OECD Skills Studies

OECD Skills Strategy Ireland

ASSESSMENT AND RECOMMENDATIONS



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BETTER POLICIES FOR BETTER LIVES

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Please cite this publication as:
OECD (2023), *OECD Skills Strategy Ireland: Assessment and Recommendations*, OECD Skills Studies, OECD Publishing, Paris, https://doi.org/10.1787/d7b8b40b-en.

ISBN 978-92-64-60885-6 (print)
ISBN 978-92-64-81981-8 (pdf)
ISBN 978-92-64-62933-2 (HTML)
ISBN 978-92-64-99566-6 (epub)

OECD Skills Studies
ISSN 2307-8723 (print)
ISSN 2307-8731 (online)

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Foreword

Developing relevant skills and using them effectively is crucial for Ireland's ability to thrive in an increasingly interconnected and rapidly changing world.

Globalisation, the digital transformation, the green transition and demographic change are combining to change and increase the skills needed to thrive in Ireland's workplaces and society. People will need a stronger and more well-rounded set of skills, including cognitive, social and emotional, and job-specific skills, to flourish in life both in and outside of work. The coronavirus (COVID-19) crisis has accelerated the digitalisation of learning and work, making upskilling and reskilling even more critical for many adults.

Ireland has achieved relatively strong skills performance in many areas. Youth are achieving high levels of skills performance; the tertiary attainment level among young adults is among the highest across the OECD; and Ireland performs better than the EU average in terms of digital skills, with strong growth in recent years. Ireland also does a good job at activating people's skills in the labour market, and their skills contribute to high levels of innovation.

However, Ireland still faces a number of important skills challenges. A concern is that many adults do not have the skills to succeed in economies and societies of the future, and participation in lifelong learning lags behind top European Union (EU) performers. Skills imbalances in the labour market are also relatively high, and workplaces could be better designed to stimulate the use of workers' skills. Furthermore, the governance of Ireland's skills system is complex and requires strong collaboration and co-ordination across government and with stakeholders.

Skills policy is already a priority in Ireland. In 2016, the National Skills Strategy (NSS) 2025 was launched, which sets a comprehensive vision for skills policy for the period up to 2025. A key element of the NSS 2025 was the establishment of new bodies, such as the National Skills Council and nine Regional Skills Fora, that make Ireland a leader in developing advanced skills governance arrangements.

Since setting the ambitious objectives of the NSS 2025 in 2016, Ireland has been profoundly transformed by the continuing impacts of global megatrends, the COVID-19 pandemic, Brexit and the Russian Federation's war of aggression against Ukraine. To ensure that its NSS 2025 is still fit for purpose, Ireland should take stock of current policy priorities and review how the NSS 2025 might need to be adapted. To support Ireland in this endeavour, the OECD has conducted a collaborative and tailored OECD Skills Strategy project.

Building on detailed analysis and widespread engagement with stakeholders, this report presents 24 tailored recommendations for Ireland, which provide high-level strategic policy directions for Ireland across four priority areas. The guidance contained in this report provides Ireland with a strong foundation on which to build a further strengthened skills system. The OECD stands ready to support Ireland as it seeks to implement better skills policies for better lives.

The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

Acknowledgements

This report is part of a series of country projects within the OECD programme of work on Building Effective National Skills Strategies.

The OECD wishes to thank Simon Harris, Minister for Further and Higher Education, Research, Innovation and Science, for his commitment to this OECD Skills Strategy project.

The OECD is grateful to Ireland's Cross-Departmental Project Team (CDPT) for its invaluable guidance and input throughout the project. We are particularly grateful to William Beausang, Stephanie O'Brien, Emma Kinsella, Karolina Murphy and Noel Martin from the Department of Further and Higher Education, Research, Innovation and Science (DFHERIS) for co-ordinating the project. Other members of the CDPT include, in alphabetical order: Marcus Breathnach (Department of Enterprise, Trade and Employment [DETE]); Nora Condon (SLMRU [SOLAS]); Trudy Duffy (DFHERIS); Jaqueline Hogan (Department of Social Protection [DSP]); Caoimhe Hope (DFHERIS); Enda Hughes (DFHERIS); Georgina Hughes-Elders (Department of Public Expenditure, National Development Plan Delivery and Reform [DPENDPDR]); Paul Keating (Department of Education [DEP EDU]); Tanya Kenny (DFHERIS); Siobhan Lawlor (DSP); Orla Lynch (DFHERIS); Mary McGarry (DFHERIS); Sarah Miley (DFHERIS); Fiona O'Byrne (DFHERIS); Nicki O'Connor (DFHERIS); Gillian Smyth (Department of the Taoiseach); and Dervila Twamley (DFHERIS). The OECD also would like to thank the Chair and members of the National Skills Council and the Regional Skills Fora Managers and Chairs for their active engagement in the project.

Our warm thanks to the over 250 representatives of departments, government agencies, education and training institutions, businesses and business associations, unions, community associations, think tanks and other organisations who generously shared their insights during workshops, group discussions and bilateral meetings with the OECD team in Ireland, and for their written input. We would also like to take the opportunity to thank Ireland's CDPT and Regional Skills Fora Managers for their excellent organisation of the national and regional workshops, group discussions and bilateral meetings. We also thank the moderators and notetakers in the workshops.

While the report draws upon data and analysis from the OECD, Ireland's authorities and other published sources, any errors or misinterpretations remain the responsibility of the OECD team.

