



لمبائك اركيتيك جوروترا قروفيسيونل دان جورواوكور باهن نغارا بروني دارالسلام  
*Brunei Darussalam Board of Architects Professional Engineers and Quantity Surveyors*

## **GUIDELINE NO. 16**

**ARCHITECTS, PROFESSIONAL ENGINEERS AND QUANTITY SURVEYORS, ORDER 2011  
AND  
ARCHITECTS, PROFESSIONAL ENGINEERS AND QUANTITY SURVEYORS, RULES 2016**

# PART II – SECTION 6 (b)

## PROFESSIONAL COMPETENCE EXAMINATION FOR ENGINEERS

-Professional Review Guidance-

**QUALIFICATION AND EXAMINATION COMMITTEE  
16<sup>th</sup> May 2017**

# Professional Review Guidance

## Contents

INTRODUCTION .....	3
INITIAL APPLICATION .....	4
Sponsors .....	5
Criminal Convictions .....	5
PROFESSIONAL REVIEW SUBMISSION.....	6
The report.....	6
Writing your report .....	6
CV .....	6
Appendices.....	7
Continuing professional development (CPD) records .....	7
Submitting your review documents.....	7
THE PROFESSIONAL REVIEW DAY .....	8
Presentation .....	8
Interview .....	8
Written exercise .....	8
RESULTS .....	9
Appeals .....	9
Re-sitting the Professional Review .....	9
Sponsors .....	9
Supporting information .....	9
APPENDIX A - PRE Attribute .....	10
APPENDIX B - Professional Review Checklist .....	12
APPENDIX C – Individual Requirements.....	13
APPENDIX D – The written exercise .....	14

## INTRODUCTION

The Professional Review is part of the Professional Competence Examination (PCE) and is the final step in becoming a BAPEQS Membership.

To sit a Professional Review, you must hold the appropriate qualifications (educational base), and have completed your initial professional development (IPD).

The Professional Review is an opportunity to demonstrate you have the level of ability, experience, knowledge and personal development that is required to become a Registered Professional Engineer.

You'll be assessed by your peer reviewers against the attributes that apply to be BAPEQS membership. The attributes are listed in Appendix A.

The Professional Review process comprises the following steps:

- ☐ Application
- ☐ Professional Review submission
- ☐ Professional Review day
  - o Presentation
  - o Interview
  - o Written exercise

This document provides detailed guidance for all steps of the process.

If you have any queries about the process, please contact BAPEQS Secretariat at 1<sup>st</sup> Floor, Ministry of Development Training Centre (MODTC), Old Airport Road, BB3510, Brunei Darussalam or email to [apeqs@mod.gov.bn](mailto:apeqs@mod.gov.bn)



## INITIAL APPLICATION

After submitting your initial application, you will be allocated your reviewers and advised of your Professional Review day.

Your initial application should include:

- ☐ An application form
- ☐ Review fee (non-refundable)
- ☐ Sponsor questionnaires (sent separately by the sponsors – see below for more details)
- ☐ Evidence that you have the required qualifications
- ☐ Evidence of initial professional development (IPD) completion at the grade for which you are applying, which can be –
  - *A Training Agreement completion certificate*
  - *A Mentor-supported training completion certificate*
  - *Career Appraisal or Member Assessment decision letter confirming you can proceed to Professional Review*
- ☐ A one-page précis of your Professional Review report – signed by your lead sponsor
- ☐ Evidence of any special requirements you would like taken into account at your Professional Review – for example, if you have a hearing impairment or if there are restrictions on what you can discuss about a particular project you've worked on. You can find out more in Appendix C

If you're re-sitting you also need to include:

- ☐ A one-page supplementary statement (signed by you and your lead sponsor) outlining what you've done since your last review. This should address the areas where you were unsuccessful. You can find more guidance on this statement on page 9

All documents (except the sponsor questionnaires) should be included – in the above order – within a single PDF file of no more than 5MB and emailed to BAPEQS at [apeqs@mod.gov.bn](mailto:apeqs@mod.gov.bn).

## Sponsors

Your application must have three sponsors, who can confirm your suitability for membership. To do so, they must fill out a sponsor questionnaire and return it to us before you send your initial application.

It's important you also read the questionnaire as it provides guidance on who is eligible to sponsor your application and what they are required to demonstrate.

You need to select one sponsor to be your lead sponsor. This person has additional responsibilities and plays a particularly important role in the success of your application.

