


The Expert Group on Future Skills Needs and Ireland's Future Skills Needs to 2020
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The Expert Group on Future Skills Needs and Engagement with Enterprise



About the EGFSN



The Expert Group on Future Skills Needs (EGFSN) advises the Irish Government on current and future skills needs of the economy and on other labour market issues that impact on Ireland's enterprise and employment growth.

It has a central role in ensuring that labour market needs for skilled workers are anticipated and met.



Role of the EGFSN



- Government Advisory Group est. 1997 in response to developing skills shortage
- The membership is comprised of representatives from Employers, Unions, Education & Training Providers & Government Departments.
- Reports to Ministers for Education & Skills and Jobs, Enterprise, & Innovation

Provides advice to Government on skills issues including:


- Projected skills requirements at **national & sectoral levels** & recommendations
- Priority education & training requirements
- Skills that must be met through **inward migration**
- Developments in overseas content/delivery systems & adaptations to Irish provision
- **How existing systems** & delivery mechanisms might be adapted
- Views on programmes supported by the NTF to the Minister
- Ensure recommendations are assessed & **inform on implementation**
- **Labour market information** for consideration for new/existing programmes



EGFSN & National Enterprise Policy

Work of EGFSN linked to Enterprise Developments, National Policy Objectives & Strategies

- Action Plan for Jobs 2012-2015
- ICT Skills Action Plan, 2014
- Strategy for the Manufacturing Sector to 2020
- Trade Tourism & Investment Strategy
- Food Harvest 2020
- Green Economy Strategy
- Migration Policy – eligible occupations
- Further Education and Training & Higher Education Strategies
- Labour Market Activation
 - ICT Conversion
 - Springboard
 - Momentum
 - Skillnets




EGFSN & Input from Enterprise

- EGFSN establishes a coherent view from enterprise on current & future skills needs


EGFSN

- draws on individual inputs of employers & stakeholders
- identifies common & recurrent themes
- Identifies the education & training provision already in place (enrolments, graduates, trends)
- forecasts/develops scenarios at a national scale
- identifies current or emerging gaps


- Make recommendations in consultation with stakeholders re appropriate measures to address gaps & feeds these into mainstream education & training providers and emerging & possible initiatives to address them




EGFSN Methods of Engaging with Enterprise



- Advisory group** for each research project with experts from the sector/occupation - representatives from enterprise, education/training providers, & relevant key stakeholders participate (4-5 meetings)
- Engagement with **40-60 employers** in a sector via structured interviews. Use structured questionnaire
- 20-30 interviews with key stakeholders** in a sector; eg representative bodies, trade associations, professional bodies, state organisations. Use structured questionnaire
- 2-4 workshops with key stakeholders** including both education & training providers, employer bodies and companies. Specific agenda to focus on key issues identified.
- Ongoing engagement with stakeholders & influence decision-making through dissemination of key skills information to stakeholders at conferences & meetings



Research Methodology - Sectors



Phase 1:
Mobilisation

Step 1
Terms of Reference

Step 2
Review published research

Phase 2:
Primary Research

Step 3
Employment profile of sector including employment & occupational forecasts to 2020

Step 6
Identify relevant education & training provision

Step 4
Industry Consultation - representative sample of international & indigenous cos.

Step 7
Education/Training Providers Consultation


Step 5
Industry Representative Bodies & State Agencies Consultation


Step 8
International Best Practice Research and identify key learnings for Ireland

Phase 3: Conclusions & recommendations


Step 9
Workshop with stakeholders to review findings of stakeholder consultations


Step 10
Gap analysis & develop recommendations






Changing Skills Needs of Enterprise


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Trends shaping future employment

1. **Technology** is impacting across skill levels, with basic ICT skills a pre-requisite for many occupations.
2. **Offshoring** - basic processing, assembling/service functions offshored from developed countries
3. **Automation** has reduced the demand for labour - routine roles
4. **Focus is on productivity** and more **knowledge intensive activities** across all occupations
5. **New and emerging sectors** - green technologies, cloud computing, data analytics, creative industries, with changing occupational needs, e.g. upskilling requirements for operatives due to technological and productivity gains within manufacturing
6. **Globalisation** has also led to **increased mobility of labour** with inward and outward migration a strong feature of many labour markets, including Ireland's, and significantly influencing the skills profile of the labour force
7. Significant degree of **churn occurring in the labour market** - New enterprises & jobs are constantly being created while other jobs are lost, enterprises fail, while employees leave jobs - promotion, retirement or return to education and training
8. Demographic Profile in various countries – ageing populations; work age v pensioners, living longer
9. Challenge ahead to ensure flow of new skills and that **the labour force is continually upskilled to meet the demands of the 21st Century workplace**


