

June 2021

The Expert Group on Future Skills Needs

An Gasra Saineolaithe um Riachtanais Scileanna sa Todhchaí

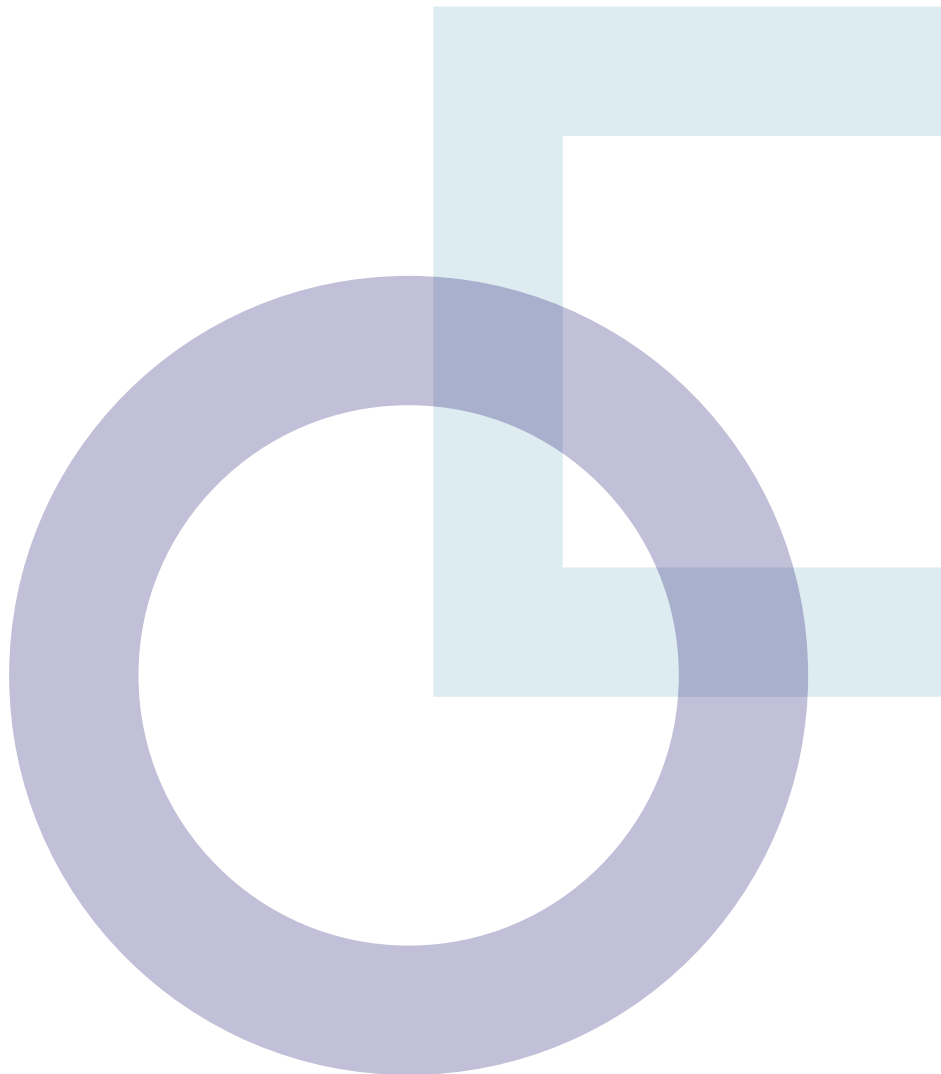
Statement of Activity 2020



National Skills Council

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> Foreword

The Expert Group on Future Skills Needs (EGFSN) was set up in the late 1990's as an independent advisory body to Government on future skills needs for enterprise. It comprises representatives from the education and training sector, the enterprise development sector, business, trade unions and government departments. It plays a key role in identifying current and future skills needs of enterprises. The EGFSN Secretariat is based in the Department of Enterprise, Trade and Employment. This Activity Report provides a summary of the work of the EGFSN in 2020, and outlines some of the main areas which the Group is addressing in 2020/21.



The Covid-19 pandemic has triggered the most severe recession in almost a century and has had an enormous impact on people's health, jobs and wellbeing. A strategic approach to developing and using people's skills will be essential for Ireland's recovery from the immediate consequences of the pandemic and resilience to future disruptions. Skills are vital in enabling individuals and businesses to adapt and eventually thrive in response to changing economic, social and environmental conditions in an increasingly complex and interconnected world.

Ireland's success in recovering from the crisis and building resilience for the future will require a strategic and co-ordinated approach to skills development, with short and longer term policy objectives. During the early part of 2020 many Irish enterprises and multinational corporations paused production in all but essential goods and services and adapted their business models to the 'new normal', including remote working. By late 2020, many of these companies had emerged stronger but for some, Covid was a bridge too far. The hospitality and tourism sectors have been particularly hard hit. Therefore, immediate priorities include: effectively re-activating skills of individuals displaced by the crisis; supporting vulnerable groups such as young people, low-skilled and part-time workers in maintaining their links with the labour market; and assisting employers and workers to successfully implement and make use of remote working.

EGFSN analysis in recent years has shown how so-called 'megatrends' such as globalisation, digitalisation, demographic and climate change are transforming learning and jobs, and the way societies function. The pandemic crisis has interacted with these trends in complex ways by accelerating some such as, for example, the shift to remote working while slowing others (at least in the short-term), such as the global flows of people and goods. An important priority in 2021 for the EGFSN will be to assess the impact of these trends, and identify skills that not only boost the recovery in the short-term but also build resilience and achieve enduring improvements for the future. Providing the appropriate skillsets to the current and future workforce to support their employability and the sustainability of Ireland's enterprise base has always been the goal of the work of the EGFSN and that work continues.

While the pandemic disrupted and pervaded all aspects of economic activity in 2020, the EGFSN continued to meet online in 2020, and continued its analysis of broader skills requirements. It also focused on the important task of monitoring the implementation of its existing recommendations. For example, work on the analysis of design skills needs that began in 2017 with *Winning by Design* continued in 2020. *Together for Design* builds on the earlier work. Design skills are becoming more cross cutting than ever, with technology blurring lines between disciplines in industry and education. In order to assume a leadership position in design, Ireland needs to be at the cutting edge of the strategic thinking, technologies and process that can help to transform research and development into commercially viable products and services which meet user needs.