If you're re-sitting please refer to page 9 to find out what your sponsors need to do.

Your lead sponsor:

- Must be a Registered Professional Engineer with BAPEQS
- Has a duty to act as a mentor during the Professional Review submission process
- Should be familiar with the current BAPEQS Professional Review process and the standards you are required to meet

Your lead sponsor could, for example, provide constructive criticism of your report, advice on the presentation and arrange practice interviews. We recommend that your lead sponsor is someone who was involved in your IPD process – your supervising engineer (SE), for example.

## Criminal Convictions

No person with an unspent conviction relating to a Serious Criminal Offence will be admitted to any grade of membership unless there are special circumstances that show beyond reasonable doubt that the person is a fit and proper person to be registered with BAPEQS.

Sponsors of such persons will be required to make a specific declaration that they are aware of such person's conviction and the nature of the offence of which the person was found guilty.

If you have an unspent conviction relating to a serious criminal offence, please indicate this, on your application form, and a member of staff will contact you directly and in confidence.

You will be sent a pro forma, asking you to state the nature of the crime and to provide a statement on why you believe you are a fit and proper person to be admitted to membership. This must be countersigned by your lead sponsor and returned to BAPEQS.

The matter will be treated with the strictest confidence.



## PROFESSIONAL REVIEW SUBMISSION

This step of the process involves sending your detailed submission to BAPEQS.

The Professional Review submission includes:

- ☐ A cover page/contents
- ☐ The Professional Review report, including –
  - o A two-page CV
  - o Appendices
- ☐ CPD records

You can find details on how to format and send us these documents at the end of this section.

You'll be given approximately four weeks' notice of your Professional Review date and the reviewers assigned to you. If you know a reviewer or feel there may be conflict of interest, you should inform the Professional Reviews office. You should not attempt to make direct contact with your reviewers.

You should send your submission to [apeqs@mod.gov.bn](mailto:apeqs@mod.gov.bn) at least 15 full working days before your Professional Review date. If you miss the deadline your Professional Review may be deferred.

### The report

#### Writing your report

Your report is a vehicle for you to demonstrate how you've achieved the relevant attributes, set out in Appendix A. However, you shouldn't try to address them in sequence.

Your report should be up to 5,000 words long. It should be your own work and presented in an ordered manner.

It's essential that you emphasise your responsibilities and experience for each attribute. You should expand on decisions you made, problems you met, and occasions when you gained unusual or extensive experience and learned valuable lessons.

The report should put particular emphasis on one or two projects in which you played a major part. You should also describe how you took a lead in some or all of the elements of the project/s.

You must clearly indicate your role in any relevant aspects of the projects you have worked on by giving the background to the important decisions you were responsible for, or made a significant contribution to. You must show where you've exercised independent judgement – as an engineer and a practising professional.

#### CV

Your report should include a brief, two-page CV, which gives an indication of the size and financial value of projects undertaken and your role and responsibilities in each project. This will not be included within the 5,000 word limit.

## Appendices

Numerical analyses, cost data, drawings or other relevant additional documentation should be included as appendices to support the content of your report. They are not included in the word count.

Your appendices should include no more than:

- ☐ Three A3 drawings
- ☐ Twelve A4 sides of additional information, including any relevant calculations

Exceeding this may result in your reviewers declining your submission.

## Continuing professional development (CPD) records

You need to submit the following CPD records for your Professional Review:

- ☐ A development action plan (DAP) which details your objectives for the current/forthcoming year
- ☐ Your personal development record (PDR) for a minimum of three years (with a minimum of 30 hours of effective learning per year)

These records must include current formal training related to health safety and welfare (attribute group 6 in Appendix A).

Before applying for Professional Review, you're required to complete a minimum of 180 hours effective learning time at Registered Professional Engineer.

For more information, please read our CPD guidance.

## Submitting your review documents

Your submission must be sent in the following format:

- ☐ The overall document must be –
  - ☐ One self-contained PDF file
  - ☐ A4-sized (A3 is suitable for drawings if required)
  - ☐ No larger than 15MB
- ☐ The filename must include your number, initials, surname and review date
- ☐ The submission cover page must include –
  - ☐ A recent photo of you
  - ☐ Your signature
  - ☐ The lead sponsor's signature
- ☐ Include hyperlinks to link data in the appendices with the relevant text in your report
- ☐ Use colour where necessary – for example, images and drawings
- ☐ Where possible, convert individual documents to PDF electronically, rather than scan them
- ☐ Ensure file is printable in the correct format – and can be read in black and white
- ☐ Use an appropriate font and text size



## THE PROFESSIONAL REVIEW DAY

The Professional Review day comprises:

- ☐ A presentation
- ☐ An interview
- ☐ A written exercise

### Presentation

Your Professional Review interview will begin with a 15-minute presentation to your reviewers based on a topic, or topics, covered in your Professional Review report. You should provide an in-depth description of what you have done, that expands on your report and highlights your involvement.