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Universities & Economic Benefit



Quality of workforce depends on quality, relevance & responsiveness of our Higher Education system

- **Virtually all occupations are becoming more knowledge-based**, increasing breadth of knowledge, rising technical qualification e.g. regulatory requirements, new technologies
- **Quality of our workforce a competitive pillar**
 - local companies supplying into MNCs global supply chains,
 - SMEs winning business abroad &
 - attraction of FDI
 - all of which have significant beneficial impacts on the wider economy
- **Better quality & better paid jobs** in the economy improves living standards
- **Other countries** continue to develop policies to improve skills as competitive advantage
- **With globalisation graduates are become highly mobile & more opportunities internationally:** world competition for skills in e.g. ICT & Life Sciences remains intense
- **Developing the research base** provides opportunities for the development of new products, services and ideas and building the talent around absorbing new research in the economy
- **Nature of FDI has shifted** from low cost/high volume job creation to high value added & skilled
- **Future FDI will depend less on cost factors and more on the quality of our workforce.**

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Universities & transferable skills



EGFSN work - companies generally satisfied with graduates and their range of skills

Lower satisfaction with some of the **transferable skills**

1. **People-related skills** (communication - written, interpersonal, team-working, customer-service skills)
 - the ability of individuals to work more autonomously,
 - be self-managing, self-motivated
 - work as part of flexible teams, - multi-disciplinary
 - adapt to change
2. **Conceptual/thinking skills**
 - collecting and organising information
 - problem-solving
 - planning and organising, learning-to-learn skills
 - project management (at least the tools)
 - think creatively and engage with innovation as a continuous process

These skills are required by businesses in addition to core specialisms & expertise & should be embedded in programmes.eg necessary for interaction with customers, suppliers, regulatory / funding bodies

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Recurring Themes in EGFSN research



- **Adding to/adjusting course or programme** e.g. Pharma – bioinformatics, Business, Science - data analytics, project management tools, Construction engineering – Building Information Modelling
- **Creation of new programmes** - post grad diplomas/certs,
- Benefits of more **interdisciplinary projects**
- **Increasing the no. of graduates for particular sectors** (ICT programmers, engineers)
- The need for more/better **work placement experience** (HEIs)
- **Enhanced industry & HEI engagement** at local level, programme design & content, delivery, especially with SMEs
- Progression outcomes from programmes
- **Promotion/awareness of various job opportunities**, skills requirements eg STEM, languages, work experience, generic skills

Ireland's Future Skills Needs

What skills will be in greatest demand amongst graduates?



- **Skills for Trading Internationally** - Ireland an open economy, needs to trade overseas
- **Foreign language proficiency & cultural awareness** (both numbers and proficiency) in German, French, Spanish & Italian; smaller nos. in Mandarin Chinese, Russian & Arabic
- **International sales** graduates, including compulsory modules on international sales in business courses & a degree & post-graduate diploma in international sales with foreign languages
- Strengthen focus within business & marketing programmes on the potential value and use of **E-commerce and social media applications**
- **Developing the research base** - development of new products, services and ideas and building the talent around absorbing new research in the economy
- **High Level ICT skills**
- **Data Analytics Skills** – data savvy people Big data savvy roles (market research analysts, business and functional managers whose roles require interpreting and using data to drive business performance)

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High Level ICT Skills



- **Strong demand** for people with high level ICT skills across the economy
- Potential **44,500 new job openings** (expansion & replacement demand) over next 6 yrs
- **68,280 ICT professionals** working within the ICT sector & across other sectors
- Forecast average **5% pa growth for these high-level ICT skills to 2018**
- Increasing the employment of **ICT professionals to 91,000 by 2018**
- Specifically Honours, masters & some Phd level graduates from
 - Computing courses (computing software, computer programming & multi-media gaming with a substantial computing content)
 - Electronic & electrical engineering (communications, mechatronics & electronic/ computing engineering).

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Data Analytics Skills



- Big data and analytics is a relatively new area of business activity characterised by rapid growth.

There is demand for:

- Individuals engaged in deep analytical roles who have the statistical and analytical ability to analyse both structured and unstructured data. Maths, statistics and computer science disciplines are the most common sources of skills for these roles. There is a reported global shortage of personnel with these skillsets.
- “Data savvy” persons with the conceptual knowledge and communication skills to frame the right questions to be answered and to challenge the results – all with a view to making better business decisions.
- Supporting technology positions whose role is to develop, implement and maintain the hardware and software tools and databases used to economically extract value from a wide variety of data. The computer science discipline is the most common source for those working in these in roles.
- Business acumen, ethics, good communication, team-working and problem solving skills are key requirements for all in these three skills categories.

