Mutual Learning Programme Database of National Labour Market Practices Ireland - National Skills Database (NSD)

This database gathers practices in the field of employment submitted by European countries for the purposes of mutual learning. These practices have proven to be successful in the country concerned, according to its national administration. The European Commission does not have a position on the policies or measures mentioned in the database.

Source of national practice	Peer Review on 'Methods for forecasting skills needs for the economy'
Title of the policy or measure (Original language)	National Skills Database (NSD)
Title of the policy or measure (English)	National Skills Database (NSD)
Country	Ireland
Name of the responsible body	Skills &Labour Market Research Unit (SLMRU), SOLAS/EGFSN
Geographical scope of the responsible body	National
Name(s) of other organisations involved (partners/sub-contractors)	Expert Group on Future Skills Needs (EGFSN) SOLAS
Start year of implementation	2003
End year of implementation	Ongoing

The NSD is a cost-effective tool which collates all available up-to-date information on the supply and demand of skills in Ireland and on the identification and anticipation of skills needs. This information is used by relevant policy makers to ensure that people are equipped with the right skills for the jobs of today and tomorrow; as such it led to policy decisions aimed at enhancing labour and skills supply and inter alia, tackling youth and long-term unemployment.

The NSD is in line with the Europe 2020 strategy and in particular with the flagship initiatives "Youth on the Move" and "An agenda for new skills and new jobs", as well as with Employment Guideline 6 on enhancing labour supply, skills and competencies, and develop capacities to better anticipate and meet the rapidly changing needs of dynamic labour markets.

More specifically, the NSD is relevant to four key areas of employment policy:

- Education and training: the NSD gathers data on the supply of skills across all education levels (with a focus on further and higher education) for the labour market. This data, when matched with an analysis of the demand for skills, is used to inform education provision into the future
- Youth: the NSD-based reports highlight the lack of workrelated experience as one of the barriers in gaining employment
- Long-term unemployed: outputs from the NSD allow for an examination of the profile of this target group (age, previous employment, if any, and level of education) which facilitates policy makers to make targeted interventions
- Active labour market policies: the NSD supports better functioning of the labour market by providing an evidence base for active labour market policies

EU policy relevance

National labour market context	There has been a high degree of flux within the Irish labour market since the inception of NSD to date. The EGFSN, the catalyst for establishing the SLMRU and subsequently the NSD, was set up in 1997 with the initial remit to address skills shortages of ICT professionals, but expanded to monitor all sectors of the Irish economy. The economic crisis of 2008 profoundly affected the labour market. An employment rate that was rising, from 65.4% in 2003 (Q4) to 68.8% in 2007 (Q4), fell sharply to a low of 58.3% in 2012 (Q1). Since then, the employment rate has risen again, reaching 63.9% in 2015 (Q4). As a result of the recession, there was a clear shift in the public spending strategy and policy approach. The two themes underpinning the reform in Ireland were: • A closer focus on the needs of the economy (present and future), ensuring that employment supports and education/training are labour market relevant; therefore, anticipating the changing composition of skills required rises in importance • A much stronger focus on the effective disbursement of limited public funding in the context of skills and training programmes, with an enhanced focus on return on investment based on evidence Since the inception of the NSD, its outputs have been used
	education/training are labour market relevant; therefore, anticipating the changing composition of skills required rises in importance • A much stronger focus on the effective disbursement of limited public funding in the context of skills and training programmes, with an enhanced focus on return on investment based on evidence
	 • address skills shortages in a tight labour market • identify job opportunities in the downturn • as the economy improved, to identify the areas where signs of growth were occurring • guide education and training provision in the context of budgetary constraints
Policy area	Active labour market policies, Education and training systems, Labour market functioning and segmentation, Labour market participation, Skills supply, productivity and lifelong learning

