E-SKILLS

Contents

Commission co-opts private sector in grand ICT skills venture

The European Commission in March is due to launch an initiative designed to close the gap between an unskilled workforce and the EU's growing demand for information and communications technology (ICT).

Neelie Kroes, Commission vice president for digital affairs, will launch a so-called Grand Coalition for Digital Jobs and Training at a conference in Brussels on 4-5 March, during which she will seek to confirm partnership 'pledges' from the private sector.

The EU executive is seeking collaboration on industry-led training, assisting labour mobility, certifying skills, improving school and university curriculums, and creating an entrepreneurs friendly environment for start-ups.

It will also seek to help the sector shrug off a dowdy reputation that is deterring young people generally, and specifically women.

Kroes' call to action in Switzerland

Kroes paved the way for the launch

with a call for action at the World Economic Forum in Davos, Switzerland, on 24 January, where she sought support behind the scenes from senior executives in the ICT sector to get concrete pledges and support for the scheme.

A shared roadmap and implementation plan will be presented by the Grand Coalition for Digital Jobs and Training at the conference where a list of concrete high-impact actions will have to be implemented in the short term.

The EU executive has already collected pledges on new jobs, internships, training places, start-up funding and free online university courses from companies such as Nokia, Telefónica, SAP, Cisco, Hewlett-Packard , Alcatel-Lucent and Randstad.

EurActiv understands that during

the conference, SAP will announce an extension of its Academy Cube initiative.

The Cube aims to identify professional opportunities for young Europeans and offer them suitable training programmes to facilitate recruitment in German companies.

The initiative includes several of the largest German IT companies and is working with the German government to dovetail potential education and skills programmes with strategic gaps and identified future needs for innovation.

SAP's pledge to work with the Commission will open the door for this scheme to be extended to many more member states, and to develop into a pan-European initiative.

Federations joining in the coalition

In addition to private-sector companies, the Council of European Professional Informatics Societies and Digital Europe – the European ICT federation – have also committed to provide strategic support.

Startup Europe, a single platform for tools and programmes supporting people wanting to set up and expand web companies, will also join in an attempt to boost ICT entrepreneurship.

A key hurdle affecting the new initiative will be "launch fatigue", as the jobs and growth agenda has already seen many high-profile official kick starts that have drifted away from public attention.

The Grand Coalition is itself part of the Commission's much-vaunted Employment Package and is seeking to capitalise and intensify existing policies, such as the Digital Agenda for Europe, the E-skills Strategy, the Opening Up Education initiative, the Rethinking Education Strategy, the Youth Opportunities Initiative, and the EU Skills Panorama.

How to make a difference

How the EU executive will prevent the Grand Coalition from disappearing within this alphabet soup of policy remains a key question.

Commission staff believe that some of the policies being lined up demonstrate that it means business. One such relates to the 'training voucher' schemes already used in Germany and Spain.

Voucher-based training models there have provided jobs for 60-70% of the 20,000 participants included within the schemes and the EU executive wants to replicate and scale up the idea on a Europe-wide level.

It also intends to facilitate mobility for unemployed persons and standardise certification of skills, through a transformed eCompetence Framework available in all 23 official languages of the EU.

Jobs creation will be the key indicator

Officials are also working to incorporate progress indicators within the Coalition's strategy, better to gauge the success of the various schemes.

"The key success factor will be to reduce the [ICT skills] gap, to convert unemployed to employed people and to see the number of graduates in ICT-related curricula rising, not falling," an EU official working on the project told EurActiv.

Much will depend, however, on the degree of buy-in the policy garners during and immediately after its launch, and Kroes' ability to drive the initiative at a time when the Commission is already juggling a range of crisis-response initiatives relating to Banking Union, and time is ticking on its mandate, which will finish at the end of next year.

Europe strives to hold back 'digital brain drain'

With more than half of Spain's and Greece's young people jobless, those with in-demand digital skills are increasingly seeking work in stabler Austria, Germany and the Netherlands.

Thousands of young Spanish and Greek professionals are leaving their homeland in search of employment. The result is a mass exodus of young, educated Spaniards – a brain drain, the likes of which has not been seen since the end of the Spanish Civil War in 1939.

Most worrying from a European perspective, they are not simply leaving for northern Europe. Although firm figures are difficult to come by, Mexico's immigration office, the Instituto Nacional de Migracion, reports the number of Spaniards granted work permits in the last quarter of 2012 alone at 7,630.

