



# ICT SKILLS Action Plan



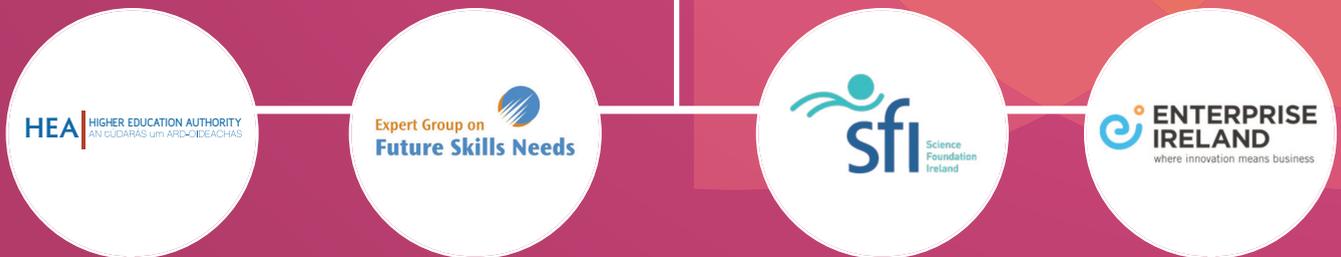
Government, Education and Industry working together to  
make Ireland a global leader in ICT talent

2014 - 2018

This Action Plan is a collaborative effort by Government, the education system and industry to meet the goal of making Ireland the most attractive location in the world for ICT Skills availability.



The education system plays a critical role in delivering skilled graduates and promoting interest in ICT



Government agencies and State-supported bodies involved in the development and implementation of the Action Plan include:



## Foreword



There are few drivers which will be more important to global job creation in the coming years than the development of ICT skills. Ireland already has huge strengths in this area: a thriving ICT enterprise base, both indigenous and multinational, the quality and responsiveness of our education system and the talent and flexibility of our workforce; all poised to develop the opportunities opened up by new technologies. But we also recognise that Ireland is part of a global race for talent and that we are increasingly competing for inward investment and export opportunities on the basis of the quality of our workforce.



This Action Plan builds on our strengths and is intended to meet the Government's ambition, set out in the Action Plan for Jobs that Ireland will become the most attractive location in the world for ICT Skills availability. In developing this new Plan we have worked extensively with industry, including a Ministerial consultation with industry representatives and the education sector, and have heard first-hand the opportunities and challenges in the sector. This Plan is also informed by the detailed work of the Expert Group on Future Skills Needs.

Before the publication of the first Action Plan in 2012, domestic supply from higher education programmes only met 45% of demand. That figure is now estimated at over 60%, and we are setting out an ambitious target of meeting three quarters of demand through domestic supply by 2018. This will be met through a range of actions in the education system including enhancing core provision and retention, continuing to provide conversion programmes and focusing the skills of our young people, especially young female students, on ICT careers.

Given the global nature of this industry, inward migration will always play a key role in meeting the demand for high-level ICT skills. In this Plan, we set out actions designed to make Ireland a destination of choice for ICT professionals, both expatriates and international talent, through a range of measures to promote Ireland internationally as a destination for highly skilled ICT professionals and a targeted and user-friendly employment permits system.

These collaborative actions will complement the key role which the industry itself has as a "skills producer", through improved talent management systems to attract, upskill and retain the best ICT talent and the development of career pathways for new graduate entrants. Taking all these actions together, and by working in a collaborative way across Government, State agencies, the education sector and industry, we will ensure that the ICT sector in Ireland continues to thrive with benefits for everyone in our society.

**Ruairi Quinn T.D.**  
**Minister for Education**  
**and Skills**

**Richard Bruton T.D.**  
**Minister for Jobs, Enterprise**  
**and Innovation**

## 1. ICT: A strategic sector for Ireland

The ICT sector is of vital strategic importance to Ireland, both in terms of the numbers of high skilled professionals employed and its significant contribution to export performance, accounting for €70 billion per annum. ICT is also widely used across other sectors of the economy. Around 60% of ICT professionals are employed in the broad ICT sector, while 40% are employed across other sectors of the economy.

Globally, the sector is in the midst of a disruptive growth and innovation phase. This includes the adoption of cloud computing, the penetration of mobile devices and technologies and the Internet of things, the emergence of Big Data analytics, IT security, micro- and nanoelectronics and the adoption of social technologies in both the personal and business environment.

This disruptive change presents challenges in terms of the supply of ICT talent. However, the opportunities are enormous for those countries that respond best in meeting these new skills needs.

