

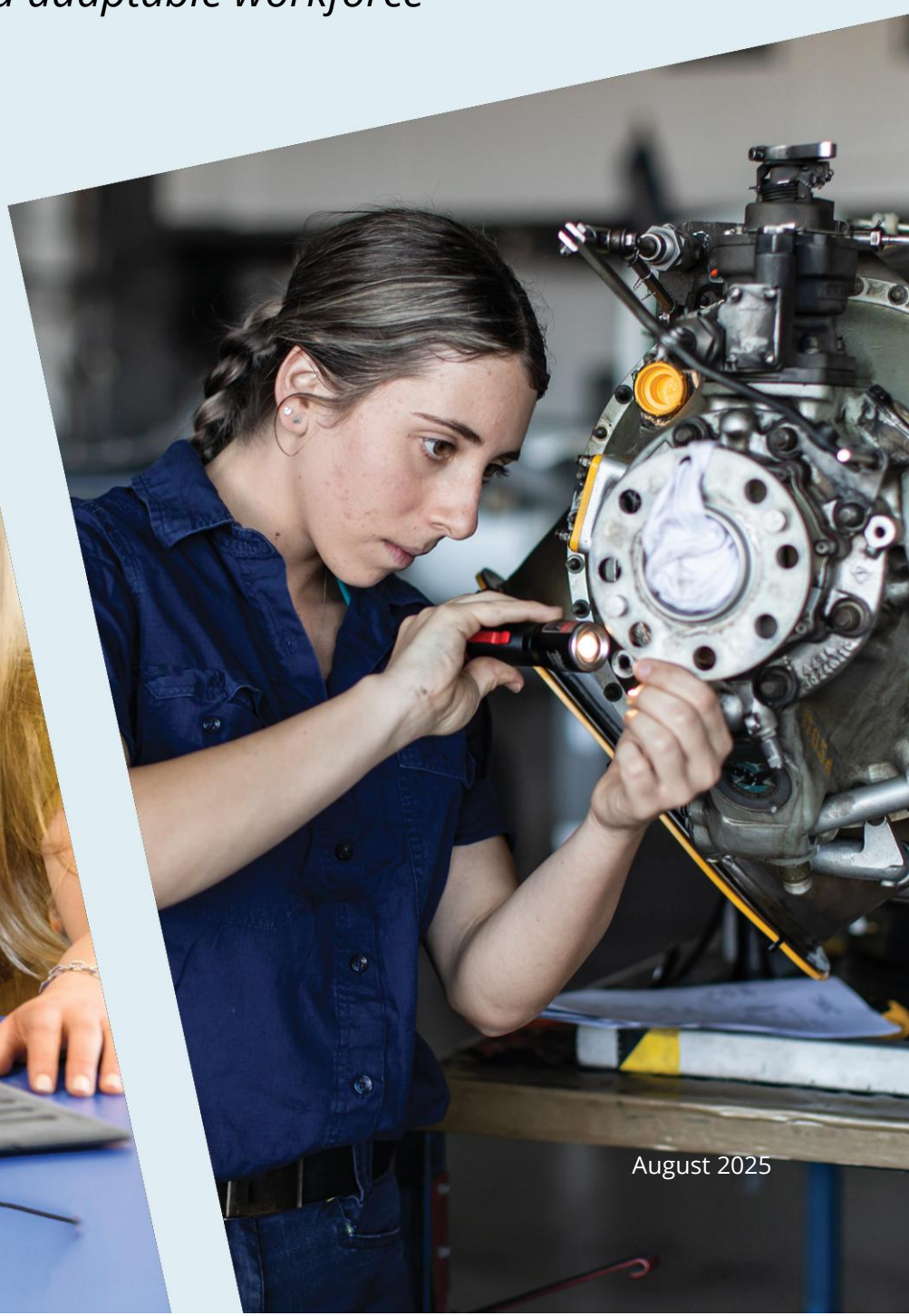


Developing the occupational entry regulation stringency index

Technical supplement

Building a skilled and adaptable workforce

Interim report



August 2025



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Publication enquiries:

Phone 03 9653 2244 | Email publications@pc.gov.au

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Developing the occupational entry regulation stringency index

The occupational entry regulation (OER) index, as described in an OECD working paper by von Rueden and Bambalaite (2020) and outlined in section 1, can be used to compare OER stringency across occupations and jurisdictions. The index methodology has previously been applied to select Australian jurisdictions and occupations by Barker (2022) and Bowman et al. (2024). The Productivity Commission has extended the index to a total of 21 occupations and to all Australian states and territories to support analysis of differences in stringency.