The Building Future Skills analysed the current structure of the Irish built environment sector; its skills base; existing education and training and labour supply interventions; international best practice in Built Environment skills development; and a range of broader issues related to the enhancement of skills development.

As the analysis revealed, efforts to address productivity shortfalls through the integration of new technologies and the built environment's role in climate change will also require the embedding of new competencies across built environment education and training programmes. The reskilling and upskilling of the existing workforce will also be necessary to ensure a more digitalised, efficient and climate neutral built environment sector.

SMEs are particularly important for job creation in Ireland. They account for over 1 million employees, or almost 70% of total employment in the Irish business economy. The research for *Leading the Way* started in late 2019 in response to a growing acceptance that improving productivity is one of the most important issues for SMEs. Its findings are intended to assist SMEs to meet the challenges of a business environment that is constantly reshaped by new technologies, changing consumer behaviour, and broader social and economic trends.

This Activity Report provides a brief summary of the EGFSN's work. It is also a testament to the commitment of the Group's members and contribution of the EGFSN's secretariat during a very challenging period.

Tony Donohoe

Chair of the Expert Group on Future Skills Needs



> Introduction

The Expert Group on Future Skills Needs (EGFSN) has the task of advising Government on future skills requirements and associated labour market issues that impact on enterprise development and employment growth.

Specifically, the EGFSN:

- Carries out research, analysis and horizon scanning in relation to emerging skills requirements at thematic and sectoral levels. Steering groups comprising of experts from relevant enterprise sectors and the education and training sector may oversee sectoral research studies to be undertaken or commissioned by the EGFSN. Drawing on statistical input and analysis from the Skills and Labour Market Research Unit (SLMRU) and consultation with the enterprise/ education experts as part of the study, draft reports setting out the projected needs are prepared by the EGFSN.
- Engages with the Higher Education authority (HEA), the Further Education and Training Authority (SOLAS), Quality and Qualifications Ireland (QQI), the Regional Skills Fora, education and training providers in the course of its research.
- Engages with DFHERIS, HEA, SOLAS and other relevant bodies to produce agreed action plans to address the skills needs identified.
- Submits the findings of its research and agreed Action Plans to the National Skills Council prior to publication.
- Disseminates its findings to the Regional Skills Fora and other relevant groups.

Research and Analysis Resources

The research, analysis and administration support to the EGFSN is provided by the Department of Enterprise, Trade and Employment.

EGFSN work undertaken by the Department of Enterprise, Trade and Employment is part-funded from the National Training Fund (NTF), through the Department of Further and Higher Education, Research, Innovation and Skills. In 2020, €447,532 was spent from the NTF towards the cost of this work.

Members of the Expert Group on Future Skills Needs

- Tony Donohoe, Chairperson – Policy Advisor, IBEC appointed 2017
- William Beusang, Assistant Secretary, Department of Education and Skills (now Department of Further and Higher Education, Research, Innovation and Skills)
- Kathleen Gavin, Principal Officer, Department of Education and Skills – retired in 2020
- Stephanie O’Brien, Department of Further and Higher Education, Research, Innovation and Skills. Stephanie O’Brien replaced Kathleen Gavin.
- Ray Bowe, IDA Ireland – retired in 2020
- Breda O’Toole, IDA Ireland. Breda O’Toole replaced Ray Bowe.
- Keelin Fagan, Manager Client Management Development and Client Skills, EI – resigned from EGFSN
- Jonathan MacMillan, EI. Jonathan McMillan replaced Keelin Fagan.
- Dr. Vivienne Patterson, Higher Education Authority
- Dr. Laura Bambrick, ICTU
- Joan McNaboe, SLMRU, SOLAS
- Shauna Dunlop, SOLAS
- David Hegarty, Assistant Secretary, Department of Enterprise, Trade and Employment
- Kevin Daly, Principal Officer, Skills and Education Unit, Department of Enterprise, Trade and Employment (also EGFSN Head of Secretariat)

1

EGFSN Research and Analysis in 2020

> EGFSN Research and Analysis in 2020

Delivering skills for Ireland's economy

The work of the EGFSN in 2020 continued to be aligned with the ambitions in Future Jobs Ireland, including the enhancement of productivity and building resilience across the enterprise base. However, with the formation of a new Government and Programme for Government announced in July 2020, the EGFSN pivoted to address the ambitions contained within it, which also contained actions to mitigate the effects of the Covid pandemic.

No one predicted the extent of the Covid-19 pandemic, which first appeared in China in December 2019 and continued to wreak havoc across the globe in 2020 and beyond.

The Covid-19 pandemic impacted significantly on the gains made in the economy since 2012. It was fortunate, however, that Ireland entered the global crisis in a strong position.

In relation to skills resilience, the Government intervened and provided support. As part of Government's response to the labour market and skills effects of the pandemic, a range of measures were introduced as a response to upskilling and reskilling needs of individuals and businesses through the July Jobs Stimulus. These measures are providing 35,000 education and training places at a cost of €100 million to help those who were displaced by the effects of the pandemic. A further 15,000 places were announced as part of the skills package in Budget 2021.

The EGFSN will continue to play a part in the supporting economic and labour market recovery in the coming years. In the relatively recent past, the EGFSN has analysed the availability of the required skills and talent base arising from the opportunities from a growing economy, including those opportunities brought about by the fourth industrial revolution, including AI, blockchain and the general digitalisation of the economy.

In 2021 and beyond, the EGFSN will continue to identify the skills required for the economy to recover and to rebuild the capacity of Ireland's workforce so that it can contribute to the recovery and future growth. Digital transformation across all aspects of the economy and society has accelerated. The way enterprises work has changed forever.

The EGFSN is committed to carrying out research into emerging skills needs and is a key component of Ireland's skills architecture. It identifies the skills required by enterprises across occupations and sectors. It provides information to all relevant policy makers and education and training providers to support the alignment of programmes with employers' needs and underpins labour market activation programmes. Its reports and analysis can assist individuals to make informed decisions around employment opportunities and career choices.

