and people by road, water, rail and air.

A transportation engineer might specialise in one or more of: pavement design, asset maintenance/management, construction/project management, traffic operations and control, transportation planning and systems analysis, freight transportation and logistics, road safety, railways or public transport systems.

WATER ENGINEERING

Water engineers specialise in water based projects; many will have a civil engineering or environmental background. Water engineers generally deal with the provision of clean water from sources or treatment plants, return of waste water and treated sewage to the environment and the handling of stormwater including the prevention of flood damage. Asset management may be a major part in a water engineer's job. This involves design, operation, maintenance and construction of infrastructure for water resources as well as planning for the maintenance and replacement of three waters assets to maintain performance and minimise whole of life costs. These can include but are not limited to pipes, treatment devices, pump stations and reservoirs.

Appendix 3: CV templates
Template 1

[FIRSTNAME LASTNAME]
[Current role or area of expertise]

Location

[City, Country]

Technical skills

- [eg Project management]
- [eg Traffic engineering]
- [insert technical skill]
- [insert technical skill]

Relevant training

- [eg Road Safety Audits]
- [eg Presentation Skills]
- [insert training]
- [insert training]

Profile

Tell us a bit about yourself – your area of expertise and career highlights. This should be around 100 words. Nam et laoreet purus, eu elementum mauris. Suspendisse id ipsum posuere, sollicitudin neque sed, cursus risus. Quisque id metus laoreet, scelerisque lacus ac, dictum neque. Sed egestas vestibulum arcu ac placerat. Proin fringilla lacinia quam, sed elementum orci sollicitudin sit amet. Aliquam suscipit mi in ipsum porttitor maximus. Etiam efficitur eget metus vitae sagittis. Cras eget diam nunc. Nulla ut lectus eget nibh condimentum eleifend euismod vitae lacus. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia curae; Sed ultricies ullamcorper diam, at suscipit sapien venenatis eu.

Education

[Qualification, Tertiary institution, Year]
[Qualification, Tertiary institution, Year]
[Qualification, Tertiary institution, Year]

Professional associations

[eg New Zealand Chartered Professional Engineer (CPEng)]
[eg Engineering New Zealand Chartered Member (CMEngNZ)]
[Transportation Group Member]

Professional experience

- **[Project name, duration of involvement, job title]**
  50–70 words describing the project, your involvement and what you brought to the table.
- **[Project name, duration of involvement, job title]**
  50–70 words describing the project, your involvement and what you brought to the table.
- **[Project name, duration of involvement, job title]**
  50–70 words describing the project, your involvement and what you brought to the table.

Page 1 of 2

Template 2

[FIRSTNAME LASTNAME]
[Current role or area of expertise]

Profile

Tell us a bit about yourself – your area of expertise and career highlights. This should be around 100 words. Nam et laoreet purus, eu elementum mauris. Suspendisse id ipsum posuere, sollicitudin neque sed, cursus risus. Quisque id metus laoreet, scelerisque lacus ac, dictum neque. Sed egestas vestibulum arcu ac placerat. Proin fringilla lacinia quam, sed elementum orci sollicitudin sit amet. Aliquam suscipit mi in ipsum porttitor maximus. Etiam efficitur eget metus vitae sagittis. Cras eget diam nunc. Nulla ut lectus eget nibh condimentum eleifend euismod vitae lacus.

Key skills

- [eg Project management]
- [eg Traffic engineering]
- [insert skill]
- [insert skill]

Qualifications & education

[Qualification, Tertiary institution, Year]
[Qualification, Tertiary institution, Year]
[Qualification, Tertiary institution, Year]

Affiliations

eg Board Member Institute of Directors
[Affiliation]
[Affiliation]

Career path

[year–present]
[Job title, company name]
50–70 words describing the role, your responsibilities and what you brought to the table.

[year–year]
[Job title, company name]
50–70 words describing the role, your responsibilities and what you brought to the table.

[year–year
[Job title, company name]
50–70 words describing the role, your responsibilities and what you brought to the table..

Major projects and contracts

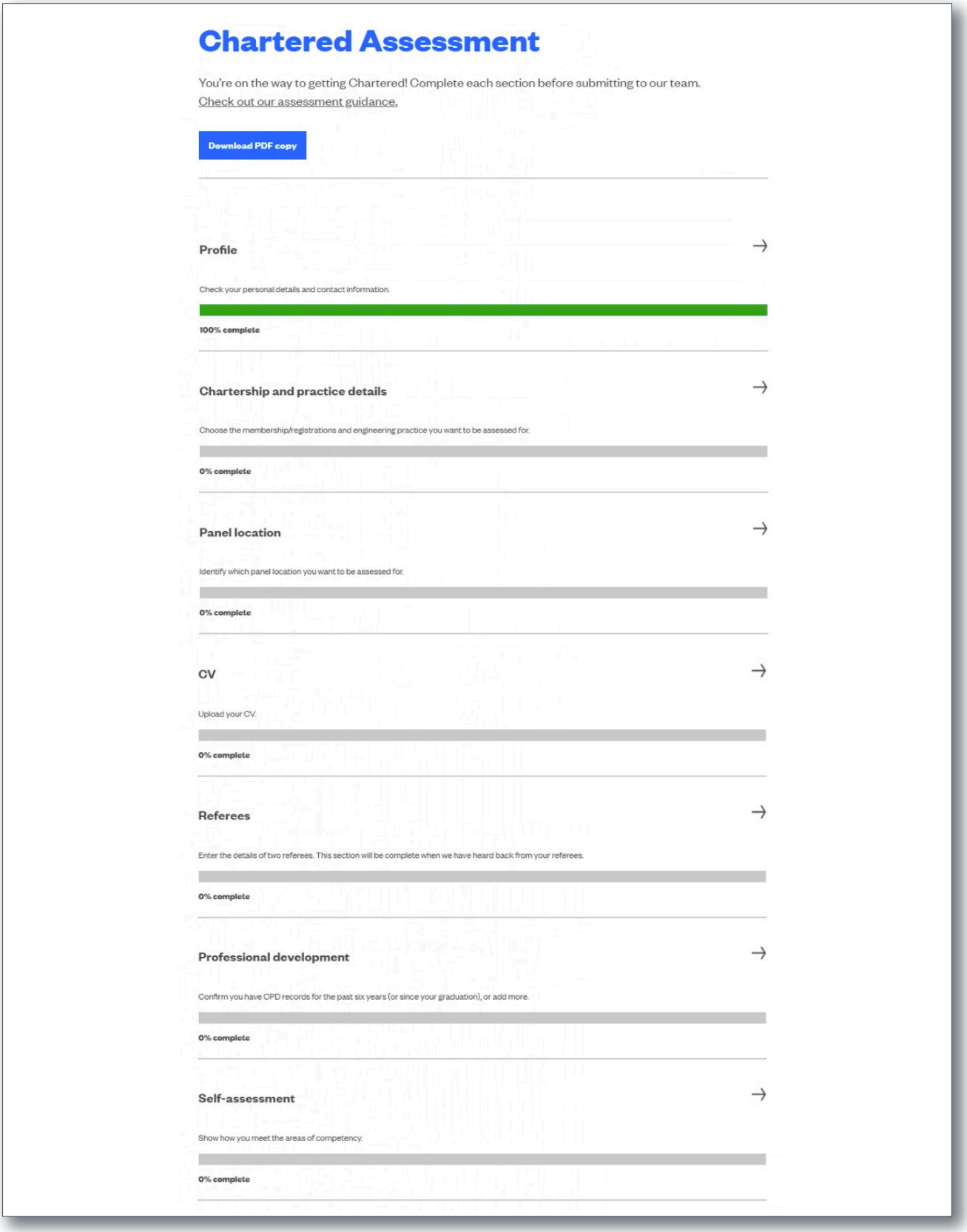
- **[Contract name and brief description 20 words]**
- **[Contract name and brief description 20 words]**
- **[Contract name and brief description 20 words]**

Relevant governance history

- **[eg Board Member Infrastructure New Zealand (year–year)]**

Appendix 4: Online application form

You will need to complete all 7 sections of the application before you can submit. This includes completed feedback from your nominated referees.



Chartered Assessment

You're on the way to getting Chartered! Complete each section before submitting to our team.
Check out our assessment guidance.

Download PDF copy

Profile →

Check your personal details and contact information.

100% complete

Chartership and practice details →

Choose the membership/registrations and engineering practice you want to be assessed for.

0% complete

Panel location →

Identify which panel location you want to be assessed for.

0% complete

CV →

Upload your CV.

0% complete

Referees →

Enter the details of two referees. This section will be complete when we have heard back from your referees.

0% complete

Professional development →

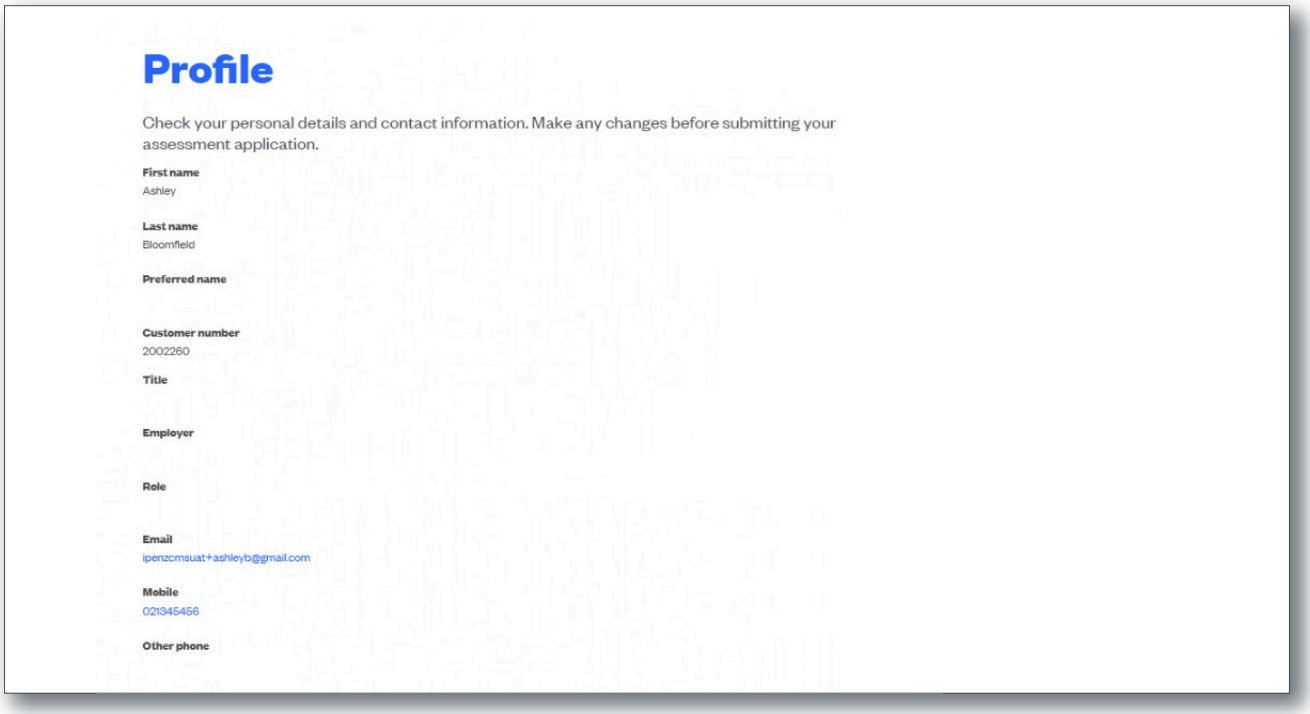
Confirm you have CPD records for the past six years (or since your graduation), or add more.