## 2. Identifying the skills needs of the industry

The skills demand for ICT talent is a global one. By 2015, it is estimated that there will be a shortage of up to 864,000 ICT professionals across the EU and the European Economic Area (EEA).

Ireland is likely to face an average increase in demand for high-level ICT skills of around 5% a year out to 2018 with the employment of ICT professionals anticipated to rise to just over 91,000.

Meeting the continuing strong domestic demand for ICT professional skills will require an increase in the numbers of high-quality computing and electronic/electrical engineering graduates, supplemented by higher education conversion and upskilling programmes for jobseekers, further investment by business in employee training as well as though the enhancement of the skills pool here in Ireland by the attraction of appropriately skilled professionals from across Europe and beyond.

The development of the new ICT Skills Action Plan has been informed by the EGFSN report Addressing Future Demand for High Level ICT Skills which examines the potential demand for high-level ICT skills at National Framework of Qualifications (NFQ) Levels 8 and above over the period 2013 to 2018 and at progression levels NFQ 6/7, arising both within the broad ICT sector and across other sectors of the economy.

The report indicates a continuing strong demand for high-level ICT skills with 44,500 job openings forecast to arise over the period to 2018 from both expansion and replacement demand. It concludes that all potential policy levers will need to be utilised to build up the ICT skills supply pipeline including through education, conversion and reskilling programmes, continuing professional development and attracting experienced international talent, including expatriate talent.

### **3. Responding to industry needs: the 2012 Action Plan**

The first ICT Action Plan was developed in 2012 as a collaborative industry-Government approach to building the domestic supply of high level ICT graduates. In line with the emerging skills gaps being identified, the Plan's key targets included doubling output of level 8 mainstream graduates by 2018, and steps to increase supply in the short term through conversion and reskilling programmes.

Significant progress has been made in meeting targets in the Plan.

- Doubling of NFQ level 8 graduate output is now expected to be achieved by 2015 - 3 years ahead of schedule.
- There has been a 58% increase in the number of students presenting for higher level maths over the past 3 years.
- 2,000 graduates on ICT reskilling/conversion courses at NFQ level 8/9+

Before the publication of the Plan, only 45% of the skills demand was met domestically from higher education programmes. The situation has been transformed, with the education system expected to meet over 60% of industry demand in 2014.

### **4. Building on the momentum: scope of the new Plan**

The focus of the new Plan is to build the supply of graduates and skilled professionals with core ICT and electronic/electrical engineering qualifications at honours degree level and above. It is at these levels that the majority of new job openings are expected to be created and which are critical to the expansion and development of ICT business activity within both the ICT sector itself and across other sectors of the economy.

The scope of the new Plan is being broadened to encompass measures to increase the supply of highly skilled ICT professionals from abroad to complement the increase in the domestic supply of high level ICT graduates from the education system. This includes measures to streamline the operation of the employment permit regime and measures to promote Ireland as a destination for skilled ICT professionals.

## **5. Developing the Plan: A collaborative approach between Government and Industry**

The Plan has been developed as a collaboration between the Department of Education and Skills and the Department of Jobs, Enterprise and Innovation, as well as a range of State agencies, including the HEA, IDA, EI, Forfás and SFI, together with the higher education institutions and a range of industry stakeholders.

A series of consultations took place with stakeholders in the preparation of the Plan in November and December 2013. In January 2014, the Minister for Education and Skills, Ruairi Quinn, and the Minister for Jobs, Enterprise and Innovation, Richard Bruton, co-chaired a consultation with industry representatives and representatives of the Higher Education sector, as well as the relevant State Agencies.