It will continue to fulfil this role in the challenging times ahead and will feed into the deliberations of the National Skills Council (NSC),¹ where priority areas can be identified and addressed.

Outlined below is a description of the work that the EGFSN carried out in 2020:

Building Future Skills - Skills for the Built Environment

As part of the Expert Group on Future Skills Needs' 2020 Work programme, it committed to undertaking an analysis of the Skills Needs of the Built Environment Sector, which encompasses construction, engineering and architecture. The report was published in September 2020 and can be found [here](#).

As the Chair of the EGFSN noted in the report's foreword 'the legacy of the 2008-10 downturn is still keenly felt in terms of enterprise structure, employer recruitment and investment in, and facilitation of, workforce development, as well as structural gaps at middle and senior management level'.

The report identifies the skills required by the Built Environment sector over the next decade to deliver on ambitions around housing, infrastructural development and climate change mitigation, as set out in strategies such as Project Ireland 2040 and the Climate Action Plan. Notwithstanding the impact of Covid-19, the report highlights how the sector will face consistent demands for its services and pool of skills over the next ten years to deliver on these priorities for Irish society and the Irish economy.

The Report highlights that many of the skills required in the next decade are the same as those required in 2020. However, changing technological and environmental factors, such as the increasing importance of Building Information Modelling (BIM) techniques and recent regulations around Nearly Zero-Energy Buildings (NZEB), create a need for additional upskilling and retraining in order to allow the sector to respond to these trends. The transformation of the sector away from physical labour will continue, although the perception of the industry as being physically demanding is considered a deterrent for attracting new entrants into the sector.

The built environment sector involves a diverse range of activities along a chain from planning to completing and maintaining or renovating built structures and infrastructural developments. Jobs and occupations range from planners, architects and engineers, to construction firms, tradespeople, specialist utility providers, retrofitters, technicians, ecologists, landscapers and specialised supporting staff in legal and administrative capacities.

This range of activities means that a large variety of skills are required within the built environment sector, many of which are very specific to the sector. Built environment occupations can be split into two categories: 'core' and 'niche' occupations. Core occupations make up the majority of frontline staff, while niche occupations consist of those with more specialised trade, support and managerial skills.

¹ The National Skills Strategy 2025 published by Government in January 2016 and the Action Plan for Education 2016 to 2019 provided for the establishment of the National Skills Council (NSC) to look afresh at the issues surrounding labour market skills needs and to prioritise the delivery of the identified skills needs. The NSC had its first meeting in 2017.

> Built Environment Skills in a Nutshell



205,400

EMPLOYED IN BUILT ENVIRONMENT SECTOR AT THE END OF 2019

INCLUDES THOSE WORKING IN COMPANIES SPECIALISING IN: CONSTRUCTION, ARCHITECTURE ENGINEERING SERVICES AND UTILITIES



13 CORE OCCUPATIONS



17 NICHE OCCUPATIONS



20 GROWING IN IMPORTANCE



LABOUR NEEDS LINKED TO POPULATION AND PRODUCTIVITY GROWTH



INDUSTRY GROWTH AND EMPLOYMENT IS HIGHLY VOLATILE

CORE OCCUPATIONS INCLUDE

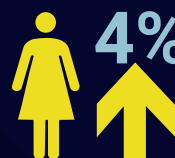
CARPENTERS AND JOINERS **12,630**

ELECTRICAL AND ELECTRICAL FITTERS **10,985**

ELEMENTARY CONSTRUCTION OPERATIVES **9,708**

CONSTRUCTION AND BUILDING TRADES N.E.C **7,826**

PLUMBERS AND BUILDING TRADES N.E.C **7,245**



4% OF EMPLOYEES IN CORE OR NICHE OCCUPATIONS ARE WOMEN



CURRENT EMPLOYMENT LEVELS ARE SUSTAINABLE ACCORDING TO 2030 ESTIMATES



ADDITIONAL EMPLOYMENT IS NEEDED IN THE SHORT-TERM

A further range of emerging occupations were also identified in the report which, although small, have exhibited large growth in recent years.

It is also very diverse in terms of the size and scale of companies within the sector. While there is a high rate of self-employment and micro-enterprises, particularly among skilled tradespeople, these companies tend to be less productive (in Gross Value -Added terms) and less profitable than larger construction enterprises.

The built environment sector is highly cyclical, and employment in the sector fell significantly following the late-2000s recession. In the years that followed, many workers left the sector due to unemployment, emigration, retirement, or leakage to other sectors. With a limited number of new entrants over this period, many occupations faced skills shortages as the economy recovered. Other structural factors, such as the ageing of the workforce, particularly amongst tradespeople and the very low rate of female participation in the industry, present challenges in terms of addressing skills shortages. Several measures that were undertaken in the past were identified, aimed at either boosting skills supply, aligning training provision with industry needs, diversifying trade, or boosting productivity and innovation.

The recommendations from the report are:

- Recommendation 1: Coordinated Campaign from Industry, with support from education and training providers and Government, to promote careers in the Built Environment Sector.
- Recommendation 2: Examine the scope for reforms to Built Environment education, training and qualifications (including apprenticeship).
- Recommendation 3: Align Skills with Technological Change.
- Recommendation 4: Developing the skills to enhance the Built Environment’s contribution to Climate Change Mitigation.
- Recommendation 5: Development and increased engagement with entrepreneurial and management skills training.
- Recommendation 6: Place the Construction Industry Register Ireland on a statutory footing.
- Recommendation 7: Assess the merits of developing a “Skills Passport” for Built Environment activities, to facilitate the recognition of skills or competencies.
- Recommendation 8: Explore the use of the procurement process to influence skills development.
- Recommendation 9: Ongoing Monitoring and Evaluation of Built Environment Skills.

Implementation of the recommendations of the report will begin in earnest in 2021.

Leading the Way – Skills for the SME Sector

This EGFSN report *Leading the Way*, was published in October 2020. It sets out a fresh approach to growth for SMEs in Ireland, where management development is a key strategic priority to drive productivity, sustainability, competitiveness and growth.