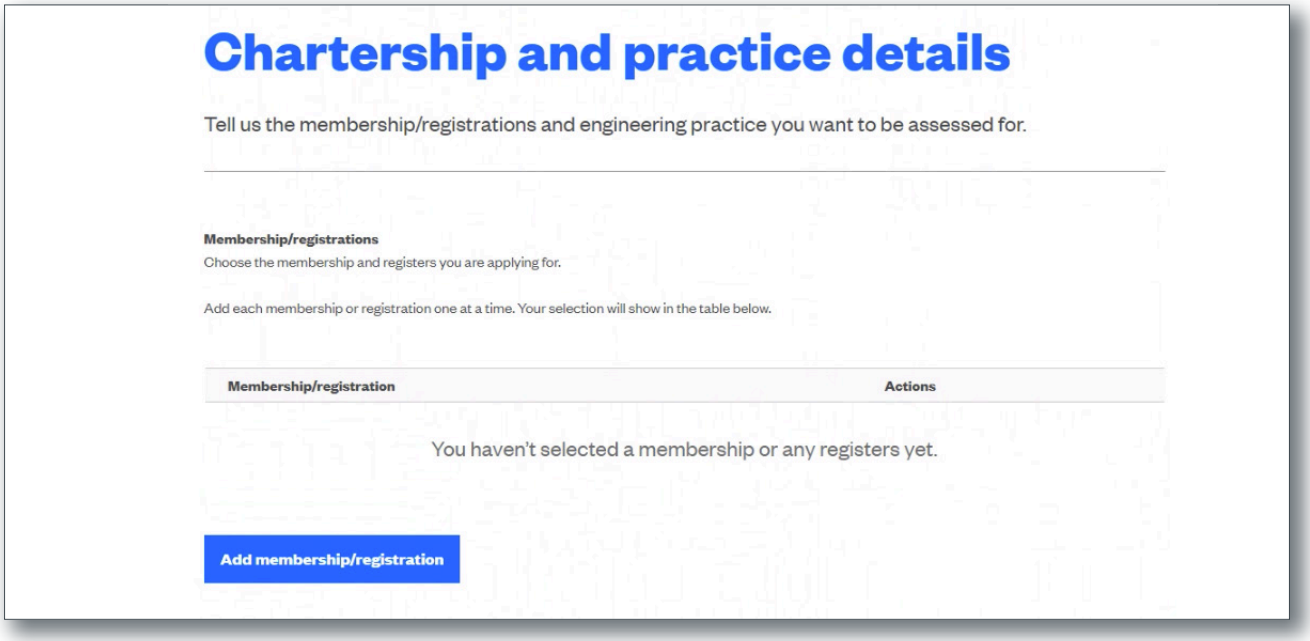
0% complete

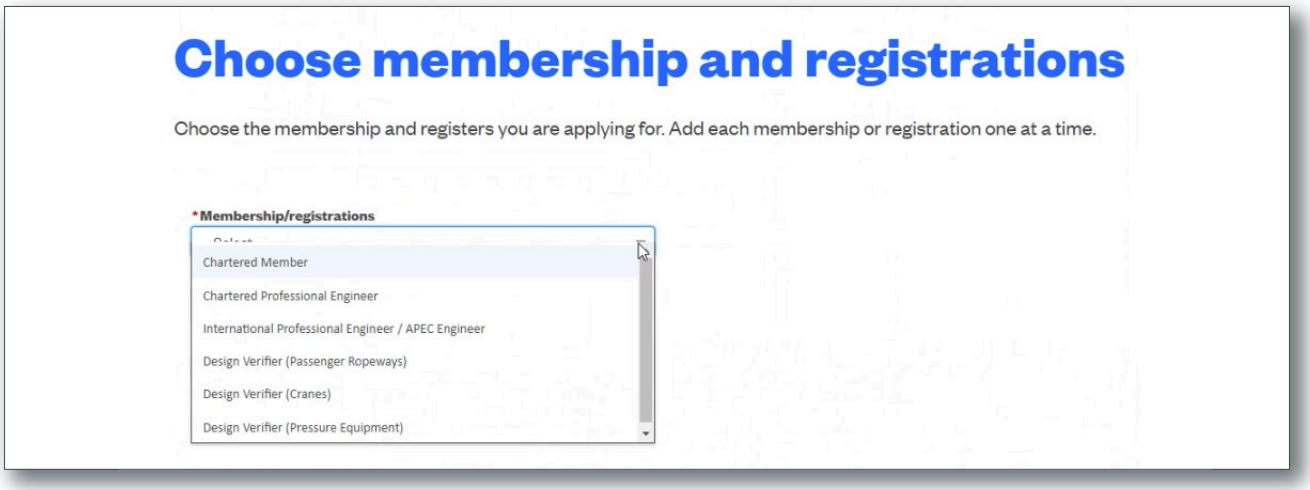
Self-assessment →

Show how you meet the areas of competency.

0% complete


Profile
Check your personal details and contact information. Make any changes before submitting your assessment application.
First name
Ashley
Last name
Bloomfield
Preferred name
Customer number
2002260
Title
Employer
Role
Email
ipenzcmsuat+ashleyb@gmail.com
Mobile
021345456
Other phone


Chartership and practice details
Tell us the membership/registrations and engineering practice you want to be assessed for.
Membership/registrations
Choose the membership and registers you are applying for.
Add each membership or registration one at a time. Your selection will show in the table below.
Membership/registration
Actions
You haven't selected a membership or any registers yet.
Add membership/registration


Choose membership and registrations
Choose the membership and registers you are applying for. Add each membership or registration one at a time.
*Membership/registrations
Chartered Member
Chartered Professional Engineer
International Professional Engineer / APEC Engineer
Design Verifier (Passenger Ropeways)
Design Verifier (Cranes)
Design Verifier (Pressure Equipment)

Practice field

Describe the area you have engineering knowledge and skills in. Focus on your core current practice area.

Use the format: [Nature or actions] of/for/in [engineering knowledge or skills]. A few successful examples are:

- Design and investigation of low-rise buildings.
- Design and construction monitoring of water and wastewater systems.
- Design of machines, load carrying and lifting equipment.

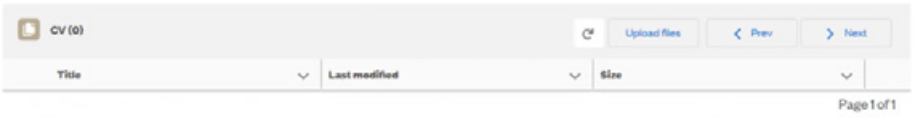
Note: Practice area is not a full scope of your engineering practice or competence. You can practice in other areas or fields of engineering if you are undertaking work that you can complete successfully within your competence, as governed through self-regulation and your annual commitment to the Code of Ethical Conduct.

Applicant practice field

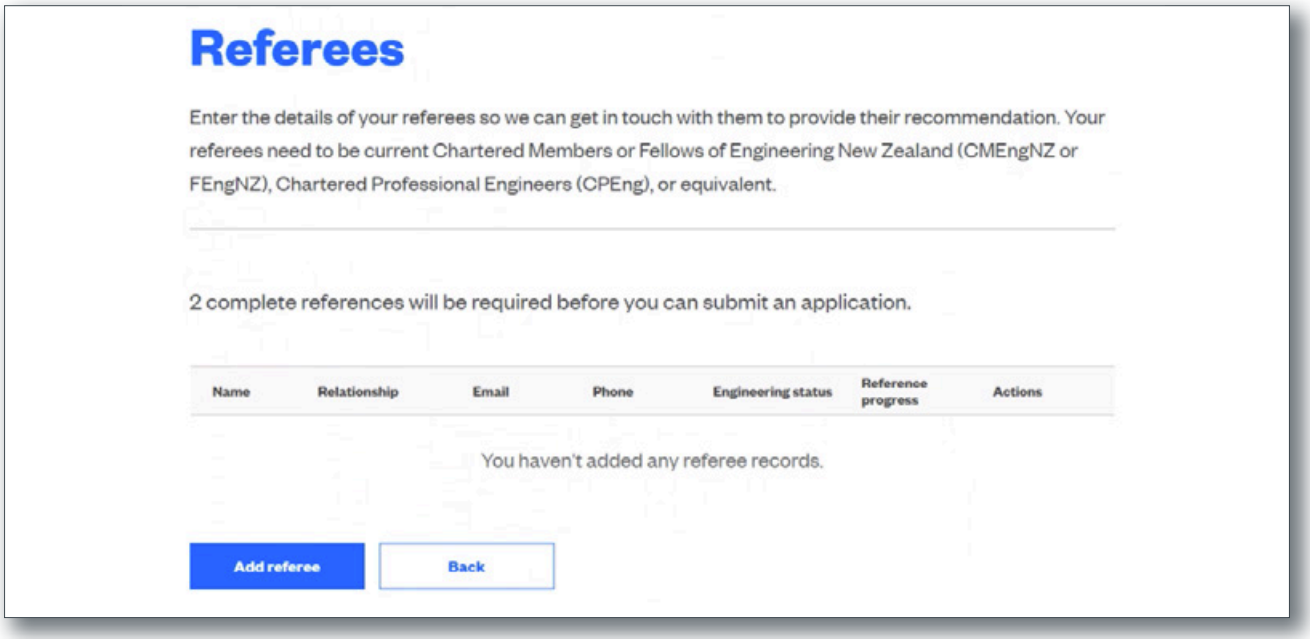
☐ Aerospace engineering	☐ Bio engineering	☐ Building services
☐ Chemical engineering	☐ Civil engineering	☐ Electrical engineering
☐ Engineering academic	☐ Engineering management	☐ Environmental engineering
☐ Fire engineering	☐ Geotechnical engineering	☐ Industrial engineering
☐ Information engineering	☐ Mechanical engineering	☐ Mechatronics engineering
☐ Mining engineering	☐ Petroleum engineering	☐ Software engineering
☐ Structural engineering	☐ Transportation engineering	☐ Water engineering