## **6. Making Ireland a global leader for ICT talent**

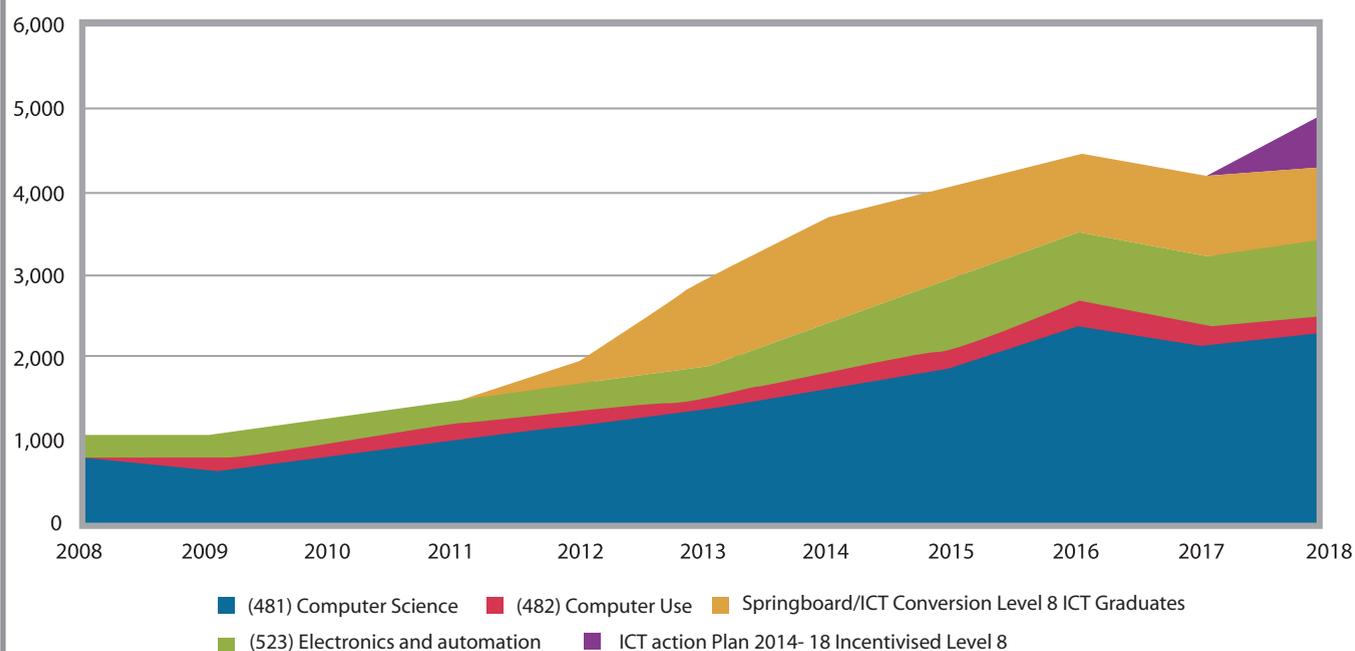
Our ambition is to make Ireland a global leader for ICT talent and skills. Our overarching target is to meet 74% of forecast industry demand for high-level ICT skills from the education system by 2018, up from the current level, estimated at over 60%.

In line with industry norms, it is envisaged that remaining demand will be met by continuing to attract highly skilled people from abroad. The continued upskilling and development of existing employees in the sector by industry will also make a vital contribution to achieving our goals.

We will meet our ambitious targets by focusing on three strategic priorities. We will:

- **Increase output of high-level graduates**
  - Incentivise additional 1,250 ICT undergraduate places in higher education institutions per year, with a target of 1,037 additional graduates per annum from the end of 2018.
  - Continue ICT upskilling and NFQ Level 8 conversion courses, in collaboration with industry in the design of programmes and the provision of structured work placements
- **Enhance ICT capacity and awareness in the education system.**
  - Support maths and ICT skills development through promotion and attraction measures, where possible facilitated by industry inputs, allied to curriculum reforms. This will include industry in “adopt-a-school” programmes;
  - Increase in retention rates on higher education ICT programmes from 80% to 83% over the life time of the Plan;
  - Support measures to align programmes with enterprise needs.

## ICT Level 8 Graduates by Field of Study 2008 to 2018



- **Ensure Ireland maintains a strong ICT talent pool and promote Ireland as a centre for high-level ICT Skills**

