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Name of Organisation:

This is a joint submission on behalf of Forfás, the industrial development agencies - Enterprise Ireland and IDA Ireland - and the Department of Jobs, Enterprise and Innovation.

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Introduction

This is a joint submission on behalf of Forfás, the industrial development agencies - Enterprise Ireland and IDA Ireland - and the Department of Jobs, Enterprise and Innovation.

Forfás is Ireland's policy advisory board for enterprise, trade, science, technology and innovation. Our objective is to contribute to the future success of Ireland's economy as an agency of the Department of Jobs, Enterprise and Innovation (DJEI), by providing evidence based enterprise and science policy advice that supports growth. We provide independent and rigorous research and advice in the areas of enterprise policy including education skills and labour market policy to support enterprise. This work informs the work of DJEI and wider Government in its responses to the fast-changing needs of the global business environment. We ensure the coherence of policies across the development agencies supporting enterprise - Science Foundation Ireland, IDA Ireland and Enterprise Ireland. Our focus is on the enterprise sector where we look to businesses to create jobs, not just in the exporting sector, but also in the domestically trading economy.

Forfás provides the secretariat to the Expert Group on Future Skills Needs and manages the group's work programme, undertaking research and analysis and represents the group at various fora both in Ireland and abroad. Some of the EGFSN's research work is referred to in this submission. It includes research drawn from the National Skills Database which holds information on the supply and demand of skills in Ireland which is developed and maintained by the Skills and Labour Market Research Unit of FÁS, on behalf of the EGFSN. The Expert Group on Future Skills Needs advises the 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. Established in 1997, it report to the Minister for Education and Skills and the Minister for Jobs, Enterprise, and Innovation.

IDA Ireland is a Government agency with responsibility for the attraction and development of foreign direct investment (FDI) into Ireland. The attraction of FDI has been a cornerstone of Ireland's economic development strategy for many decades. IDA Ireland focuses on business sectors that are closely matched with the emerging needs and competitive advantages of the Irish economy, and that can operate competitively in global markets from an Irish base. This means attracting high value investment in High End Manufacturing, Global Services (including Financial Services) and Research, Development and Innovation, from both new and existing clients in sectors such as, Life Sciences (Pharmaceutical, Biopharmaceutical and Medical Technologies), Information Communications Technology (ICT), Engineering, Professional Services, Digital Media, Consumer Brands and International Services. Client companies of IDA Ireland created 12,722 new jobs during 2012, adding a total of 6,570 new net jobs, the third consecutive year of growth in net employment. Strong gains across financial services, life sciences, ICT and business and consumer services continue to give a broad balance to the IDA portfolio, with total employment now measured at over 152,000. Including indirect employment this comes to almost 270,000.

Enterprise Ireland partners with entrepreneurs, Irish businesses, and the research and investment communities to develop Ireland's international trade, innovation, leadership, and competitiveness. The ultimate objective is increased employment and prosperity in Ireland. The companies that Enterprise Ireland works with are a vital source of employment in every county in Ireland and are spread across a wide range of sectors. In 2012, Enterprise Ireland's client companies employed 145,460 people on a full-time basis, and an additional 23,991 part-time positions. Total employment in Enterprise Ireland client companies therefore stood

at 169,451. The total direct and indirect employment impact associated with Enterprise Ireland client companies is estimated at over 300,000 jobs.

The Department of Jobs, Enterprise and Innovation is charged with the development and implementation of government policy in the areas of enterprise, employment promotion, innovation, trade, the regulation of business and the protection of workers. Responsibilities include enterprise development, science technology and innovation policy, company, intellectual property and competition law, the registration of companies, co-ops and friendly societies, control of mergers, distributive trade legislation, consumer protection and industrial relations and matters effecting conditions of employment and occupational health and safety. Its mission is to support the creation of good jobs by promoting the development of a competitive business environment in which enterprises can operate to high standards and grow in sustainable markets.

The agencies and the Department welcome the invitation from the Department of Education and Skills to make a submission to the Review of Apprenticeship in Ireland with particular reference to the following areas outlined in the Apprenticeship Background Issues Paper:

- Area 1: Overview of effectiveness of the current Apprenticeship Programme
 highlighting the issues to be addressed to ensure a skilled workforce to meet
 lreland's current and future needs;
- Area 2: A Reformed/restructured Apprenticeship System changes recommended in regard to the issues of governance, equity, range of occupations, funding, recruitment, curriculum, assessment, delivery, providers and the economy;
- Area 3: Information on other systems/programmes in Ireland including those with significant work-based learning;
- Area 4: Information on programmes in other jurisdictions which have a significant work based learning element;
- Area 5: Scope for broader integration of other occupations/disciplines into an apprenticeship or traineeship model in Ireland;
- Area 6: Other points relevant to the review.

Executive Summary

This is a joint submission to the Review of Apprenticeship in Ireland on behalf of Forfás, the industrial development agencies - Enterprise Ireland and IDA Ireland - and the Department of Jobs, Enterprise and Innovation.

The Forfás Review of Labour Market Programmes, March 2010, addressed the issue of the effectiveness of the apprenticeship programme. It found that the Apprenticeship Programme was valuable but was lengthy, costly and cyclical. It proposed that the average duration of an apprenticeship should be examined and that progression should be competency-based rather than time-based. The review found that in 2008 the FÁS cost of an apprentice completing was €35,396 and €46,667 if the Department of Education and Skills' costs are included and that other means of developing training programmes with employers' involvement that are more flexible, less expensive and of a shorter time duration should be considered. It recommended that the cyclical nature of apprenticeship registration needed to be addressed especially for construction trades. The fact that Individual employers control the recruitment to apprenticeship led to unsustainable numbers in training with no prospect of employment when the boom ended and very low recruitment currently which is leading to some shortages.

The ideal model for apprenticeship in the future should take account of the needs of learners, the needs of employers and the needs of the economy. It should:

- Be flexible to incorporate the skills implications of the drivers of change in the economy and globally and encompass other means of developing training programmes with employers' involvement, like the traineeship model;
- Increase the range of occupations covered to meet the needs of the economy and equip individuals for current or future job opportunities, especially as regards services occupations (e.g. customer support, sales/direct selling, transactions processing & procedures, wholesale/retail, hospitality, catering, healthcare, transport/logistics/supply chain management, horticulture, hairdressing, beauticians);
- Evolve a curriculum for the relevant occupations that reflects the tasks needed to be performed in the modern workplace with the length, breadth and depth of technical coverage and work-based practical experience to ensure qualifications and learning outcomes are achieved at the appropriate full NFQ level 5, 6 or 7;
- Encompass an access path for those who wish to enter it from different educational attainment levels including accelerated entry routes recognising prior experience; it should provide for well-structured and mapped progression routes to higher levels of technical skills, supervisory and management roles operating seamlessly between second level, VET, Higher Education and on the job training;
- Be rebranded with an emphasis on its characteristics that make it a valuable flexible work based training programme leading to a range of recognised valuable careers in services, and manufacturing occupations available to school leavers, jobseekers and those seeking to upskill or change careers;
- Address future supply issues and cater for situations where individual employers cannot offer enough places. Consideration could be given to networks of companies recruiting and training apprentices or placements abroad.

Area 1. Overview

Effectiveness of the current Apprenticeship Programme

This section sets out our views on the effectiveness of the current apprenticeship programme, highlighting the issues that should be addressed to ensure the provision of a skilled workforce to meet Ireland's current and future skills needs.