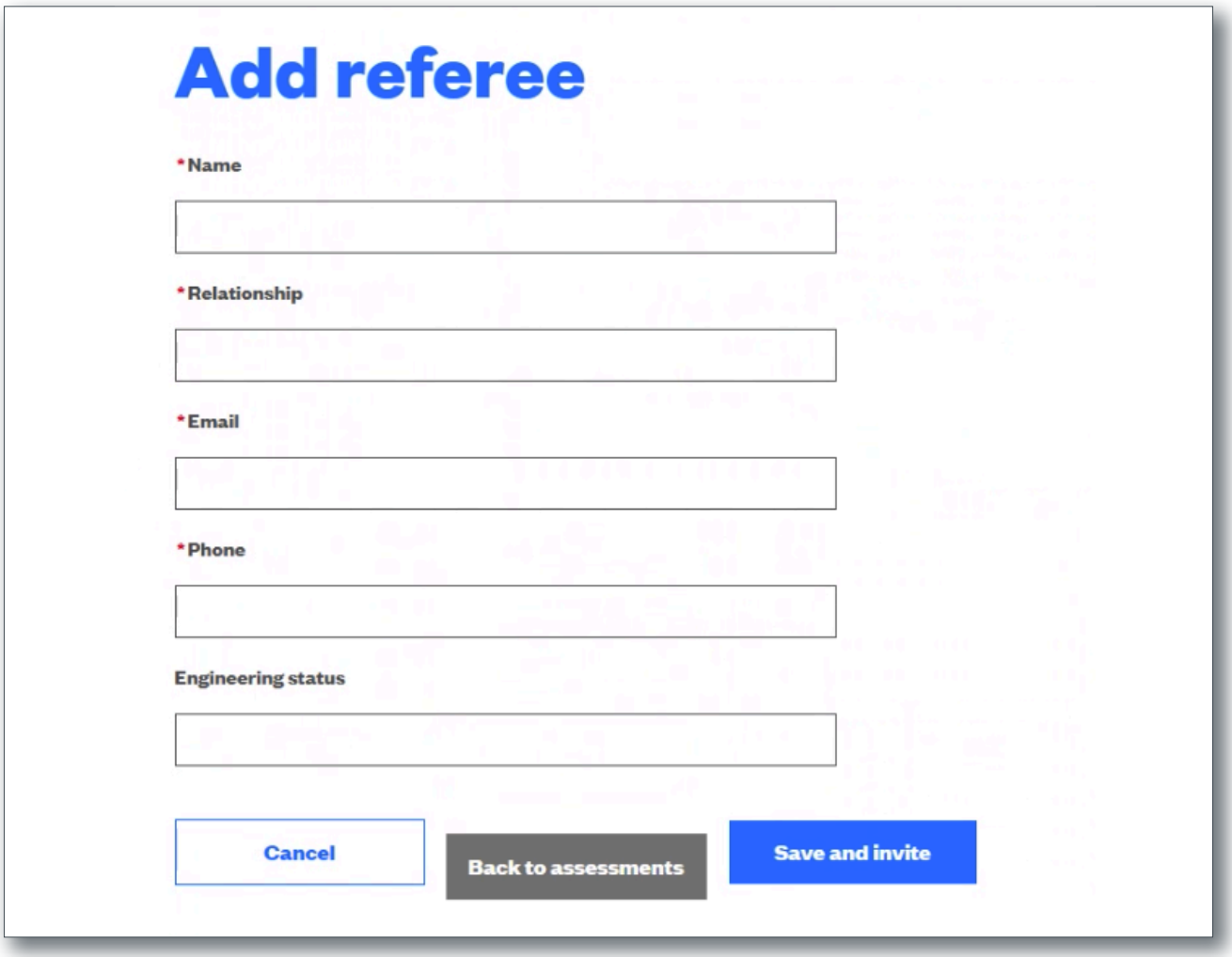
CV

Upload a current version of your CV that includes your work roles, responsibilities, career progression and projects.

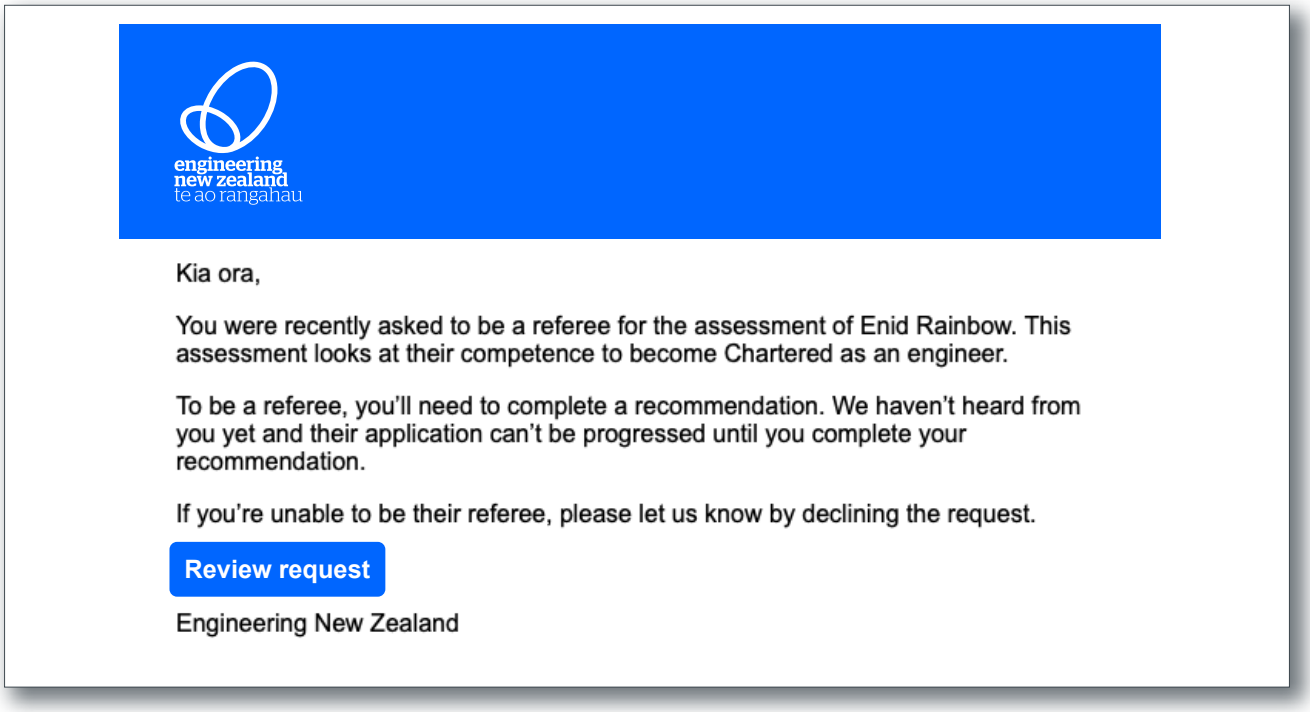


Back


Referees
Enter the details of your referees so we can get in touch with them to provide their recommendation. Your referees need to be current Chartered Members or Fellows of Engineering New Zealand (CMEngNZ or FEngNZ), Chartered Professional Engineers (CPEng), or equivalent.
2 complete references will be required before you can submit an application.
Name
Relationship
Email
Phone
Engineering status
Reference progress
Actions
You haven't added any referee records.
Add referee
Back


Add referee
*Name
*Relationship
*Email
*Phone
Engineering status
Cancel
Back to assessments
Save and invite

Once you click 'Save and invite', your referee will receive the email below. Please ask them to check their Junk folder.



engineering new zealand
te ao rangahau

Kia ora,

You were recently asked to be a referee for the assessment of Enid Rainbow. This assessment looks at their competence to become Chartered as an engineer.

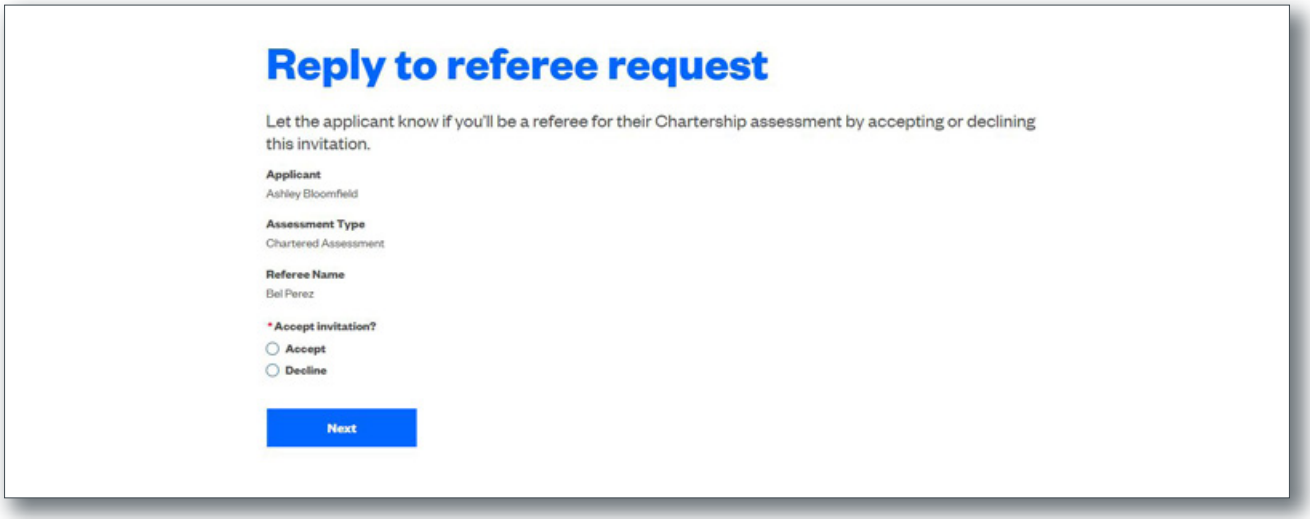
To be a referee, you'll need to complete a recommendation. We haven't heard from you yet and their application can't be progressed until you complete your recommendation.

If you're unable to be their referee, please let us know by declining the request.

Review request

Engineering New Zealand

You referee will need to click 'Review request' in the email sent. They will then be directed to this screen where they will need to accept or decline the invitation to act as your referee:



Reply to referee request

Let the applicant know if you'll be a referee for their Chartership assessment by accepting or declining this invitation.