You are encouraged to use visual aids to illustrate your presentation, but they should be no larger than A3. You're permitted to use a laptop computer, but external power supplies will not be provided.

### Interview

You will then be interviewed by your reviewers, who will seek to confirm you have achieved the required level of competence, as stated in your report. The presentation and interview will last a maximum of one hour .

If you haven't demonstrated sufficient evidence of a particular attribute in your report, your reviewers will pose specific questions to try to draw out your knowledge and experience in that area.

### Written exercise

Structure of the exams is as follows:

- (a) A common examination on rules, regulations and ethics (Two hours allocated time to answer 10 compulsory multiple choice questions and 3 out of 5 essay questions)
- (b) Discipline (civil/electrical/mechanical/other branches of engineering) based examination (Four hours allocated time to answer 1 compulsory question and 4 out of 7 questions)

## RESULTS

We'll let you know when your result will be emailed to you. The names of successful candidates will be published on BAPEQS's website.

If you're unsuccessful at your Professional Review you will be given the reasons why.

### Appeals

Candidates have the right to appeal where they feel there was an error in the process, and in cases of unforeseen events. Appeals must be received within two months of the date of your result letter.

If you plan to appeal, we recommend you contact BAPEQS office.

### Re-sitting the Professional Review

If you're unsuccessful at the Professional Review you'll need to undertake the whole process again. You should therefore prepare in the same way you did for your original Professional Review, demonstrating in your new submission, how you have addressed the feedback from your previous Professional Review.

When you re-sit, you have to demonstrate all the required attributes (see page 11), not just those that you were unsuccessful in. You are advised to consult with your sponsor when preparing another application.

### Sponsors

Your sponsors must fill out a new [sponsor questionnaire](#). If any of your original sponsors are unable to support your application again, you'll need to find new sponsors.

Your lead sponsor must also provide an additional statement on their questionnaire telling us what you have done to prepare for your re-sit.

### Supporting information

If you sat your review more than three years ago your application will be treated as new.

However, if it's been less than three years, you must send us a one-page supplementary statement in addition to the submission, which is described on page 5. This statement (signed by you and your lead sponsor) must outline what you've done since your last review, to address the areas where you were unsuccessful.

### Fees

You'll also need to pay the fee to BAPEQS Secretariat

– please go to the [fees page](#) of our website for details.



## APPENDIX A - PRE Attribute

At any Professional Review you must have had responsible and relevant experience at a level such that you can demonstrate the attributes shown in the table below.

The interpretation of Attributes 1 and 2 will relate to your fields of work as indicated to the reviewers on your application form. You must demonstrate a sound understanding of core engineering principles in those fields.

The reviewers will judge your level of attainment of Attributes 3 to 9 with regard to their relative importance within your fields of work.

As a prospective professional engineer, in order to fulfil your obligation to society and to meet the requirements of Health, Safety and Welfare legislation, you must have a sound knowledge and understanding of the construction process together with the activities connected to it. You must have an appreciation of, and be able to identify and manage, risks to all those engaged and affected by the design, creation, operation, use, maintenance and demolition of any works. For those whose experience includes the construction process, site experience will ordinarily be required.

Attribute group	Attributes of Engineer to be demonstrated at Professional Review	
	Additional Attributes to be demonstrated	
1. Knowledge and understanding of engineering	A	Maintain and extend a sound theoretical approach in <b>enabling the introduction and exploitation</b> of new and advancing technology.
	B	<b>Engage</b> in the <b>creative</b> and <b>innovative</b> development of engineering technology and continuous improvement systems.
2. Technical and practical application of engineering	A	<b>Conduct</b> appropriate research, relative to design or construction and appreciate its relevance within own area of responsibility.
	B	Undertake the design and development of engineering solutions and <b>evaluate</b> their effectiveness.
	C	Implement or construct design solutions and evaluate their effectiveness.
3. Management and leadership	A	Plan, <b>direct and control</b> tasks, people and resources.
	B	<b>Lead</b> teams and develop staff to meet changing technical and managerial needs.
	C	Demonstrate <b>continuous improvement</b> through quality management.