Bart Staats was the OECD Project Leader responsible for managing this OECD Skills Strategy project in Ireland. The authors of the report were: Bart Staats, OECD Centre for Skills (Chapter 1 and Chapter 2); Tamar Friedman Wilson, OECD Centre for Skills (Chapter 3); Heather Carey, Work Advance Ltd. (Chapter 4); and Laura Reznikova, OECD Centre for Skills (Chapter 5). Sofía Gómez Sanchez and Isabel Monaghan (OECD Centre for Skills) provided background research and workshop support. Mikaela Malka (OECD Centre for Skills) assisted with proof-reading.

Andrew Bell, Head of OECD Skills Strategies, provided analytical guidance and supervised the project. El Iza Mohamedou, Head of the OECD Centre for Skills, oversaw the project, while Stefano Scarpetta, OECD Director for Employment, Labour and Social Affairs, and Mark Pearson, OECD Deputy Director for Employment, Labour and Social Affairs, provided strategic oversight.

Véronique Quénehen and Jennifer Cannon (OECD Centre for Skills) provided invaluable support for mission organisation, report layout and design and publication planning. Julie Harris provided proofreading and editorial support.

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Abbreviations and acronyms

The following are the main abbreviations and acronyms cited in the report.

Abbreviation/acronym	Full description
AEGIS	Adult Educational Guidance and Information Services
AI	Artificial intelligence
ALMPs	Active labour market policies
AUG	Adult Upgrading Grant
BTEI	Back to Education Initiative
CAO	Central Applications Office
CCSP	Community Childcare Subvention Plus
CDPT	Cross-Departmental Project Team
CEDEFOP	European Centre for the Development of Vocational Training
CEOs	Chief executive officers
COALESCE	Collaborative Alliances for Societal Challenges
CPD	Continuing professional development
CSO	Central Statistics Office
CVSE	Community, voluntary, charity and social enterprise
CVT	Continuing vocational training
CVTS	Continuing Vocational Training Survey
DAFM	Department of Agriculture, Food and the Marine
DCEDYI	Department of Children, Equality, Disability, Integration and Youth
DEP EDU	Department of Education
DETE	Department of Enterprise, Trade and Employment
DFHERIS	Department of Further and Higher Education Research Innovation and Science
DHLGH	Department of Housing, Local Government and Heritage
DoES	Department of Education and Skills
DPENDPDR	Department of Public Expenditure, National Development Plan Delivery & Reform
DRCD	Department for Rural and Community Development
DSP	Department of Social Protection
DTCAGSM	Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media
ECS	European Company Survey
EfP	Evidence for Policy Unit
EGFSN	Expert Group on Future Skills Needs
EI	Enterprise Ireland
EQF	European Qualification Framework
ERC	Education and Research Centre
ESCO	European Skills, Competences, Qualifications and Occupations Classification
ESRI	Economic and Social Research Institute
ETB	Education and training board
FDI	Foreign direct investment
FE	Further education

Abbreviation/acronym	Full description
FET	Further education and training
GDP	Gross domestic product
GNI	Gross national income
GVCs	Global value chains
HCI	Human Capital Initiative
HE	Higher education
HEA	Higher Education Authority
HEIs	Higher education institutions
HELS	Higher Education Links Scheme
HPWPs	High-performance work practices
HSE	Health Service Executive
ICT	Information and communications technology
IDA	Industrial Development Agency
IEA	International Association for the Evaluation of Educational Achievement
IGEES	Irish Government Economic and Evaluation Service
IIP	Investors in People
ILAs	Individual learning accounts
IRC	Irish Research Council
ISCED	International Standard Classification for Education
ISCO	International Standard Classification of Occupations
IT	Information technology
IoT	Institute of Technology
LCA	Leaving Certificate Applied
LCE	Leaving Certificate Established
LCVP	Leaving Certificate Vocational Programme
LECPs	Local Economic and Community Plans
LEEF	Labour Employer Economic Forum
LEOs	Local Enterprise Offices
LFS	Labour Force Survey
LMAC	Labour Market Advisory Council
LMI	Labour market information
MFI	Micro Finance Ireland
MNEs	Multinational enterprises
MoUs	Memoranda of understanding
NAA	National Apprenticeship Alliance
NACE	Statistical classification of economic activities in the European Community
NAO	National Apprenticeship Office
NCCA	National Council for Curriculum and Assessment
NCPC	National Competitiveness and Productivity Council
NCPP	National Centre for Partnership and Performance
NCS	National Childcare Scheme
NCSE	National Council for Special Education
NDP	National Development Plan 2021-2030
NES	National Employer Survey
NESC	National Economic and Social Council
NEET	Not in education, employment and training
NFQ	National Framework of Qualifications
NGO	Non-governmental organisation
NPF	National Planning Framework
NSAI	National Standards Authority of Ireland
NSC	National Skills Council

Abbreviation/acronym	Full description
NSSSG	National Skills Strategy Steering Group
NTF	National Training Fund
NTFAG	National Training Fund Advisory Group
PDST	Professional Development Service for Teachers
PES	Public employment services
PIAAC	Programme for the International Assessment of Adult Competencies
PISA	Programme for International Student Assessment
PLC	Post-Leaving Certificate
QQI	Quality and Qualifications Ireland
R&D	Research and development
R&I	Research and innovation
RAS	Recruitment Agency Survey
RPL	Recognition of prior learning
RD&I	Research, development and innovation
RSES	Regional Spatial and Economic Strategies
RSF	Regional Skills Fora
SFI	Science Foundation Ireland
SGI	Sustainable Governance Indicators
SLMRU	Skills and Labour Market Research Unit
SME	Small and medium-sized enterprise
SOG	Senior Officials Groups
SPAs	Strategic Performance Agreements
SST	Specific Skills Training
STEM	Science, technology, engineering and mathematics
ToR	Terms of Reference
TTOs	Technology Transfer Offices
TUs	Technological Universities
UDL	Universal Design of Learning
VTOS	Vocational Training Opportunities Scheme
WBL	Work-based learning

Executive summary

OECD-Ireland collaboration on the OECD Skills Strategy project

This OECD Skills Strategy Assessment and Recommendations project reviews how Ireland's existing skills strategy – the National Skills Strategy (NSS) 2025 – might need to be adapted to ensure that it is still fit for purpose. Through desk research and active engagement with government and stakeholder representatives in multiple workshops, group discussions and bilateral meetings, the project identifies priority areas for action and provides tailored recommendations for improving Ireland's skills outcomes. This report is not positioned as an implementation plan. Further work is required by Irish stakeholders to sequence and prioritise investments in order to move forward on the areas for action identified.