The Forfás Review of Labour Market Programmes, March 2010¹, addressed the issue of the effectiveness of the apprenticeship programme. It found that the Apprenticeship Programme was valuable but was lengthy, costly and cyclical. It proposed that other means of developing training programmes with employers' involvement that are more flexible, less expensive and of shorter duration be considered. The participant profile for the Apprenticeship programme was young males, 60% of whom had the Leaving Cert. There were very few female apprentices despite offers of bursaries over time to encourage more. Forfás recommended that consideration could be given to following the Traineeship model and widening out the scope to cover a number of other occupations. This could also help to increase the number of females who might participate.

The Review found that in the decade up to 2007 the apprenticeship system worked well in terms of developing the skills of apprentices for the then twenty-six designated trades, although the length of apprenticeship was found to be relatively long and the cost was high. The apprenticeship programme cost €179m in 2007 and was the second highest programme cost comprising 19% of the total FÁS budget of €939m in 2007 and €966m in 2008. There was also an additional cost of circa €57m in that year to Institutes of Technology incurred for apprenticeship activity.

The review showed that the then most recent survey (2007) indicated that a majority of companies (82%) that had used apprenticeship were either very or fairly satisfied with it. 100% of successful apprentices receive a Level 6 Advanced Certificate Craft Qualification Award.

Since 2007 the Apprenticeship system has run into difficulties particularly reflecting the greatly reduced level of activity in the construction sector. There were significant numbers of redundant apprentices and, in Sept 2009, measures were introduced to help redundant apprentices progress within the system. There were also added unforeseen costs for the State in terms of the creation of excess capacity provision within FÁS and the Institutes of Technology. The cyclical nature of apprenticeship registration needs to be addressed to minimise the costs, especially during a recession, of sharp contractions in sectors (e.g. for construction trades), whilst also ensuring a steady supply in trades with strong demand ensuring that skills shortages don't arise.

Issues identified in the Forfás Review to make the programme more effective

i. The average duration of an apprenticeship which is a minimum of four years (except for print media which is three years) should be examined. The length could be based upon when apprentices attain the competency level required, so that some individuals could complete their training faster if they reached the required skill level. As in other

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¹ http://www.forfas.ie/media/100319forfas-labour-market-review-report.pdf

- countries, such as Australia and the UK, progression should be competency-based rather than time-based.
- ii. The cyclical nature of apprenticeship registration needs to be addressed especially for construction trades. The system whereby FÁS did not limit or control recruitment numbers led to a situation which was extremely costly to the State. The fact that Individual employers control the recruitment to apprenticeship (and by default the state investment in training) led to unsustainable numbers in training with no prospect of employment when the boom ended and now very low recruitment which is leading to shortages in some areas currently e.g. toolmaking. The DES/DJEI Study Group set up in 2009 to forecast expected levels of apprentice recruitment for eight construction trades and six non-construction trades up to 2016 assists with planning the state involvement but the programme is still dependant on employers to recruit for their immediate needs and not necessarily planning for future requirements.
- iii. The Apprenticeship programme is costly. The Forfás review found that in 2008 the FAS cost of an apprentice completing was €35,396 and €46,667 if the Department of education costs are included.
- iv. It is appropriate to consider other means of developing training programmes with employers' involvement that are more flexible, less expensive and of a shorter time duration. This would be in line with most other European countries. Consideration could be given to following the Traineeship model and widening out the scope to cover a number of other occupations. This could also help to increase the number of females who might participate.

Overview of an ideal model for apprenticeship in the future

Changing Nature of Skills Requirements - the 21st Century Workplace

There are many factors, internal and external, impacting on skills and labour requirements of enterprise. They can be underpinned by policy decisions (e.g. environmental/regulatory) or driven by global competition (e.g. offshoring). There has been long term structural change, for example, the rise of services relative to manufacturing and agriculture. Technology is impacting across skill levels, with basic ICT skills a pre-requisite for many occupations, for instance within wholesaling or retailing and production processes. The high birth rate in Ireland in recent years raises demand for a range of services, for example, within the education system and the health system and childcare, while the fact that people are living longer creates greater demands in elder care professions. 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.

There are new and emerging sectors, for example, green technologies, cloud computing and creative industries, and there are sectors that have changing occupational needs, for instance, upskilling requirements for operatives due to technological and productivity gains within manufacturing. Underneath headline labour market indicators, there is always a significant degree of churn occurring in the labour market. New enterprises and jobs are constantly being created while other jobs are lost and some enterprises fail, while employees vacate jobs for a range of reasons including promotion, retirement or return to education and training. With this, there will always be a level of flow or replacement demand in the labour

market arising through people moving within and between firms, which is also a major source of labour market opportunity².

Workplace training in the form of a modern wide ranging apprenticeship system will be important in the challenges ahead to ensure flow of new skills and that the labour force is continually upskilled to meet the demands of the 21st Century workplace.

The main impact on skills arising from the global drivers of change outlined below is for higher skills requirements across virtually all roles³. As basic processing, assembling and service functions are offshored and moved out of developed countries and/or the demand for labour is reduced through automation, the future skills focus is on productivity and more knowledge intensive activities⁴. As a result, the relative share of 'knowledge intensity' within businesses in developed economies is rising across all occupation levels, bringing its own challenges for the appropriate skills mix required in to the future. Within knowledge-based manufacturing and services value creation from human capital is now more likely to involve a higher level of autonomy, and rely on the judgement, insight and know-how of individuals, who draw upon their specialist knowledge. In this context, the development of both technical and soft skills is equally important. This is observable across virtually all occupations and in all types of business activity. Whether in the operation of machinery and equipment, or in the provision of business services, value creation is maximised as individuals manage complexity, not simplicity⁵. Furthermore, globalisation together with advances in ICT, and the associated increase in intra-industry trade, has increased specialisation of production. As firms become more specialised, the requirement is for a higher level of technical skill in the workforce and management⁶. These have implications for the content and delivery of the ideal model of apprenticeships as outlined below.

² EGFSN, National Skills Bulletin 2013, Chapter 10 Transitions - http://www.skillsireland.ie/publications/featuredpublications/title,10965,en.php

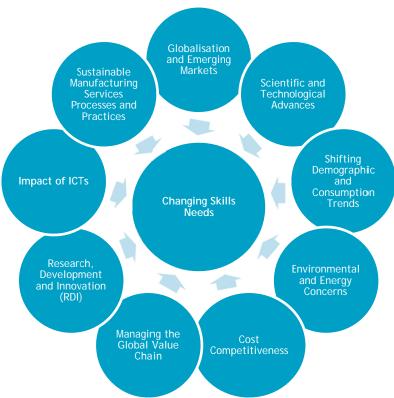
³CEDEFOP (2009) Future Skills Needs in Europe - Medium Term Forecast Synthesis Report

⁴ DG Enterprise & Industry (2010) EU Manufacturing Industry: Challenges and Opportunities for the Coming Years

⁵ Ibid

⁶ Department of Industry, Tourism & Resources Australia (2007) Drivers of Change in Australian Industry

Drivers of Change



Any new model of apprenticeship needs to be flexible to adjust to the many drivers of change impacting the overall environment for business and in turn be able to adjust to how these impact on the skills that will be required within the country. These drivers of change are at both a macro level and at the level of the different businesses. They include the following:

- Globalisation (the movement of people, capital, goods, services and ideas across borders) is accelerating and evidenced through the growth of emerging markets in terms of world trade. In 2010, developing economies were the recipients of the majority of inward foreign direct investment flows for the first time.
 - In the case of Ireland there is some evidence, for example, that the influx of craft workers from Eastern Europe from 2004 increased the supply of certain craft skills thereby eliminating the need in certain circumstances for businesses to take on new apprentices and train them.
- Scientific and technological advances have significant implications for skills. In
 particular, Key Enabling Technologies (KETS) such as advanced materials, nanotechnology,
 biotechnology, photonics and advanced manufacturing are increasingly having a
 transformative effect on businesses now and in the future.
 - These require new processes and new skills in, for example, the operation of new and expensive machinery and equipment, robotics and other technological advances.