Its findings can assist SMEs to meet the challenges of a business environment that is constantly reshaped by new technologies, changing consumer behaviour, and broader social and economic trends.

Improving productivity is one of the most important issues for SMEs in Ireland. Management development, and the adoption of world class management practices, is one of the key levers for achieving that. Management development has been found to positively affect productivity, innovation, and firm survival rates. Studies on the SME sector in Ireland found Irish firms were below average in many areas of management skills.

The report examines management skills and practices in SMEs in Ireland, the attitudes and barriers to management development, and the opportunities that exist for Irish SMEs to improve their performance through greater investment in targeted, high-quality management training and development.

Research has shown firms that invest in management development grow faster, survive longer and innovate more effectively, and improving management skills is seen by the OECD as a key lever in improving Irish SMEs' productivity performance.

The report's key messages are that:

- Management Development must be a Real Strategic Priority if Irish SMEs are to Grow and Prosper;
- 88% of firms say that developing management skills is an important strategic priority, but 49% of them do not have a formal budget for management and leadership development;
- There is a need to transform Attitudes into Actions: Make Management Development a real investment priority for SMEs.
- Investment in Management Development must be recognised as a Commitment to the Future – the Future of each SME in Ireland.
- More use of Formal Training or Strategy Away-days Drives Innovation Performance and Outcomes for firms;
- SMEs should value external sources of information, like Customers, Suppliers, Competitors, Universities, external Data Sources and Networks.
- SMEs need to focus more on HRM and Talent Management if they are to match international good practice.
- Better use of data, including Monthly Accounts, will lead to better Business Decisions.

- It's important not just to set KPIs but to monitor them over time to assess progress against the firm's strategic objectives.

A huge range of training, mentoring and support is available to managers – more than 1,100 management courses trained more than 81,000 managers in 2019. An appendix to the report sets out the training offerings across the country.

The report sets out six recommendations:

- To develop a communications strategy for management development;
- To set out a step-by-step pathway for management training;
- To make the training offer more accessible;
- To put a focus on best management practice;
- To ensure adequate funding; and
- To measure impacts.

These recommendations are being considered by an implementation steering group that was established to drive forward the actions contained within the report.



Together for Design

The 2017 EGFSN report *Winning by Design* provided an introduction to design skills and evidence that design skills are key in developing Ireland's innovation ecosystem. *Together for Design*, published in June 2020, builds on this foundation, focusing on the three design disciplines identified as important for Ireland, namely digital, product and strategic design. *Together for Design* looked at the future demand for these design skills over the years 2020–2025.

This research was led by a steering group consisting of representatives across Government Departments, State Agencies, enterprise, education and the design community. It combines quantitative analysis based on data provided by the Central Statistics Office, Higher Education Authority and SOLAS, and qualitative research undertaken through a stakeholder survey, one-on-one interviews, and insights from three workshops which brought together representatives from across the design community, enterprise and education in a conversation about design in Ireland.

The final report features a review of the design skills of students in Ireland, an assessment of relevant national and international policies to support and promote design, and the main drivers impacting on current and future design skills.

4

4.1 Introduction

A key consideration of this research is to understand how many students leave the education system annually that have the skills or potential skills to take up job roles in the design occupations defined by this research. In essence this helps to understand if sufficient numbers of graduates are completing courses to meet the demand for jobs in these occupations going forward.



A key consideration of this research is to understand how many students leave the education system annually that have the skills or potential skills to take up job roles in the design occupations defined by this research. In essence this helps to understand if sufficient numbers of graduates are completing courses to meet the demand for jobs in these occupations going forward. Identifying these courses is challenging in the sense that these skills span a number of course types and, in some instances, form a module within a wider course type. As such, we have approached this part of the research by focusing on a key word search approach working with colleagues in the HEA and SOLAS to identify courses which match as closely as possible with the skillsets as reviewed during the defining stage of the research. Working with DEI provided a layer of detailed knowledge of design courses within the Higher Education sector in Ireland relevant to this research. The focus on supply terms was on:

- **HEIs.** HEIs are universities receiving direct grant funding, institutions conducted by higher education corporations, and designated institutions. There are 8 universities in Ireland, serving around 107,000 students (2017). There were 76,500 students in the 11 Institutes of Technology (2017). There are also 13 Higher Education Colleges, serving 22,189 students as of 2019.¹¹⁷
- **FEs.** FEs are bodies that primarily provide any study after secondary education that is not part of HE (that is, not taken as part of an undergraduate or graduate degree). As of 2018, there were 24,928 further education and training courses in Ireland, with a total of 175,054 unique learners enrolled in the FE sector.¹¹⁸

¹¹⁷ Available at: <https://heca.ie/>

¹¹⁸ SOLAS (2019). *This is FET Facts and Figures 2018*. Available at: <http://www.solas.ie/SolasPdfLibrary/This%20is%20FET%20Facts%20and%20Figures%202018.pdf>

The report emphasises that Ireland's design skillsets need to be at the forefront of global developments to be able to compete and be recognised as a leading centre of design excellence in Ireland. To meet the demands for these leading-edge skillsets, it is vital that the education, enterprise

and design communities come together to ensure there are sufficiently qualified graduates to supply the workforce of the future. The report finds that by 2025 the number of design jobs in Ireland could range from 65,000 to 77,000.

The research reviewed the main trends and drivers of change impacting on the industry's current future skills and competencies requirements. It looked at international policy to determine best practice in design skills provision. The research included a modelling exercise to determine the future design skills requirements for enterprise over a 5-year period to 2025. It concluded with a set of policy recommendations, the implementation of which will be overseen by the EGFSN Secretariat.

The report found that for design to thrive, so that it can drive and benefit Ireland's economic potential, action needs to take place in the areas of:

- A collective voice for leadership in design;
- Policy interventions to address skill shortages in design;
- Collaboration between education and enterprise;
- Develop career pathways in design;
- Design in education.

You can read the full report [here](#).

5

5.3 Sectors Skills - Engineering & Design



AN IMPORTANT PART OF THE PICTURE IS TO UNDERSTAND HOW DESIGN SKILLS ARE USED IN OTHER PARTS OF THE ECONOMY.