Key findings and opportunities for improving Ireland's skills system

People's skills have made an important contribution to Ireland's well-being and strong economic performance and will continue to be an important driver of continued improvement in the future. However, Ireland faces some critical challenges today, and others are visible on the horizon. Significant labour shortages are apparent in Ireland; regional inequalities have been rising; rising housing prices create affordability concerns; and several sectors have not experienced growth in labour productivity in recent years. In addition, the Russian Federation's war of aggression against Ukraine has resulted in a large inflow of Ukrainian refugees, and the conflict contributed to a surge in energy and food prices that will cut households' real incomes, dampen consumption growth and fuel uncertainty. The coronavirus (COVID-19) crisis has accelerated the digitalisation of learning and work, making digital skills increasingly a prerequisite to actively participate in a more complex, interconnected world. At the same time, new skills are needed to adapt to climate change and to limit global warming, loss of biodiversity and pollution.

The scale and pace of change globally is such that Ireland's skills ecosystem is now required to take a leap forward. People will need to leave education with the skills needed not only to meet the needs of the labour market and society of today but for those of tomorrow as well. Adults will need opportunities to upskill and reskill to perform new tasks in their existing jobs, assume the duties of new jobs and adapt to new modes of work, behaviour, consumption and participation in society. Firms will have to adopt more creative and productive ways of using their employees' skills, and robust governance structures will be needed to ensure that reforms are sustainable.

It is timely that Ireland now considers how to build ambitiously on its strengths to put skills at the centre of a broad policy response and significant investment to tackle the challenges facing the country and seize the opportunities of the future. This OECD Skills Strategy project is the foundation for Ireland to achieve this objective. Four overarching priority areas and key findings are summarised below.

Priority 1: Securing a balance in skills through a responsive and diversified supply of skills

In the context of rapidly changing skills needs, it will be essential for Ireland to develop a skills system that helps to secure a balance between skills demand and supply. Ireland needs to ensure that its skills system is flexible and responsive to address skills shortages and mismatches as they emerge and plan for future skills needs. A diversified supply of skills is also needed to build adaptability and resilience in the face of societal and economic change. To better secure a balance in skills, Ireland should:

- improve information and guidance for individuals on learning and career pathways
- strengthen learning and career pathways over the life course
- make education and training provision more responsive to changing skills needs.

Priority 2: Fostering greater participation in lifelong learning in and outside the workplace

Encouraging a culture of lifelong learning is crucial to ensuring that individuals actively engage in adult learning after leaving the compulsory education system. In turn, participation in different forms of adult learning results in a wide range of benefits, including higher wages for individuals, higher productivity for firms and higher levels of social trust. Across countries, there is a growing need to upskill and reskill regularly over the life course to adapt to labour market and societal developments. To foster greater participation in lifelong learning in and outside the workplace, Ireland should:

- strengthen incentives to participate in lifelong learning for individuals
- strengthen incentives to participate in lifelong learning for employers
- make lifelong learning more flexible and accessible.

Priority 3: Leveraging skills to drive innovation and strengthen firm performance

Optimally using people's skills is associated with higher wages and job satisfaction for employees, high rates of productivity and innovation within firms, and stronger growth of the economy. Better leveraging skills will therefore be central to supporting economic growth, promoting resilience to global megatrends, and ensuring Ireland can achieve its aims of digital leadership and a just transition. To better leverage skills to drive innovation and strengthen firm performance, Ireland should:

- better utilise Ireland's research talent and public research and innovation system to drive innovation within firms
- promote the continuous improvement of leadership and management skills within enterprises
- incentivise and enable enterprises to make better use of the skills of their workers through innovative workplace solutions.

Priority 4: Strengthening skills governance to build a joined-up skills ecosystem

Well-functioning skills governance arrangements are the bedrock of a "joined-up" skills ecosystem, where skills policy design, implementation, monitoring and evaluation are impactful, mutually reinforcing and rooted in an extensive and robust evidence base. The complexity associated with skills policies, compounded by the uncertain and rapidly changing environment in which skills policy decisions are made, makes strong skills governance essential. To strengthen skills governance for a more joined-up skills ecosystem, Ireland should:

- promote a whole-of-government and strategic approach to skills policy
- support effective engagement with stakeholders throughout the skills policy cycle
- strengthen the collection, exchange and use of skills information.

1 Key insights and recommendations for Ireland

This chapter describes the key insights and policy recommendations of the OECD Skills Strategy Assessment and Recommendations project for Ireland. It applies the OECD Skills Strategy Framework to assess the performance of Ireland's skills system, describes the policy context, and introduces the four priority areas for action, including key findings and high-level strategic recommendations for each. Subsequent chapters describe each priority area in greater detail, highlighting the opportunities for improvement, good practices and recommendations for improvement.