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Manufacturing



- Sector currently employs around **200,000 people**
- **Replacement demand in the region of 4,000 to 5,000 persons p.a.** regardless of whether employment expands or not
- Employment outlook depends on addressing domestic competitiveness & a favourable international trading environment
- **Increasing demand for higher skills**, skilled operative jobs replacing elementary jobs & **employment of qualified technicians & STEM professionals continuing to increase as a proportion of total employment**
- A small no. of skills shortages but critical at an operational level to the technical expertise in the sector - toolmaking, machinists, supervisors, polymer technicians and **across a number of engineering disciplines**
- **3rd level role in upskilling requirements for employees through CPD / in company programmes**
- Scenario of up to 20,000 additional jobs in the sector to 2016

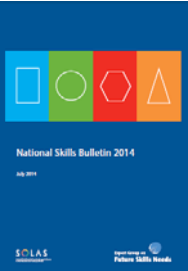
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National Skills Bulletin 2014

- National labour market overview
- Sectoral employment trends and outlook
- Occupational analysis:
 - Employment trends and profiles for 135 occupations
 - Unemployment trends and profiles
 - Labour market transitions
 - Vacancies
 - Sourcing from outside the EEA
 - Indication of skills and labour shortages


Objective - To inform policy design in the areas of:

- Education and training provision
- Active labour market policies
- Immigration
- Career guidance




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**What is being done to address
Ireland's skills needs?**



ICT Skills Action Plan




EGFSN Report, Nov 2013

Continuing strong demand for people with honours degree level+ (NFQ 8 & 9) ICT skills across the economy could lead to 44,500 new job openings arising from expansion & replacement demand over the next 6 years


Government's ICT Skills Action Plan (14 March 2014)

- Graduates from HE supply over 60% of the demand & this plan will boost graduate numbers to meet approx. 74% by 2018 by enhancing core provision, improved retention, conversion programmes & awareness raising, especially for females on ICT careers
- Inward migration will always play a key role in meeting the demand for high-level ICT skills with the issue of up to 2,000 work permits for ICT professionals in 2014



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Employment Permits (Amendment) Bill 2014



- Provides flexibility to deal with changing labour market, work patterns & economic development needs
- Provides for a robust employment permits regime & clarity & certainty to potential investors & employers to better enable business planning & HR decision-making

A legislative basis for the following new Employment Permit types:

- 1. Critical Skills EP (formerly Green Card) as advised by the EGFSN**
 - To attract highly skilled people into the labour market to fill our critical skill shortages
 - Labour Market Needs Test is not required
- 2. General EP (formerly Work Permit)**
 - To attract 3rd country nationals for a range of occupations of a general skill level
 - All occupations eligible unless specified in "Ineligible Categories of Employment" list
 - Labour Market Needs Test is required
 - Salary of €30k



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Further Education & Training Strategy



Strategic Goals:

- **Planning and Funding** - provision will be planned & funded on the basis of objective analysis of needs and evidence of impact
- **Active Inclusion, Literacy and Numeracy Strategy** - provision will support the active inclusion of all citizens with special reference to literacy and numeracy
- **Quality Provision** - provision will meet appropriate national and international quality standards
- **Employer Engagement - linked to labour market needs and will contribute to national economic development**
- **Standing of FET** – reposition FET as a high-status learning path leading to worthwhile career options

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Higher Education Strategy



- A System Performance Framework, stating national priorities and key objectives of Government for higher education was set out by the Minister for Education and Skills for 2014-2016.
- One of the core objectives in the Higher Education performance framework is meeting Ireland's human capital needs across the spectrum of skills areas, including those identified by the EGFSN
- A set of high level system indicators for 2012-16 has been agreed and the Higher Education Authority will report to the Minister annually on these targets



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Aligning Labour Market Activation initiatives with Future Skills Needs of Employers



Springboard & ICT Conversion

The EGFSN Guidance document summarises the skills in demand across various sectors in the economy. Each year it accompanies the Government funded call for up to 6,000 places on part-time HE courses for jobseekers with the aim of progressing them to employment

Priorities for Springboard / ICT Conversion 2015 were:

1. High-level ICT Skills for the ICT Sector and across all sectors
2. Big Data & Analytics skills
3. Skills for Manufacturing
4. Skills to Trade Internationally across all sectors
5. Skills for International Financial Services
6. Construction Skills
7. Entrepreneurship across all sectors
8. Creativity, Design & Innovation across all sectors
9. Freight Transport, Distribution and Logistics
10. Cross Enterprise Skills including management skills, communications and problem-solving skills.



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