4. Independent judgement and responsibility	A	Identify the limits of a <b>team's</b> skill and knowledge.
	B	Exercise sound <b>holistic independent judgement</b> and take responsibility.
5. Commercial ability	A	Demonstrate <b>sound judgement</b> on statutory, contractual and commercial issues in relation to your area of responsibility
6. Health, safety and welfare	A	A <b>sound knowledge</b> of legislation, hazards and safe systems of work.
	B	<b>Manage</b> risks.
	C	<b>Manage</b> health, safety and welfare within own area of responsibility.
	D	<b>Leading</b> continuous improvement in health, safety and welfare.
7. Sustainable development	A	A <b>sound knowledge</b> of sustainable development best practice.
	B	<b>Manage</b> engineering activities that contribute to sustainable development.
	C	<b>Leading</b> continuous improvement in sustainable development.
8. Interpersonal skills and communication	A	<b>Communicate</b> well with others at all levels including effective use of English orally and in writing
	B	<b>Discuss</b> ideas and plans competently and with confidence
	C	Effective personal and social skills.
	D	<b>Manage</b> diversity issues.
	E	Communicate new concepts and ideas to <b>technical and non-technical colleagues</b>
9. Professional commitment	A	Understanding and compliance with the BAPEQS Code of Conduct.
	B	Plan, carry out and record CPD and encourage others.
	C	Engage with engineering activities.
	D	Demonstration of appropriate professional standards, recognising obligations to society, the profession and the
	E	Exercise responsibilities in an ethical manner.

#### Notes:

- (1) The engineering process is held to include the conception, design, construction, commissioning, maintenance, decommissioning, removal, management and procurement of engineering works.
- (2) All Professional Reviews for BAPEQS registration will be conducted in English.

## APPENDIX B - Professional Review Checklist

Item	Professional Review preparation checklist	Completed
1	Ensure that you are using the current version of this guidance document.	
2	Check attributes required for the grade of membership for which you are applying and against which you will be assessed (Appendix A).	
3	Complete current Professional Review (Professional Competence Examination) application form.	
4	Complete current sponsor questionnaire form.	
5	Obtain lead sponsor and further sponsors as required for the applicable grade of membership.	
6	Check <u>submission dates</u> and produce activity schedule of actions.	
7	Collate report documentation, photographs, appendices etc.	
8	Prepare a one-page précis of your report.	
9	Prepare report.	
10	Collate development action plan and professional development records.	
11	Review report with lead sponsor to verify achievement of attributes. Ensure report is signed by the lead sponsor.	
12	Plan mock review (presentation, interview and written exercise) with your mentor or lead sponsor	
Item	Professional Review application checklist	Complete
1	<p>The following documentation should be submitted in a single PDF file of no more than 5MB to the Professional Reviews office by email to <a href="mailto:apeqs@mod.gov.bn">apeqs@mod.gov.bn</a>:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Completed Professional Review application form</li> <li><input type="checkbox"/> Completed sponsor questionnaires (ensure all sponsors have been submitted directly to the BAPEQS)</li> <li><input type="checkbox"/> Evidence of academic qualifications (unless already approved or not relevant to application)</li> <li><input type="checkbox"/> Evidence of Initial Professional Development (IPD) completion, which will be one of the following – <ul style="list-style-type: none"> <li>• A Training Agreement completion certificate</li> <li>• A mentor-supported training completion certificate</li> <li>• Career Appraisal or Member Assessment decision letter confirming you can proceed to Professional Review</li> </ul> </li> </ul>	
2	<p>Payment of application fee (available options listed below):</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Cash</li> </ul> <p>Please pay directly to BAPEQS Secretariat</p>	



## APPENDIX C – Individual Requirements

We're committed to making reasonable adjustments to our Professional Review process to accommodate specific individual requirements. Individual requirements may include disabilities and security clearance.

You need to tell us about these requirements in the space provided in your Professional Review application form. We'll also need to see any evidence, like certified documents or statements.

### **Disability or sensory impairment**

We'll make whatever 'reasonable adjustments' are required for candidates with a disability, such as dyslexia, speech impairment or sensory loss, for example. Our Equality and Diversity Policy ensures everyone receives the same opportunities during the review process.