Demographics - Projected world population growth of 9.3 billion by 2050 and shifting demographics, including ageing populations within developed economies, will have a profound impact on the future demand for goods and services. Growing middle class populations within the BRIC nations are expected to drive additional demand for goods and services.

Aging population in Ireland gives rise to increased opportunities for home care, elders care roles that could form part of a wide apprenticeship traineeship model.

- Consumer preferences are shifting in many countries with increasing emphasis on the sustainability of products, their carbon footprint and 'air miles'.
- Environmental regulations and goals for energy efficiency mean that many businesses are developing sustainability teams to drive efficiencies from input, through production and delivery to customers.

For craft trades this requires workers to have systems integration knowledge around optimum energy efficiency lighting and heating systems installations and advising on their economic paybacks⁷.

- Disaggregated global supply chains are driving specialisation within many firms seeking to plug in to global networks.
- Cost competitiveness is placing increased scrutiny on all aspects of the business raising the demand for continuous improvement and lean manufacturing techniques.

Increased automation and highly computerised processes in businesses have implications for the curriculum content and on the job training of existing apprentice trades and potential for the development of new ones.

- The competitive manufacturing environment puts a particular emphasis on research, development and innovation activities, not only in the context of R&D for new products and services, but also the ability to absorb technologies and expertise developed externally which can drive innovation in manufacturing products and processes.
- ICTs are having a highly significant impact on manufacturing and service processes with ICT enabled processes such as increasing automation, computer integrated manufacturing (CIM), simulated manufacturing, virtual test beds and 'digital factories' at the cutting edge of manufacturing competitiveness.

⁷ EGFSN Future Skills Needs of Enterprise within the Green Economy in Ireland, Nov 2010, http://www.skillsireland.ie/publication/egfsnSearch.jsp?ft=/publications/2010/title,7063,en.php

In the engineering trades, for example, technological developments in high precision tool design and manufacture has shifted to a highly computerised process and tools are increasingly multi-functional and complex and subject to very low fault tolerance levels⁸. This has implications, for example, for the supply of toolmakers with skills in CAD technology.

Skills, in addition to costs competitiveness and the business environment, are therefore a primary driver of competitiveness services and also in manufacturing⁹. The quality of skills available depends both on the development of the existing workforce and the relevance of the graduates from the education and training sector.

A new Apprenticeship Model

The ideal model for apprenticeship in the future should take account of the needs of learners (career, progression, transferability, sustainable employment), the needs of employers (cost, flexibility, skilled employees) and the needs of the economy (cost, relevance, skills to meet drivers of change). Its characteristics should include the following:

- Be sufficiently flexible to incorporate the skills implications of the drivers of change outlined above;
- Encompass other means of developing training programmes with employers' involvement, like the traineeship model;
- Close consultation with employers, so that the skills and competencies required for the ideal apprenticeship model are addressed. This should form clarity between industry and education regarding the up to date competencies needed in the workforce and enable emerging mismatches to be addressed on an on-going basis. Employers should be central to the new model from advising on the setting of occupational standards, to through design of curriculum content so that they are integral to the increased provision of the on-the-job training aspects;
- Better reflect the current and future skills required in the labour market by increasing the range of occupations covered by the new model, especially as regards services occupations similar to the UK model (e.g. customer support, sales/direct selling, transactions processing & procedures, wholesale/retail¹⁰, hospitality, catering, healthcare, transport/logistics/supply chain management, horticulture, hairdressing, beauticians) or other skilled trades not included within the current apprenticeship

⁸ EGFSN National Skills Bulletin 2013, July 2013.

⁹ Cost Competitiveness and the Business Environment are two key strands that are dealt with in the Forfás, Making it in Ireland - strategy for manufacturing, April 2013.

¹⁰ EGFSN Future Skills Needs of the Wholesale and Retail Sector, April 2010 recommended that the range of qualifications provided through Fás, IBEC Retail Skillnet, VECs and a number of Higher Education Institutions be developed to provide a comprehensive unified offering focused on the specific skills sets required by the sector at NFQ levels 4-6.

framework, formal operative level traineeships (2yrs in Germany) and machinists apprenticeships (in parts of the US) to meet the needs of modern high tech manufacturing industry. It would be in line with most other European countries and could also help with improving the gender balance of those who might participate. The focus should be on providing a wide range of apprenticeships/traineeships that meet the needs of the economy and equip individuals for current or future job opportunities and provide a wide array of vocational opportunities for school leavers, jobseekers and those seeking to upskill or change career;

- Continuously evolve a curriculum for the relevant occupation/role that reflects the tasks needed to be performed in the modern workplace. For example, a number of employers interviewed for the EGFSN manufacturing skills study expressed the view that the apprenticeship curricula were out of date and in particular that the combination mix of electrical and mechanical emphasis for their sector was not available. In the case of toolmakers the programmes did not include the use of modern CAD technology and apprentices were not trained on the latest equipment. The modern apprenticeship needs to have a structured syllabus that has the length breadth and depth of technical coverage of the relevant occupation/role that includes significant work based technical practical experience to ensure qualifications and learning outcomes are achieved in that field and at the appropriate full NFQ level. Resources will need to be devoted to curriculum development which should increasingly include online applications for the off the job aspects of the programme.
- Encompass an access path for those who wish to enter it from different educational attainment levels. For example the entry level should vary for those accessing from secondary school depending on whether they enter with a Junior Certificate, where they might enter a bridging programme to apprenticeships, or a Leaving Certificate qualification and should recognise prior learning for mature entry routes for jobseekers with prior experience and/or employees who are upskilling with significant work experience.

The numbers entering at Junior Cert level have decreased significantly in the last eight years and accounted for 26% of registered apprentices at the end of 2011. Therefore the new model needs to reflect the rising educational attainment level of the cohort of school leavers going into apprenticeships. It also should be more encompassing of mature entry routes and not solely focus on apprenticeship training being an alternative progression route to third level education for school leavers given that 28% of entrants are currently over 21 years. Some of these could include those who progressed to IOTs and discovered that they were more suited to the practical apprenticeship options.

 Include accelerated routes which could be facilitated through recognition of prior learning. The EGFSN report Future Skills Requirements of the Manufacturing Sector to 2020, April 2013, recommended the use of the accelerated apprenticeship scheme (exemptions from phase 1-5 can be granted) to augment the number of apprentices qualifying as toolmakers every year to meet identified current shortages¹¹.

Provide for well-structured and mapped progression opportunities to higher levels of technical skills, supervisory roles and management careers. These will need to work well and operate seamlessly between second level, VET, Higher Education and on the job training. Industry ownership and endorsement of career paths ensures that the education and training infrastructure can be mapped appropriately to provide clarity to learners. It also provides clarity between industry and education regarding required competencies and enables gaps in learning infrastructure to be addressed where they may arise;

The EGFSN Future Skills Requirements of the Manufacturing Sector to 2020 research reported employees having difficulty in identifying learning opportunities that might assist them in progressing their careers. The EGFSN recommended that "the Manufacturing Development Forum should lead a review of manufacturing career paths. It should engage industry, employee representatives and relevant providers of education and training and the qualifications bodies including Industry representatives, Further Education providers, FÁS/SOLAS, Skillnets and Higher Education representatives. The review should have reference to international experience with developing and mapping career paths, such as the US stackable credentials model, the training and progression models of various "dual system" countries in Europe and the training and progression maps of sector skills councils such as SEMTA in the UK"

In the case of manufacturing the range of occupations to be mapped should include operative/craft, technician, supervisor and professional occupations.