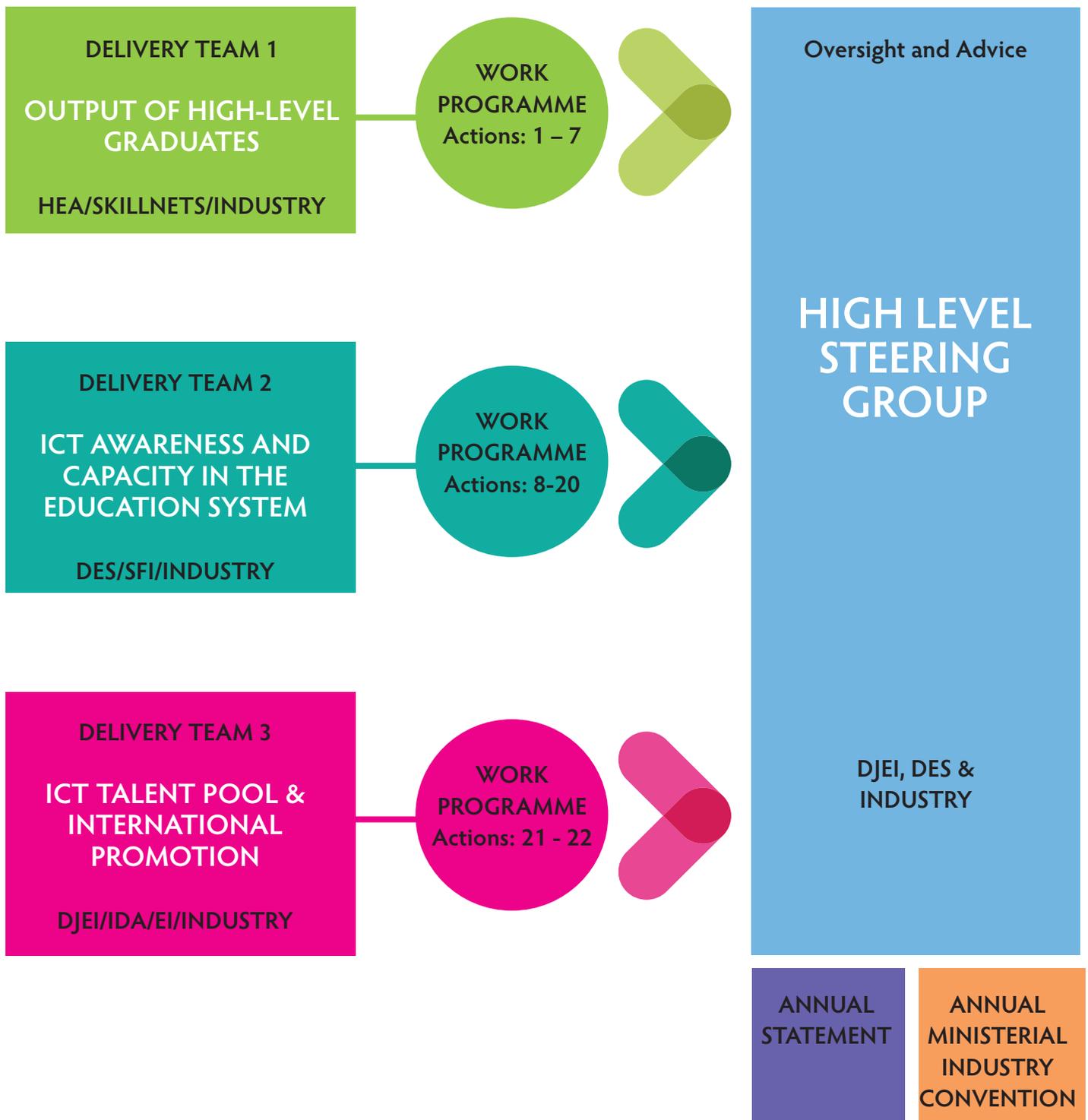
- Increase efficiency in the employment permits process, to attract highly skilled individuals and introduce new legislation and associated enhancements to the application process;
- Facilitate the issuance of up to 2000 employment permits per year to experienced ICT professionals with skills in high demand. Given the rapidly evolving nature of the industry, these high-level ICT occupations will be reviewed on a six-monthly basis;
- Promote Ireland internationally as a destination for Highly skilled ICT professionals including through the development of a single website portal to attract international talent;
- Organise careers fairs abroad with the active participation of companies which have open vacancies.

These collaborative actions will serve to complement the ongoing work by industry itself to upskill its own talent base.

## 7. Making it happen: Implementation structures

Overall implementation of the Plan will be driven by a High Level Steering Group under the auspices of the two Ministers. Three cross-sectoral delivery teams will develop and implement work programmes covering the actions in each of the strategic priority areas. A vital feature in the approach to implementation will be the continued central engagement of industry as a key partner in the process. The delivery teams and High Level Steering Group will have appropriate regard to the work of other groups, including the recommendations of the STEM Education Review Group. The High Level Steering Group will review the effectiveness of the implementation structures after 18 months.