While it is not possible to get this level of detail from up to date data sources such as the Labour Force Survey (LFS), it is possible to get some indication from the Census of Population, undertaken every five years in Ireland. The latest Census information available was for 2016.

The 2016 Census indicates that there were 29,231 people working in design-related occupations (SOCs 2126, 2135, 2136, 2137) in that year, 69% of which were programmers and software development professionals. Although it is unclear exactly how many of this cohort were working in design. Figure 9 highlights the concentration of those skills employed in jobs across sectors.

The largest sector by a considerable margin employing these skills is Information and Communication, accounting for almost 17,000 jobs or 18.5% of all jobs in that sector that year. There is a considerable gap after that with these skills accounting for around 3% of jobs in Financial & Insurance Activities and between 2% and 3% in sectors including Manufacturing and Professional and Technical Services. All remaining sectors employ less than 1% of people with these specific skills and the shares are particularly low in sectors including Accommodation and Food Services, Agriculture and Health.

2

Other Activities & Policy
Inputs by the EGFSN in 2020

> Other Activities & Policy Inputs by the EGFSN in 2020

Input into Review of Employment Permit Change Proposals

In 2020, the research of the EGFSN informed the Department of Enterprise, Trade and Employment's Economic Migration Policy Unit, which has responsibility for the employment permits system and manages the Highly Skilled Eligible Occupations List and Ineligible Occupations List.

Dissemination of information on Future Skills Needs

Despite the Covid Pandemic, during 2020 the EGFSN continued to engage with stakeholders and partner organisations to ensure that information on the skills needs of the economy was shared with the relevant people.

The Secretariat took part in many online meetings and webinars and made presentations on skills needs at different fora throughout the year. In addition, the EGFSN Secretariat continued to engage with enterprise and educational bodies to develop plans for skills needs.

All reports published by the EGFSN are available on the website www.egfsn.ie. An e-alerts system is also in place to electronically distribute the group's reports.

In 2020 over 650 subscribers to the EGFSN website received e-alerts notifying them of EGFSN research publications. Subscribers also received e-bulletins promoting the work of the EGFSN and sharing stories from EGFSN partners.

Communications Activities

It is important to note that all aspects of the EGFSN's role involves communication, whether it is advising Government on projected skills requirements; making recommendations on how to improve education and training systems and delivery mechanisms; or inputting into the Department's employment permit regime. In addition, the EGFSN has a wider audience of students, parents and other stakeholders and as noted above the Secretariat has engaged in many online communications initiatives during 2020.

The new EGFSN website was established in 2019 and the contemporary style of the website together with its more user-centric interface is an impactful way of sharing information on the work of the EGFSN. The EGFSN is shorthand for an expert group that has a defining role in the new skills architecture. Policy makers understand the EGFSN brand and it was important to promote it amongst all the Expert Group's audiences.

Legacy reports from the EGFSN dating from 1999 are available on the website in an easily searchable way and are available as a source of knowledge for the EGFSN audience.

By embedding a twitter feed into the homepage, the EGFSN website remains dynamic and by April 2021 had 366 twitter followers. In addition, by creating a LinkedIn account that is accessible via www.egfsn.ie the work of the EGFSN can be broadcast to a wider audience. By May 2021, there are 514 LinkedIn followers with an engagement rate of 6.67%.

The Expert Group will continue to develop its relationships with its stakeholders in 2021 to highlight the nature and extent of the emerging skills needs of the economy, especially in light of the impact of COVID-19 on the labour market and the economy.

The EGFSN Secretariat continually monitors engagement with stakeholders via its social media channels and regularly shares pertinent information with its followers. The use of infographics to illustrate EGFSN findings will be explored. Special consideration will be given to the EGFSN audience and how best to transmit information to them in a clear and accurate way.

Common themes from EGFSN Reports

There are some common themes surrounding skills development that have arisen in the course of EGFSN research in recent years. Many of these themes are applicable in sectors that are not subject to recent EGFSN research. These are themes that the EGFSN share with stakeholders during engagement through various fora. They are:

1. The need to align education and training provision with industry's requirements.
2. The need for standardised work placements, internship/traineeship/apprenticeship opportunities.
3. The need to identify clear career paths within sectors and to clearly communicate and promote career opportunities, through engagement with school guidance counsellors.
4. The need to provide upskilling and Continuing Professional Development (CPD) programmes for employees.
5. The need to ensure the workforce has strong transversal (comms skills, literacy, digital skills) skills is key in enabling people to gain and maintain employment for enterprise.

3

Implementation of Recommendations in EGFSN Reports

> Implementation of Recommendations in EGFSN Reports

Brexit Skills – Addressing the Skills Needs Arising from the Potential Trade Implications of Brexit

The study published by the EGFSN in June 2018 – *Addressing the Skills Needs Arising from the Potential Trade Implications of Brexit*- was a partial update of two studies previously undertaken by the Group: 2012's *Key Skills for Enterprise to Trade Internationally*, and 2015's *Addressing the Demand for Skills in the Freight Transport, Distribution and Logistics Sector in Ireland, 2015–2020*.

Following the report's publication and leading up to the departure of the UK from the European Union, the Department of Business, Enterprise and Innovation formally engaged with the responsible bodies identified in the report, including a number of Government Departments, agencies, and industry bodies, to action and formally progress its recommendations.

This engagement took the form of a "Brexit Skills Implementation Oversight Group", composed of key Government Departments, agencies and offices, which convened regularly in advance of the UK's departure from the European Union. It had an important role in ensuring that all actors were kept up-to-date and their actions aligned with ongoing developments. The recommendations from the report influenced policies and actions across the Government's contingency planning for Brexit. Examples include:

- The Department of Business, Enterprise and Innovation and its enterprise agencies were involved in the Government's national Brexit preparedness public information and awareness campaign and inputted into "Getting Ireland Brexit Ready".
- The Department of Business, Enterprise and Innovation's establishment of a dedicated "Getting Business Brexit Ready" web portal, which included sections on advice and guidance, financial supports, and upskilling, and was also linked to the Department's social media campaign.
- Enterprise Ireland's national and regional communications campaign urged companies to prepare for Brexit through planning, innovating, competing and diversifying their trade, which complemented its promotion of the Brexit Scorecard, Be Prepared Grant, Brexit Advisory Clinics, and Act on Support programme.
- The awareness raising and outreach, as well as Brexit supports, offered by InterTradeIreland and the Local Enterprise Office network, included the Brexit Planning Online Guide, Start to Plan and Brexit Implementation Vouchers, the Brexit mentor programme, as well as Brexit related conferences, workshops and targeted radio and social media advertising campaigns.
- DBEI's engagement with the Revenue Commissioners in the roll out of its Trader Engagement programme, the support for customs training and advice offered under InterTradeIreland's Start to Plan voucher, the launch of Enterprise Ireland's Customs Insights and InterTradeIreland's

Customs Virtual Learning Environment courses, and the roll out of the Local Enterprise Office “Prepare Your Business for Customs” workshops.