Skills matter for Ireland

Skills[1] are vital for enabling individuals and countries to thrive in an increasingly complex, interconnected and rapidly changing world. Countries where people develop strong skills, learn throughout their lives, and use their skills fully and effectively at work and in society, are more productive and innovative. They also enjoy higher levels of trust, better health outcomes and a higher quality of life (OECD, 2019[1]).

Getting skills policies right is critical for ensuring societal well-being and inclusive and sustainable growth in Ireland

The skills of Irish people have made an important contribution to Ireland's well-being and strong economic performance and will continue to be an important driver of continued improvement in the future. After the shock of the coronavirus (COVID-19) pandemic, there has been a broad-based recovery, with Ireland's gross domestic product (GDP) projected to grow 3.8% in 2023 and 3.3% in 2024, and an unemployment rate at its lowest since the economic crisis in Ireland over a decade ago (OECD, 2023[2]; 2022[3]). Foreign direct investment (FDI) has been a key driver of growth, with many multinational enterprises (MNEs) setting up offices in Ireland in the last decade (IDA Ireland and DETE, 2021[4]). Ireland also scores well on diverse measures of societal well-being, with high levels of reported life satisfaction, strong community engagement, high-perceived personal security and one of the lowest gender wage gaps among OECD countries (OECD, 2020[5]).

However, Ireland still faces some important challenges today, and others are visible on the horizon. An immediate challenge is the Russian Federation's (hereafter "Russia") invasion of Ukraine. Ireland has welcomed more than 73 000 Ukrainian refugees, who need to be supported with housing, jobs and education (OECD, 2022[6]). The conflict also contributed to a surge in energy and food prices. These inflationary pressures, exacerbated by disruptions in global value chains, will cut households' real incomes, dampen consumption growth and create fuel uncertainty. These challenges add more risks to a sustained recovery. Significant labour and skills shortages are apparent in Ireland; regional inequalities have been rising (e.g. the income gap between leading and lagging regions has widened); rising housing prices create affordability concerns; and several sectors have not experienced growth in labour productivity in years (OECD, 2022[7]; 2020[5]). The United Kingdom's departure from the European Union (EU) "Brexit" adds uncertainty and continues to create risks to Irish firms' competitiveness (OECD, 2022[6]; 2020[5]). OECD-led efforts to reform the international tax system will also affect Ireland and its large number of MNEs. From 2024 onwards, many MNEs (with global revenues over EUR 750 million) will be subject to a global minimum effective tax rate of 15%. Responding to these social and economic challenges, Ireland should develop skills policies that help to foster inclusive and sustainable growth and strengthen well-being.

A number of megatrends are changing the skills needed for success in work and society

Global megatrends such as globalisation, technological change, climate change and population ageing will continue to affect Irish society and economy, transforming jobs and how people consume, interact and spend their time. To thrive in the world of tomorrow, people will need a stronger and better-rounded set of skills, and better use of their skills will need to be made in the labour market and workplaces.

The digital transformation has been reshaping Ireland's society and economy. Digital skills are fast becoming a prerequisite to actively participate in more complex, interconnected societies and are needed in most professions. As firms adopt more and more digital technologies to conduct their work, certain job tasks and, in some cases, entire jobs can become automated. Before the pandemic, the OECD estimated that in Ireland 16% of workers faced a high risk of seeing their jobs automated, compared to an OECD average of 14% (Nedelkoska and Quintini, 2018[8]). A more recent OECD study using a more precise methodology finds an even higher risk of automation across the OECD (Lassébie and Quintini, 2022[9]). Moreover, a study by the Economic, Social and Research Institute estimated that skills-displacing

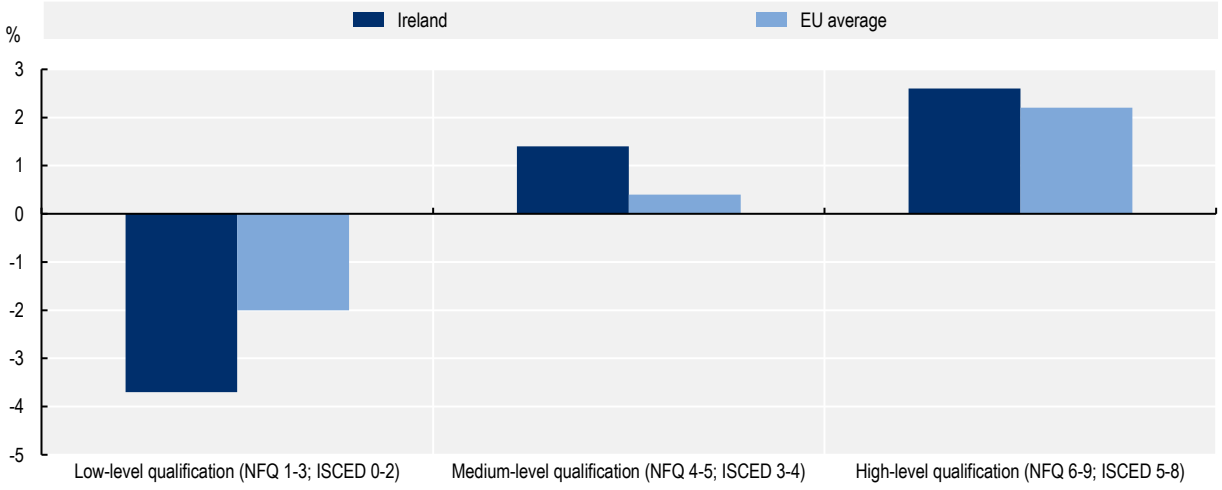
technological change affects 21% of employees in Ireland (McGuinness, Pouliakas and Redmond, 2021[10]). Research undertaken by the Expert Group on Future Skills Need (EGFSN) shows that one in three jobs in Ireland are at high risk (a probability greater than 70%) of being disrupted by the adoption of digital technologies (Expert Group on Future Skills Needs, 2018[11]). The Skills and Labour Market Research Unit (SLMRU) finds that over 370,000 people in Ireland work in occupations at high risk of automation and further 600,000 are in jobs considered at medium risk of automation (SOLAS, 2020[12]). Technological change can help drive productivity and overcome skills shortages. However, it also means that many people will need to develop skills for new jobs or upgrade their skills for existing ones.