These job migration trends have not gone unnoticed in the European Union, which is struggling with worst unemployment rates in decades following the 2008 financial and economic meltdown.

In March, the European Commission is set to launch a "Grand Coalition for Digital Jobs", outlining measures designed to increase job mobility, but also to rationalise training and certification in the sector to match skills to vacancies.

The root causes of the brain drain – a lack of available labour in southern Europe, and a lack of skilled youth in northern countries – will require deeper remedies, however.

New standards for competence in ICT

According to Fiona Fanning, the secretary general of the Council of European Professional Informatics Societies CEPIS, the increasing demand for skilled workers in the information and communications technology (ICT) sector in stabler economies is hampered not only by the lack of new entrants into the profession, but also by mismatches in competences that workers have today.

The lack of a common means to consistently understand and communicate ICT professional competencies and attractive career paths is considered one of the key reasons for this.

Seeking to resolve this challenge, the e-Competence Framework (e-CF) – a pan-European reference framework of ICT competences – will be recognised as a priority by the Grand Coalition.

It provides a standard to describe and communicate ICT worker and manager competences. These skill sets are country-independent and openly shared for use across all ICT-related professions.

The e-CF is intended to be applied in educational and standardisation institutes, in human resources, by ICT professionals who seek to deepen their careers and expertise and for specialists who provide ICT training, certifications, jobs and services.

The framework has been developed by a large number of European ICT and HR experts in the context of the European Committee for Standardisation (CEN). It is hoped that its immediate deployment will foster mobility among ICT Professionals in Europe.

Grand Coalition will see series of certification launches

This initiative will be backed up by others relating to certification. For example, CEPIS is pledging to undertake a pan-European e-Competence Benchmark, an online interactive tool designed to enable current and future ICT professionals to identify the competences they need or lack for various ICT roles, thus enabling them to adapt to labour market demand.

Individuals can check their competences against a range of profiles and better equip themselves for future roles using the benchmark.

The e-CF Framework was also created by CEN and will be freely available to all after the launch at the March Grand Coalition launch.

Meanwhile the European Computer Driving Licence (ECDL), the key European certifying authority of computer skills, plans to announce a new approach in support of the Coalition. The 'new ECDL', with a wider range of modules and greater flexibility, reflects the growing need for certification options that support employability by aligning individuals' skills with employers' needs.

"Tailored skilling and upskilling of the workforce through a recognised certification standard that has flexibility will help create more and better jobs, as well as facilitate labour mobility," according to Damien O'Sullivan, ECDL's chief executive. 'New ECDL' will be announced at the grand coalition's inaugural event on 4 March, with the European network of certification providers, with over 24,000 test centres, undertaking to implement this in the months that follow.

Standards for ICT training desperately needed

All of this cannot come too soon, according to Kathryn Parsons, the co-founder of the De-Coded start-up, which runs one-day courses designed to help people learn how to programme computers.

De-Coded has seen unprecedented demand for its courses from professional and untrained workers of all ages and backgrounds. There is clearly unmet

demand for training, according to Parsons.

"Coding is not being taught in schools, and there are no agreed methodologies for measuring coding ability," she told a 'Big Tent' brainstorming session for the ICT sector organised by Google in Brussels yesterday (20 February).

Yvonne van Hest, the manager of international labour market development on behalf of the thriving ICT cluster around Eindhoven in The Netherlands, acknowledged that the root problem of brain drain lies in the low standard of technical skills available in the Netherlands itself.

"We have only 18% of young people taking up technical subjects, whereas we need 40%," she said, adding: "We need to start reflecting the German system, where there is much more cultural value for ICT and technical engineers."

Migration can store up benefits in the long term

Van Hest said that Brainport is keen to solve the problem by collaborating more closely with regions in countries such as Spain which is providing a steady flow of skilled workers to The Netherlands.

A joint conference between technology sector interests from The Netherlands and Spain, along with EU executive representatives, will address the issue in April, according to Van Hest.

"We need to create more of a virtuous circle so that [the] skilled unemployed leaving Spain in higher numbers to come to the Netherlands are balanced with policies that mean the whole of Europe can benefit," she explained.

Nevertheless the narrative of 'brain drain' can also mask benefits arising from the phenomenon. Spanish technicians working in the Netherlands benefit the Dutch economy – and the workers themselves – but also Spain.

In the short run, migration reduces pressure on budgets as the Spanish unemployed move to Germany rather than claiming benefits at home.

And in the longer term, a pool of highly skilled workers can be re-deployed back in Spain once the crisis is over.