# Implementation Structures



# Table of Actions

# Strategic Priority One:

Increase output of high-level graduates

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
<p><b>1. Incentivise provision of an additional 1,250 ICT undergraduate places per year in higher education institutions</b></p> <p>Issue call for expressions of interest in providing additional places in identified ICT skills areas leading to full level 8 award</p> <p>Undertake an audit of capacity in ICT discipline areas in higher education institutions</p>	<p>HEA/HEIs</p> <p>HEA/HEIs</p>	<p>Number of additional places provided each year</p> <p>Additional 1,037 graduates each year</p> <p>Potential capacity issues identified and considered</p>	<p>2018+</p> <p>2014</p>	<p>Commitments to provide undergraduate work placements for incentivised course places</p> <p>Support promotion of initiative and raise awareness of employment opportunities.</p>
<p><b>2. Increase in retention rates</b></p> <p>Additional measures to be sought from higher education institutions to increase retention of ICT students, drawing on research and practice that demonstrates success of additional interventions in Mathematics, learning to learn and communications. Measures will be made a requirement in order to access targeted skills funding</p> <p>National Forum for Enhancement of Teaching and Learning to conduct a project which co-ordinates evaluation, sharing and promotion of good practice on retention of ICT students at NFQ Levels 6-9.</p>	<p>HEA/HEIs</p>	<p>Steady increase in level 8 ICT retention: up from 80% currently to 83%, as per HEA ICT numbers projections</p> <p>Targeted improvement in level 6/7 retention from 63%-65% to 70% by 2018</p> <p>Enhanced student engagement in terms of classroom attendance and participation and overall programme outcomes.</p>	<p>3% increase in Level 8 completion by Q4 2018</p> <p>Level 6/7 5-7% increase by Q4 2018.</p>	<p>Contribution in the form of industry guidance; review and contribution to course design; participation in mentoring; promotion of ICT careers and work placement</p>

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
<p><b>3. Launch new rounds of conversion/upskilling programmes in 2014</b></p> <p>Issue a call for further ICT conversion/upskilling courses in February 2014</p> <p>EGFSN guidance on target skills areas prepared in advance with input from enterprise agencies and industry reps</p> <p>Launch new round of ICT skills conversion/upskilling programmes</p>	DES/HEA	<p>Number of ICT course places filled</p> <p>No of work placements provided</p> <p>Graduate output</p> <p>Employment outcomes</p>	Tender for the delivery of the programme to be issued February 2014 with courses to roll out from June 2014	<p>Input to call via guidance material/briefings</p> <p>Promotion of call by industry associations</p> <p>Industry/education partnerships with higher education institutions in submitting course proposals and delivery, including work placements</p> <p>Participation in assessment and selection panel(s)</p> <p>Engagement with graduates via work placement and hiring</p> <p>Promote awareness and engagement with initiative by participants and employers</p>
<p><b>4. Delivery of Skillnets ICT conversion programmes</b></p> <p>Delivery of: ICT Ireland Skillnet Conversion Programmes in Software Engineering, Java Fundamentals and Cloud Computing &amp; Virtualisation.</p> <p>ISA Software Skillnet Cloud Careers &amp; UX Conversion Programmes</p> <p>ITAG Skillnet Software Testing Conversion Programme</p> <p>Animation Skillnet Game Production &amp; Animation Production conversion programmes</p>	Skillnets/ICT Ireland/ISA/ITAG/DBIC	<p>240 unemployed participants on ICT conversion programmes</p> <p>Progression outcomes of participants.</p>	Programmes delivered from Q1 – Q4 2014	<p>Input to the development of ICT conversion programmes</p> <p>Provision of suitable work placements opportunities</p> <p>Provision of training facilities for conversion programmes</p> <p>Promotion of ICT programmes</p>

# Strategic Priority One:

Increase output of high-quality graduates

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
<p><b>5. Deliver Skillnets ICT programmes to industry</b></p> <p>Skillnet networks to deliver a wide range of ICT technical and management programmes to increase the number of ICT skilled professionals e.g. Big data analytics, UX Design Principles, Cloud Computing, Product Management.</p> <p>Key programmes include; ISA Software Skillnet Postgraduate Diploma and MSc in Product Management</p> <p>ICT Ireland Skillnet Postgraduate Diploma and MSc in Technology &amp; Innovation</p> <p>Introduce three new ICT training courses under Skillnets Future Skills Needs Programme (FSNP)</p>	<p>Skillnets/ICT Ireland/ISA/ITAG/DBIC</p>	<p>1700 employed participants completing range of ICT technical and management programmes</p> <p>Provision of places for 200 unemployed participants on these programmes</p> <p>100 employed participants undertaking level 9 programmes designed by Skillnet networks</p> <p>New programmes launched.</p>	<p>2014</p>	<p>Promotion and participation in ICT programmes</p> <p>Investment in ICT programmes jointly funded by Skillnet Networks and Industry</p> <p>Leadership of enterprise networks and identification of training needs.</p> <p>Industry experts input to the development of the new level 9 programmes for industry practitioners.</p>
<p><b>6. Implement the higher Education System Performance Framework 2014-16</b></p> <p>Implementation of system objective 1:</p> <p>To meet Ireland's human capital needs across the spectrum of skills by engaged institutions through a diverse mix of provision across the system and through both core funding and specifically targeted initiatives</p>	<p>HEA</p>	<p>Level of achievement against high level indicators in relation to ICT/STEM skills.</p> <p>Publication of Annual System Performance report</p>	<p>Report Q2 2014</p>	<p>Participation in IBEC Employers Survey</p>