Applicant
Ashley Bloomfield

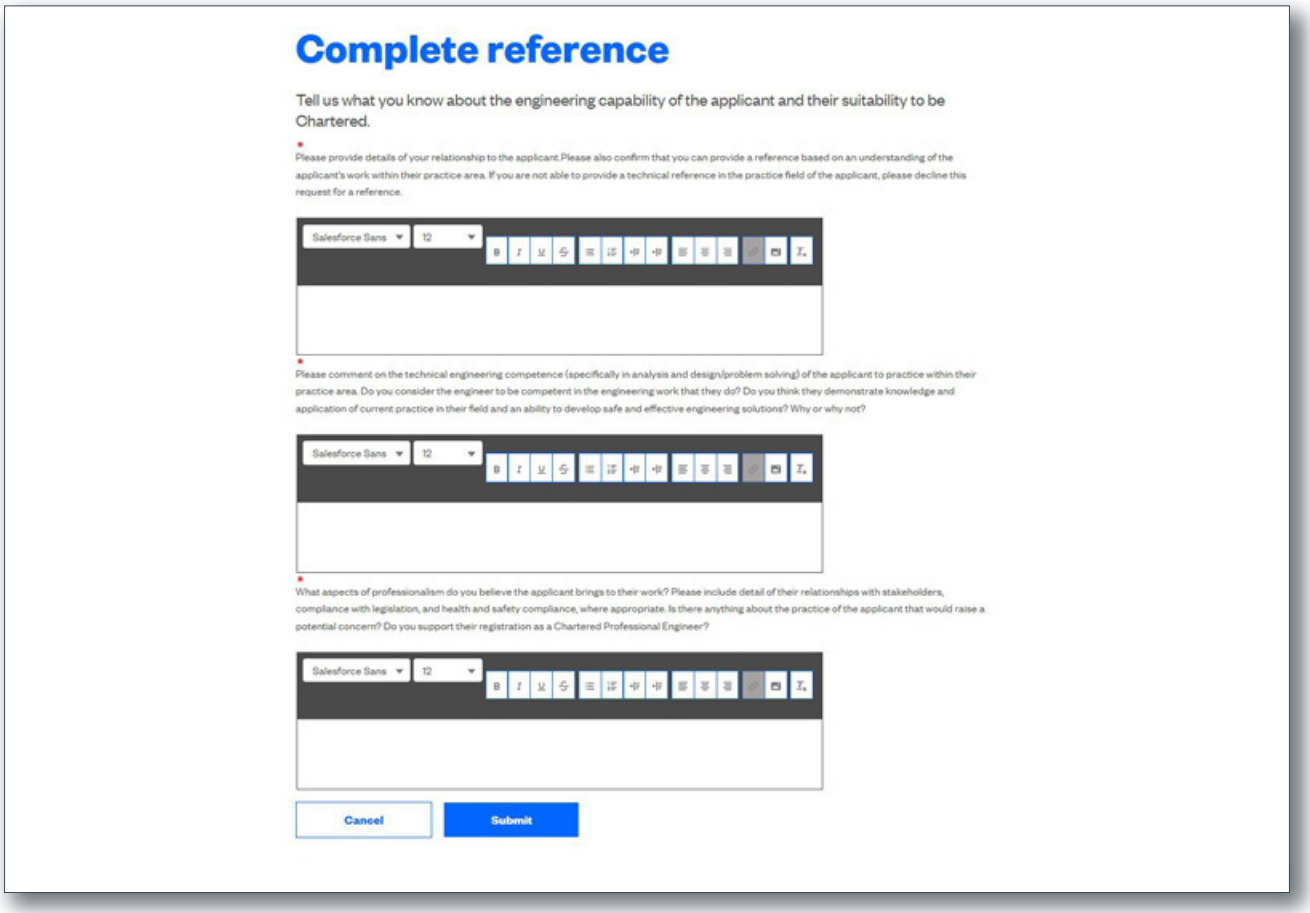
Assessment Type
Chartered Assessment

Referee Name
Bel Perez

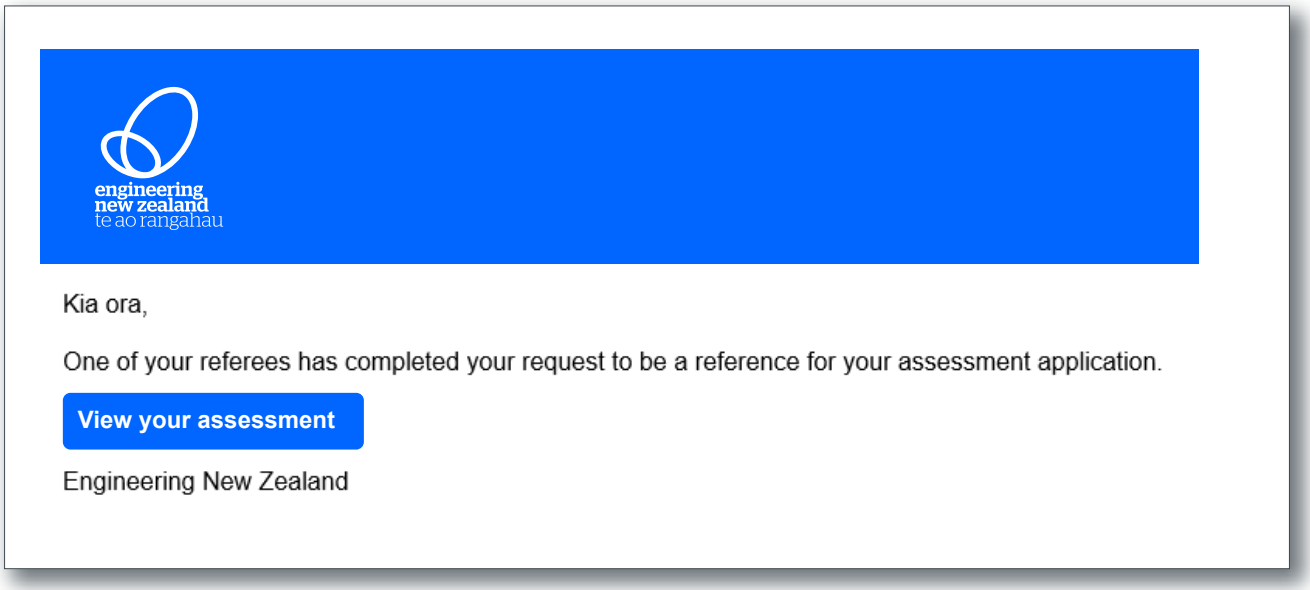
* Accept invitation?
Accept
Decline

Next

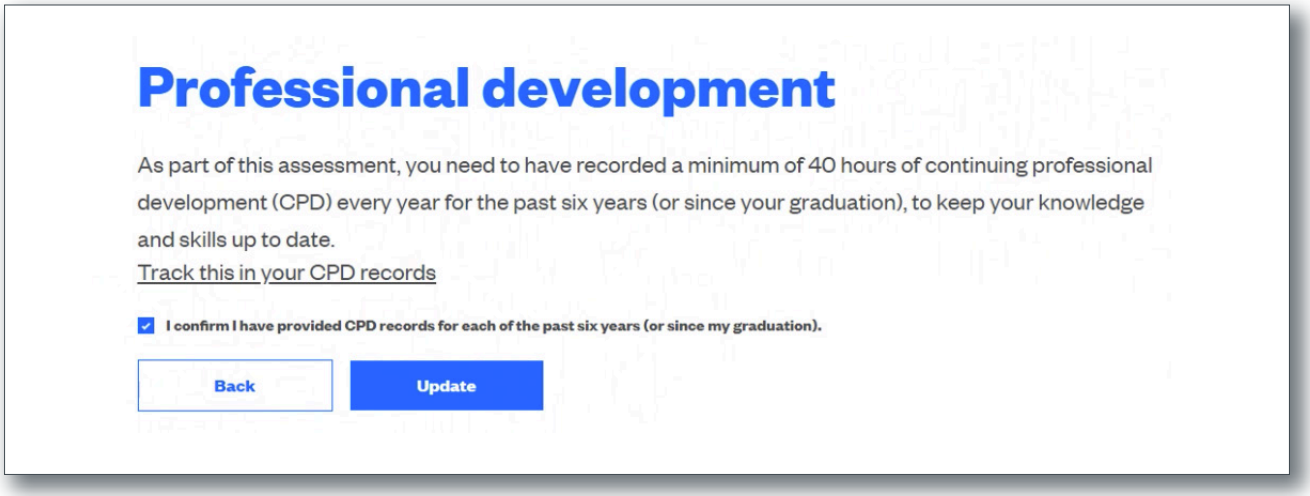
If they click 'accept', referees will be directed to the page below:



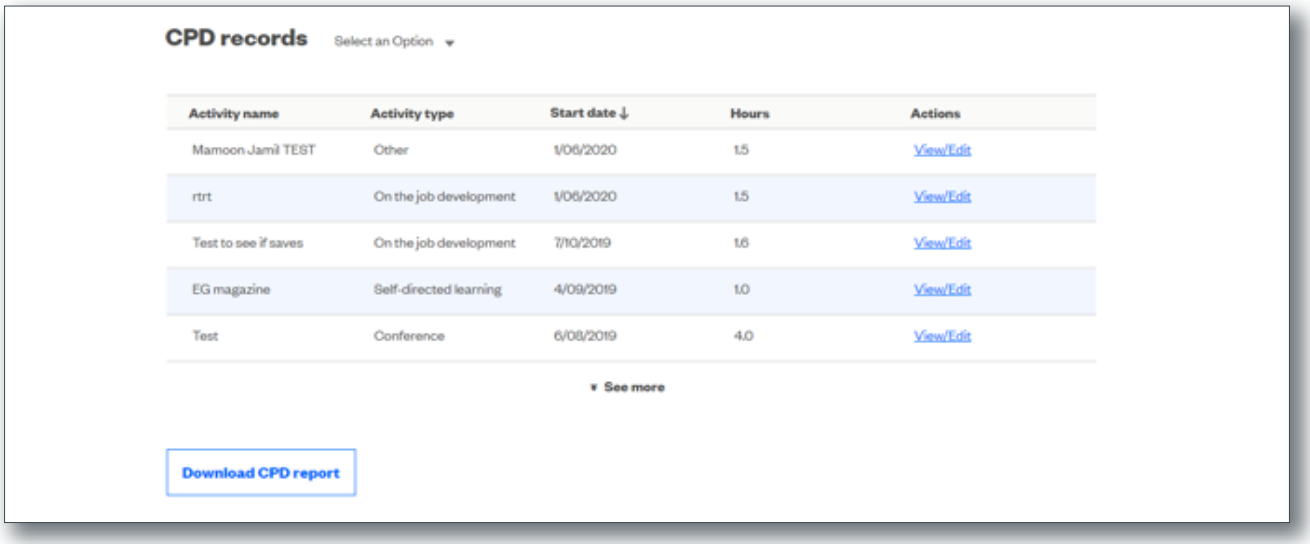
When a referee completes their response and clicks 'submit', you will receive an email notifying you of this (see below). It is up to you to follow up with your referees. You won't be able to submit your application until both of them have submitted their responses.