- Rebranded with an emphasis on its characteristics that make it a valuable flexible work based training programme leading to a range of recognised valuable careers. Interviews undertaken with manufacturers for the EGFSN Future Skills Requirements of the Manufacturing Sector to 2020 report identified difficulties in attracting employees due to a lack of knowledge of the career opportunities and negative perceptions of what manufacturing work entails. Once the reformed Apprenticeship system is in place there should be a comprehensive campaign rolled out promoting its advantages to both employers and potential recruits, along the lines of a similar rebranding in the UK.
- Set the learning outcomes at the appropriate level on the NFQ. This may mean that not all apprenticeships/traineeships under the new model are at advanced level 6 as is currently the case with Apprenticeships. It could mean that some are at level 5 (e.g. childcare, carers, with a progression to more senior roles at level 6) or indeed that the learning outcomes required by some roles in industry in certain electrical and engineering craft trades might be better set at NFQ level 7.

¹¹ http://www.skillsireland.ie/media/270213-Future_Skills_Requirements_of_Manufacturing-Publication.pdf

Ensure that more of the practical aspects of the curriculum are undertaken in the work setting and that the new model addresses future supply issues and caters for situations where individual employers cannot offer enough places. Consideration could be given to networks of companies recruiting and training apprentices or placements abroad.

How should the Irish apprenticeship system fit into the EU and international structures?

EU and international structures should be considered in designing a new apprenticeship model.

Developments at EU level

In 2013 Country Specific Recommendations (CSRs) were issued to sixteen EU Member States drawing attention to the need to reform VET systems in order to include a stronger work-based learning component, including specific references to the implementation of apprenticeship type schemes. In response to the alarming youth unemployment rate and following up also on the 2012 CSRs, many EU Member States have already started reviewing their regulatory frameworks with a view to introducing apprenticeship type schemes or expanding them¹². While Ireland was not the subject of any CSR in 2013 (as it remains covered by the EU/ECB/IMF Support Programme), Ireland can expect to have draft CSRs addressed to it by the European Commission in 2014.

The European Council Conclusions of 27-28 June 2013 referred to the promotion of high quality apprenticeships and work-based learning, notably through the European Alliance for Apprenticeships¹³, as a key element of supporting youth employment. The European Council stipulated that youth employment should be given a particular focus in implementing the EU Structural Funds. The proposal for the ESF Regulation for the next programming period 2014-2020, which was advanced during the Irish Presidency of the Council of the EU in the first half of 2013, already includes a dedicated ESF investment priority targeting the sustainable labour market integration of young NEETs¹⁴. Ireland is among the EU Member States with high youth unemployment rates that is committed to implementing the Youth Guarantee agreed by the Member States during Ireland's Presidency. The EUR 6 billion Youth Employment Initiative (YEI) will further boost support for Youth Guarantee schemes, for regions such as Ireland that have youth unemployment rates above 25%.

Under its commitment to the European Alliance for Apprenticeships in July 2013, the European Commission has already committed to:

 promote peer learning/review to support policy reform in Member States, in particular those with VET-related country-specific recommendations

¹² See the European Commission's policy guidance on work-based learning http://ec.europa.eu/education/lifelong-learning-policy/doc/work-based-learning-in-europe_en.pdf

¹³ European Alliance for Apprenticeships: http://ec.europa.eu/apprenticeships-alliance

¹⁴ Young people (age group (15-24) not in employment, nor in any education or training.

- ensure the best use of EU funds to contribute to the objectives of the Alliance (support systems-level development, learning content and mobility of apprentices and staff)
- explore the inclusion of apprenticeships in the EURES network, in close cooperation with relevant stakeholders
- invite Eurochambres and other relevant stakeholders to pledge measures contributing to concrete delivery of the Alliance.

The current Lithuanian Presidency of the Council of the EU is working on a Council Declaration on actions that may be taken by EU Member States aimed at setting up, reviving or modernising apprenticeship schemes.

Technical assistance and mutual learning regarding apprenticeship & traineeship schemes.

The European Commission has put in place a special project: "Providing targeted advice on ESF support to apprenticeship and traineeship schemes" which is supported by a pool of policy experts on apprenticeship and traineeship schemes, specialised in a wide range of areas such as labour market policies, EU policies and initiatives, inclusion and mobility aspects, standards and quality assurance to advise the following groups who may be interested in ESF actions related to apprenticeships /traineeships at national level such as:

- Policy makers at national, regional and local level in the areas of youth employment, education and training policies
- ESF Managing Authorities
- Relevant national and regional agencies
- Social partners

The Review Group might wish to consider whether there may any advantage to be gained from availing of ESF support which can, for instance, take the form of longer term/on-going advice and tailored consultancy providing guidance for agencies which are in the process of developing new or improving their existing traineeship and apprenticeship schemes, preparing the new ESF operational programme, etc. Such advice can address a wide range of aspects of apprenticeship and traineeship schemes across the following categories:

- Definition of schemes
- Types of schemes
- EU policies and initiatives
- Standards and Quality Assurance
- Legal/Regulatory Frameworks & Governance

¹⁵ The project is managed by Ecorys UK together with the Institute for Employment Studies (IES) and Istituto per la Ricerca Sociale (IRS) Italy, on behalf of DG Employment, Social Affairs and Inclusion of the European Commission. See full details of DG Employment, Social Affairs and Inclusion support for advice on apprenticeship and traineeship schemes at http://ec.europa.eu/social/main.jsp?catId=1045&langId=en

- Setting up a scheme
- Financing a scheme
- Good practice in running schemes (including lessons learnt)
- Assessment and certification
- Monitoring and evaluation
- ESF key information
- Geographic mobility
- Country overviews

The promotion of apprenticeship schemes at international level.

The G20 Labour and Employment Ministers' Declaration adopted at the G20 Labour and Employment Ministers Meeting held in Moscow on 18-19 July 2013 contains a shared commitment to, inter alia, strengthening and expanding quality apprenticeship programmes and other work experience programmes to facilitate transition from school-to-work. The G20 Labour Ministers reviewed good practices and the progress made in implementing commitments made under the G20 Training Strategy. Their review exercise in July 2013 was informed by reports from international organisations such as the ILO's report "Overview of Apprenticeship systems" which identifies international best practices and locates data on Ireland within a comparative framework¹⁶. The ILO paper examines the roles and responsibilities of the principal agents involved in regulated apprenticeship systems and the paper ends with conclusions and lessons drawn from the ILO's cross-country analysis. The ILO Report is also relevant to the question posed by the Department of Education & Skills Consultation exercise (Area 4) regarding information on programmes in other jurisdictions which have a significant work based learning element.

¹⁶ See "OVERVIEW OF APPRENTICESHIP SYSTEMS AND ISSUES", ILO contribution to the G20 Task Force on Employment, ILO November 2012 (revised) at http://www.ilo.org/global/about-the-ilo/how-the-ilo-works/multilateral-system/g20/WCMS_190188/lang--en/index.htm

Area 2. A Reformed Apprenticeship System

Looking forward, what changes would you recommend in a re-structured or fundamentally reformed apprenticeship system in regard to any or all of the issues below.

Governance

Should future apprenticeships have a statutory underpinning? What aspects, if any, should be statute regulated, and what aspects should be market or stakeholder controlled?

Any new model of apprenticeship should be a non-legislative scheme, which offers the following:

- The dual system approach which provides the programme participant with the opportunity, to apply in the workplace, the skills and knowledge learned in the off the job training
- The flexibility to be able to respond to the skills implications of the drivers of change outlined above and the ability to respond to identified skill needs and constantly review the offering to maintain its relevance to the changing Labour Market.
- The variety in duration and progression levels, assessed by modules which lead to full awards at levels 5, 6 and 7 on the NFQ and/or industry recognised certification
- The variety of occupations available through traineeships and some PLC courses and those offered in other jurisdictions as outlined in the discussion document.
- 1b How and who should be involved in planning, curriculum development, support, regulation and monitoring of apprenticeships to ensure compliance with national objectives? (Quality assurance to be through Quality and Qualifications Ireland (QQI))
- What would be the most effective system of governance to combine long term system and brand stability with an agile response to national needs? How can governance arrangements be simplified/streamlined?