Brussels plans fresh push for more women in ICT jobs

The European Commission in June plans to publish a survey explaining why Europe's information and communication technology (ICT) sector has too few women despite a projected deficit of 700,000 skilled workers by 2015.

Some 7 million people work in the European digital sector, which creates around 120,000 new jobs every year, but women comprise 30% of the workforce and many of them are in junior roles.

The European Commission will use the survey to launch an attempt to reverse this trend and to encourage young people, particularly women, to take up an ICT-related career.

"My motto, my dream, my bumper sticker is to get every European digital and my ambition is to get more women into ICT," said Neelie Kroes, the EU's Digital Agenda Commissioner.

Creating the right conditions

Edyta Ziomek, a Commission policy officer, told EurActiv that one reason women are not strong in the sector is the total number of computer science graduates in Europe is diminishing, and women tend to choose other career types such as law or medicine.

"Moreover, even those that have a degree in computer science or a similar area will sometimes afterwards pursue a career in a different field. This phenomenon is called a 'leaking pipeline'," Ziomek said.

"However, the success stories of ICT products and services like Angry Birds, Skype, GSM standards and the SMS show

that ICT development requires a lot of creativity. Maybe this ingredient can make the ICT studies and careers more appealing also to women," she added.

Attracting more women into ICT jobs will not just help address a demographic imbalance that risks damaging the whole economy, according to the Commission, it will also contribute to realising equal opportunities and empower women to shape the information society.

Ziomek said that the work-life balance also explains why few women choose a career in ICT, but this issue is not specific to the ICT sector.

"Wherever you find a bigger number of women engineers, you typically have a particular educational system that encourages females to consider ICT jobs as a valid career choice, a longstanding tradition of women working in the technology field, and a certain mindset that highlights a sense of possibility for women working in ICT," Ziomek said.

The Commission's study – led by DG Connect – will aim to "quantify the cost of women lagging behind in ICT careers on the basis of hard data," Ziomek said. "We want to make a business case for gender diversity in the ICT sector and show what it can mean for economies and women's income levels."

Role models needed

Tiphaine Dalmas, a software engineer with Aethys in Edinburgh, told EurActiv that the encouragement and the opportunities in the sector could be improved in order to attract women.

"There is also a lack of female role models, and variety in those role models," Dalmas said, adding that sexism remains an issue, with pressure and derogatory remarks from male colleagues, and lower pay for women doing the equivalent jobs of men.

Dalmas stressed that the ICT sector does have an image problem with the stereotypical notion that it's only for 'geeky guys'.

"The nerd argument implies the counter-stereotype: that women are put off by all things 'nerdy' to start with, or worse that they actually need colourful fluff to be attracted to a work environment," Dalmas said.

Dalmas said women could bring 'their brains' to the ICT sector.

"I sometimes hear arguments such about [women's] programming and management style: that women are more communicative and 'nurturing'," Dalmas said, "but I'm yet to see any serious study

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that shows that women are making a very gender-specific contribution to the field."

Companies make use of best practises

The Commission wants the industry to recognise that female talent cannot be overlooked if European companies think seriously about innovation.

"Women should shape the future world that new technologies will be transforming at a dizzying speed," said a Commission spokesman.

Private companies in the ICT sector, including Google, HP, Panasonic and Microsoft, are now developing initiatives to ensure greater participation of women in their businesses. Together, they have proposed a Code of Best Practices for Women in ICT that reflects recent positive developments and seeks to be a rallying point for others wishing to support and promote greater participation of women in the sector.

The code covers different areas such as education, recruitment, career development, and return to work after leave.

In schools, the stakeholders want to break stereotypes and emphasise the attractiveness of the ICT sector. At university level, it emphasises encouraging female students who have opted for ICT-related studies to continue in their chosen field.

When they start working within the sector, it's important to retain and promote them by persuading them that there are good career prospects and by enhancing their potential. After leave, they should be encouraged to return to the sector.

Kroes: Europe needs a digital ecosystem to create growth

Europe's ICT sector is falling behind its Asian and American competitors due to the lack of skills and lack of women active in the sector. Europe needs a digital ecosystem as the evidence of the sector's impact on growth is endless, says Neelie Kroes, European Commission vice-president.

Neelie Kroes is the European Commissioner for the Digital Agenda. She answered questions by EurActiv's Jeremy Fleming and Henriette Jacobsen ahead of the e-skills conference in Brussels to launch the Grand Coalition for Digital Skills and Jobs 4-5 March.

Why is Europe lagging on ICT skills compared to Asia, US?