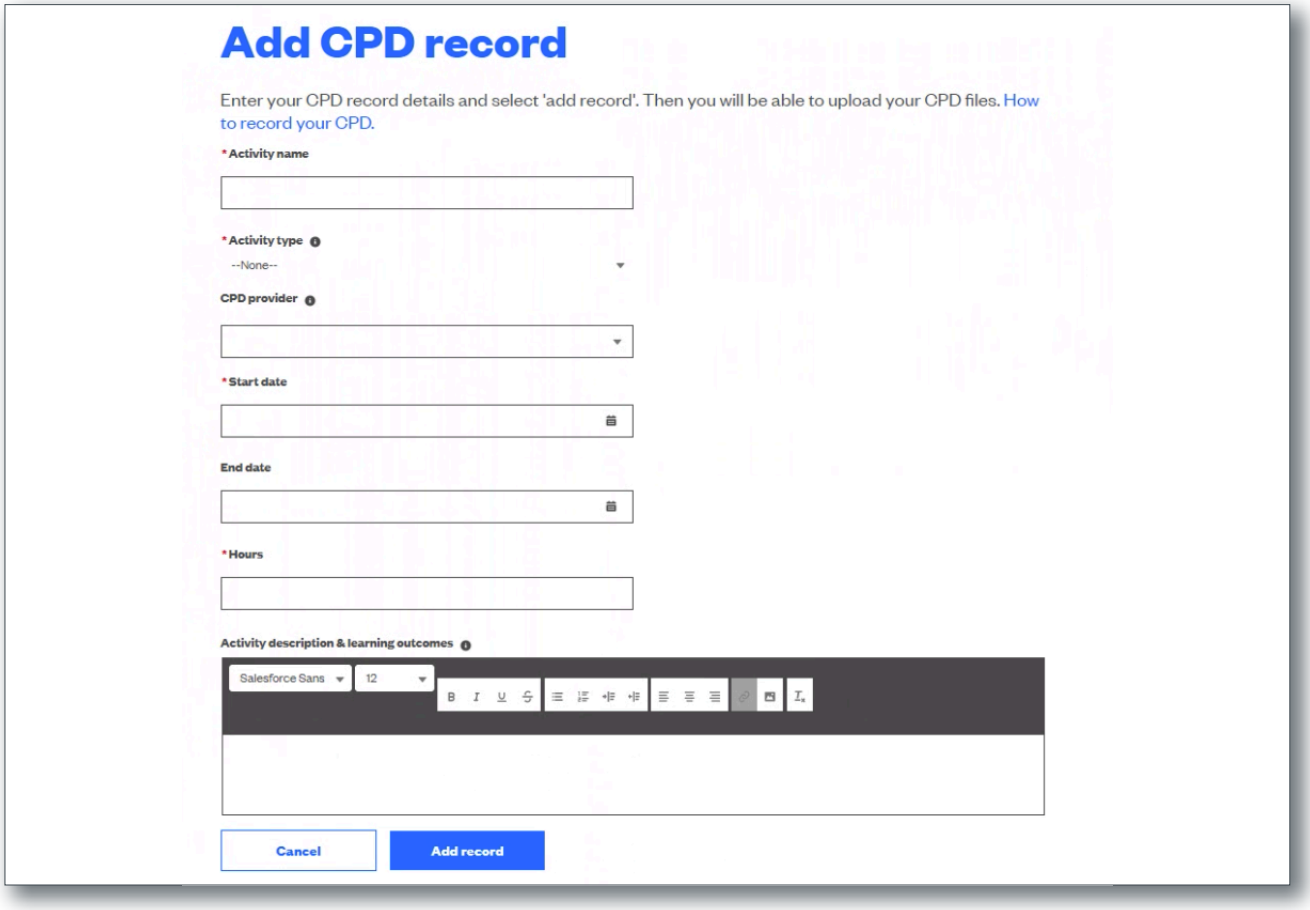
The next section of the application requires you to confirm you have provided CPD records for each of the past 6 years or since your last assessment. In this section, you also have the opportunity to update your CPD (click 'update').



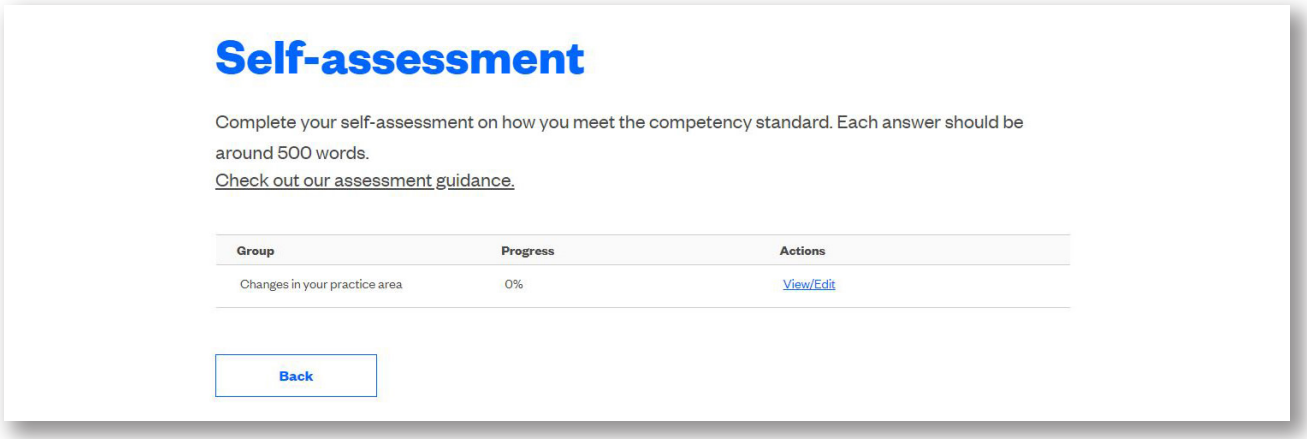
You can have a look at the CPD records you have already saved to your profile, and can also download a CPD report which will provide you with a summary of the hours you have completed each year.

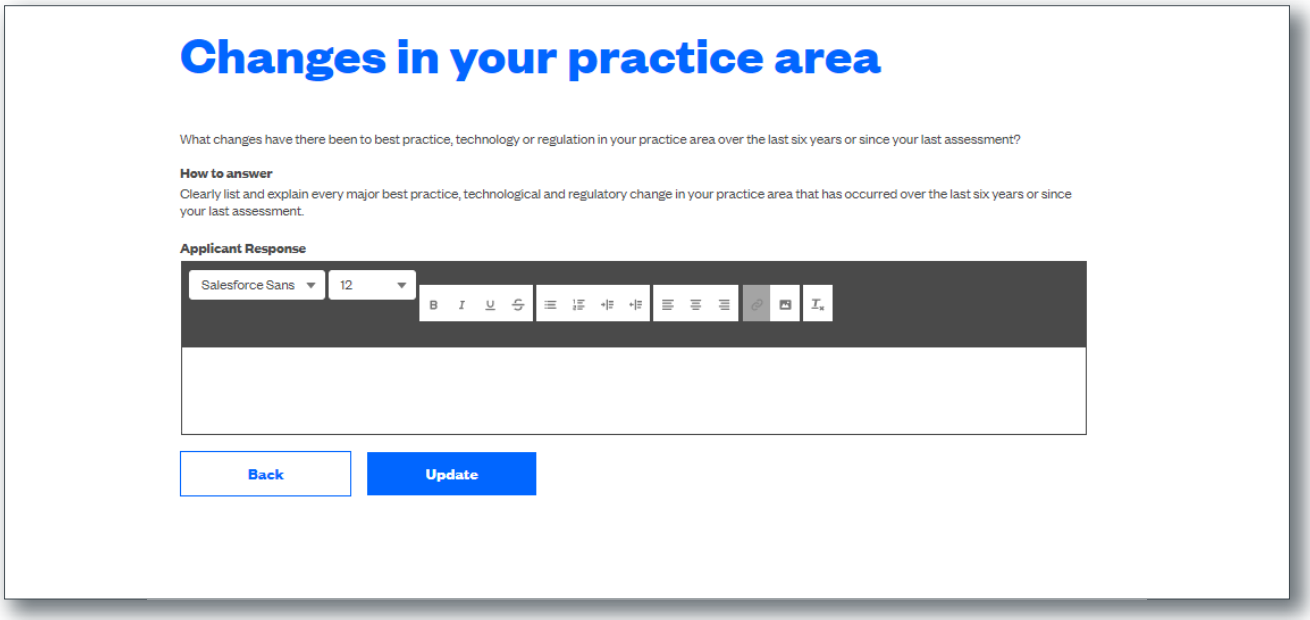


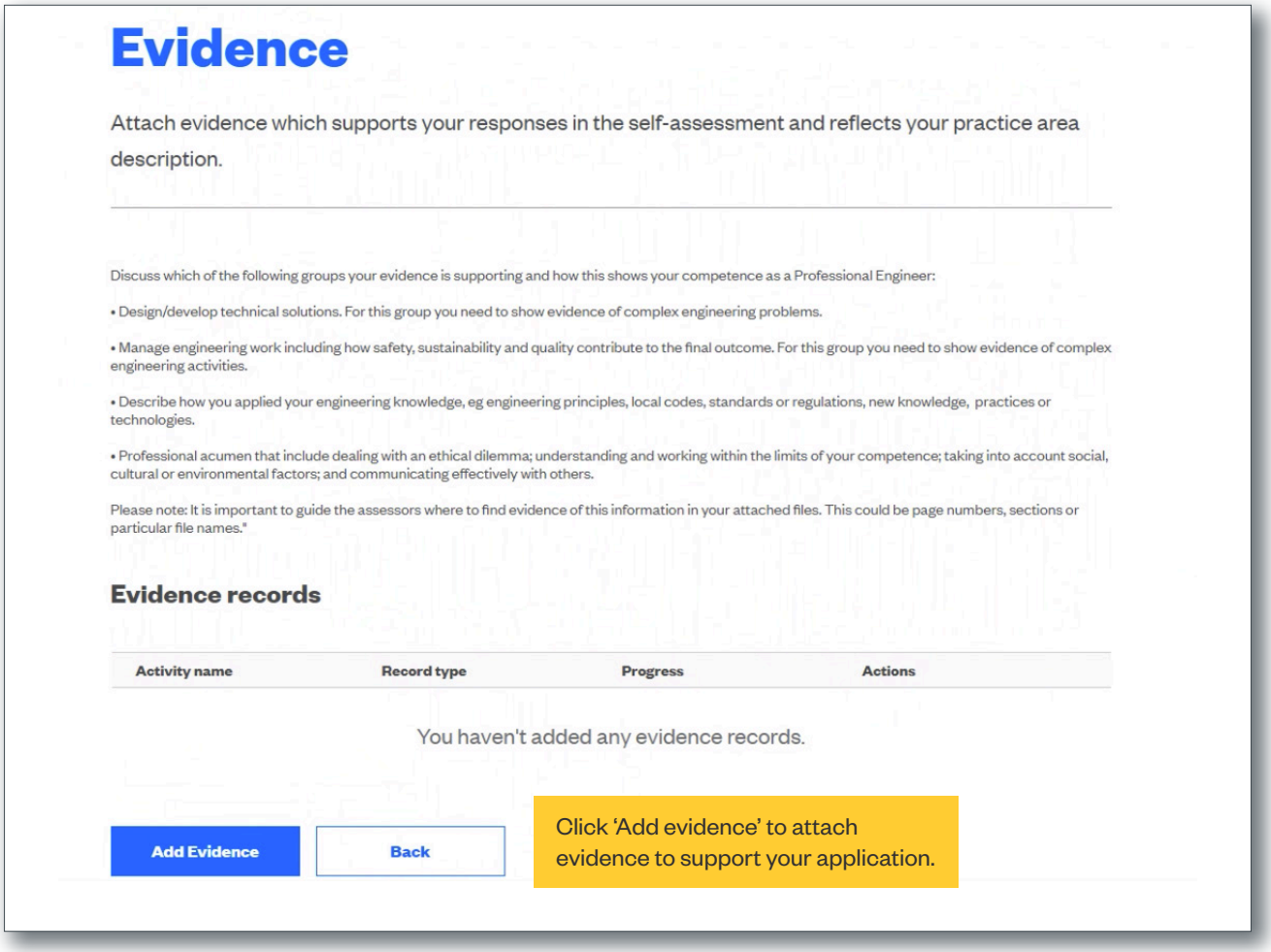
You can also add new CPD records.



