



## **Submission to the Review of the Occupations Lists for Employment Permits**

For the attention of the Economic Migration Policy Unit, Department of Business, Enterprise and Innovation (DBEI)

12<sup>th</sup> July 2019

This submission has been completed in the template provided by DBEI.

## A. Submitter Details

### 1. Name of firm/organisation and contact details: (Please ensure you include a contact email address for queries)

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### 2. Please describe the main activity, sector and characteristics of the organisation making the submission [*not required for Government Department/State Bodies*]

With over 25,000 members, Engineers Ireland is the voice of the engineering profession in Ireland. Engineers Ireland was established in 1835 making us one of the oldest and largest professional bodies in the country. Members come from every discipline of engineering, and range from engineering students to fellows of the profession.

Our responsibility is to:

- Promote knowledge of engineering
- Establish and maintain standards of professional engineering and engineering education
- Provide opportunities for Continuing Professional Development (CPD)
- Maintain standards of professional ethics and conduct
- Ensure that professional titles are granted to qualified candidates
- Act as the authoritative voice of the engineering profession in Ireland

### 3. Please provide an overview of your sector, including importance to the economy; recent and projected growth of the sector; national or sectoral strategies/actions; employment numbers/types of occupations in the sector

Engineering is a diverse profession, based on the application of scientific principles and methods to solving practical problems. Engineers contribute to many sectors of the economy, including construction, manufacturing, ICT, utilities, transport and logistics, and professional and scientific services. A wide range of Government policy targets growth in these sectors, including Rebuilding Ireland, Project Ireland 2040 (National Development Plan 2018-2027 and National Planning Framework), Future Jobs and the Climate Action Plan.

### 4. If you are not a representative body, please provide the name and contact details of your representative body for your sector, if there is one.

Engineers Ireland is the representative body for all disciplines of engineers in Ireland.

## B. The Occupation

### 5. Please state the Occupation title

Civil engineering technician, specialising in BIM  
Building engineering technician, specialising in BIM

### 6. The Standard Occupational Classification Code most appropriate to this role (SOC) (see 2.2.1 above )

3114 Building and civil engineering technicians

### 7. What status do you propose for this occupation?

For inclusion on the Critical Skills List \_\_\_\_\_ X \_\_\_\_\_

For removal from the Critical Skills List \_\_\_\_\_

For inclusion on the Ineligible Occupations List \_\_\_\_\_

For removal from the Ineligible Occupations List \_\_\_\_\_

### 8. Please provide details of the occupation to include the following:

#### a. Brief overview of the role / job profile

Building and civil engineering technicians perform a variety of technical support functions to assist civil and building engineers. This includes the use of software packages, such as computer-aided design (CAD) and building information modelling (BIM).

#### b. Current average remuneration this role attracts (basic salary not including bonuses, allowances etc.)

Engineers Ireland conducts annual salary surveys (approx. 2,000 responses). We do not capture information on remuneration at the occupation level, just at the sector level. Median salaries for the Civil & Building Engineering Sector are shown in the table below. It is reasonable to assume that building and civil engineering technicians would earn slightly lower than these sectoral median values, however, shortages of specialised skills have driven salary increases in the sector.

Experience	Civil & Building Engineering Sector
1-2 years	€33,000
3-5 years	€37,000
6-10 years	€45,000
11-15 years	€56,750
16-20 years	€70,000
21-25 years	€74,500
26-30 years	€83,750
>30 years	€82,750

**c. Qualifications and/or level of experience required to fulfil the role**

The required academic qualification for Technician membership of Engineers Ireland is a minimum of Level 6 on the NFQ (or equivalent).

**d. The number of employees in your organisation currently working in this role**

n/a

**e. What progression opportunities does the role allow**

Building and civil engineering technicians can progress to Civil/Building Engineer level and later into management. Building and civil engineering technicians are eligible to apply for the Engineering Technician registered professional title awarded by Engineers Ireland.

## C. Reasons for adjustment:

The Department must be satisfied that industry is committed to meeting its labour needs from the resident and EEA labour market, and that recourse to the recruitment of foreign nationals is only undertaken where a genuine skills shortage exists, rather than other factors relating to the conditions of the employment which should be addressed through means other than economic migration.

### **9. Please provide an overview of the challenges faced by your business/sector, i.e., extent of labour and/or skills shortages; the impact and consequences for your business/sector if labour demands are not achieved**

Findings within Engineers Ireland's 'Engineering 2019: A barometer of the profession in Ireland' report highlighted the strong demand for engineering talent in Ireland, with 94% of the engineering employers surveyed agreeing that the shortage of engineers with the right skills is their main barrier to business growth. Engineering professionals, particularly those in the civil and building sector, are needed to meet Ireland's current and future needs, including realising and competitively delivering on the ambitions outlined in Project Ireland 2040, e.g. in housing.

### **10. Please provide any general information that you feel is pertinent in relation to your industry, e.g. wage ranges for occupations where shortages occur, whether the perceived shortage is general to the occupation or only occurs at specific levels of experience, or for very specific expertise.**

Civil and Building Engineers and Technicians are highly sought after with 59% of Irish-based engineering organisations surveyed for the Engineering 2019 report looking to hire these professionals in 2019. The report also found that the 55% decrease in civil and building engineering graduates over the period of 2012 - 2017 was 'a particular cause of concern'. We have received feedback from Engineers Ireland members and corporate partners that there is a shortage of specialist skills in civil and building engineering technician competences such as in BIM.