It is not a simple matter of lagging,

but a mix of missing skills; skills in the wrong place or at the wrong price. We need to build up our digital ecosystem to avoid a situation where tech companies move from frustration into an exit from our continent.

Is ICT a sexy sector? If not how can you make it one?

Hugely sexy. It changes lives. It's about design, about shopping, about entertainment, about making life better. It's not just about programming! The people who work in ICT are paid well and have a lot of freedom - if I was born 50 years later I would have loved to build a career in this sector.

What can women bring to the ICT sector, if they can be encouraged to get involved?

One: numbers! We need more people, plain and simple, and the pool of women not in ICT is very big.

Two: role models. Extra women will attract extra women. Most people don't want to be alone or in a small minority in a workplace, so women need to see its possible and that it will get better and their choice is a part of the positive change.

Why is now a good time to launch this grand coalition?

Time is not our friend. We need to take action right now, today, tomorrow, throughout the next two years before the skills and vacancies issue gets out of control. It takes time to put people in training, to alert people to the new choices they have, to wake up politicians. So I want the digital sector to show that it is job-creating, that it has a positive impact and to show to entrepreneurs and companies that we want them to stay in Europe.

How can so many strands be effectively co-ordinated, who will have ultimate 'ownership' of the process?

I think it's about partnership not ownership. My goal isn't to get my name in headlines. My goal is getting our young people in jobs and keeping our companies in a healthy state. I will use whatever means to get us there. But that is a responsibility for the sector too. The truth is they are the new backbone of the European economy and that brings some moral responsibility alongside the obvious self-interest they have in joining such an effort.

Are you hoping that some of the Youth unemployment scheme funding earmarked in last week's agreed MFF can be channeled towards the grand coalition?

It's too early to speculate on that, but I don't think money is the most crucial factor here. You need some to grease the wheels, but we aren't trying to throw money at the problem, we're not looking for welfare. We're saying that the digital sector is about collaboration and high skills and we don't get the necessary

ecosystem by each of us sitting in a corner complaining that the world isn't perfect or we can't find the right people to fill the job vacancies.

What evidence is there that ICT is a lever for wider economic growth?

It's almost endless. Investment in ICT skills and equipment and networks drives about half of our productivity growth in Europe. Without productivity growth you have no economic growth – unless you have a lot of babies or a lot more immigrants. So obviously ICT is one of the quickest and most politically effective options we have to deliver growth.

It's sad that the European Council didn't see that in the budget discussions, but that makes efforts like this Coalition all the more important.

Who are the main targets of the scheme, are you keen to focus on specific geographic regions?

We are taking all pledges from any

company, they are the priority, but also any public organisation that wants to be involved. It's too hard to focus on a specific part of the digital world or a specific country – that is the sort of thing that the companies need to decide themselves. But I am pleased to see so much interest so far in Spanish initiatives. That is a great sign of hope for that country and its terrible unemployment situation.

Is there a danger that up-coming regulations (cyber security/data protection) may act as a dampener on growth?

I don't think so. Of course regulations impose a burden, but there is already a much bigger burden of undetected attacks and the risk of major security breaches that cost companies a lot more in the long run. The UK government says one of its biggest risks and the moment is a lack of skilled cybersecurity experts – that tells me that we are right on both counts: better prepared on security, better prepared on skills. That's my motto.

Kroes: Industry 'morally obliged' to help youth get ICT skills, jobs

Europe's ICT industry has a 'moral' obligation to pull behind the Commission's new Grand Coalition for Digital Growth and Jobs and help young people get jobs, Commission vice president, in charge of the digital economy, has told EurActiv in an interview.