It could be more akin to the current approach by FAS to the development of a new Traineeship rather than the complex consultative nature of the current apprenticeship regime. The curriculum development resource is essential and may require to be contracted out to subject matter experts in conjunction with consultations with a group(s) for specific occupations with significant employer involvement, to advise on the scope and standards for the occupation, stages of design, development and implementation of the training course. Reviews/evaluations of courses should be systematically undertaken, informed by a combination of centrally devised initiatives, feedback from stakeholders such as course participants, employers, training providers, government policy, labour market trends, the economic environment, requirements of the economy and designed to the requirements of QQI. Solas and the ETBs could manage the new programme and contract out the aspects to be delivered by the IOTs, Skillnets or industry specialist providers as appropriate. Involvement from the IOTs/Higher Education system will be essential to ensure that smooth progression paths to HE operate at levels 7 (and 8 where appropriate) under the new model.

Equity

2a How can a better gender balance be achieved in apprenticeships?

The new model should cover a wider range of training programmes with workplace training across a range of manufacturing and services sectors (e.g. customer support, sales/direct selling, transactions processing & procedures, wholesale/retail, hospitality, catering, healthcare, transport/logistics/supply chain management, horticulture) and other skilled trades not included within the current apprenticeship framework, e.g. formal operative level traineeships and machinists. It could incorporate some vocational occupations in the current VEC PLC and VTOS programmes and a wider range than those covered under the current FAS Traineeship Programme.

2b How can education and training and labour market entry routes for early school leavers, and those ill equipped for direct entry to more academically oriented FE and HE programmes, be best protected and expanded?

The new model should include different entry points for those who wish to enter it from different educational attainment levels. For example the entry level should vary for those with a Junior Certificate, where they may enter a bridging programme to the new model, compared to those entering with a Leaving Certificate and should cater for mature entry routes between jobseekers with no prior experience in the field compared to those employees who are upskilling with significant prior work experience who might be given access to accelerated routes. The different entry levels could be facilitated through recognition of prior learning.

Increased focus should be kept on retaining those likely to become early school leavers within the second level system. Those intending to leave school after the Junior Cert and enter apprenticeships will have weaknesses in general competencies. Consideration should be given to some 'pre apprenticeship' bridging course that might address their educational attainment, that might include amongst other things, for instance, the modules on offer in the Leaving Certificate Applied curriculum in the three main areas of vocational preparation, (involving work experience, enterprise and communication), general education, (offering life skills, the arts, social education, leisure and language) and vocational education.

2c How can the interests of persons with disabilities be advanced within future apprenticeships?

The aim should be for people with disabilities to be able to participate in training and education opportunities so as to maximise their potential to participate in work and create a participatory and inclusive labour market in Ireland. There is a need for training and education facilities to be disability friendly as regards physical access and for adaption of material and equipment where appropriate.

Range of Occupations

3a Should the range of occupations covered by apprenticeship/traineeships be broadened outside the traditional craft industries? If so, what occupations/programmes should be covered and how would this be achieved? Please state why you consider these occupations suitable for apprenticeship.

A range of occupation specific and industry endorsed apprenticeship/traineeships are required beyond the traditional craft occupations to better reflect the range of roles and occupations in the economy. They should be fulltime courses that combine directed off-the-job training with significant elements of work-place training in a host company. This dual system provides the programme participant with the opportunity, to apply in the workplace, the skills and knowledge learned in the off the job element.

The range of occupations covered by the apprenticeship/traineeship should be widened out to encompass other means of developing training programmes with employers' involvement, like the traineeships model especially in services occupations (e.g. customer support, sales/direct selling, transactions processing & procedures, wholesale/retail, hospitality, catering, healthcare, transport/logistics/supply chain management, horticulture, hairdressing, beautician) or other skilled trades not included within the current apprenticeship framework e.g. formal operative level traineeships (2yrs in Germany) and machinists (in parts of the US). This would lead to the new model embracing a number of other occupations. This would better reflect the current and future skills required in the labour market and the range of roles operating in the country. It would be in line with most other European countries. This could also help to increase the number of women who might participate. The focus should be on providing a wide range of apprenticeships to meet the needs of the economy and equip individuals for current or future job opportunities including replacement and expansion demand.

These programmes could vary in duration and provide a progression path within an occupation and be assessed by modules which lead to major awards at levels 5, 6 and 7 in the NFQ and/or industry recognised certification.

With the amalgamation of the VECs with the FAS training centres to form the ETBs, there is scope for programme rationalisation and some PLC and VTOS courses e.g. childcare practitioner, computing and technology, horticulture, sport and leisure could have increased on the job training more akin to traineeships/apprenticeships.

Funding

How can the costs of apprenticeship be shared between apprentices, employers and the State?

Expenditure on the Apprenticeship Programme is funded by the National Training Fund. The NTF was established in 2000 to support the training of those in employment and those who wish to take up employment. It is resourced by a levy on employers of 0.7% of earnings of certain classes of employees. So employers already provide a significant element of the current funding.

- Ireland differs from other countries in that it provides allowances to apprentices during the off the job phases. Consideration should be given to ensuring that these allowances are more akin to the trainee allowances across other programmes. This may lower the overall cost of allowances under apprenticeships.
- As traineeships evolve into apprenticeships under the ideal model, wages will need to reflect changing market conditions. Any new model of apprenticeship will have implications for enterprise and sector level collectively agreed wage setting mechanisms.
- The Employer should remunerate the trainee for the on the job training elements but for employers to provide more on the job training the programme will need to be adjusted along the lines outlined under the section the "Ideal Model for Apprenticeship".

The more generic aspects, e.g. the basic practical skills and the theoretical training could be provided in the ETBs. It may be more cost effective to provide more of the specific/technical practical training in the company where the latest technology is available. However, in the course of some EGFSN research, a number of companies pointed out that for certain sector/occupations, it may not be appropriate to have trainees learn directly on the job initially where equipment is highly specialised and extremely expensive. There were concerns expressed to Forfás by companies in the manufacturing sector about the supply of skilled trades or technician level workers capable of working on machinery that combines mechanical, electrical, and electronic and IT/software technologies. There were specific concerns about toolmakers, machinists and polymer technicians, as all of these occupations involve skilled work with modern machinery. In the context of current training provision for these roles, the issue arose regarding the funding of equipment costs for training and the need to pool resources between IOTs, Skillnets, and the relevant industry associations. A similar such pooling of resources and costs arose in the case of the FAS training facility for the biopharma-pharmachem sector in Cork. It was developed in response to the identified training needs for both new and existing industries in that sector. It originated from the need to provide trainees with the opportunity to develop their practical diagnostic skills and related knowledge training in complex inter-relation technologies. The unit consisted of a process training area, a clean room, three class rooms and related services. The facility was supported by individual companies in the biopharma-pharmachem sector, UCC, Cork, Institute of Technology, Education, Training & Organisational Services (ETOS) and NIBRT. FÁS conducted two programmes (biopharmaceutical processing and medical devices) but the facility was also available to relevant industry and third party training providers to train, upskill or reskill employees. In a similar linkage with Industry the Tralee FAS Training Centre is currently developing a series of technician training programmes for Wind Turbine maintenance which involves the installation of a scaled tower; turbine and ancillary equipment, some of the cost of which is being provided by the industry sector.