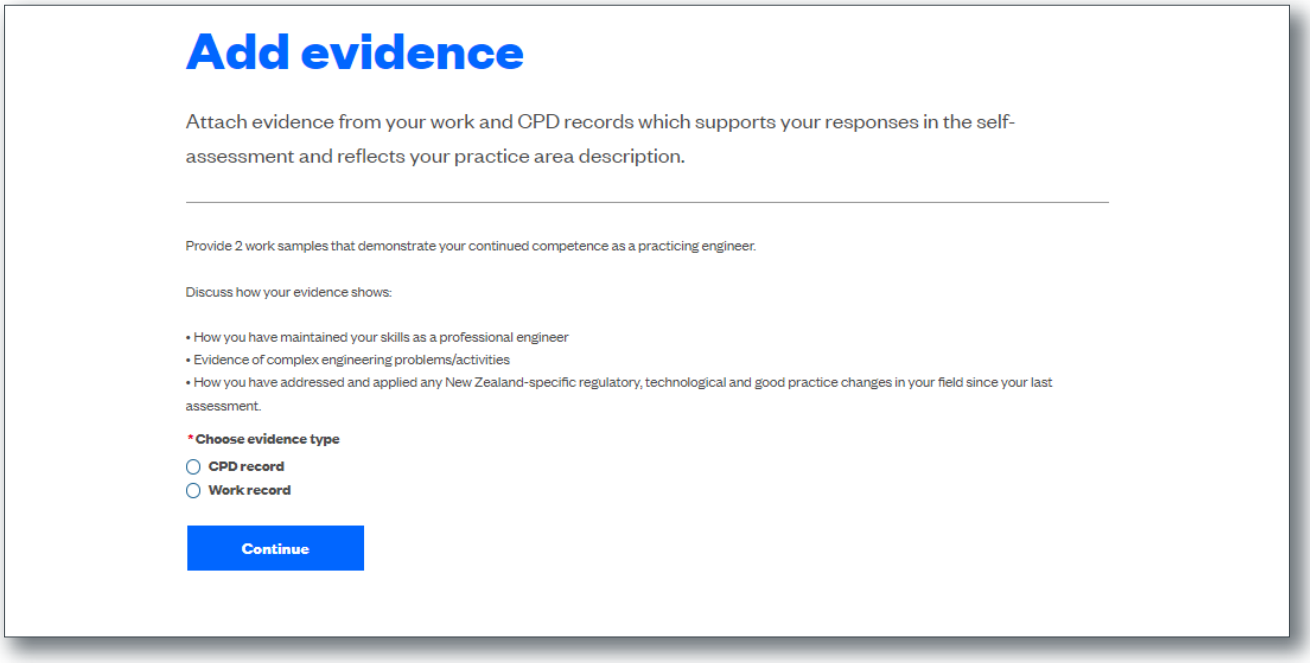
Please reference the evidence you'd like to provide to support your self-assessment



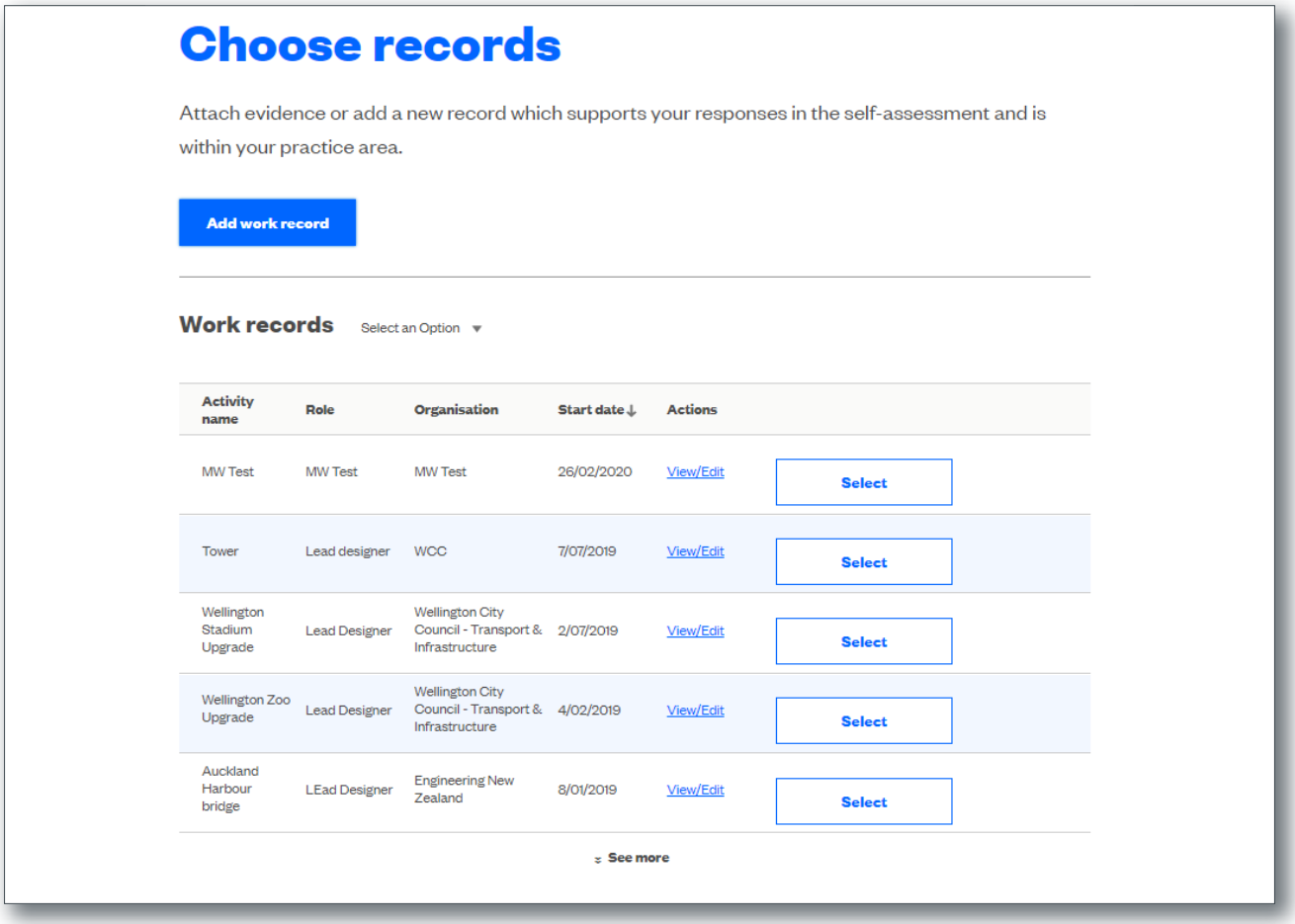

Changes in your practice area
What changes have there been to best practice, technology or regulation in your practice area over the last six years or since your last assessment?
How to answer
Clearly list and explain every major best practice, technological and regulatory change in your practice area that has occurred over the last six years or since your last assessment.
Applicant Response
Salesforce Sans
12
Back
Update


Evidence
Attach evidence which supports your responses in the self-assessment and reflects your practice area description.
Discuss which of the following groups your evidence is supporting and how this shows your competence as a Professional Engineer:
• Design/develop technical solutions. For this group you need to show evidence of complex engineering problems.
• Manage engineering work including how safety, sustainability and quality contribute to the final outcome. For this group you need to show evidence of complex engineering activities.
• Describe how you applied your engineering knowledge, eg engineering principles, local codes, standards or regulations, new knowledge, practices or technologies.
• Professional acumen that include dealing with an ethical dilemma; understanding and working within the limits of your competence; taking into account social, cultural or environmental factors; and communicating effectively with others.
Please note: It is important to guide the assessors where to find evidence of this information in your attached files. This could be page numbers, sections or particular file names."
Evidence records
Activity name
Record type
Progress
Actions
You haven't added any evidence records.
Add Evidence
Back
Click 'Add evidence' to attach evidence to support your application.

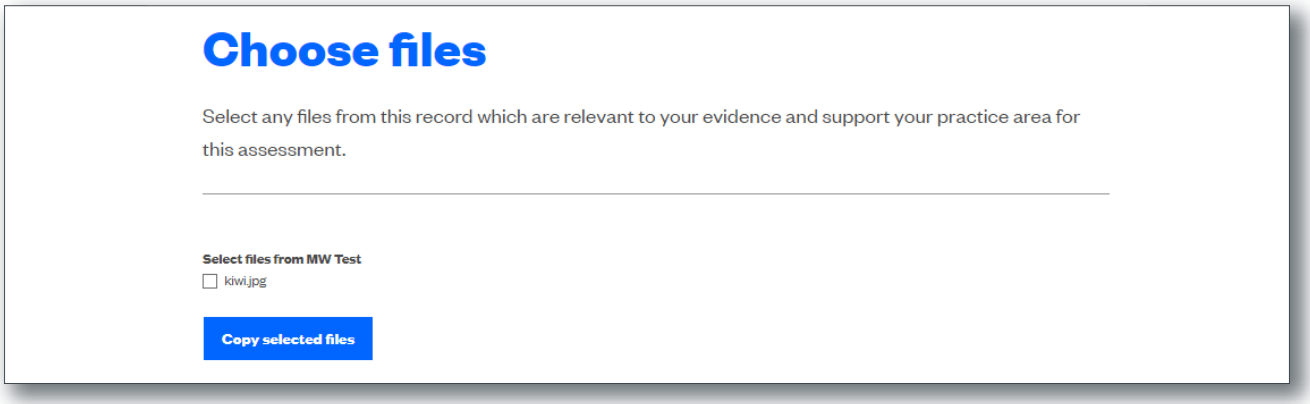
The ‘add evidence’ page enables you to select evidence from your saved CPD or work records.