At the same time, new skills are needed to adapt to climate change and to limit global warming, loss of biodiversity and pollution. Climate change has an impact on both consumer demand and how and what economies produce and, by extension, the skills people need for work and living (OECD, 2020[5]). Employment in the green economy will become more significant, with specialist jobs arising in sectors impacted by climate change adaptation (Indecon Economic Consultants, 2020[13]). A study by the EGFSN anticipates strong future skills demand in jobs related to onshore/offshore wind energy and residential retrofitting activities (Expert Group on Future Skills Needs, 2021[14]).

Overall, the digital and green transitions will transform the types of skills required in society and the economy for the foreseeable future, and the impact of these megatrends is already evident. Higher levels of skills have become increasingly important for success in the labour market, and this trend is expected to continue (SOLAS, 2021[15]). Ireland is already among the EU countries with the largest shares of people indicating that tertiary degrees are needed for their jobs (CEDEFOP, 2022[16]). Projections show that demand for workers with higher-level qualifications will continue to grow, while demand for workers with lower-level qualifications will decline (Figure 1.1) (CEDEFOP, 2023[17]). Sectors such as construction, arts and recreation, and health and social care are projected to grow the most, while sectors such as agriculture, forestry and fishing, and mining and quarrying are expected to decline (CEDEFOP, 2023[17]). These trends emphasise the need to effectively support workers' job transitions, especially workers in declining sectors, and to develop the skills for future societies and economies.

Figure 1.1. Projected labour force growth in Ireland by qualification, 2018-30

As a percentage of the annual rate



Note: ISCED: International Standard Classification of Education.
Source: CEDEFOP (2023[17]), *Skills Forecast*, www.cedefop.europa.eu/en/tools/skills-intelligence/future-annual-employment-growth.

StatLink https://stat.link/mgbyp6

The Irish population is ageing fast. While the overall population is projected to increase by 8% between 2018 and 2030, the population aged over 65 is expected to grow by 41% (OECD, 2020[5]). This will pose significant challenges to the structure of the Irish economy since population ageing can lead to labour shortages, with fewer qualified workers entering the labour force. It could also negatively affect economic growth (OECD, 2019[1]). Furthermore, more money from a proportionally smaller tax base will be required to fund pensions, healthcare and other services for the elderly. Improving productivity will, therefore, become even more important to continued economic growth in Ireland.

Sudden shocks such as the COVID-19 pandemic also have important skills implications. The COVID-19 pandemic has accelerated changes in the economy that were already underway, forcing firms to move their operations on line and introduce or expand teleworking practices in ways that are making digital skills increasingly essential skills (OECD, 2022[7]). The crisis has also brought significant interruptions to learning, both in initial education and adult education and training. This is happening at a time when learning is all the more important for keeping pace with a fast-changing world.

Skills policies should be at the core of Ireland's response to these trends

The Irish skills system will need to support the development and effective use of a diversified supply of skills to tackle the challenges and seize the opportunities of a rapidly changing world. People will need to leave education with the skills needed not only to meet the needs of the labour market and society of today but for that of tomorrow as well. Adults will need opportunities to upskill and reskill to perform new tasks in their existing jobs, assume the duties of new jobs and adapt to new modes of work, behaviour, consumption and participation in society. In addition, firms will have to adopt more creative and productive ways of using their employees' skills, and robust governance structures will be needed to ensure that reforms are sustainable. While a broad range of policies is required to address these challenges, skills should be at the core of Ireland's policy response.

Building on a tradition of skills strategies, Ireland is in a unique position to put skills at the centre of a broad policy response that aims to tackle the challenges facing the country and seize the opportunities of the future. This OECD Skills Strategy aimed to support Ireland in achieving this objective.

The OECD Skills Strategy project in Ireland

In this OECD Skills Strategy project (Box 1.1), the OECD worked collaboratively with Ireland to achieve a number of objectives.

First, it reviewed how Ireland's existing skills strategy – the National Skills Strategy (NSS) 2025 (Box 1.2) – might need to be adapted to ensure that it is still fit for purpose. Since setting the ambitious objectives of the NSS 2025 in 2016, Ireland has been profoundly transformed by the continuing impacts of global megatrends, the COVID-19 pandemic, Brexit and the war in Ukraine. The NSS 2025 should be the cornerstone of Ireland's efforts to chart a course through these realities and toward a prosperous and healthy future. The review of the NSS 2025 should equally help ensure that skills remain at the top of the policy agenda.