Kroes will launch a so-called Grand Coalition for Digital Jobs and Training at a conference in Brussels on 4-5 March, during which she aims to confirm partnership 'pledges' from the private and public sector.
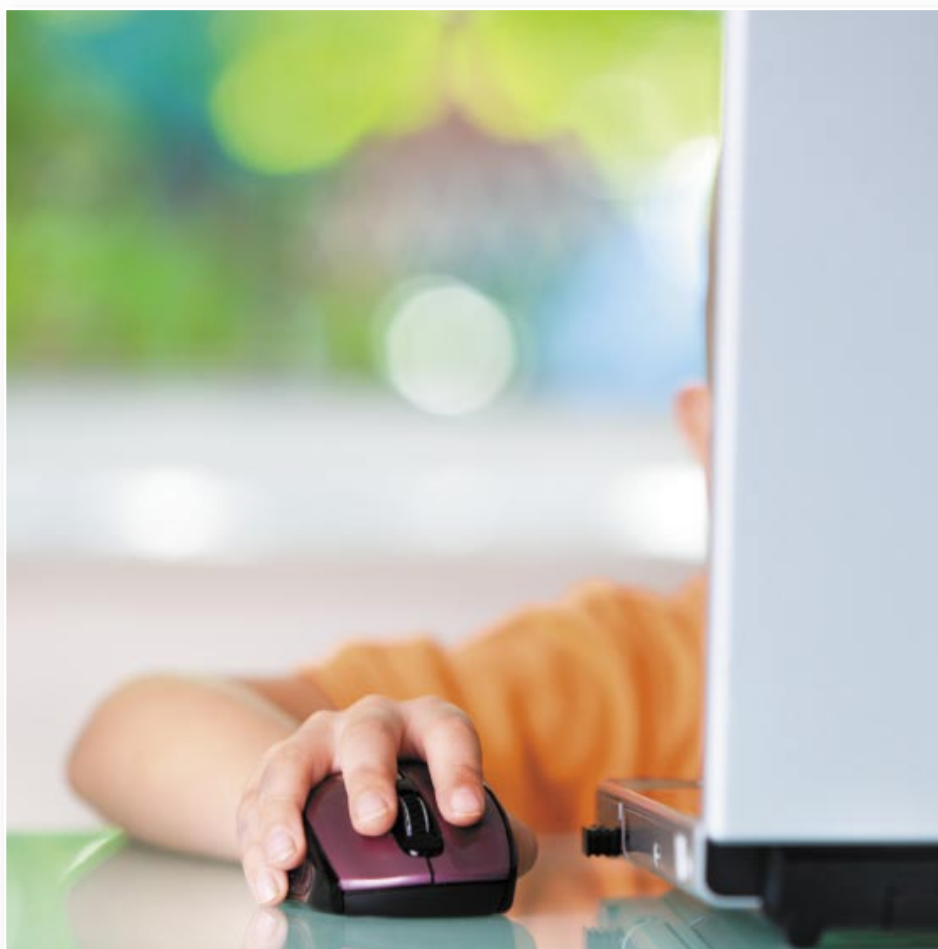
The Commissioner said she would use "whatever means will get us there", to obtain partnership pledges, and underlined that it is "a responsibility for the sector too".

"The truth is they are the new backbone of the European economy and that brings some moral responsibility alongside the obvious self-interest they have in joining such an effort," Kroes said.

Kroes contends that the ICT sector needs to attract more women and young people to its ranks because "the pool of women not in ICT is very big", and the sector needs to make up numbers.

"Extra women will attract extra women," she said in the interview, explaining that most people don't want to be alone or in a small minority in a workplace.

The Commissioner argued that Europe urgently needs to build up a 'digital ecosystem' to avoid a situation where tech companies move from frustration into 'an exit from our continent'.

"Time is not our friend… I want the digital sector to show that it is job-creating, that it has a positive impact and to show to entrepreneurs and companies that we want them to stay in Europe," she added.

"Hugely sexy"

Kroes dismissed the idea that ICT suffers from a dowdy image, insisting that it is "hugely sexy. It changes lives. It's about design, about shopping, about entertainment, about making life better. It's not just about programming!"

She said if she had been born 50 years later, "I would have loved to build a career in this sector."

Investment in ICT skills and equipment and networks drives about half of our productivity growth in Europe, according to the Commissioner, explaining that without such productivity economic growth would not be possible "unless you have a lot of babies or a lot more immigrants".

Kroes dismissed suggestions that the Grand Coalition would seek to attract resources from the Youth Employment Fund earmarked in the recently agreed multi annual financial framework 2014-2020 (MFF).

"You need some to grease the wheels, but we aren't trying to throw money at the problem, we're not looking for welfare," she said, adding: "We don't get the necessary ecosystem by each of us sitting in a corner complaining that the world isn't perfect or we can't find the right people to fill the job vacancies."

She also dismissed suggestions that regulations in the pipeline on data protection and cyber security would dampen growth in the ICT sector.

The burden such regulations might impose, Kroes said, were overshadowed by "a much bigger burden of undetected attacks and the risk of major security breaches that cost companies a lot more in the long run."

Struggling southern states targeted in ICT training push

EU education ministers met in Brussels last Friday to debate how new online tools can benefit the unemployed, with a specific focus on struggling Mediterranean countries. Meanwhile, a new initiative, the Academy Cube, seeks to bring together all stakeholders on one online platform to retrain unemployed people with e-skills for future ICT jobs.