For certain roles, there is no fixed approach to training e.g. machinists. The skillset is not fixed because different types of machine, and machines made by different manufacturers, can have significantly different specific skills requirements. In this area many companies provide training to new recruits themselves, and provide additional training over time to raise their skill level or to multi-skill across a number of different machines. Firms with a strong training programme that have been able to recruit in recent years appear to be able to meet their own needs. The difficulty seems to arise chiefly for firms that do not have a recent history of recruiting operatives at entry level and training them as machinists. When

these lose staff or increase sales they need to recruit experienced machinists, and have difficulty in finding them within Ireland. The costs of providing a supply of people to meet this replacement demand should be jointly shared between industry and the State under the reformed Apprenticeship model.

4b How can the costs of expansion into new disciplines be best supported given economic constraints?

Through streamlining and updating the existing provision of similar programmes currently being delivered by FAS and the VECs and delivering for more of the specific/technical practical training in the companies.

4c Who should pay the learner (a) on the job (b) off the job?

The employer contributions to the NTF complemented by the Exchequer should cover the cost of the off the job training provision. This should not include wages and only a training allowance that is in line with other forms of training that would introduce equity with those on other education and training programmes.

The employer should continue to pay the on the job wages but at market rates for the different occupations and perhaps more in line with the trainees contribution to the company¹⁷.

4d Should pay or allowances vary by discipline?

The early years of training under the apprenticeship are costly to employers and trainees contribute little to the employer in that period. The payment by the employer should be market-based reflecting the going rate for that occupation/discipline and reflect the contribution of the trainee to the business, e.g. as with trainee accountants, solicitors. The training allowance could vary by discipline in line with the competency required for the role, this will encourage a more discriminatory career path towards some key sectors.

What supports, if any, should be available for learners availing of off the job training away from home?

Reasonable supports to cover travel and accommodation whilst attending off the job modules. Online delivery should be increasingly used and this should reduce these costs.

Recruitment

- 5a Who should control recruitment to apprenticeships and how should this be done?
- Given that an agile response to labour market needs inevitably gives rise to peaks and valleys in demand, how can the impact of this on planning, infrastructural investment, and employment of trainers, be best catered for?
- 5c Should State provision of training be decoupled from employer recruitment?

¹⁷ Any new model of apprenticeship will have implications for enterprise and sector level collectively agreed wage setting mechanisms.

How can the supply and demand for the different disciplines be most effectively planned?

The Forfás Review of Labour Market Programmes recommended that the apprenticeship programme continue to be demand led but that there be a moderating mechanism to avoid over- or under-supply to address the cyclical nature of apprenticeship registration.

The system whereby FÁS did not limit or control recruitment numbers led to a situation which was extremely costly to the State. The fact that individual employers control the recruitment to apprenticeship led to unsustainable numbers in training with no prospect of employment and is now leading to very low recruitment resulting in shortages in some areas. The DES/DJEI Study Group set up in 2009 to forecast expected levels of apprentice recruitment for eight construction trades and six non-construction trades up to 2016 assists with planning the state involvement but the programme is still dependant on employers to recruit for their immediate needs and should systematically plan for future requirements, rather than await signals of shortages emerging.

A forecasting model is required for some strategically important skills areas to ensure we have an adequate supply of suitably trained individuals available for the workforce e.g. Toolmakers; Instrumentation; Maintenance Electricians, etc. The remaining programmes under the new Apprenticeship model could operate on a basis of supply and demand.

One option could be to apply a lower and higher limit for registration for these key trades through some external assessment of future supply and demand. At the lower limit the State could ensure an on-going stock of apprentices to meet the future needs of the economy. Consideration could be given to providing an incentive for employers to take on apprentices over and above what they need, or funding of the in company trainer or provision for certain occupations through Skillnets networks where groups of employers might jointly train up apprentices surplus to their requirements. Placement of trainees abroad as part of their training might also assist in building up a future supply. At the higher limit the State could moderate the number of apprentices/trainees being registered. If employers wished to recruit more then they should bear the full costs of the on and off the job elements of the programme.

5e What should be the minimum entry requirements? Should these vary for individual occupations?

The new model should include different entry points for those who wish to enter it from different educational attainment levels. For example the entry level should vary for those with a Junior Certificate, where they may enter a bridging programme to the new model, compared to those entering with a Leaving Certificate and should cater for mature entry routes between jobseekers with no prior experience in the field compared to those employees who are upskilling with significant prior work experience who might be given access to accelerated routes. The different entry levels could be facilitated through recognition of prior learning.

Curriculum

What is the appropriate balance of (a) technical and occupational skills and (b) transversal skills, and what subjects should be added or strengthened in the programme? (e.g. Transversal skills could include mathematical skills, ICT, communications, literacy, teamwork, planning, research and evaluation skills)

It should include a mix of all of the above and the balance will reflect the educational attainment of the intake, the nature of the apprenticeship and the learning outcomes required at the NFQ level.

Provision needs to develop both specific vocational skills for employment and wider employability skills that promote occupational mobility. This should be done in an integrated way, i.e. generic/transferable skills need to be taught in conjunction and made relevant to job specific skills, or at least framed within the context of a specific career path for the learner. Guidance supports also have a role in their development, particularly in the promotion of self-directed learning and management of career paths. Employers are not necessarily always interested in developing these skills (as they are not always job specific and can promote mobility outside of the firm), therefore, the State and the individual should take a role in their development. The ideal apprenticeship model should ensure that employability skills are reflected in course content/objectives.

Should the programmes for various trades and occupations have different learning outcomes and durations?

The duration of the programme should be based upon when apprentices/trainees attain the competency level required, so that some individuals could complete their training faster if they reached the required skill level. As in other countries, such as Australia and the UK, progression should be competency-based rather than time-based. The programmes could vary in duration and provide a progression path within an occupation and be assessed by modules which lead to major awards at levels 5, 6 and 7 in the NFQ and/or industry recognised certification.

6c How should the programme provide for progression beyond apprenticeship?

The programme should provide for well-structured and mapped progression opportunities to higher levels of technical skills, supervisory roles and management careers. These will need to work well and operate seamlessly between second level, VET, Higher Education and on the job training. Industry ownership and endorsement of these career paths is required to ensure that the education and training infrastructure can be mapped appropriately to provide clarity to learners.

6d How can learners be best prepared for potential career change in a knowledge based society?

With regard to apprenticeships in the manufacturing sector the EGFSN *Future Skills Requirements of the Manufacturing Sector to 2020* research reported employees having difficulty in identifying learning opportunities that might assist them in progressing their careers. The EGFSN recommended that "the Manufacturing Development Forum should lead a review of manufacturing career paths. It should engage industry, employee representatives

and relevant providers of education and training and the qualifications bodies including Industry representatives, Further Education providers, FÁS/SOLAS, Skillnets and Higher Education representatives. The review should have reference to international experience with developing and mapping career paths, such as the US stackable credentials model, the training and progression models of various "dual system" countries in Europe and the training and progression maps of sector skills councils such as SEMTA in the UK" The range of occupations to be mapped should include operative/craft, technician, supervisor and professional occupations.

Such an exercise is also required for the services type apprenticeships/traineeships under the ideal model and should assist learners preparing for a career change identify the nearest relevant role for which they can prepare. Online training and flexible part-time provision and in company training are all ways of preparing for potential career changes.

What transition measures/programmes, if any, are needed to prepare students to enter an apprenticeship, (a) in the case of early school-leavers and (b) in the case of those with a Leaving Certificate or equivalent and (c) those with significant experience beyond school?

Increased focus should be kept on retaining those likely to become early school leavers within the second level system. Those intending to leave school after the Junior Cert and enter apprenticeships will have weaknesses in general competencies. Consideration should be given to some 'pre apprenticeship' bridging course that might address their educational attainment through the inclusion of, for instance, the modules on offer in the Leaving Certificate Applied curriculum in the three main areas of vocational preparation, (involving work experience, enterprise and communication), general education, (offering lifeskills, the arts, social education, leisure and language) and vocational education.