The OECD's published methodology requires a degree of interpretation when determining responses to questions that form part of the index. This technical supplement summarises the PC's interpretation of the questionnaire through additional guidance and examples. It outlines the OECD's original index questions, possible responses and definitions – drawing on annex D of the OECD working paper (von Rueden and Bambalaite 2020) and Australian work conducted by the Reserve Bank of Australia (RBA) and NSW Treasury (Bowman et al. 2024) – in addition to guidance developed by the PC and applied in this inquiry (section 2).

The index has several shortcomings. Limitations that apply generally include that:

- the narrow set of questions and response options are not able to fully capture the complexity of the Australian regulatory environment – specific examples are in section 2
- choices of how to weight each individual question and scale the final score are subjective and will affect the final index value and comparisons. We have adopted the OECD's choice of weights and scaling (section 1) to better enable comparisons with past analysis
- stringency reflects some of the costs associated with OER – the index is not designed to capture the benefits.

Additional limitations that apply to specific questions are outlined in section 2.

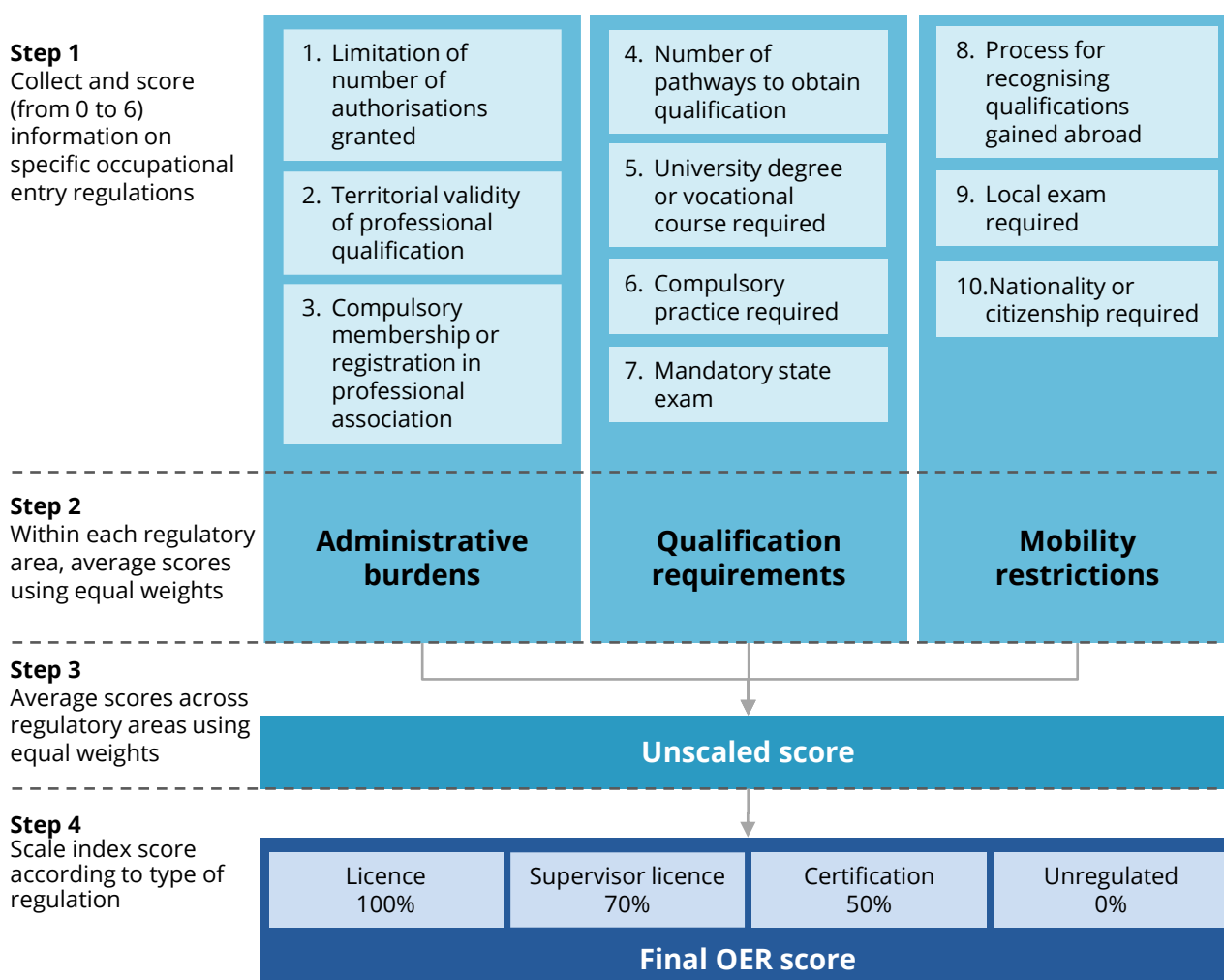
In some instances, the PC's OER index scores do not match scores produced by others for Australian occupations and jurisdictions (such as Bowman et al. (2024)). This is explained by factors such as changes in OERs over time and differences in interpretation and application of the OER index questions. For example, in assessing the number of pathways into an occupation (question 4), the PC has counted pathways with reference to groupings of Australian Qualifications Framework (AQF) levels (section 2).