Second, this project identified the current policy priorities for Ireland, which was achieved by assessing the most important challenges and opportunities facing Ireland's skills system. Through desk research and active engagement with stakeholders consulted during this Skills Strategy project (hereafter "project participants"), four overarching priority areas were identified, and recommendations were developed (see Priority areas and recommendations). This process started in March 2022 with an Extraordinary Meeting of the National Skills Council (NSC). An Assessment Mission took place in June 2022 to identify potential opportunities to improve performance, and a Recommendations Mission was held in October 2022 to test and refine a list of Potential Policy Directions. Overall, in regional and national workshops in Dublin,

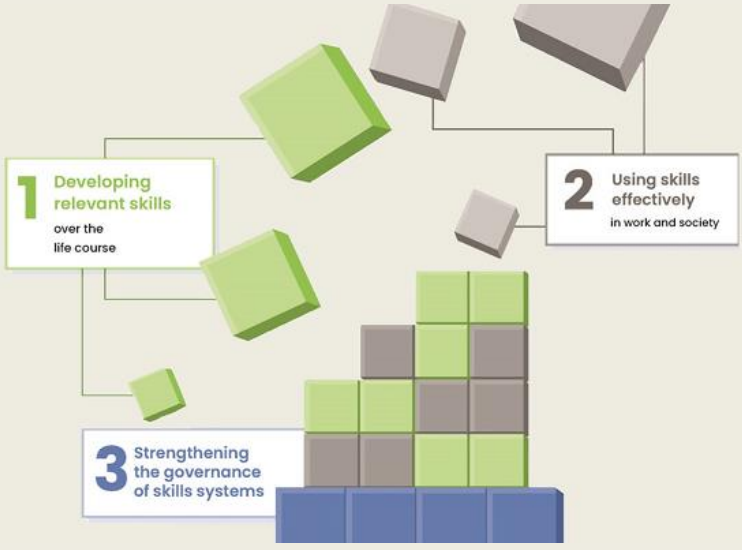
Athlone, Limerick and Cavan, as well as in various group discussions and bilateral meetings, the project engaged over 250 project participants, representing government departments and organisations, employer organisations, educational establishments, research institutions and other interested parties (see Annex 1.A for an overview of the engagement activities).

Box 1.1. The OECD Skills Strategy Framework

OECD Skills Strategy projects provide a strategic and comprehensive approach to assess countries' skills challenges and opportunities and build more effective skills systems. The OECD collaborates with countries to develop policy responses tailored to each country's specific skills challenges and needs. The foundation of this approach is the OECD Skills Strategy Framework (Figure 1.2), the components of which are:

- **Developing relevant skills over the life course**: To ensure that countries are able to adapt and thrive in a rapidly changing world, all people need access to opportunities to develop and maintain strong proficiency in a broad set of skills. This process is lifelong, starting in childhood and youth and continuing throughout adulthood. It is also "life-wide", occurring both formally in schools and higher education (HE) and non-formally and informally in the home, community and workplaces.
- **Using skills effectively in work and society**: Developing a strong and broad set of skills is just the first step. To ensure that countries and people gain the full economic and social value from investments in developing skills, people also need opportunities, encouragement and incentives to use their skills fully and effectively at work and in society.
- **Strengthening the governance of skills systems**: Success in developing and using relevant skills requires strong governance arrangements to promote co-ordination, co-operation and collaboration across the whole of government; engage stakeholders throughout the policy cycle; build integrated information systems; and align and co-ordinate financing arrangements. The OECD Skills Strategy project for Ireland adopted this approach by forming a Cross-Departmental Project Team (CDPT) to support the whole-of-government approach to skills policies and engaging a wide variety of project participants.

Figure 1.2. The OECD Skills Strategy Framework



Source: OECD (2019[1]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://dx.doi.org/10.1787/9789264313835-en.

Box 1.2. The National Skills Strategy 2025: "National Skills Strategy: Ireland's Future"

In 2016, Ireland launched its comprehensive National Skills Strategy (NSS) 2025. It builds on findings presented in the advisory report, *Tomorrow's Skills: Towards a National Skills Strategy Tomorrow's Skills: Towards a National Skills Strategy*, by the EGFSN, as well as various national and international policy papers, evaluations and strategies on skills and talent development, innovative education and training, and forecasts of current and future skills needs. A high-level Steering Group supported the development of the new strategy, and more than 120 stakeholders provided input to a consultation paper in 2015.

The NSS 2025 was developed in the context of a significant reform in the education and training sector to develop a more dynamic, responsive and high-quality system that provides all learners with the knowledge and skills they need to participate fully in society and the economy. To support the achievement of this vision by 2025, the strategy took a comprehensive stock of Ireland's skills performance and outlined six strategic objectives, the realisation of which counts on the support and co-operation of a wide array of stakeholders:

1. Education and training providers will place a stronger focus on providing skills development opportunities relevant to the needs of learners, society and the economy.
2. Employers will participate actively in the development of skills and make effective use of skills in their organisations to improve productivity and competitiveness.
3. The quality of teaching and learning at all stages of education will be continually enhanced and evaluated.
4. People across Ireland will engage more in lifelong learning.
5. There will be a specific focus on active inclusion to support participation in education and training and the labour market.
6. There will be support for an increase in the supply of skills to the labour market.

Source: Department of Education and Skills (2016[18]), *Ireland's National Skills Strategy 2025 – Ireland's Future,* www.gov.ie/en/publication/69fd2-irelands-national-skills-strategy-2025-irelands-future/.