Despite an EU-wide unemployment rate of more than 10% - and far higher for young people - employers are often unable to find workers with the right information and communications technology (ICT) skills for positions across the labour market.

In addition, students entering the job market are unaware of the immense range of ICT jobs available across industries, from games designers and smart meter installers to car modelling and public-sector services.

The Academy Cube was founded in Germany in November 2012 by a number of companies, universities and public authorities but is set to become a pan-European initiative.

"The idea is to create an open e-learning platform and at the same time a job portal and bring together job seekers, but also employers who would like to recruit talents, job agencies from the member states, universities and those who can offer training content," said Andreas Tegge, vice president for EU government relations at SAP.

"The Academy Cube will initially focus on Spain, Portugal, Italy and Greece; those countries with high youth unemployment, but also with a large number of talents," he said.

Reaching the unemployed talent

Tegge mentioned that at the moment the industry needs workers who know how to deal with big data. While SAP has a training course on big data and universities have training courses, the Academy Cube will be in a position to put together one single course on big data which is not available right now.

Most companies have proprietary e-learning platforms and systems, but these are commercial offerings and too expensive, Tegge said, and are therefore frequently out of reach of southern European unemployed.

The Academy Cube's pilot project will begin with 15-20 students from all over Europe, especially southern Europe.

"The concept of the Academy Cube has been well received by the European Commission. It will be our pledge to the EU Grand Coalition for Digital Jobs. We invite other companies, universities, job agencies and other stakeholders to become partners of the Academy Cube," Tegge said, referring to the Commission's Grand Coalition for Digital Training and Jobs, set to be launched in Brussels at a conference on 4 and 5 March.

The Cube is one of a number of attempted boosts to ICT training that the Grand Coalition will see launched.

New skills-assessment tool

Speaking to EU education ministers in Brussels on Friday (15 February), EU Commissioner for Education Androulla Vassiliou presented a new web-based tool called Education and Skills Online, another key part of the initiative.

This online tool, developed by the Commission and the OECD, aims to help citizens, enterprises and institutions

assess their skills for themselves both in terms of their strengths and their weaknesses.

"This will help them identify the areas, where they would benefit from up-skilling and thus help them to improve their chances on the labour market," Vassiliou said.

The EU's 27 education ministers were meeting in Brussels at the initiative of Ireland, which holds the rotating EU presidency, to debate a discussion paper on education and skills for jobs.

Ireland came with a stark warning: as the EU experiences historically high rates of unemployment, "skills gaps, deficiencies and mismatches are holding Europe back from achieving its full potential in job creation," the paper said.

The skills gaps are being reported precisely in those sectors with high growth potential: the green economy, ICT and healthcare.

Making better use of modern technologies in education and training is also one of the Commission's priorities, Vassiliou stressed.

"We need to educate our young and not-so-young people to live and thrive in an ICT dominated world. We need to harness the real power of ICTs as new means to meet traditional educational goals such as raising the quality of education and

opening up access for all," she said.

Predicting the future

In Ireland, the government has launched an ambitious plan that seeks to create 100,000 new positions by 2016 and a further 100,000 by 2020.

While the unemployment rate in Ireland is approaching 15%, the government is trying to foresee where Ireland might offer growth opportunities: such as ICT, pharmaceuticals, life sciences, finance and other services.

"We want to empower our young people and our unemployed to give them the skills now at this point in time so that when those jobs do arise, they will be ready to take them up immediately," said Ciarán Cannon, the Irish minister for education and skills, at an ICT event hosted by Microsoft.

Retraining and up-skilling

Education ministers were invited to share best practice and highlight one practical initiative in their home country.

The Irish government has introduced a new training opportunity called Spring Board. The programme is designed to provide flexible higher education places targeted at unemployed people who have lost jobs mainly in the construction

sector following the bursting of the Irish housing bubble in 2007.

The programme is mainly designed for architects, engineers and technicians who have mathematical, analytical, management and life skills that can be used in another sector.

Meanwhile in Germany and Spain voucher-based training models have provided jobs for 60-70% of 20,000 participants, a success that the EU is keen to replicate and scale up t.

Under the German voucher system, young people with a foundation education can redeem a voucher by taking a further course offering digital skills, where there is a demonstrable market need for these.

This pegs the free education initiative to market demand, ensuring that the free educational opportunity offered will culminate in the likelihood of a work offer.

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