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
<p><b>7. Work Placements</b></p> <p>Support development of web portal to facilitate work placements for participants/graduates on targeted ICT initiatives and to assist in job seeking and recruitment.</p> <p>Feasibility work includes review and collaboration with employment support services of the Department of Social Protection</p>	<p>EI/HEIs/HEA/DSP/ Industry</p>	<p>Number of employers engaged and using the portal</p> <p>Number of placement opportunities featured on portal</p> <p>Number of placements facilitated via web portal</p> <p>Number of CVs active and number of employer contacts made</p>	<p>Subject to feasibility being confirmed, portal operation for targeted ICT initiatives (eg.Springboard/ICT skills conversion programme) Q1 2015</p>	<p>Input to the initial and ongoing development of the web portal</p> <p>Provision of suitable work placements opportunities</p> <p>Use of portal in recruitment processes</p>

# Strategic Priority Two:

Enhance ICT capacity and awareness in the education system

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
<p><b>8. Promote career opportunities to primary and second level students</b></p> <p>Highlight and promote STEM career opportunities and career pathways open to students, particularly those in ICT fields; encourage students to retain their STEM subjects at post-primary level and pursue STEM courses at third level. Specific actions will include:</p> <p>Carry out a national survey of undergraduate students to identify why they did or did not choose STEM courses after school</p> <p>Develop and manage a database of trained STEM volunteers including people with a variety of ICT backgrounds, to engage with schools and teachers nationwide and give career talks (focused on Junior Cycle &amp; TY students)</p>	<p>SFI (SFI Discover: Smart Futures programme)</p>	<p>Increased awareness of STEM career opportunities among post-primary students, parents, guidance counsellors and teachers as evidenced by:</p> <ul style="list-style-type: none"> <li>- Detailed analysis of results of national survey of undergraduates</li> <li>- Training of 450+ STEM volunteers to give careers talks (50% industry – 50% research)</li> <li>- The development of an online booking system for schools</li> </ul>	<p>Q2 2014</p> <p>Q1 2014 to Q4 2016</p> <p>Q1 2014 to Q4 2016</p>	<p>To make sufficient numbers of industry employees available for communications training to enable them to carry out school/teacher engagement</p> <p>To allow industry employees time to carry out school visits</p>

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
<p>Launch a media campaign with a high profile STEM Ambassador to communicate careers messages encompassing ICT , to students, teachers, parents, guidance counsellors etc.</p>		<ul style="list-style-type: none"> <li>- To be able to offer a careers talk to each of the 723 post-primary schools in the country by 2016</li> </ul>	<p>Q2, Q3 2014</p>	<p>To support and endorse any media campaign by participating in photo-calls, providing quotes for press releases</p>
<p>Deliver career pathways information in an easily accessible manner online</p>		<ul style="list-style-type: none"> <li>- Delivery of media campaign with high-profile ambassador (clippings, video views, website traffic)</li> </ul>	<p>Ongoing</p>	<p>To provide appropriate information on ICT career pathways and skills (Engineers Ireland STEPS programme)</p>
<p>Deliver a series of career profiles highlighting female role models in STEM, including those with ICT backgrounds, on Smart Futures.ie</p>		<ul style="list-style-type: none"> <li>- Creation and accessibility of STEM career pathways information mapped out and easily accessed online</li> </ul>	<p>Q3, Q4 2014 - 2016</p>	<p>To provide access to female employees working in ICT areas for interviews and profiling</p>
<p>Work with SFI-funded Research Centres to develop work placement opportunities for transition year student. As well as supporting established programmes such as the STEPS 'Engineering your Future' scheme, CareersPortal 'Work Xperience' and CRANN Cool Jobs programmes.</p>		<ul style="list-style-type: none"> <li>- Creation and publication of regular career posts on SmartFutures.ie highlighting female role models in ICT fields</li> <li>- The development of a coordinated TY work placement initiative within SFI-funded Research Centres</li> </ul>		
<p>Support and promote competitions aimed at post-primary students encouraging them to develop STEM skills using innovate communications methods</p>		<ul style="list-style-type: none"> <li>- Includes the sponsorship of the Apps4Gaps data analytics competition and the Eircom Junior Spider Awards etc.</li> </ul>		