The numbers entering at Junior Cert level have decreased significantly in the last eight years and accounted for 26% of registered apprentices at the end of 2011. Therefore the new model needs to reflect the rising educational attainment level of the cohort of school leavers going into apprenticeships.

It also should be more encompassing of mature entry routes. The EGFSN report *Future Skills Requirements of the Manufacturing Sector to 2020*, April 2013, recommended the use of the accelerated apprenticeship scheme (exemptions from phase 1-5 of the current model may be granted where appropriate) to augment the number of apprentices qualifying as toolmakers every year to meet identified current shortages

Assessment

Should the different disciplines/trades lead to awards at different levels of the national framework of qualifications?

YES - see comments above under section 6b

7b Should interim awards be provided for during training?

Full awards should be provided across the wider proposed range of occupations at levels 5,6 and 7.

Should time spent on and off the job be more flexible where learners are assessed as meeting the final learning outcomes for the relevant discipline?

YES - see comments on accelerated apprenticeships under 6e above.

7d How should arrangements for accreditation of prior learning be best delivered?

The EGFSN research in 2011 *Developing Recognition of Prior Learning (RPL)- The Role of RPL in the Context of the National Skills Strategy Upskilling Objectives*¹⁸ recommended that accreditation of prior learning at NFQ levels 4-6 should be targeted primarily at the following:

- Those seeking to upskill in a sector with significant previous experience
- Upskilling due to regulatory/mandatory qualification requirements
- Employers seeking to upskill staff e.g. new technologies and work practices
- Assessment should be through for example challenge exams, skills demonstrations, skills audits.
- It should be in consultation with employers and unions and done to encourage initiatives at sectoral or regional level
- It should be led by FÁS, VECs (now more appropriately Solas and the ETBs), IOTs and Skillnets under the direction of the Department of Education and Skills
- In consultation with: awarding bodies (QQI), NALA; Employer Representatives; Unions;
 Skillnets and Guidance Services.
- 7e How can redundant apprentices be best catered for?

Reskilling/Upskilling in areas of future skills needs

¹⁸ http://www.egfsn.ie/media/egfsn110411-developing_recognition_of_prior_learning.pdf

Delivery

- 8a What should be the appropriate balance between work based learning and education/training?
- 8b How should this be best structured in terms of phases, duration, block or day release, e-learning etc.
- 8c Can employers play a greater role in delivery and how should this be done?
- Should web based learning form part of the approach and how would this be integrated into the programme?

Predominantly the balance should be worked based learning as reflected in comments above.

The best structure should be determined in consultation with employers and should be flexible regarding the delivery of the off the job content. This off the job content should include flexible based learning approaches including RPL. Both on and off the job learning should be supplemented with web based delivery content, to instruct the apprentice through self directly learning modules that they can access through PC/Tablet or smart phone to reinforce best practice learning outcomes in their work place environment.

Providers

- 9a What providers should deliver the off the job elements in regard to (a) technical and occupational skills (b) transversal skills
- 9b How should this be structured?

The off the job elements could be delivered by the ETBs, IOTs, Skillnets or private providers.

Economy

- What is the impact of your proposals on the economy in terms of:
 - a) meeting Ireland's current and future skills needs
 - b) providing a high quality entry route for apprentices to sustainable employment

These proposals are predominantly aimed at addressing the current & future skills needs for a wide range of roles in manufacturing and services across a wider number of sectors in the economy. They also reflect the importance of employment across the various sectors as outlined in the following table from the *EGFSN National Skills Bulletin 2013*, published in July 2013¹⁹ as follows:

¹⁹ http://www.skillsireland.ie/media/15072013-National_Skills_Bulletin_2013-Publication.pdf

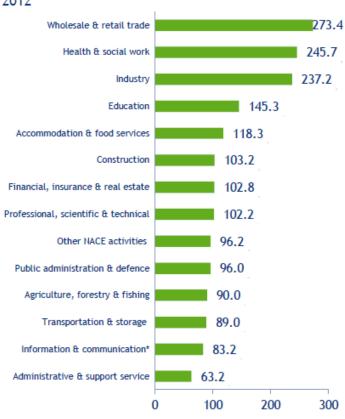


Figure 2.1 Employment by Sector (000s), Quarter 4 2012

Source: Analysis by FÁS (SLMRU) based on CSO data

In quarter 4 2012, the wholesale and retail sector was the sector with almost 273,500 persons employed. The health care sector, which includes social work and related activities, was the second largest, with 245,700 persons engaged. Industry, comprising all manufacturing activities, as well as utilities and extraction, was the third largest sector, employing just above 237,000.

The EGFSN NSB highlights that whilst "over the period quarter 4 2011 - quarter 4 2012, the occupational distribution of employment remained relatively unchanged, the share of skilled tradesmen and operatives continued to decline (by less than one percentage point each), while the share of 'white collar' employment increased. In quarter 4 2012, 'white collar' and services occupations had an unemployment rate of 6% or less while the highest unemployment rate was in elementary and skilled trades occupations."

"Over the period quarter 4 2011 - quarter 4 2012, employment increased in agriculture, information and communication (ICT), and the professional, scientific & technical sector. Employment declined in public administration and defence, construction, transportation and storage, administrative services, and industry (including manufacturing). Over the period 2007-2012, the ICT sector recorded the strongest growth, adding 11,000 net jobs. In quarter 4 2012, the unemployment rate of persons previously employed in the construction industry remained the highest of all sectors."

This highlights the importance of our proposals to extend the range of apprenticeships beyond the craft trades.

The latest *EGFSN Vacancy Overview*²⁰ outlines the areas where job vacancies arose during 2012. Through an analysis of almost 100,000 vacancies (from two sources - DSP/FÁS Jobs Ireland and IrishJobs.ie), it shows that vacancies continue to exist for most occupations with a strong demand for those with work experience, third level qualifications and/or foreign language skills.

It provides insights that would be useful to the Apprenticeship review in the context of extending the range of apprenticeships as it highlights the skills that are required due to replacement or expansion demand or because they are currently in short supply. It provides evidence from the analysis of job announcements that there will be future expansion demand particularly in the areas of ICT and sales, marketing and customer services.

²⁰ http://www.skillsireland.ie/publication/egfsnSearch.jsp?ft=/publications/2013/title,11060,en.php

Area 3. Other systems in Ireland including those with a significant work based learning element

These include the following:

■ The HEA NFQ level 8 ICT conversion²¹- this programme has the involvement of employers in design, selection, delivery and the work placement of the jobseekers.

In a response to specific skills shortages for high-level ICT skills identified by the EGFSN research *Addressing High-Level ICT Skills Recruitment Needs: Research Findings*²², a joint Government-Industry ICT Action Plan aimed at building the supply of high-level ICT graduates was launched. One of the key measures in the Plan is the roll-out, from March 2012, of more than 700 places on intensive NFQ level 8 higher diploma ICT skills conversion programmes by higher education providers in partnership with industry. Participants engage in a 9 month work placement as an integral part of the programme. Due to very positive initial evaluation and strong industry endorsement a second phase of the conversion programmes is being rolled out in 2013.

²¹ https://www.ictskills.ie/

²² http://www.skillsireland.ie/publication/egfsnSearch.jsp?ft=/publications/2012/title,9406,en.php

Area 4. Programmes in other jurisdictions which have a significant work based learning element, and are relevant to future models of apprenticeship/traineeship in Ireland.

No comments in this section

Area 5. Scope for broader integration of other occupations/disciplines into an apprenticeship or traineeship model in Ireland.