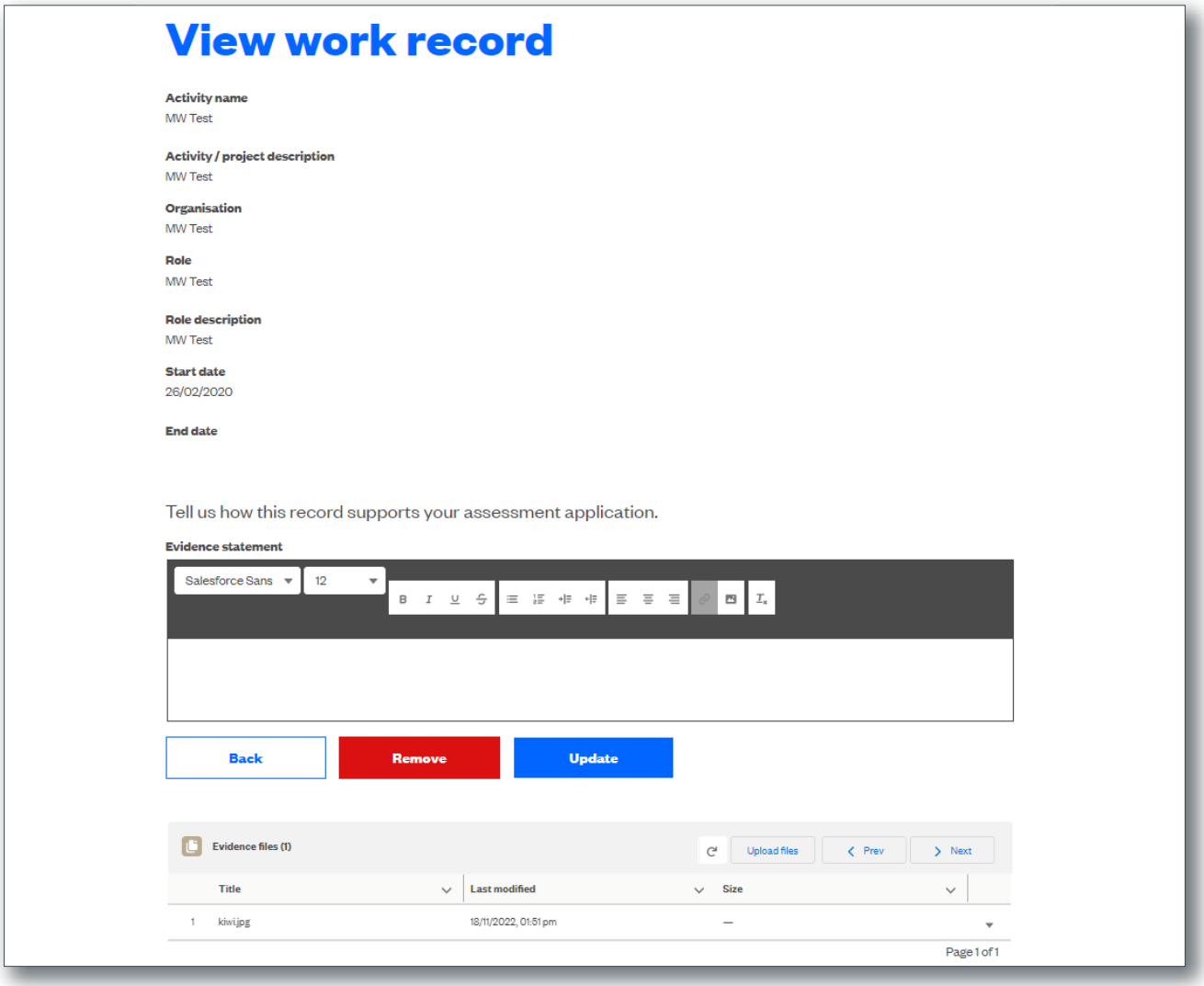
Selecting 'Work records' at the previous page takes you to the 'Choose records' page where you can select from your saved work records.



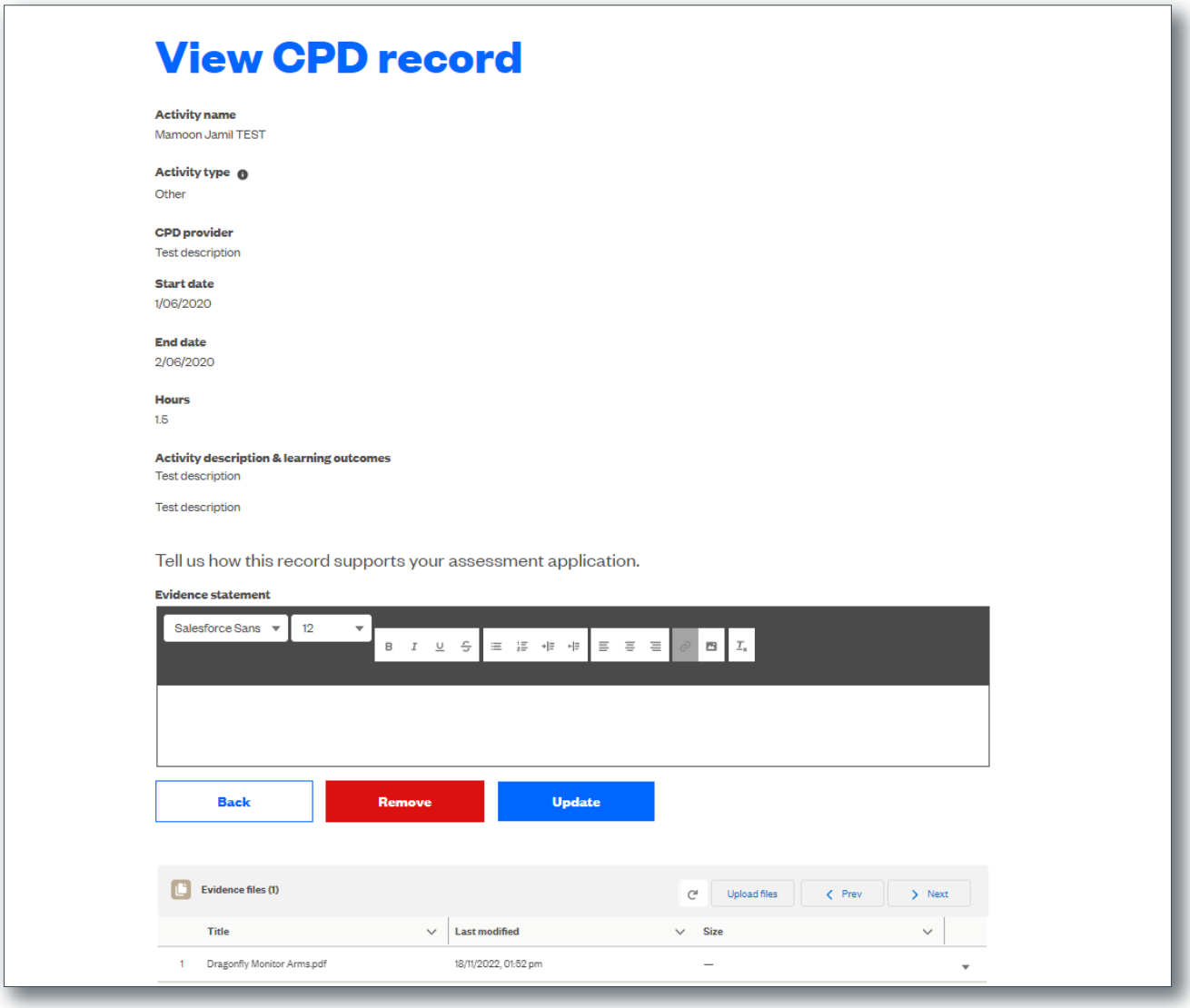
Once you select a work record, you can select any files from the work record which are relevant to your application. You will also be able to add additional files to this work record at the next step.



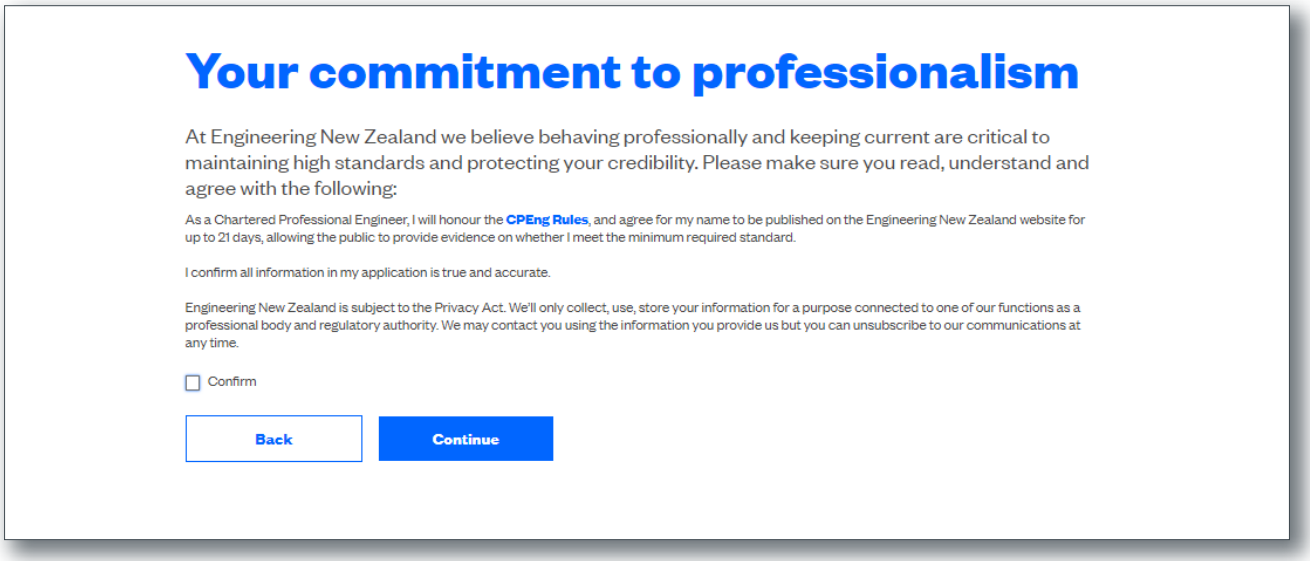
Provide an explanation as to how the work record supports your application. Reference specific page numbers, sections etc to make it easy for your Assessment Panel to find the evidence you are referring to. In this area, you are also able to upload more files to support your work record.

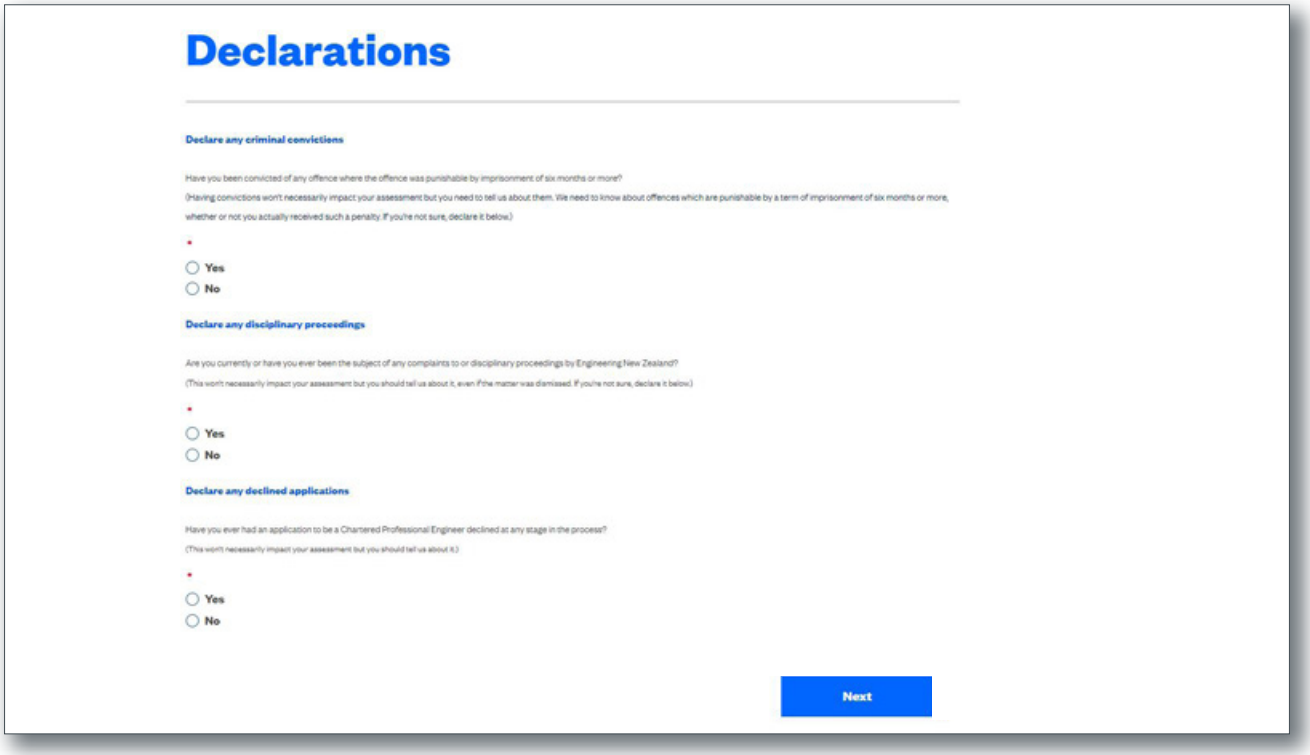


If you select 'CPD record' at the 'Add evidence' page, you will be able to select the CPD record you'd like to use. You'll then be directed to this page which asks you to tell us how the record supports your application. Again, please be specific, referencing page numbers, sections etc to make it easy for your Assessment Panel to find the evidence you are referring to. You will also be able to upload additional files for your CPD record in this area.

