PRESS RELEASE

# 44,500 new job openings for people with high-level ICT skills over the next six years- according to new Forfás and Expert Group report

**(MONDAY 4 NOVEMBER 2013)** The continuing strong demand from employers for people with high-level ICT skills across the economy could lead to 44,500 new job openings arising from expansion and replacement demand over the next six years, according to a new report published today by Forfás and the Expert Group on Future Skills Needs. Job openings will be for both new graduates and skilled professionals

The report, *Addressing Future Demand for High-Level ICT Skills*, is a deliverable under the Action Plan for Jobs 2013, forecasts the demand for high-level ICT skills up to 2018 within the ICT sector and across other sectors of the economy. The Report's timely publication comes against a background of strong competition for high-level ICT skills globally. It makes recommendations to ensure that Ireland maintains a strong competitive advantage when it comes to attracting mobile ICT investment and encouraging entrepreneurs to set up, grow and locate their ICT businesses in Ireland. Ensuring an adequate supply of creative and innovative ICT talent from both the domestic and international talent pool is key to that effort.

In 2012, there were 68,280 ICT professionals working within the ICT sector and across other sectors of the economy. The report forecasts that there will be increased demand of on average 5% per annum for these high-level ICT skills up to 2018, increasing the employment of ICT professionals to 91,000.

To achieve the jobs potential, the report notes that all potential policy levers will need to continue to be utilised to increase high-level ICT skills supply. These includes mainstream education and training, conversion and reskilling programmes, continuing professional development and attracting experienced international talent, including expatriate talent. The report highlights the key demand for high-level ICT professionals and notes that the level and quality of domestic ICT graduates is a critical component in the supply of skills and over time adding to the stock of experienced professionals.

The report recommends that additional iterations of the conversion programmes from 2014 and beyond will be essential to contribute to meeting the increasing demand. In just over one year an investment of €10m by the Department of Education and Skills has delivered over 1,500 places on industry designed ICT conversion programmes. These programmes provide graduates from other disciplines the opportunity to pursue new careers in ICT and industry access to a new pool of talented graduates with up to date ICT qualifications.

The output of computer graduates in Ireland has increased by 25% over the last two years and a doubling of graduate output is now expected to be achieved by 2015 - three years ahead of the Action Plan target of 2018. This comes as a result of the implementation of the Government ICT Skills Action Plan which is a collaboration between Government, Industry and the education system.

Welcoming the launch of the report, the Minister for Education and Skills, Ruairi Quinn, TD said "At a time of expanding industry demand for skills this shows what can be achieved when Government, industry and the education system work together.

Just under two years ago when Minister Bruton and I launched the ICT Skills Action Plan, it was estimated that the domestic supply of ICT talent was meeting about 45% of the skills demand of industry. As a result of the measures we have taken under the Plan it is now projected that the supply of graduates from the education system will meet 63% of demand in 2014."

The Minister added "The implementation of key reforms at primary and second level, allied to the introduction of bonus points for maths is also building the mathematical proficiency of students entering third level which is critical to ensuring a strong supply of graduates for all STEM roles. This is evident in the almost 60% increase in the honours level maths take up at Leaving Cert level, over the last 3 years.

"This report provides a very timely input to the review of the ICT Action Plan which my Department is undertaking jointly with the Department of Jobs Enterprise and Innovation," he concluded.

Richard Bruton, TD, Minister for Jobs, Enterprise and Innovation said: "The ICT sector is of strategic importance to Ireland, both in terms of the numbers of jobs employed and its contribution to Ireland's export performance, accounting for €70 billion in exports per annum. ICT skills are already a key focus of the *Action Plan for Jobs* with three of our seven Disruptive Reforms dedicated to ICT, including particular actions aimed at ICT skills. This report will further sustain the effort to ensure Ireland has the necessary skills to meet the opportunity that this sector offers for jobs and growth."

Chairperson of the EGFSN, Una Halligan said "The research highlights the positive employment potential and the large scope for job creation in Ireland if the right steps are taken. Industry has an important part to play here. Improved ICT talent development and retention practices within companies are essential for both experienced employees and the career path development of new graduates.  It is positive that around 90% of the enterprises interviewed for this report are planning to hire new ICT graduates, and that a majority are willing to invest more on in-company training. Another important aspect will be industry's role in raising awareness of the excellent and rewarding careers in the sector and attracting people, particularly women, to the opportunities available."

Martin Shanahan, Chief Executive of Forfás, commenting on the global perspective: "The challenge to meet Ireland's demand for people with ICT skills is set against the background of a strong global demand for ICT talent with other countries also actively competing for these skills.  Several technological and market trends are impacting on the development of ICT related business opportunities and the demand for skillsets and competences.  These include the adoption of cloud computing; the rapid penetration of mobile devices and technologies; emergence of Big Data analytics; adoption of social technologies, IT Security and Micro and Nano electronics.

Having the right policies in place to develop and attract ICT skills to Ireland is of the utmost importance for both foreign direct investment companies and indigenous companies. The successful implementation of measures to boost the supply of ICT professionals in Ireland depends upon the active collaboration of Government, education and training providers and businesses."