- The engagement by DBEI, Enterprise Ireland and the Department of Education and Skills with Skillnet Ireland to develop the “Clear Customs” free training initiative, which was aimed at building capacity in the customs intermediary sector and boosting in house customs capacity amongst businesses that regularly trade with the UK. The initiative was developed in collaboration with the Chartered Institute of Logistics and Transport, Irish Exporters Association and Irish International Freight Association, and is delivered through CILT Skillnet.
- The publication of the Currency Risk Management for Irish SMEs guide, and support for financial and currency management advice and training under Enterprise Ireland’s Act On programme, InterTradeIreland’s Start to Plan voucher, and Enterprise Ireland’s Management Development training provision.
- DBEI’s contribution towards the roll out of *Global Footprint 2025*, which works to raise Ireland’s profile internationally, including as a place to live, do business, and invest; the implementation of the Government’s Diaspora policy, *Global Irish*; and the implementation of the recommendations of the *Review of Economic Migration Policy*, published in September 2018, which will ensure the policies governing the employment permit system are fully supportive of Ireland’s emerging labour market needs.

Establishment of the Logistics and Supply Chain Skills Group (LSCSG)

The Logistics and Supply Chain Skills Group (LSCSG) was set up on foot of recommendations in two EGFSN reports (2015 report ‘Addressing the Demand for Skills in the Freight Transport, Distribution and Logistics Sector’ and the 2018 report ‘Addressing the Skills Needs Arising from the Potential Trade Implications of Brexit’). The recommendations were:

- i. to develop an industry-led Freight Transport, Distribution and Logistics Skills Engagement Group with a common purpose of enhancing Ireland’s logistics and supply chain skills capability; and
- ii. to establish a Logistics and Supply Chain Skills Group, to manage a coordinated response from the Logistics/Supply Chain sectors to promote the sectors and their skills needs.

Established in April 2019, the LSCSG met formally for the first time in October 2019. Membership of the Group includes the Department of Transport, the Department of Enterprise, Trade and Employment (DETE), the Department of Further and Higher Education, Research, Innovation and Science (DFHERIS), the Department of Social Protection (DSP), National Maritime College of Ireland (NMCI), Technological University Dublin, Chartered Institute of Logistics and Transport (CILT), IPICS: The Supply Chain Management Institute, representatives from Ibec Supply Chain Network, Freight Transport Association Ireland (FTAI), Irish Exporters Association (IEA), Irish International Freight Association (IIFA), Institute of Chartered Shipbrokers, and the Irish Road Haulage Association (IRHA).

The role of the Logistics and Supply Chain Group is to:

- Improve the profile of Logistics/Supply Chain roles, making it easier to recruit talent including by improving knowledge among secondary students of the range of interesting roles available across all sectors, and enhance employee retention;
- Make progression pathways available to those entering or already working in the roles, particularly for those at lower skilled levels, with clear role definitions mapped to academic or other vocational awards;
- Ensure development opportunities are available to provide the required skills, knowledge and competencies;
- Monitor labour market developments in the Logistics and Supply Chain sectors, and provide insights into their emerging skills needs;
- Provide a forum for ongoing communication, collaboration and leadership by the Logistics and Supply Chain sectors in addressing the skills needs of the sectors in Ireland.

An annual progress report produced by the Logistics and Supply Chain Skills Group (LSCSG) was finalised in December 2020 and officially published in January 2021. The report can be found [here](#).

The Group, convened for an initial period of two years, is currently chaired by the Department of Transport, on the basis of its links to wider transport policy issues, and to underline the seriousness of the Group's role as part of Ireland's wider response to Brexit and the skills needs within Logistics and Supply Chain activities more generally.

The Department of Transport's role is largely a coordinating one. It is the responsibility of the Logistics and Supply Chain representatives to drive the work of the Group, aimed at enhancing the perception of the sector's diverse roles, entry routes and development opportunities, its ability to attract and retain talent, and hence its ability to service the demand for skills over the coming years. Five meetings of the Group have been held since October 2019. Participation levels have been strong, discussions have been informative and the desire to achieve the goals of the Group has been evident.

The LSCSG throughout 2020 continued working towards its goal to support the promotion of careers, skills development and sustainable employment in the Logistics and Supply Chain sectors. Many actions are underway, working towards the overall objectives of the Group. The five meetings that have taken place have created momentum in helping the group to achieve its aims. In facilitating these meetings, the objective to provide a forum for ongoing communication, collaboration and leadership by the Logistics and Supply Chain sectors in addressing the skills needs of the sector in Ireland is being met. Additionally, these meetings and discussions have taken account of evolving Brexit, and COVID19, developments. Subgroup 2 has made progress towards the objective to make progression pathways available to those entering or already working in the roles, particularly for those at lower skilled levels, with clear role definitions mapped to academic or other vocational awards. Meanwhile, Government departments continue with the objective to monitor labour market developments in the Logistics and Supply Chain sectors and provide insights into emerging skills needs.

During its second year the LSCSG will be tasked with moving from ideas into actions, and the work programme provides guidance by outlining the key activities necessary to achieve overall goals, including the goal to establish a panel of Champions to be ambassadors for careers in the industry. The subgroups will be integral to this progress and their work, along with the work of the Group as a whole, will be the determining factor that will shape the Group's success in its second year.