The performance of Ireland's skills system

Developing relevant skills

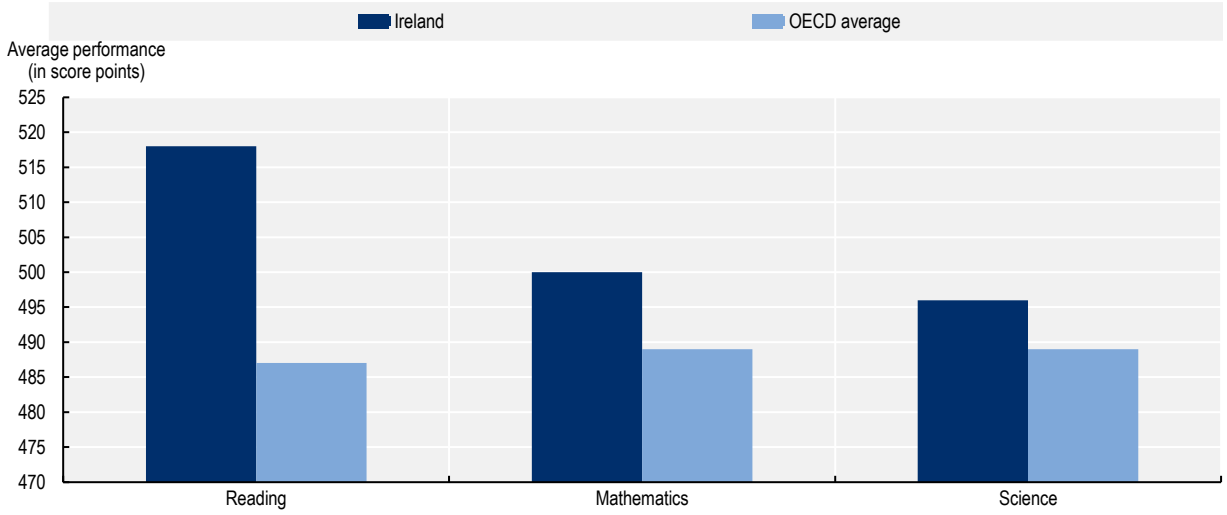
To ensure that countries are able to adapt and thrive in a rapidly changing world, all people need access to learning opportunities to develop and maintain strong proficiency in a broad set of skills. This process is lifelong and "life-wide", occurring formally, non-formally and informally.

Overall, youth are achieving high levels of education and skills performance

Ireland has done a good job of developing its youths' foundational skills. According to results from the OECD Programme for International Student Assessment (PISA), 15-year-olds in Ireland score above the OECD average in reading, mathematics and science (Figure 1.3) (OECD, 2019[19]). In fact, the reading skills of Irish 15-year-olds rank among the highest in the world, and Ireland is the only OECD country where PISA reading performance improved significantly for both advantaged and disadvantaged students

between 2008 and 2018 (OECD, 2019[20]). In addition to strong foundational skills, Ireland's education system should provide youth with a balanced set of social and emotional skills to prosper in today's demanding, changing and unpredictable world. The current reform ("redevelopment") of the Senior Cycle already acknowledges the need for developing these skill sets and the role of education systems in developing the knowledge, skills, values and dispositions for future generations (Department of Education, 2022[21]).

Figure 1.3. Performance in reading, science and mathematics, 15-year-olds in Ireland, 2018



Source: OECD (2019[19]), *PISA 2018 Results*, https://doi.org/10.1787/19963777.

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Many young people in Ireland attend higher education. For instance, the share of young adults with a tertiary degree increased considerably in recent decades and is now significantly above the OECD average (63% of 25-34 year-olds progressed to tertiary education in 2021, compared to the OECD average of 47%), ranking Ireland 5th out of the 38 countries for which data are available (OECD, 2023[22]). With this expansion, it will be important for Ireland to safeguard the quality of learning in both further education and training (FET) and HE. Tertiary institutions need to prepare students for an increasingly complex and rapidly changing economy and society and provide them with a broad set of skills. The Irish National Employer Survey from 2018 showed that employers are generally content with the skills of graduates. However, they indicate that some types of skills could be strengthened, including commercial awareness, entrepreneurial skills and language capability (Fitzpatrick Associates, 2019[23]). In addition, while many students are completing their studies in tertiary institutions, challenges remain. For example, about three out of every four undergraduate entrants to HE finish their degree, but completion rates vary significantly across sectors, educational institutions, fields of study and student cohorts (Higher Education Authority, 2021[24]).

Overall, the generally positive outcomes of the initial education system bode well for the future of Ireland's skills system. With higher levels of skills, young people are in a better position to progress to HE, access good quality jobs in the labour market and continue learning throughout life.

Many adults do not have the skills to succeed in an increasingly complex and interconnected world

The tertiary attainment level among young adults in Ireland is comparatively high, as noted above, which is positive. However, educational qualifications are not perfect proxies for the actual skills that adults possess. Evidence shows that many Irish adults are at risk of falling behind in an increasingly complex and interconnected world since they do not have the right skills to thrive in their current jobs and are unprepared for changes in the world of work. For instance, only 27% of adults feel that their skill sets prepare them "very well" for future roles as the workplace evolves (Accenture, 2021[25]). Moreover, while data on the breadth and depth of adult skill levels could be improved, there are some indications that the skills of many adults could be improved. For example, the Survey of Adult Skills (a product of the OECD Programme for the International Assessment of Adult Competencies, PIAAC) shows that only 25% of adults had problem-solving skills at Levels 2 or 3 in 2012 – meaning that they can navigate across pages and applications to solve a problem or use digital tools to facilitate or make progress towards the solution of a problem. This is well below the OECD average of 31% (OECD, 2019[26]). The next round of PIAAC data, available in 2024, will allow Ireland to see if its performance has improved in the intervening years.

In addition, while Ireland performs above the EU average in terms of digital skills – scoring fifth overall in the Digital Economy and Society Index 2022, with strong growth in recent years (European Commission, 2022[27]) – only 30% of adults have less than basic digital skills (including information and data literacy, digital content creation and more) (Eurostat, 2022[28]). In addition, it is particularly worrying that adults with comparatively weak socio-economic profiles (e.g. lower social classes, low education levels) self-report that their digital skills are below average (Accenture, 2022[29]).