Specific policy or labour market problem being addressed	 Lack of systematic data: Prior to the set-up of the NSD, there was no national entity which gathered all available data on the supply and demand of skills; labour market information was disjointed, unstructured and therefore unsuitable for comparison purposes and it was difficult to outline where skills shortages were occurring Skill mismatches: by gathering, analysing, and matching data from the NSD it became possible to identify and address mismatches between supply and demand of skills Evidence based policy: the NSD became a hub which contained all relevant data necessary to meet an increased demand for evidence based policy decisions across government departments and education and training bodies Anticipating skills needs: the NSD extended its relevance by facilitating the forecasting exercise aimed at anticipating future skills needs; it was also utilised to support the development of an evidence-based national skills strategy
Aims and objectives of the policy or measure	The main aim of the NSD is to collate and manage a database which contains all relevant data in relation to the supply and demand of skills in order to identify areas of skills shortages and skills mismatches. As such, it provides a platform for timely analysis and forecasting of the labour market at occupational level.
Main activities/actions underpinning the policy or measure	 Collation of data: Data related to employment/unemployment, employment permits, both private and public vacancies, recruitment agency survey, job announcements and jobseekers; education data across all levels of education, including both enrolments and outputs, along with graduate destination is collated. Ensuring consistency and uniformity required for relational database: In order to unify all information received from various data sources, all data in the NSD are coded using either Standard Occupational Classification (SOC) whereby skills are approximated by occupations, or the International Standard Classification of Education (ISCED), whereby skills are approximated by courses.
Geographical scope of policy or measure	National
Target groups	Low-skilled people,People not in education, employment or training (NEETs),Young people (aged 16 to 25 years)

Outputs:

- Sectoral studies: the EGFSN have produced numerous studies utilising the SLMRU's analyses of data held in the NSD to inform policy makers of skills needs across sectors such as ICT, finance, health, biopharma, construction, manufacturing and hospitality.
- Annual publications including National Skills Bulletin, Monitoring Ireland's Skills Supply, Regional Labour Markets Bulletin, Vacancy Overview
- **Skills forecasting:** e.g. Occupational Employment Projections 2020
- **Surveys:** Recruitment Agency Survey conducted biannually, Follow Up Survey on FET graduates
- Regional skills profiles: enhancing skills needs identification and provision at a regional level
- Career guidance portal: a SOLAS/EGFSN careers portal http://lmi.fas.ie/search.aspx was established to provide a detailed employment outlook by occupation, based on NSD outputs

Outcomes:

By gathering and collating relevant data, the NSD was in a position to identify skills mismatches and shortages in the Irish labour market. This intelligence was used to inform a number of policy decisions including the following:

- Skilled migration: the analysis of data from the NSD
 has a crucial role in the compiling of the Highly Skilled
 Eligible Occupations List for managing skilled migration
 into Ireland (list was standardised using the Standard
 Occupational Classification system (SOC 2010) as
 recommended by the SLMRU to be aligned with outputs
 from the NSD).
- Informing the National Skills Strategy: the analysis produced from the NSD provided an integral part in the formulation of the National Skills Strategy for Ireland.
- Provided rationale for the establishment of Regional Skills Fora (overseen by the Department of Education and Skills): these fora are envisaged as a vehicle for cooperation between education and training providers and enterprise at a regional level with the aim of achieving closer alignment between the skills needs of enterprise and local provision
- Labour Market activation policies: where job opportunities were identified from the outputs from the NSD, labour market activation initiatives were developed such as JobBridge (the National Internship Scheme), Momentum (an initiative aimed at long-term unemployed people to gain the skills needed to access work in areas where job opportunities were identified based on outputs

Outputs and outcomes of the policy or measure

	from the NSD) and Springboard (offering free higher education courses up-skilling unemployed people for employment in high value sectors).
Management and implementation arrangements	 Identification of skills needs by utilising the NSD requires co-operation between a number of government agencies and statutory bodies; this institutional framework includes the Department of Jobs, Enterprise & Innovation and associated agencies (namely those supporting exporting companies and promoting Ireland as a location for FDIs), the Department of Education & Skills, agencies responsible for funding and quality of education provision (higher and further education), education qualification awarding body, and public employment service (PES)); more specifically, a close co-operation between the EGFSN and SOLAS is required Technically, the NSD has been designed as a Microsoft Sequel Server database. A range of software packages can be used to query and analyse the data (e.g. Microsoft Access, SPSS, Excel etc.). A number of features are added to the basic Microsoft Access package to maximise efficiency. These include, inter alia, a number of pre-designed user friendly queries. The use of the database is confined to a small number of highend users. The number of users is restricted due to data confidentiality issues, but also due to the fact that in order to interpret the data held in the database, an indepth knowledge about the manner in which the data is collected, stored and related is essential There is a continuous, specifically stipulated annual funding arrangement in place, under the Irish National Training Fund ('Provision of Information on Skills Requirements') used to part-fund the work of the EGFSN and the SLMRU (and by extension, the maintenance of the NSD)