The PC has used the OER index in chapter 3 to help identify where there are differences in stringency across jurisdictions for the same occupations. However, given the shortcomings of the index, it should not be used for assessing whether the level of OER is appropriate for any occupation. Rather, the PC has drawn on additional information to explore whether the level of stringency associated with select occupations is appropriate.

1. Overview of OER index methodology

The structure of the OER stringency index is illustrated in figure 1. The data underlying the index consists of scored responses to 10 questions, covering three areas of regulation: administrative burdens, qualification requirements and mobility restrictions. A score for each regulatory area is calculated by averaging individual scores within each regulatory area. The unscaled index score is then calculated by averaging scores across the three regulatory areas. Finally, the index score is scaled according to the type of regulation that applies to the occupation: a licence, supervisor licence, certification or no regulation. These terms are defined in section 2.

The final index score is between 0 and 6, where a higher number indicates higher stringency.

Figure 1 – Structure of the OER stringency index

Source: Based on von Rueden and Bambalaite (2020).

2. OER index questions

The OER index questionnaire consists of five questions to understand the type of regulation that applies to the occupation, and 10 questions scored from 0 to 6 that contribute to the index score.

Type of regulation

Question A

Question: Is the profession regulated in this jurisdiction?

Answer: Yes
No

OECD guidance: None.

PC guidance: Identify legislation referring to either the occupation title or deferring powers to another regulatory body that in turn refers to the occupation title.

Legislation that refers to the premises and not the worker should still be considered regulated, but under a supervisor licence (refer to question D).

Where an occupation only has entry regulations through education and training requirements, it must require at least six months of cumulative training time to be considered regulated for the purposes of the index.

If the profession in the OECD list of occupations examined does not perfectly align with any profession in the Australian jurisdiction, refer to the closest Australian occupation based on the OECD core activities list.

Examples:

- Butchers in New South Wales have regulations applicable to the premises but not to the individual. The premises must abide by food health and safety standards and at least one individual must produce evidence of a food handling hygiene certificate (NSW Food Authority nd). This profession is regulated however the type of licence is a supervisor licence (questions D and E). The following questions should be answered from the perspective of the premises.
- A hypothetical occupation only requires a three-day fire safety course and a two-week food handling course in order to practice. As the total training time is less than six months, we would not consider this profession to be regulated for the purposes of the index.
- Taxi drivers are included in the OECD list of occupations but are not an explicit occupation category referred to in legislation in Western Australia. However, the core activities of a taxi driver closely align with passenger transport drivers, which are regulated in Western Australia (WA DTMI nd). As such, all future questions should be answered from the perspective of passenger transport drivers.

Limitations:

- The definition of a regulated occupation and its scope of practice may differ across jurisdictions. This complicates cross-jurisdictional comparisons as reserved activities can differ.

Question B

Question: Are there any reserved activities?

Answer: Yes

No

OECD guidance: A profession has an exclusive right to an activity if it is the only one allowed to provide the activity.

A profession has a shared exclusive right when that profession and a limited number of other professions are the only ones allowed to provide the activity. For example, in some countries, lawyers and notaries may both have the shared exclusive right to administer oaths. It may be possible that the right to exercise a specific activity is shared by the profession with the state.