VEC PLC and VTOS Programmes

The Department of Education and Skills commissioned Forfás to produce the *Guidelines for the Alignment of Further Education Programmes with Skills Needs of Enterprise*, Jan 2012, in the context of improving how the Further Education sector can better respond to current and future skills needs. The review identified the key role that the VTOS and PLC programmes have to play in engaging with local enterprises and addressing specific vocational/occupational skills. There is scope for integration of some of these vocational/occupational skills into an apprenticeship model.

At the time of the Forfas research (2010 data), the VEC centres account for the majority of FETAC awards attained in Science, Computing, Arts, Craft and Design, Media, Business, Administration, Core Skills, Languages, General Studies, Health and Welfare, Personal Services, Tourism and Sport. Overall, VEC provision seems significantly directed towards services sectors. VEC centres have relatively few awards associated with sectors/occupations, for example, in engineering, logistics, construction, security and manufacturing relative to FÁS. This is reflective of traditional distinctions between further education (tending to encompass soft skills) and training (which tends to be responsive to a specific sector need). However, these distinctions are becoming blurred, with an increasing need for core skills development in tandem with specific vocational training, reflecting the combined requirement for learners to have skills for employment and employability.

Addressing the scope for integration of other occupations and disciplines into apprenticeship/traineeship model could consider what other FET providers are currently delivering. For example, specialist education and training providers such as Teagasc, Bord lascaig Mhara and Fáilte Ireland all have specific sectoral/occupational focuses.

Area 6. Please make any other points you consider relevant to the review

Progress on the National Skills Strategy 2020 targets

Any model of future apprenticeships will have a role to play in progressing the skills level in the overall workforce and assist in reaching the targets set out in the National Skills Strategy for 2020.

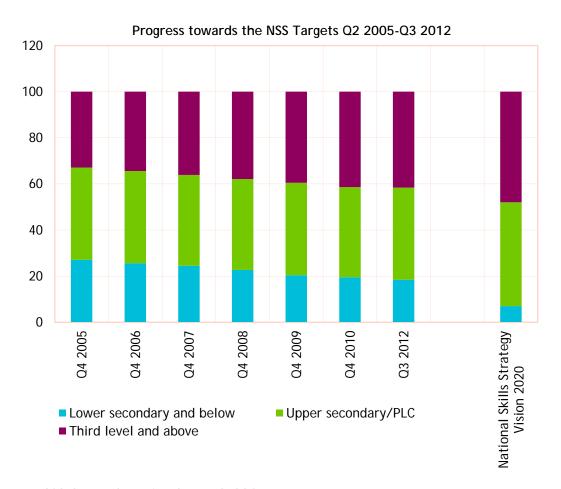
It is important therefore that the new model incorporate access and progression paths for the apprentices/trainees from awards at NFQ level 4/5 through to NFQ level 6/7 and upwards.

The key proposals in the National Skills Strategy for 2020 are that:

- 48 per cent of the labour force should have qualifications at National Framework of Qualifications (NFQ) levels 6-10 - i.e. from higher/advanced certificate to PhD level;
- 45 per cent should have qualifications at NFQ levels 4 and 5 Awards equivalent to higher secondary level education; and
- The remaining 7 per cent are likely to have qualifications at NFQ levels 1 to 3 (equivalent or below Junior Certificate) while aiming to make the transition to higher levels of educational attainment.

The new apprenticeship model will have a direct impact on the target of increasing the proportion of the population aged 20-24 with NFQ level 4 or 5 awards to 94 per cent by 2020, for those that do not complete the Leaving Certificate and who progress to equivalent, more vocationally oriented programmes.

It is estimated that 42% hold third level qualifications, 40% have obtained higher secondary/FET qualifications, while the proportion of those holding lower secondary or below has dropped to just under one fifth for the first time since tracking of the progress towards the NSS targets began.



Source: CSO Quarterly National Household Survey

The percentage of those in the labour force with Higher Education qualifications (NFQ Levels 6-10) has increased from 33% in Q2 2005 to 42% in Q3 20122. Specifically, there are approximately 245,000 more people in the labour force in Q3 2012 with Higher Education Level qualifications than there were in Q2 2005. The prospects for meeting the target of 48% of the labour force possessing a Higher Education Level qualification by 2020 set out in the National Skills Strategy would appear to be good based on current trends.

In relation to Levels 4 & 5 (Higher Secondary including Leaving Certificate), the percentage rate in Q3 2012 remains at 40%, the same level as in Q2 2005, there remains a challenge in closing the gap with the National Skills Strategy target at these levels. In absolute terms, the number of those within the labour force with Higher Secondary education has increased by around 48,000 since Q2 2005.

This is the net effect of:

- improvements in progression and retention rates: The percentage rate for early school leavers has declined from 13% in 2006 to 9% in 2011.
- the percentage of the population aged 20-24 with at least Higher Secondary or equivalent level education increased from 86% in 2005 to 89% by 2011, compared to the 2020 target of 94%.
- retention at Leaving Cert for the latest available cohort of entrants (2005-2006 entry cohort) has also risen from 81.3% (in 1996) to 90% in 2012, compared to a 2020 target of 90%.

The following table summarises progress in each of the headline National Skills Strategy targets.

Progress	towards achieving	r the Nationa	al Skills Strater	iv tarnets

	NSS Target	National Skills Strategy Baseline	Current Position	Progress	Data source
•	48 % of Labour Force at levels 6-10	33 %	42 %	+9 %	CSO QNHS Q3 2012
	45 % of Labour Force at levels 4-5	40 %	40 %	0%	CSO QNHS Q3 2012
•	7 % will be at levels 1-3	27 %	18%	+9 %	CSO QNHS Q3 2012
•	94% of 20-24 population should have at least NFQ Levels 4/5	86%	89%	+3%	CSO Q2 2011, Module on Educational Attainment
•	The retention rate at Leaving Certificate should reach 90 % by 2020.	81.3%	90 %	+8.7 %	Department of Education
•	The progression rate to Third Level should increase to 72%	55%	69%	+14%	Higher Education Authority (HEA)

Potential Sources of Employment Taking into Account the Skills Profile

Whilst the unemployment rate decreased by 0.8% to 13.7% between Q4 2011 and Q4 2012, Ireland's key challenge is getting people back to work. The Governments Action Plan on Jobs, 2012 and 2013 is aimed at rebuilding our economy, protecting existing jobs and creating new ones. The objectives of the Action Plans are to create the environment where 100,000 net new jobs will be created over the five year period to 2016 – 20,000 in manufacturing, 30,000 in internationally traded services and an additional 50,000 indirect spin off jobs. The Agencies have developed programmes to realise significant job growth in target sectors. For example, IDA Ireland plans for over 2,500 new jobs in each of the sectors – Financial Services, Life Sciences, ICT, and Content and Business Services. Cleantech is an emerging opportunity. Enterprise Ireland is targeting opportunities in sectors such as Agri-food, Life Sciences, Software, Financial and Business Services, Telecoms, Internet, Media and Entertainment, Cleantech and Engineering. Údarás na Gaeltachta has a targeted plan for niche areas including Audiovisual and Digital Media, Aquaculture and Fish Processing, Cultural Tourism, Arts, Culture and Creative Industries.

Our economic recovery is highly dependent on a skilled labour force. There is a clear link between skills and qualifications and employment. Aligning our education and training system to equip people with the skills and competencies required by enterprise is essential. A new model of apprenticeships has a role to play in this skills development to meet the needs of these growth sectors.

The publications of Forfás and the advisory groups to which it provides research support are available at www.forfas.ie To sign up for our email alerts contact us at info@forfas.ie or through the website. August 2013 **Forfás** Wilton Park House Wilton Place Dublin 2 Tel: +353 1 607 3000 Fax: +353 1 607 3030 www.forfas.ie