

## Report of Engineering Competencies

The Report of Engineering Competencies is a systematic procedure used to obtain information about competencies an applicant has demonstrated in the past. This assessment process is based on the assumption that ***the best predictor of future performance is past performance.***

In the Report of Engineering Competencies process, the applicant describes their past actions, and we evaluate them, assuming that their future actions will be similar. The concept is familiar to all of us, and we use it reflexively when we decide, for example, to visit a restaurant that we enjoyed in the past – we assume that our future meals will be good, since our past ones were. The Report of Engineering Competencies employs the same concept. They can be applied through interviews or with written responses.

The Competency-Based project is proposing a written Report of Engineering Competencies. This will include:

- structured reporting by applicants on how they have demonstrated competencies in past situations; and
- structured evaluation criteria and processes for the assessors who review the reports.

The Report of Engineering Competencies will allow applicants to provide written examples of their competencies, demonstrating their actions at the appropriate level of proficiency. The process allows applicants to think through past situations. Each written example follows a standardized approach and must include a description of the:

1. **Situation:** a brief description of the background or context of the situation;
2. **Action:** the actions taken, referring specifically to the role the applicant played in the situation, what they did, how they did it, and why they did it (the rationale);
3. **Result:** the outcome(s) of the events, and the rationale for choosing the example (why this is a good example), and share additional insight.

You can see a benchmark example that Meets Requirements, [here](#).

The example is then validated by the applicant's supervisor (called a validator) who is asked to confirm that the example is accurate and attest that the performance is ongoing. If the performance described is not typical, the validator must provide comments to explain why.

Next, the Report of Engineering Competencies form is reviewed by two assessors. The assessors independently review examples provided by the applicant, then share results to reach a consensus on whether the applicant has met the required level of proficiency or not. All supporting evidence and rationale is recorded during the evaluation process.

The steps in the Report of Engineering Competencies are:

### **Step 1. Applicant provides written examples of competencies**

*Sample Instructions to Applicants:* "For every competency on the list below, please provide 3 relevant examples of how you have demonstrated it in the workplace. For each example given, you must describe the situation, your actions, and the outcome".

- **Situation:** What was the situation?
- **Actions:** What did you do? How did you do it? Why did you do it?
- **Outcome:** What was the outcome?

### **Step 2. Validator confirms applicant's examples**

The Validator is asked to read an example of work experience submitted by the applicant and answer the following questions:

- Is the example provided typical of the applicant's ongoing performance?
- Does the example provided accurately represent the applicant's role in the situation?
- What was the level of technical engineering guidance that the applicant required in the situation described?

### **Step 3. Assessors evaluate competency examples**

#### **a) Two assessors independently evaluate competency examples**

The following three types of evidence are considered by assessors:

#### **Behaviours**

- What level of behaviour was primarily demonstrated (at, below, or above the target level)?

#### **Context**

- To what extent was the complexity of context similar to that of a professional engineer?
- To what extent were the applicant's roles and responsibilities similar to that of a professional engineer?
- To what extent was the situation new vs. typical, high risk vs. low risk?

#### **Outcome**

- To what extent were the applicant's actions responsible for producing the outcome?
- To what extent was the outcome successful (e.g., impact)?

#### **b) Assessors reach consensus on competency ratings**

### **Step 4. The Constituent Association makes the final decision**

- Considering all five requirements for licensure, the final decision is made on granting a licence.

This process is shown in the [Workflow Diagram](#).