There is no exclusive right to an activity if anyone can provide this activity without having to fulfil any special criteria.

PC guidance: If there are multiple hierarchies of licences, where professions higher in the hierarchy can complete all the activities of those lower in the hierarchy, then those professions lower in the hierarchy should not be considered to have reserved activities.

The ability to perform the activity via an apprenticeship or through study should not be considered as violating a profession's exclusive right to an activity.

If licensing only applies to the activity if its value exceeds a certain threshold or if it is combined with other activities, the occupation is still considered to have reserved activities.

Examples:

- Enrolled and registered nurses do not have any reserved activities, as all activities can be completed by a nurse practitioner or a doctor. The answer is 'no'.
- Hairdressing apprentices in New South Wales can perform some hairdressing activities during their apprenticeship despite not having the required qualification to work in the occupation (NSW Fair Trading nd). Hairdressers are still considered to have an exclusive right to the activity. The answer is 'yes'.
- In New South Wales, stand-alone contracts for internal paintwork do not require a licence unless the paintwork is part of other home building work (NSW Fair Trading nd). A contractor licence is required to do residential building or trade work (including painting) when valued at more than \$5,000 in labour and materials (NSW Fair Trading nd). Painters are considered to have a reserved activity. The answer is 'yes'.

Question C

Question: Is the profession title protected by law?

Answer: Yes
No

OECD guidance: A professional title is a name used to indicate a particular qualification. A professional title is protected when public authorities define the conditions for conferring it or give a particular body (e.g. a professional association) the power to do so and if they protect the use of that title by imposing fines or other measures when this is used improperly.

A professional title may be combined with the existence of exclusive or shared exclusive rights or not. When there are no reserved activities, anyone can exercise those activities, but the use of the title is restricted to those that meet the requirements and have been authorized to use it.

Question D

Question: How is access to the profession regulated?

Answer: Unregulated
Licence
Supervisor licence
Certification

RBA guidance: Licensing: Practitioner must obtain legal authorisation to practice.
Supervisor licence: Practitioners can undertake the regulated activity under the supervision of a fully licensed professional.

Certification: Practitioners can voluntarily be certified to use a legally protected title, but no one is barred from practicing.

Unregulated: Practitioners can freely practice without any restriction.

PC guidance: Supervisor licence is used when an employee with a high school education can start working in the occupation without any other qualifications as long as there are supervisory arrangements. These arrangements could include another employee being present with the required licence or working at an approved premises. If there is a supervisor licence, all future questions should be answered from the perspective of the supervisor.

Examples:

- A gas fitter in the Northern Territory can work without any qualifications under a provisional gasfitter licence if they are supervised by a general gasfitter licensee (NT WorkSafe nd). All future questions should be assessed from the perspective of the supervisor and the final OER index number will be scaled by 70%.

Limitations:

- For some professions, there may be multiple tiers of licensing available. For example, some licences allow the practitioner to contract, some allow the practitioner to practice but not contract work, and some licences may allow practitioners to practice but only under supervision of someone with a higher level of licence (the supervisee still requires a licence). This question does not capture where there are additional tiers of licensing.

Question E

Question: Does only a supervisor need to obtain authorisation?

Answer: Yes
No

OECD guidance: It is possible that people can exert the regulated activity so long as they do so under the supervision of one fully certified/licensed professional. For example, electricians in Belgium can do electrical work without holding any qualification provided that they are under the qualified person's effective and permanent control.

Administrative burden

Question 1

Question: Limitation to number of authorisations granted?

Answer: Yes (6)
No (0)

OECD guidance: None.

PC guidance: Answer 'yes' only if legislation or regulatory bodies explicitly state that there are a limited number of licences available.

Examples:

- For a hypothetical occupation, it is known that only a few people enter the training program each year due to tough academic requirements which artificially put a limit on the number of authorisations granted. In this circumstance, answer 'no' because there is no clear limit on the number of licences.

Limitations:

- The number of people in some professions may be restricted through an entrance exam. It is possible that the 'pass-rate' of the entrance exam varies to limit the number of licences in the profession. In these circumstances there is no official limit on the number of professions allowed to practice so question 1 has been answered 'no'. However, there may be an unofficial limit controlled through the exam and affecting OER stringency, which is not captured by the index.