EGFSN High-Level ICT Skills Forecast and Technology Skills 2022

In 2019, the Expert Group on Future Skills Needs (EGFSN) published *Forecasting the Future Demand for High Level ICT Skills in Ireland, 2017–2022*. The evidence from this report fed into the development of the ICT Action Plan *Technology Skills 2022*.

The action plan focuses on the development and attraction of High-level ICT skills. These are defined as those skills required for designing, building and implementing high level ICT systems such as those in computer and electronic/electrical engineering at NFQ 6/7 and 8+ and those skills with a combination of ICT and business, analytic and foreign language skills. It excludes ICT user skills.

The high-level ICT Skills Forecast was the fourth in a series undertaken by EGFSN (2008, 2012, 2013); third as evidence-based input into ICT Skills Action Plan process. It forecasts demand across NFQ Levels 6-10, broken down by computing and electrical/electronic engineering skills.

The implementation of *Technology Skills 2022* is being driven by a high level steering group co-chaired by the Departments of Further and Higher Education, Research, Innovation and Science, and Enterprise, Trade and Employment. Its membership includes the Higher Education Authority, SOLAS, Skillnet Ireland, Science Foundation Ireland, Enterprise Ireland, IDA Ireland, Technology Ireland, MiDAS and the Third Level Computing Forum.

The progress so far on the implementation of actions in *Technology Skills 2022* has been consistent. 3,000 participants have taken part in Springboard+ ICT courses in 2018, with a similar number in 2019. There have been 4,000 places between Springboard+ and HCI Pillar 1 in 2020. By the end of December 2020, there were a total of 348 registrations on ICT Apprenticeships. Over 450 unemployed trainees looking to enter the ICT profession have undertaken a range of programmes with Skillnet Ireland including the Future in Tech programme.

In addition, there has been implementation of the recommendations of the Review of Employment Permits System (2018), including removal of requirement for spouses/partners to obtain permit and direct access to labour market.

The aim is to increase education and training system output from 7,500 in 2018 to 12,500 in 2022. There are five main overarching actions. The full Action Plan is available [here](#).

Together for Design – Implementation

Following the completion of the *Together for Design* report in 2020, a Design Skills Implementation Group was formed by the EGFSN Secretariat to progress the report's actions. The Group consists of various different elements of the design community, representing both industry and education. The Group has met quarterly since April 2020 and is focussed on driving the implementation of the report's actions.

The first year of implementation has resulted in some notable achievements, such as a number of successful proposals funded under Springboard+ and the Human Capital Initiative (HCI). Of particular note in this regard is the creation of the Creative Futures Academy which was awarded over €10 million under the HCI. Led by NCAD in collaboration with IADT and UCD, the Academy will be a professional catalyst for the creative industries in Ireland.

Further notable achievements include: the development of new design-focussed inter-institutional collaborations with industry; 24 additional training initiatives launched by Design Skillnet to assist designers and businesses in the Covid-19 environment; work placements provided to 10 graduates under Design Skillnet's Work Ready Initiative; targeted engagement to develop career pathways in design through working with the Institute of Guidance Counsellors and through developing the 'Design Your Life' video series; and the development of The BIG IDEA Transition Year Programme. Progress has also been made on actions focussed on developing an apprenticeship programme and promoting the relevance of strategic design in non-design courses.

Over the next year, the EGFSN Secretariat will continue to work with the Group to drive further progress on all actions.

4

2020/21 Work Programme

> 2020/21 Work Programme

The National Skills Council (NSC) approved the 2020 Work Programme for the Expert Group on Future Skills Needs (EGFSN). The Work Programme is described in this chapter.

The NSC was established in April 2017 and is chaired by the Minister for Further and Higher Education, Research, Innovation and Skills. Its establishment arose out of the National Skills Strategy which identified that the overall architecture for identifying, prioritising and responding to skills needs should be refreshed. The NSC oversees research and provides advice on the prioritisation of identified skills needs and how to secure the delivery of identified actions. The key elements of the EGFSN model of analysis and horizon scanning, with close engagement with enterprise, continues and has been further strengthened. The EGFSN presents the findings of its sectoral studies to the NSC and makes strategic recommendations to assist the NSC and policy makers in addressing the emerging skills needs.

Skills for a Low Carbon Economy

In 2020, the Department of Enterprise, Trade and Employment commissioned research to determine the demand for, and nature of, the skills required to deliver on key elements of Ireland's [Climate Action Plan](#) to 2030. The Expert Group on Future Skills Needs (EGFSN), which advises the Irish Government on current and future skills needs of the Irish economy, and on other labour market issues that impact on Ireland's enterprise and employment growth, will be the main client. Research and secretariat support is provided to the Group by DETE.

The Government's Climate Action Plan to Tackle Climate Breakdown, published in 2019, sets out the measures through which the magnitude of long-term climate change is to be mitigated through actions to reduce greenhouse gas emissions and decarbonise all sectors of the economy. Some of these measures are further elaborated on in the [National Energy & Climate Plan](#) (NECP) and the [Long Term Renovation Strategy](#). By 2030 the Climate Action Plan (CAP) aims to reduce emissions levels by 30% relative to 2005 levels, including through a commitment that 70% of electricity needs will come from renewable sources. In 2018, 33.2% of electricity in Ireland was produced from renewable sources.

The ultimate objective is to achieve a transition to a competitive, low carbon, climate resilient and environmentally sustainable society and economy by 2050. In order to achieve this objective, Ireland will require a change in its overall emissions trajectory of the order of a 2% decline each year from 2021–2030, and a much steeper decline of 7% per annum between 2030 and 2050; this is to be achieved on the basis of a minimum 80% emissions reduction by 2050, relative to 1990.

This study aims to be a key input into this planning, by identifying the nature, scale and evolution of the skills required by enterprises to facilitate Ireland's transition to a low carbon economy in the years to 2030 in five key areas:

1. Energy efficient retrofit both in Dwellings and Commercial buildings
2. Installation and subsequent servicing of Heat Pumps and other renewable heating systems/ options
3. Development and subsequent maintenance of onshore and offshore Wind energy capacity
4. Development and subsequent maintenance of Solar energy capacity
5. Rollout of comprehensive Electric Vehicle fleet and charging network infrastructure

This will permit the undertaking of evidence-based planning by both Government and the broader low carbon economy stakeholder community around the nature and scale of required education and training responses, as well as around other sources of skills supply.