The full report and its recommendations are available on the Expert Group on Future Skills Needs website www.skillsireland.ie and the Forfás website www.forfas.ie

**Key Recommendations:**

| 1. Review the scope and governance of the ICT Action Plan |
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| ▪ As part of the planned review of the ICT Action Plan, review the scope to encompass all sources of ICT skills supply and ensure clarity of responsibilities for the overall coordination and implementation of actions. Report on the progress of the updated ICT Action Plan on a half-year basis to the Minister for Education & Skills and Minister for Jobs, Enterprise and Innovation. (new action) |
| **Lead:** Department of Education and Skills, Department of Jobs, Enterprise and Innovation. |

| 2. Boost the Quantity and Quality of ICT Skills Output |
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| ▪ Ensure third level Computing and Electronic/Electrical Engineering programmes remain focused on the development of the core skills that enterprises need in line with internationally accepted curricula, allowing for sub-specialisation in years 3 and 4. Establish a timetable for implementation. (reinforcing action) |
| **Lead:** Universities/IoTs, Higher Education Authority. |
| ▪ Review and streamline where required existing internship programmes each with differing requirements. Expand the volume of structured ICT undergraduate internships opportunities in line with the planned increase in domestic supply and explore ways to increase the absorptive capacity of enterprises, particularly indigenous companies. (new action) |
| **Lead:** HEA, Employer Bodies, Companies, IDA Ireland, Enterprise Ireland. |
| ▪ Run additional iterations of the NFQ Level 8 Conversion programme starting in 2014 as a strategic response to meeting ICT skills demand. Change eligibility criteria for the retention of social welfare payments while on the programme back from 9 months in a 12 month period to 3 months. Jobseeker register data should be "mined" to identify and inform suitable candidates of conversion opportunities. (reinforcing action) |
| **Lead:** Department of Education and Skills, HEA, Department of Social Protection. |

| 3. Inspire Future Talent |
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| ▪ Attract more talent with the right aptitude to careers in ICT, especially women. Communicate career advice to young people, especially girls, at second level – and to their parents on the range of rewarding ICT career opportunities available. Establish and report on initiatives to raise female acceptances on ICT programmes from 15% to 25% by 2018. Draw upon the best practice i.e. annual events such as EU initiative "Cyberellas are IT" and International Telecommunication Union "girlsinict" portal and other programmes, Dell (WITEM) Accenture, Intel, Microsoft and Coder Dojo. (reinforcing action) |
| **Lead:** Science Foundation Ireland (Discover Science & Engineering), Higher Education Authority, ICT Ireland, Engineers Ireland, Companies. |
| ▪ Organise one-day ICT skills events and practical workshops, with ICT skills competitions for different ages, to raise overall awareness and to attract undiscovered talent of all ages to ICT careers, including those pursuing non-formal entry to ICT careers. (new action) |
| **Lead:** Employer Bodies, Companies, Science Foundation Ireland (DSE) |

| **4. Promote Ireland Internationally as the Centre for Global ICT Talent** |
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| ▪ Establish a single website with public and corporate involvement to attract international ICT talent - building on the best of existing websites and balancing the needs of both indigenous and FDI companies. It should draw upon the example of the "Make it in Germany" and "Contact Singapore" portals. Utilise the EURES system more fully for the sourcing of experienced ICT professionals from within the EU/EEA area. (new action) |
| **Lead:** IDA Ireland, Enterprise Ireland, Companies, Dept of Social Protection (EURES). |
| ▪ Organise career fairs abroad to attract back expatriate ICT talent and high-level ICT talent in locations with a surplus of ICT skills. Such career fairs should be focused around a group of companies with actual jobs to fill. The potential use of Irish embassies abroad could be considered for such events.(new action) |
| **Lead:** Enterprise Ireland, IDA Ireland, Dept of Social Protection (EURES), Companies. |

| **5. Addressing the Skills Challenge** |
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| ▪ Enterprises to move further towards being "skills producers" of talent including the development of experienced employees and supporting the career pathways of new graduate entrants. Encourage ICT talent management and retention systems within enterprises in line with the example of Engineers Ireland Continuing Professional Development Programme. An annual advanced ICT talent management and retention seminar should be run to share best practice. This would address the need by enterprises to be aware and more effective in managing HR which can support, attract and retain the best talent, both from within Ireland and from other countries. (new action) |
| **Lead:** ICT Ireland, Engineers Ireland, Companies. |
| ▪ Build up ICT skills learning platforms by public and private bodies which provide for on-line training at various levels for ICT professions, students and unemployed persons - including for industry-based training and certification aimed at up skilling ICT practitioners and retraining career changers. This should provide modules and programmes at various levels, up to Master's Degree. This will help to foster ICT as a profession. (new action) |
| **Lead:** Universities/IoTs, Skillnets, SOLAS/ Education &Training Boards, Companies. |
| ▪ Establish initiatives to develop e-leadership professional skills (persons with deep expertise in ICT and transversal business and entrepreneurship skills) to drive increased business value and innovation from the use of ICT within enterprises – in conjunction with third level institutions and enterprise. Draw upon learning at a European level (e.g IT-vest in Denmark and the UK Cranfield IT Leadership programme). (new action) |
| **Lead:** Universities/IoTs, Irish Computer Society, Companies. |

| 6. Maintain the ICT skills development capacity of Higher Education Institutions |
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| ▪ Invest in maintaining the ICT skills development capacity of HEIs.  This should include up-grading and maintaining the laboratory infrastructure to an up-to-date industrial standard. Create opportunities for existing ICT teaching staff to continually develop their knowledge of the latest technology trends through collaboration between institutions and enterprise; including for short in-service courses. (new action) |
| **Lead:** Universities/IoTs, Higher Education Authority, Companies. |

**ENDS**