Question 2

Question: Restrictions on territorial validity of professional qualification?

Answer: Yes (6)

No (0)

OECD guidance: The question tries to ascertain if a professional can exercise in the whole jurisdiction or only in parts of the jurisdiction. The answer should be yes, even if such restrictions can be overcome by taking additional steps (i.e. taking additional exams, obtaining additional licences/authorisations, etc.).

PC guidance: Replace this question with, does this state or territory automatically recognise licences or authorisations from other jurisdictions? If so, the answer should be 'no'.

The answer should also be 'no' if there are no reserved activities, including in cases where the occupation requires a supervisor licence, a certificate or is unregulated.

The answer should be 'yes' if people with licensing and qualifications from other jurisdictions are not automatically allowed to work in the jurisdiction.

Examples:

- Queensland has not signed up to automatic mutual recognition for real estate agents (DEWR nd). The answer should be 'yes'.
- Victoria has signed up to automatic mutual recognition for real estate agents (CAV nd). The answer should be 'no'.

Question 3

Question: Compulsory membership or registration in professional association?

Answer: Yes (6)

No (0)

OECD guidance: None.

PC guidance: Consider registration with professional associations and regulators. The registration body can be Australian and not specific to the jurisdiction. The registration body should be specific to the occupation and not a general body that operates a registration scheme for a wide variety of unrelated occupations.

Examples:

- Select healthcare professionals such as medical practitioners, chiropractors, midwives and psychologists are required to register with the Australian Health Practitioner Regulation Agency (Ahpra) and their respective National Boards. Practicing without an Ahpra registration, even if registered with a jurisdiction specific board, is prohibited (Ahpra nd). The answer should be 'yes'.

Qualification requirements

Question 4

Question: How many pathways are there to obtain the qualifications to legally practice the profession?

Answer:

One = full restrictive (6)

Two = half restrictive (3)

Three or more = no restrictions (0)

OECD guidance: A pathway is the process by which a person can obtain the qualifications to legally practise the profession (e.g., one pathway may require an undergraduate degree plus one year of compulsory practice, while another could require a short vocational course and a much longer period of compulsory practice).

PC guidance: Determine how many entry pathways allow someone to practise the profession, where qualifications are counted within the following groupings:

- certificate/diploma: AQF level 1-6
- higher education: AQF level 7-10
- work experience: the experience should last at least six months duration.

If an occupation requires either a bachelor degree or a masters degree to qualify, as both degrees fall within the higher education grouping, the answer is 'one'.

If the only pathway requires both higher education and work experience, the answer should be 'one'.

The following are not considered pathways:

- rare circumstances that grant temporary authorisation due to emergencies or temporary staff shortages
- mutual recognition
- reapplication for a licence.

Examples:

- Hairdressers in New South Wales require a Certificate III (NSW Fair Trading nd). This is a single pathway. The answer should be 'one'.
- Land agents in South Australia can complete a diploma of property or a degree in law or business (SACBS 2024). There are two pathways. The answer should be 'two'.
- School teachers in Tasmania require completion of an accredited initial teacher education program, which includes accredited bachelor degrees and masters degrees (TRB Tasmania nd). These types of degrees both fall under higher education. The answer should be 'one'.

Question 5

Question: Is an undergraduate university degree or a vocational course required in order to legally practice or to obtain the professional title when this is protected by the law, whether this is required by law or by self-regulation by professional bodies, or a combination of the two? If so, for how long?

Answer:

- No (0)
- Yes, up to 1 year (1)
- Yes, more than 1 year to 2 years (2)
- Yes, more than 2 years to 3 years (3)
- Yes, more than 3 years to 4 years (4)
- Yes, more than 4 years to 5 years (5)
- Yes, more than 5 years (6)

OECD guidance: None.

PC guidance: Answer should be 'no' if it is possible to obtain entry into the occupation via prior experience instead of a qualification. Duration of degree or course should be treated as the shortest, full-time equivalent study time for either the certificate/diploma or higher education pathway from the perspective of an individual with a high school diploma and no further qualifications.

Examples:

- To obtain a qualification to participate in a hypothetical occupation, the regulator mandates either a certificate IV or a diploma. The certificate IV takes 18 months of full-time equivalent study to complete. The diploma takes 12 months. As the diploma is the shortest full-time equivalent study time, the answer should be 'yes, up to 1 year'.