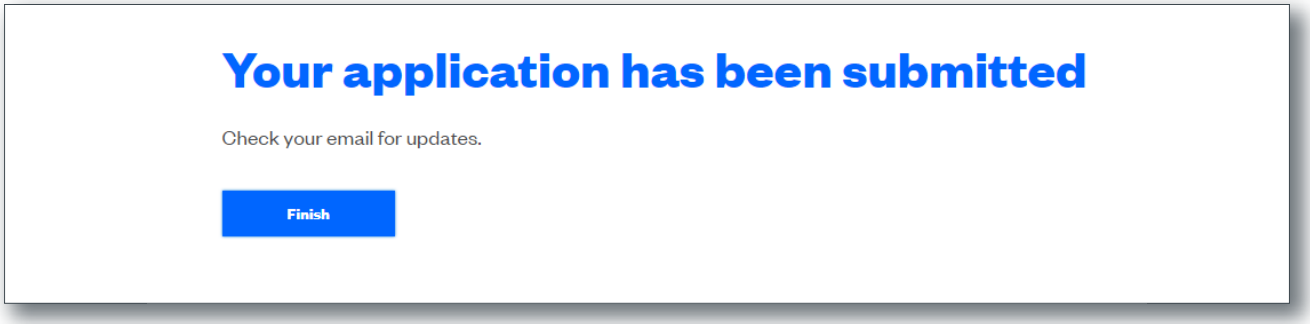


Once your application is complete, click the 'Submit' button on the bottom right. You'll be asked to confirm your commitment to professionalism and complete the declarations.





Your application is complete – you will see the screen below and will also receive an email confirming that your application has been submitted.



Frequently asked questions

What does my application status mean?

- **Started:** you're compiling your assessment application
- **Payment pending:** awaiting payment by credit card or invoice
- **Submitted:** with our team for checking and validation (2–3 weeks)
- **Editing:** additional information required before being passed to an assessment panel (it is in your best interests to submit the required information within 2 weeks, to avoid any delays in the process).
- **Assessors being assigned:** we're finding your assessment panel (2–6 weeks)
- **Assessment in progress:** your assessment is being reviewed by the panel (6–8 weeks)
- **Pending Board:** waiting for a Competency Assessment Board to be available (the CAB meet once a month)
- **Board assigned:** Competency Assessment Board has been assigned
- **Complete:** outcome of assessment finalised and shared with you
- **Withdrawn:** application has been withdrawn

What is occupational regulation?

In March 2022, Cabinet agreed to proceed with MBIE's proposals for occupational regulation. These proposals include:

- Mandatory registration for all engineers with a four-year Washington Accord degree
- Compulsory licensing for engineers working in high-risk disciplines
- Protection of title for registered engineers and licensed engineers
- Repealing the CPEng system and the CPEng Act 2002, and tougher penalties.

Full implementation is likely to take until the end of the decade. In the interim, we need to ensure the current CPEng system is appropriately addressing risk, and that we are best situated to support the coming transition.

What is the CPEng Review Project?

The development of an updated, credible and fit-for-purpose Chartered Professional Engineers model that appropriately assesses the technical competence and professionalism of Chartered Professiona Engineers and holds these engineers to account, where required.

- We are making changes to strengthen the CPEng system through consistency of administration. We are doing this so that stakeholders have increased confidence in the system and the public have increased trust in work done by CPEng engineers. We are also doing this to support the coming transition to a new occupational regulation system.
- We have already delivered a fully operational, separate Chartered Professional Engineers Board. That new Board took effect as of 1 January 2022. This will help address the conflict of interest between Engineering New Zealand as a membership organisation and registration authority.
- We are working on a new operations manual for the Registration Authority's assessment and reassessment processes, with the required supporting procedures. This will conclude in 2023.

I can't attach any documents because my work is highly confidential/ the property of my employer. What should I do?

We take confidentiality seriously and have put processes in place to protect your application.

- Engineering New Zealand assessors sign a confidentiality agreement prohibiting them from disclosing any aspect of your assessment to anyone except the relevant Practice Area Assessors, Knowledge Assessors, Competency Assessment Board members or Engineering New Zealand staff.
- We accept Work Record files that have been redacted to protect confidential information.
- You'll be given the opportunity to review who we've assigned to your assessment panel. If you have any concerns, we'll be happy to assign an alternative panel member.

What if I don't have any files to attach to my work records?

Because our competence assessments are evidence-based, you need to provide files as evidence of your experience. Email correspondence can be used as evidence.

How many evidence files can I attach?

Our general guidance is quality over quantity. One to four files are usually enough to provide sufficient evidence of your work. Give your assessors only the relevant information and be specific about where your evidence is in the Work Record files. For example, specify page numbers, sections, calculations, photograph titles, chart details etc.

How much does assessment, membership and registration cost?

You can find the latest prices on the Engineering New Zealand website. There's a one-time charge for Chartered assessments and knowledge assessments. The fee for CPEng reassessment is included in your annual registration fee.

If I'm successful, when will my name appear on the 'find an engineer' search online?

Your name will be added to the relevant register as soon as possible after the Competency Assessment Board has approved your application.

I don't have two referees that meet the criteria. Can I still apply?

Your referees need to be current Chartered Members or Fellows or Engineering New Zealand (CMEngNZ or FEngNZ), Chartered Professional Engineers (CPEng), or equivalent. If you're struggling to find referees, try attending Engineering New Zealand events and branch meetings and start networking now.

What's the difference between Chartered Membership and Chartered Professional Engineer registration (CPEng)?

Chartered Members belong to Engineering New Zealand and get all the perks of being part of our community. CPEng is different from membership and is a registration under the CPEng Act 2002.

CPEng is only open to professional engineers, who must demonstrate an ability to deal with complex engineering problems and activities. Chartered Membership is also available to professional engineers, but additional categories provide recognition for engineering technologists, engineering technicians and engineering geologists.

Both require a similar assessment. The competence standard for both are effectively the same, but CPEng registration requires evidence of New Zealand-specific good practice and reassessment at least once every six years. This makes Chartered Membership more accessible for engineers practising overseas, and provides direct entry for engineers who have been assessed in an equivalent overseas jurisdiction, eg CEng (UK) or CPEng (Australia). Chartered Membership isn't reassessed because you'll be doing ongoing professional development to stay current.

Both CPEng and Chartered Membership are underpinned by the same Code of Ethical Conduct and a fair, robust and proportionate complaints and disciplinary process.

Common terms

Assessment criteria: the standard we use to assess engineers on their competence.

Assessment panel: usually made up of a Lead Assessor and a Practice Area Assessor, the panel evaluates reviews your assessment application, before providing recommendations to the Competency Assessment Board.

Chartered assessment: evaluates if you meet the competence standard to become Chartered, either as a Chartered Member (CMEngNZ) of Engineering New Zealand or a Chartered Professional Engineer (CPEng).

Chartered Membership: the Engineering New Zealand class of membership for engineering professionals who have demonstrated their engineering competence to an internationally-recognised benchmark.

Chartered Member CMEngNZ: solves complex engineering problems and activities by applying specialist engineering knowledge and first principles to their work.

Chartered Member CMEngNZ (Engineering Technologist): solves broadly-defined engineering problems and activities by applying knowledge of engineering principles.

Chartered Member CMEngNZ (Engineering Technician): solves well-defined engineering problems and activities through knowledge and use of established analytical techniques and procedures.

Chartered Member CMEngNZ (PEngGeol): solves complex engineering geological problems and activities by applying in-depth engineering geology knowledge.

Chartered Professional Engineer (CPEng): solves complex engineering problems and activities, which requires applying specialist engineering knowledge and first principles to their work.

Competence Assessment Advisor: a member of the Engineering New Zealand team assigned to your application and your main point of contact once you submit your application for validation.

Competency Assessment Board (CAB): the group of senior engineers that accepts or rejects recommendations made by the assessment panel.

Complexity: one of the key ways we differentiate between the competence registers.

CPD record: information about the continuing professional development activities you've done to maintain currency as an engineer.

CPEng reassessment: evaluates if you have maintained current competence to meet the Chartered Professional Engineer standard.

Dublin Accord: the agreement for the international recognition of Engineering Technician qualifications.

Educational accord: an agreement that benchmarks educational standards. If you hold an Accord- accredited qualification, you'll benefit from mutual recognition of your qualification between signatory countries.

Engineering Geologist: deals with complex engineering geological problems and activities requiring specialist and in-depth geological engineering knowledge.

Engineering Professional: deals with complex engineering problems and activities requiring the application of specialist engineering knowledge and work from first principles.

Engineering Technologist: deals with broadly-defined engineering problems and activities that require knowledge and use of principles and applied procedures.

Engineering Technician: deals with well-defined engineering problems and activities requiring knowledge and use of established analytical techniques and procedures.

Knowledge assessment: evaluates if you have gained an appropriate level of technical knowledge and understanding through your work or study to practice at the level of a professional engineer.

Lead Assessor: Chartered Engineer in charge of managing the assessment process.

Practice area: a combination of the area in which you hold specialised engineering knowledge and the nature of the activities you perform. These may change over the course of your career but your competence will be assessed for your current area of engineering practice.

Practice Area Assessor: the volunteer technical expert on your assessment panel who has knowledge in an area of engineering relevant to your own practice area/field.

Practice field: indicates the nature of your engineering work.

Recognised external authorities: overseas engineering registration authorities that are signatories

Sydney Accord: the agreement for the international recognition of Engineering Technologist qualifications.

Sample evidence: documents you include in your Work Record to provide evidence of your personal involvement in a project or activity.

Washington Accord: the agreement for the international recognition of engineering qualifications.

Work record: information about the projects or activities you've carried out in your engineering work, used in competence assessments to demonstrate the practical application of your engineering knowledge and skills.

REGISTRATION AUTHORITY
FOR CHARTERED PROFESSIONAL ENGINEERS

engineering new zealand
te ao rangahau

L6, 40 Taranaki St
Wellington 6011
assessment@engineeringnz.org
www.engineeringnz.org

The Registration Authority under the Chartered Professional Engineers of New Zealand Act 2002 is the Institution of Professional Engineers New Zealand (trading as Engineering New Zealand).