# Strategic Priority Two:

Enhance ICT capacity and awareness in the education system

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
<p><b>9. Develop a framework to facilitate the expansion of "adopt a school" type programmes</b></p> <p>Framework document for use by industry and schools to be drawn up which will facilitate the adoption process</p>	Industry and DES	Schools receive support from industry across range of areas	To be agreed by delivery team	<p>Provide IT equipment</p> <p>Provide tech support</p> <p>Provide software development classes</p> <p>Provide software/hardware troubleshooting classes</p> <p>Provide guest speakers to classes</p> <p>Provide work placement opportunities for transition year students</p>
<p><b>10. Enhance higher education awareness-raising measures</b></p> <p>HEA to provide support to institutions in delivering Summer Computing Camps to encourage second-level students to consider ICT careers</p> <p>Higher education institutions to continue to support Coder Dojo in provision of space, administrative supports and mentoring</p> <p>Enhanced focus on attracting female participants, particularly in calls for targeted provision</p>	HEIs/HEA	<p>Support 14 annual summer camps at 14 higher education institutions, offering ICT-related courses, 30-50 participants per camp'</p> <p>All relevant higher education institutions linked to or supporting Coder Dojo initiatives in their regions or clusters as appropriate</p> <p>Marketing and promotion to encourage increase in female participation in Springboard, ICT Skills and targeted mainstream provision. Links with partners such as Silicon Republic.</p>	<p>Annually to 2018</p> <p>All by 2018</p> <p>Annually to 2018</p>	<p>Industry sponsorship or in-kind supports;</p> <p>ICS Tech Week</p> <p>Industry assistance to higher education institutions in promoting and championing opportunities for women in computing, e.g. via Multinational Technology Forum; ICT Ireland; IDA; EI; Engineers Ireland women in Technology and other industry networks</p>

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
<p><b>11. Implement Junior Cycle Reform programme</b></p> <p>Finalise and roll out courses in Digital Media Literacy and Programming &amp; Coding</p> <p>Embed key skill of digital technology into all subjects and short courses as they are revised</p> <p>Ensure statements of learning are fully embedded e.g. <i>“uses technology and digital media tools to learn, communicate, work and think collaboratively and creatively in a responsible and ethical manner”</i></p> <p>Ensure all teachers receive Continuous Professional Development in relation to new junior Cycle and specifications</p> <p>Standardised testing for second years in maths and science</p>	<p>DES DES/NCCA</p> <p>DES/NCCA</p> <p>DES/NCCA</p> <p>DES</p>	<p>Availability in schools</p> <p>Uptake by students</p> <p>Revision of syllabuses.</p> <p>CPD rolled out to all (c.26,000 Whole time equivalent) post-primary teachers over the lifetime of implementation.</p>	<p>Finalise courses in Spring 2014 Available to schools from September 2014</p> <p>Revised English specification available to schools September 2014.</p> <p>Revised Science specifications available to schools in 2015.</p> <p>Remaining subjects to be implemented on a phased basis up to 2020</p> <p>Spring 2017 (maths) and Spring 2018 (science)</p>	<p>Development of short courses for new Junior Cycle</p>

# Strategic Priority Two:

Enhance ICT capacity and awareness in the education system

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
<p><b>12. Implement Project Maths</b></p> <p>Ensure all teachers receive Continuous Professional Development in relation to Project Maths</p>	DES	<p>Improved take-up of Higher Level Maths</p> <p>Better Maths skills for 2nd level students</p> <p>Continue CPD roll out to all (c.5,800) post-primary maths teachers.</p> <p>Post-graduate course for “out of field” maths teachers</p>	<p>First mainstream all strands LC is 2014 and JC 2015</p> <p>2nd cohort of teachers currently studying</p>	Support for roll out of Project Maths
<p><b>13. Implement Literacy and Numeracy Strategy</b></p>	DES	<p>Increase proportion of 15-year olds at Level 4 or above in PISA by 5 percentage points;</p> <p>Halve percentage of students at 15 years old scoring at or below L1;</p> <p>Increase proportion taking higher level mathematics in Leaving certificate to 30%;</p> <p>Increase proportion taking higher level Maths in JC to 60%</p>	Over lifetime of strategy, out to 2020	
<p><b>14. Build on the positive impacts of the bonus points initiative for Higher Level Maths</b></p> <p>Review of bonus points to be carried out by the IUA</p>	HEIs	<p>Increase in the take up of Higher Level maths to 30% during the lifetime of the National Literacy and Numeracy Strategy</p> <p>Review will consider the impact and future of the bonus points initiative.</p>		Over the lifetime of the National Literacy and Numeracy Strategy to 2020