Question 6

Question: Is relevant compulsory practice required to legally practice or to obtain the professional title when this is protected by the law, whether this is required by law or by self-regulation by professional bodies, or a combination of the two?

Answer:

- Yes (6)
- No (0)

OECD guidance: Compulsory practice is done after the completion of the studies or in some cases could be alternative to studying. Instructions: The answer should be 'no', if an internship is required as part of the academic course.

PC guidance: Compulsory practice must be separate from the process of obtaining the qualification. Work-integrated learning, placements, or apprenticeships are not included.

Answer should be 'no' if practice is not required when completing a certificate/diploma or higher education.

Answer should be 'yes' if the work experience pathway is present in question 4 and the certificate/diploma and higher education pathways are absent.

Answer should be 'yes' if compulsory practice is required and the certificate/diploma and higher education pathways are present in question 4 and the experience pathway is absent.

Question 7

Question: Is there a requirement to pass one or more professional examinations in order to legally practice or to obtain the professional title when this is protected by the law?

Answer: Yes (6)

No (0)

OECD guidance: A professional examination is any exam the candidate professional has to successfully pass to be allowed to practice. A typical example is the bar exam that is necessary to pass to become a lawyer.

PC guidance: Exam should refer to tests of occupation specific skills, not tests of medical fitness nor tests that people may take without any interest in the occupation such as a driving test or English proficiency tests. Examination must be separate from the process of obtaining a qualification, such as higher education exams.

Answer should be 'yes' if there are no supplementary or alternative pathways to obtaining the qualification other than successfully passing the examination. This applies even when the examination may occur prior to the commencement of a pathway.

Answer should be 'no' if examination can be avoided by completing a certificate/diploma, higher education, or work experience.

Examples:

- To obtain a licence to drive a public passenger vehicle and hence become a taxi driver in Tasmania, you must successfully complete a passenger vehicle knowledge test at a service centre (Service Tasmania nd). The answer should be 'yes'.
- All plumbers in Victoria must pass a registration exam for the classes of plumbing they wish to register in (BPC nd). The answer should be 'yes'.

Mobility restrictions

Question 8

Question: Do laws or regulations establish a clear and transparent process for recognising qualifications that have been earned abroad?

Answer: Yes (0)

No (6)

OECD guidance: None.

PC guidance: A 'clear and transparent' process consists of a government body (or legislation) outlining criteria for recognising qualifications gained abroad or demonstrates a pathway to recognising qualifications gained abroad. Qualifications gained in New Zealand should not be treated as qualifications gained from abroad.

Answer should be 'yes' if there exist jurisdiction-wide programs (including at the Commonwealth level) that offer qualification recognition processes for a range of occupations.

Answer should be 'yes' if a process exists to recognise qualifications gained from any country (excluding New Zealand).

Answer should be 'no' if no process exists to recognise qualifications gained abroad or if the only country the process is available for is New Zealand.

If there is no qualification relevant to the occupation in the jurisdiction, the answer should be 'yes', even if no process exists.

Examples:

- The South Australian Department of State Development offers an overseas qualification recognition service. Determinations are on a case-by-case basis and eligibility only applies to certain qualifications. Further criteria are not publicly available but more information can be gained by contacting the department (SADSD nd). As an assessment process is present, the answer should be 'yes'.
- Hairdressers in Victoria do not require a qualification (NSW PEC 2024). The answer is 'yes' even if there is no process for recognising qualifications from abroad.

Question 9

Question: Are foreigners required to take a local examination in order to practice?

Answer: Yes (6)
No (0)

OECD guidance: None.

PC guidance: The exam should be designed for foreigners and not an exam that Australian nationals would also be expected to take. The exam should refer to tests of occupation-specific skills, not tests of medical fitness nor tests that others may take without any interest in the occupation such as a driving test or English proficiency tests.

Question 10

Question: Is nationality or citizenship required for the professional to practice in your country?

Answer: Yes (6)
No (0)

OECD guidance: None.

PC guidance: Nationality or citizenship of a country needs to be explicitly mentioned as a requirement to practice. Requirements to pass generic security clearance tests or working visas are not restrictions on nationality or citizenship.

Answer should be 'yes' if only Australians and New Zealand citizens are allowed.

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