### **Security-mindedness and security clearance**

You should consider whether information in your review submission should be omitted or reduced in its level of detail due to security reasons. However, there's no reason why this should detract from the quality of your report.



## APPENDIX D – The written exercise

The exams are of two sets:

- (i) A common examination on rules, regulations and ethics (Two hours allocated time to answer 10 compulsory short questions and 3 out of 5 essay questions)
- (ii) Discipline (civil/electrical/mechanical/other branches of engineering) based examination (Four hours allocated time to answer 1 compulsory question and 4 out of 7 questions).
- (iii) For the interview, the candidate will be required to do a 15-minute presentation based on topics covered in your professional report. Then you will be interviewed by your reviewers for a maximum of 1½ hours based on experience report, project and logbook.

### Discussion groups

Organised discussion groups can help develop your writing skills and encourage debates between engineers.

### Use of laptop computers

You may use your own laptop to complete the written exercise, unless a computer is provided for you at your review centre. If you use your own laptop computer you won't be allowed to use or connect to your own external media drive or device.

Guidance for using laptops in the written exercise:

- ☐ Internet access is not permitted
- ☐ While you're allowed to access information stored on your laptop, if you cut and paste or use other people's work as your own, you could be penalised for poor communication or plagiarism (see below)
- ☐ We won't be able to help if you experience technical problems with your own equipment. If there's a problem, you'll be given a maximum of 60 additional minutes to complete the written exercise. In exceptional circumstances, you can submit work that has been partly hand-written and partly done on computer

### Plagiarism

Plagiarism is presenting the work of others as your own. This means using words or ideas, for example, without the permission of the original author or authors, and without acknowledgement of the original author. Plagiarism should be avoided at all stages of your Professional Review, including reports, drawings, presentations and the written exercise.

Here are some guidelines to help avoid plagiarism:

- ☐ Don't cut and paste material from others
- ☐ Where you've directly quoted others, or the work of others, attribute the source fully and, where appropriate, use quotation marks. As a rule of thumb, material derived from others should be considered a quote, unless it's assumed to be common knowledge – for example, standard equations that are in the public domain.

## Collusion

In the context of the Professional Review, collusion is any agreement to conceal someone else's contribution to your piece of work, when you know that they intend to submit the same material. The guidance above equally applies to avoiding collusion.

Plagiarism and collusion may lead to a ban on applying for membership or, for existing members, permanent expulsion from BAPEQS application.

If an allegation of plagiarism or collusion is made relating to your application for membership, no result will be given until an investigation has taken place.

## Example subjects for Professional Review written exercise questions

Please note: This list is indicative not exhaustive.

### Financial

- ☐ The financial implications of decisions made by engineers
- ☐ Whole-life asset management
- ☐ Budget management
- ☐ Cost control
- ☐ Private finance
- ☐ The financing of infrastructure development
- ☐ Operational and maintenance cost analysis
- ☐ Estimating/tendering
- ☐ Payment and compensation

### Management

- ☐ Re-thinking construction
- ☐ Quality, health, safety welfare, and environmental management systems
- ☐ Effective delegation
- ☐ Team leadership
- ☐ Communication during the design and construction of engineering works
- ☐ Training/development of staff
- ☐ Partnering/alliances
- ☐ Business improvement
- ☐ Marketing
- ☐ Site/project management

### Societal

- ☐ Equality and diversity in the Brunei, in relation to the engineering industry
- ☐ Sustainable development
- ☐ Influencing local, national and international political decisions
- ☐ The influence of recent international events on engineering
- ☐ The role of BAPEQS
- ☐ Overseas aid
- ☐ BAPEQS's Rules for Professional Conduct and ethics
- ☐ Health and safety management



- ☐ Aesthetical and environmental issues in engineering
- ☐ Health, safety and welfare during the design, construction, maintenance, operation and subsequent removal of the works
- ☐ Environmental impact of engineering projects
- ☐ Status of the engineer in society

### Commercial

- ☐ Methods of funding and procuring construction projects
- ☐ Forms of contract for engineering works
- ☐ Joint venture contracts
- ☐ Risk analysis
- ☐ Target cost contracts
- ☐ Partnering/alliances
- ☐ Supply-chain management

### Technical/academic

- ☐ Research and development
- ☐ Knowledge transfer
- ☐ The professional development of engineers
- ☐ Performance specifications
- ☐ National and international regulations on the control of pollution
- ☐ The role of an engineer as a specialist or a generalist
- ☐ Quality management
- ☐ Infrastructure maintenance