In order to properly support the delivery of these built environment energy efficiency, renewable energy generation and road transport electrification objectives over the coming decade, this study will seek to:

- Identify the nature and quantify the scale of the skills needs of enterprises supporting the transition to a low carbon economy in the coming years. This will include the development of skills demand forecasts based on a number of assumptions, including the targets set out in Irish Government and EU strategies; and
- Develop a suite of recommendations that can be drawn upon to ensure that the future skills needs of activities supporting the transition to a low carbon economy are fully addressed by stakeholders through the education and training system and any other relevant sources of skills supply.

The report is due to be published in summer 2021.

AI Skills Research

The aim of this study is to identify and understand the skills implications of the growth of AI over the next 5 to 10 years. It will act as an introductory paper to uncover the skills-related issues and challenges that will need to be tackled if the opportunities and potential of AI are to be realised. It will provide a framework, or common starting place, on which further in-depth skills analysis can be built, and from where specific interventions can be recommended with confidence.

The study will focus not on the high-level ICT skills that have been covered elsewhere – by Technology Skills 2022, for example – but on those possibly less technical skills necessary for the responsible deployment, management and regulation of AI, as well as the implications for workers (non-AI-specialists) and ordinary citizens.

AI offers huge potential for productivity improvement and economic growth, but it also has, inherent in it, many risks and issues that must be managed and planned for if its adoption and roll-out are to be a success. When managed properly, AI can bring substantial economic benefits, such as a more competitive industry, cross-sectoral impacts and increased labour productivity. AI can also, for example, reduce labour costs, promote health and safety, and create new jobs, products and services

in almost every sector. As with digitalisation more broadly, it is not just that jobs will be eliminated but that tasks will change, and this will open up opportunities for people to do different work and to work alongside AI – which, in turn, will lead to a need for up-skilling and re-skilling for many workers.

The skills necessary for this successful adoption and roll-out may not be immediately obvious. International policies and strategies published in recent years make it clear that it is not just a matter of putting AI experts to work on developing systems and solutions. There are a whole range of issues and concerns that frame and contain this activity. AI must be deployed in an ethical, safe and trustworthy manner. It must engender confidence in the general public and must not create bigger problems than it solves.

AI needs to be developed within the principles and framing actions set out in international proposals from the European Commission and the OECD.

The report is due to be published in 2021.

Skills for International Financial Services

In April 2019, the Irish Government launched 'Ireland for Finance' the new Strategy for the IFS Sector in Ireland.

One of the aims of 'Ireland for Finance' is to address the skills challenges facing the industry through renewed focus on education and lifelong learning (Skillnet Ireland, Springboard+), STEM education, increased uptake of apprenticeships, greater education-industry linkages, and increasing diversity.

In the context of this strategy, the EGFSN is carrying out a skills needs analysis to identify any shortfalls or gaps and to highlight needs by region.

This study will commence in 2021.



> Appendix 1: Recent Publications by the Expert Group on Future Skills Needs (2013–2020)

Report	Publication Date
Leading the Way	October 2020
Building Future Skills	September 2020
Annual Activity Statement	July 2020
Together for Design	June 2020
Construction Skills – Strand 1	December 2019
The Expert Group on Future Skills Needs Statement of Activity	September 2019
High Level Demand ICT Forecast	March 2019
‘Digital Transformation’: Assessing the Impact of Digitalisation on Ireland’s Workforce	December 2018
2018 Final Report of the Hospitality Skills Oversight Group	September 2018
Addressing the Skills Needs Arising from the Potential Trade Implications of Brexit	June 2018
Winning by Design	November 2017
The Expert Group on Future Skills Needs Statement of Activity 2016	October 2017
Hospitality Skills Oversight Group Interim Report	June 2017
Update on Future Skills Needs in the Food and Drink Sector	April 2017
Monitoring Ireland’s Skills Supply 2016	November 2016
Regional Labour Markets Bulletin	October 2016
National Skills Bulletin	September 2016
Future Skills Needs of the Biopharma Industry in Ireland	May 2016
Vacancy Overview 2015	May 2016

Guidance for Higher Education Providers on Current and Future Skills Needs of Enterprise: Springboard+ 2016	February 2016
Assessment of Future Skills Requirements in the Hospitality Sector in Ireland, 2015-2020	November 2015
Regional Labour Markets Bulletin 2015	October 2015
Monitoring Ireland's Skills Supply: Trends in Education and Training Outputs 2015	August 2015
National Skills Bulletin 2015	July 2015
Vacancy Overview 2014	May 2015
Lifelong Learning among Adults in Ireland, Quarter 4 2014	May 2015
A Study of the Current and Future Skills Requirements of the Marine/ Maritime Economy to 2020	April 2015
The Expert Group on Future Skills Needs Statement of Activity 2014	April 2015
Addressing the Demand for Skills in the Freight Transport, Distribution and Logistics Sector in Ireland 2015–2020	February 2015
Regional Labour Markets Bulletin 2014	September 2014
Monitoring Ireland's Skills Supply – Trends in Education and Training Outputs 2014	August 2014
National Skills Bulletin 2014	July 2014
Vacancy Overview 2013	May 2014
Assessing the Demand for Big Data and Analytics Skills, 2013–2020	May 2014
The Expert Group on Future Skills Needs Statement of Activity 2013	April 2014
Regional Labour Markets Bulletin 2013	March 2014
Guidance for Higher Education Providers on Current and Future Skills Needs of Enterprise: Springboard 2014	February 2014
Addressing Future Demand for High-Level ICT Skills	November 2013
Monitoring Ireland's Skills Supply: Trends in Education and Training Outputs 2013	July 2013

National Skills Bulletin 2013	July 2013
Future Skills Requirements of the Manufacturing Sector to 2020	April 2013
The Expert Group on Future Skills Needs Statement of Activity 2012	April 2013
Guidance for Higher Education Providers on Current and Future Skills Needs of Enterprise: Springboard 2013	February 2013
Vacancy Overview 2012	February 2013



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