- Reliable data prior to the establishment of the NSD, no system existed for the gathering of all relevant national data in relation to skills demand and supply; the SLMRU had to identify all relevant data sources, make contact with data providers and assess what specific data was available and best methods for linking and standardising the data
- Comparable data the data gathered initially was in varying formats with different definitions of skills levels; in order to establish the NSD, the SLMRU cleaned and matched the data to internationally recognised classifications, namely SOC for data relating to occupations and ISCED for education-related data
- Developing trust in order to access the wide array of labour market related data from various sources, it was essential to develop good working relationships with data providers; for example, in order to access the detailed microdata from the NSI, the members of the SLMRU became Officers of Statistics with the Central Statistics Office
- Maintaining relationships with stakeholders/data providers – regular stakeholder meetings were initiated and data providers were given an opportunity to review NSD-based publications prior to their release to allow for any comments or inputs relating to the analysis of their data
- Identifying new data sources in order to remain relevant and to improve outputs, the SLMRU continued to expand the dataset held in the NSD by identifying relevant data providers e.g. job announcements by the IDA (Ireland's inward investment promotion agency) and initiating the Recruitment Agency Survey.

Key challenges

Key conditions for success	Strong cooperation between government departments and agencies: it was essential to establish and nurture relationships with data providers, such as the Irish NSI (CSO), in order to build trust and initiate mutual learning; this allowed for a continuous improvement of the data held in the NSD and the scope and relevance of the outputs Use of standardised data (e.g. SOC/NACE/ISCED): it was essential for the success of the NSD to attach an internationally-recognised coding system to all the data held in the NSD in order to allow for comparisons across a wide variety of data sources and, therefore, identify where skills shortages may be occurring; while some data came with codes attached, manually assigning codes was required in some circumstances Obtain/maintain funding (stipulated allocation from the Exchequer (specifically the National Training Fund (NTF)): in order for the NSD to function and expand, it was essential that the funding stream was maintained Skills: the establishment, maintaining and expanding of the NSD has been dependent on a small team of researchers, most of whom have worked in the SLMRU since the inception of the NSD; this has allowed for a deep understanding of the mechanisms of the NSD, and its main aims and objectives along with a continual relationship with data providers EGFSN: the members of the EGFSN were drawn from representatives of business, employees, education, government departments and state agencies; the Group provided invaluable guidance and support in the development of the NSD and in the dissemination of the analyses produced from the data held Relevance to the labour market: the changing labour market environment since the inception of the NSD necessitated the SLMRU to continuously adapt the outputs of the NSD
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Type of assessment	Qualitative and quantitative assessment
Duration and frequency of the assessment	Monitoring is on-going with the users of the outputs of the report, statistical users and policymakers and the NSD and its related work has been the subject of a number of peer reviews, nationally and internationally.

Further information on the assessment	 A peer review of the NSD based outputs was undertaken within the Determining Labour and Skills Shortages and the Need for Labour Migration in Ireland, EMN Ireland (2015; www.enm.ie) The Department of Education & Skills conducted a review of the EGFSN and found that the work of the Group was highly valued across government departments and had a good reputation and credibility among industry along with education providers The SLMRU received an Innovation in Government Award in 2008 for the development and demonstrated usefulness of the National Skills Database
Links to the website, background information and assessment material	DJEI (employment permits section); EGFSN (various reports): http://www.skillsireland.ie/ SOLAS Research and Publications Eurther Education & Training Strategy 2014-2019 Qualifax (The National Learners Database): National Skills Bulletin 2015 CEDEFOP: National Skills Bulletin 2014 The systems for the early identification of skills needs in Ireland DES National Skills Strategy: IRELAND'S NATIONAL SKILLS STRATEGY 2025 Mutual Learning Programme Skills Forecasting in Ireland — Can the data tell a useful story?
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