### **11. Do you have any plans for expansion or development envisaged?**

n/a – Engineers Ireland is a professional body

### **12. Wider economic factors may have an influence on such occupational shortages. For example, are the labour/skills shortage or surplus impacting productivity, innovation or competitiveness? Please provide evidence.**

The economic recession was a challenging time for engineering and construction, but the industry has bounced back in recent years and is now prospering. For example, 89% engineering employers told us that they expect their financial position to greatly improve or slightly improve in 2019. However, the number of graduates from civil and building engineering courses fell by 55% over the period 2012-2017 and there are now serious skills shortages. See Engineering 2019 report.

## D. Training, innovation and industry initiatives

The Department must be satisfied that the industry is committed to fully utilising the domestic/ EEA labour market before industry considers employing non-EEA nationals.

**13. Please provide information on any demonstrated industry commitment to training and industry initiatives to enhance domestic/EEA recruitment that you are aware of, specifically:**

**a. What steps are being taken by industry and employers in the short term and long term to address this shortage?**

Engineers Ireland is exploring a variety of solutions to overcome engineering skills shortages, including but not limited to:

- Increasing the number of engineering graduates from higher education
- Promoting professional engineering apprenticeships
- Upskilling/reskilling those qualified/working in other fields
- Engaging with Irish engineers working abroad
- Attracting international engineers to Ireland
- Retaining qualified engineers in the profession

**b. Describe global labour-saving innovations in your industry and how your company or sector is planning to adopt these**

Engineers Ireland encourages the adoption of a wide range of innovative technology, including BIM, through our CPD programme (see c below), our accreditation of academic courses and showcasing best practice across the industry. However, the adoption of innovative technologies such as BIM is predicted on a skills base of engineers and technicians, which are currently in short supply.

**c. Are you aware of initiatives by the sector to upskill the resident population or plans by industry representatives to engage with education and training providers in ensuring that the sector's skills needs are met?**

Engineers Ireland has a thriving Continuing Professional Development programme of training, seminars and other courses to help upskill the sector. Our CPD is informed by engagement with our members, corporate partners and other stakeholders and is targeted at some of the skills deficiencies highlighted in this submission. We also award the CPD Accredited Employer Standard for in-company CPD.

**d. Are there education and training initiatives and programmes? If yes, why is the graduate output not sufficient to meet your sector's needs, e.g. quality of graduates? quantity? geographic mobility?**

See sections above

**e. Does your business have an agreed skills plan? For example a plan for upskilling the current workforce and or potential workforce?  
If yes, describe the expected outcomes of the plan.**

See sections above

**If no, what plans are in place to develop one and within what timeframe?**

## E. Irish/EEA labour market resources

The State is committed to supporting Irish and EEA job seekers and the economic migration system is managed to contribute to this support. The Department of Employment Affairs and Social Protection can provide a range of supports to employers seeking to fill vacancies, and applicants for employment permits to fill general labour needs should avail of this support in the first instance. Changes to the eligibility of particular occupations in the context of the employment permits system will only be made where there is clear evidence of extensive engagement of sectoral actors in the Irish and European labour markets and where it is clear that the response to this engagement has proved inadequate to meet the relevant labour or skills requirement.

### **14. Please provide information on the efforts made by your business/sector to recruit qualified Irish/EEA job seekers, i.e. campaign reach, duration, outcomes etc.**

Engineers Ireland is exploring a variety of solutions to overcome engineering skills shortages, including but not limited to:

- Increasing the number of engineering graduates from higher education
- Promoting professional engineering apprenticeships
- Upskilling/reskilling those qualified/working in other fields
- Engaging with Irish engineers working abroad
- Attracting international engineers to Ireland
- Retaining qualified engineers in the profession

### **15. Please provide information on the actions taken by your business/sector to avail of the Department of Social Protection's Employer Engagement Team services to source qualified job seekers**

n/a – Engineers Ireland is a professional body

### **16. Also please explain efforts made to recruit qualified EEA job seekers using for example Eures, Jobs Fairs, industry associations abroad, Jobs Ireland, etc.**

n/a – Engineers Ireland is a professional body

### **17. Have you used other methods other than Jobs Ireland, Jobs Fairs, e.g., industry associations abroad, etc.**

n/a – Engineers Ireland is a professional body

## F. Consultation

**18. If not a representative body, have you consulted with any industry representative body on this issue?**

Engineers Ireland is the representative body for all disciplines of engineers in Ireland.

**If yes, please provide some information on the aims and progress of the consultation?**

**19. Has your business/sector had any engagement with the lead policy Government Department for your sector on this issue?**

Engineers Ireland has engaged with DBEI for several years on skills shortages across the engineering profession. For example, in the previous review of the Critical Skills List, Civil Engineers were included – which we very much welcome. We are also in close contact with a wide variety of State agencies who employ large numbers of engineers and who are also experiencing skills shortages.

**If yes, please provide some details of the aim, progress, context of engagement and/or current status of such engagement and contact details for the Department official if possible**

**Thank you for your participation.**

**Please ensure any commercially sensitive information included in this submission has been indicated.**