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
<p><b>15. Revise Senior Cycle Sciences</b></p> <p>Finalise the specifications for senior cycle sciences</p>	NCCA/DES	Revision of syllabuses	2014	
<p><b>16. Revise applied mathematics specification</b></p> <p>Develop background paper on applied mathematics</p>	NCCA		2014	
<p><b>17. Revise primary mathematics syllabus</b></p> <p>Publication of background research papers</p>	NCCA		2014	
<p><b>18. Launch and Implement the new Digital Strategy for Schools</b></p> <p>Publish and implement the new digital strategy which will set out a policy direction for the use digital technologies in teaching, learning and assessment for the next 5 years.</p>	DES	<p>Increased ICT capacity and usage in schools</p> <p>Increase in numbers of students applying for ICT programmes in higher education institutions</p>	2014	<p>Engage with Digital Strategy Development through public consultation process and ICT Ireland's participation on the ICT in Schools Steering Group</p>

# Strategic Priority Two:

Enhance ICT capacity and awareness in the education system

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
<p><b>19. Include ICT in Continuous Professional Development for Teachers</b></p> <p>Inclusion of ICT in all continuing professional development for teachers for example a new course has been developed - Active Learning in Literacy and Numeracy using Tablet Devices.</p>	DES & PDST	New online and face to face courses rolled out to teachers	Q1-Q4 2014	
<p><b>20. Promote Ireland internationally as a destination for high level ICT skills</b></p> <p>Devise and implement a programme around a single website portal, with agency and industry involvement, to attract international technical talent, balancing the needs of both indigenous and FDI companies.</p> <p>Organise careers fairs abroad, involving companies with open vacancies, to attract expatriate and international technical talent.</p> <p>Promote international awareness of the ICT Action Plan and Ireland's commitments in this area</p>	Enterprise Ireland/IDA/ Department of Social Protection/ Department of Foreign Affairs and Trade/Irish Software Association/ ICT Ireland/ ICT industry	<p>Portal to be consistently in top 3 in searches for 'global technical talent'</p> <p>Active promotion by EI and IDA offices overseas and by embassies.</p>	Detailed proposal to be completed by Q3 2014	<p>Participation in working group</p> <p>Active participation in portal and Careers missions;</p> <p>ICS to support immigrating ICT professionals.</p>

# Strategic Priority Three:

Ensure Ireland maintains a strong ICT talent pool and promote Ireland as a centre for high-level ICT Skills

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
<p><b>21. Increase efficiency of the Employment permits system to facilitate access to high level ICT skills from overseas</b></p> <p>Employers will be facilitated through the issuance of up to 2000 employment permits per annum in the ICT occupations identified by the EGFSN report as in critical short supply. This will be reviewed on a six-monthly basis to monitor progress in addressing the skills shortage.</p>	DJEI	Employers are able to secure the critical ICT skills they need	Q2 2014	Stakeholder feedback
<p>Enactment of Employment Permits (Amendment) Bill</p>	DJEI	Creation of new categories of Employment Permit including Critical Skills Employment Permit; measures to facilitate access to Irish labour market by skilled ICT professionals in shortage areas and their families	Q1 2014	Stakeholder feedback
<p>Introduction of eForm</p>	DJEI	20% reduction in rejection of applications with corresponding improvement in processing time, leading to faster processing times, including for ICT professionals	Q1 2014	Stakeholder feedback

# Strategic Priority Three:

Ensure Ireland maintains a strong ICT talent pool and promote Ireland as a centre for high-level ICT Skills

Actions/Tasks	Lead Responsibility	Success Criteria/Output	Timeframe	Industry inputs
Introduction of Trusted Partner registration scheme	DJEI with assistance of IDA, EI, Department of Foreign Affairs and Trade	A fast track for selected pre-registered employers to facilitate hiring of non-EEA professionals with key skills. First priority target group in 2014 is IDA/EI clients	Q2 2014	Stakeholder feedback
Design and disseminate awareness-raising e-brochure that highlights the attractiveness and advantages of Ireland's Employment Permits system	DJEI	Greater awareness of Ireland's EP system resulting in greater uptake by non-EEA experienced ICT professionals possessing the skills that are in short supply	Q3 2014	
Participate in Web Summit 2014	DJEI	Increased uptake by non-EEA experienced professionals possessing skills in short supply	Q2 2014	
ePayments	DJEI	Improvement in processing times; user-friendly for non-EEA based clientele		
<b>22. Run an annual advanced ICT talent management and retention seminar to share best practice among companies in upskilling and HR talent management.</b>				
Organise and run an annual advanced ICT talent management and retention seminar.	ICT Ireland and Engineers Ireland.	An advanced ICT talent management and retention seminar run	Annually 2014 – 2018	ICT Ireland and Engineers Ireland