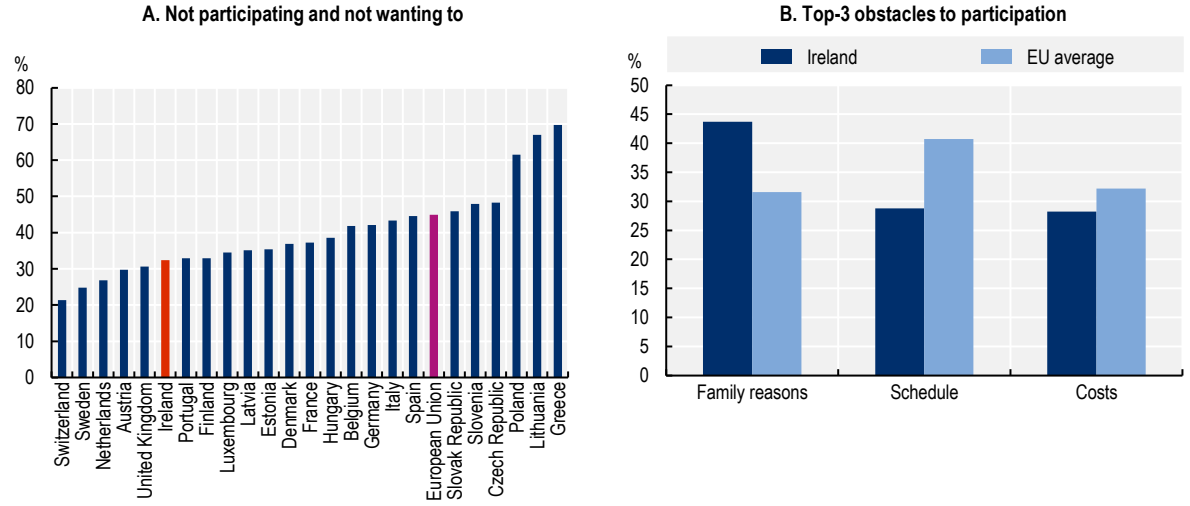
Participation in lifelong learning in Ireland lags behind top EU performers

Lifelong learning (i.e. learning by adults no longer engaged in initial education) will be essential to equip all adults with the skills needed in current and future labour markets. While lifelong learning opportunities in Ireland are generally perceived as being of high quality, participation in lifelong learning in Ireland is not as high as might be expected. Some 14% of Irish adults participated in formal and non-formal education and training (in the last four weeks) in 2021, which is slightly above the EU average of 10.8%, but far behind top EU performers, such as Finland (31%) or Sweden (35%) (Eurostat, 2021[30]). With regard to informal learning (e.g. learning on the job), over 62% of adults in Ireland reported engaging in informal learning in the last 12 months, which is similar to, but slightly surpasses the EU average (60%) (Eurostat, 2022[31]). Some groups of adults are participating more in lifelong learning than others. Younger cohorts, higher educated, and employed adults are most likely to participate in learning activities (SOLAS, 2022[32]).

While a lack of motivation is one of the main reasons for not participating in learning activities, the willingness to learn is comparatively high in Ireland. The share of people who did not and did not want to participate (32%) is among the lowest in the European Union (Figure 1.4, Panel A). For the adults who are motivated to learn, there are a number of obstacles that prevent them from participating. The three main reasons adults cite for not participating are family reasons, schedule and costs (Figure 1.4, Panel B) (Eurostat, 2016[33]). Additionally, while information on lifelong learning is readily available, and most people agree that it is easy to find, project participants concur that navigating training offers constitutes a barrier to entering training, requiring further guidance (Fitzpatrick Associates, 2019[23]).

A large share of employers in Ireland provides continuing training to employees; however, support varies considerably between various types of businesses. Employer support is lower in indigenous companies (85%) compared to multinationals (91%), in manufacturing (80%) compared to service (87%) industries, in small enterprises (84%) compared to larger ones (93%), and outside of Dublin (83%) compared to in Dublin (91%) (Fitzpatrick Associates, 2019[23]). Adult learning is often driven by work-related needs, with about one in two adults participating in non-formal learning activities for work-related reasons (SOLAS, 2022[32]).

Figure 1.4. Motivation and obstacles to participating in education and training in Ireland, 2016



Source: Eurostat (2016[33]), *EU Adult Education Survey 2016*, https://ec.europa.eu/eurostat/web/microdata/adult-education-survey.

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Using skills effectively

To ensure that countries and people gain the full economic and social value from investments in developing skills, people also need opportunities, encouragement and incentives to use their skills fully and effectively at work and in society.

The skills of some adults could be more fully activated in the labour market

Compared with most OECD countries, Ireland does a good job activating people's skills in the labour market. Labour force participation is above the OECD average and above the rates prevailing in the 1990s (OECD, 2022[7]). However, while Ireland's employment rate (73% in Q4 2022 for people aged 15-64) is above the OECD average (70%), it is well below that of top performers, such as Iceland (82%), the Netherlands (82%) and New Zealand (80%) (OECD, 2023[34]) (Central Statistics Office Ireland, 2023[35]). In addition, while long-term unemployment has shown a strong downward trend in the last decade – with 30% of unemployed adults in 2021 – it is still significantly higher than in top-performing OECD countries, such as New Zealand (11%) and Canada (16%) (OECD, 2023[2]). There are also several groups for which the activation of skills could be further improved, including adults with low levels of education, women, people with disabilities, and more (OECD, 2022[7]; 2020[5]). Integrating disadvantaged groups into the labour market is crucial to ensure no groups are left behind and improve Ireland's overall employment performance (OECD, 2018[36]).

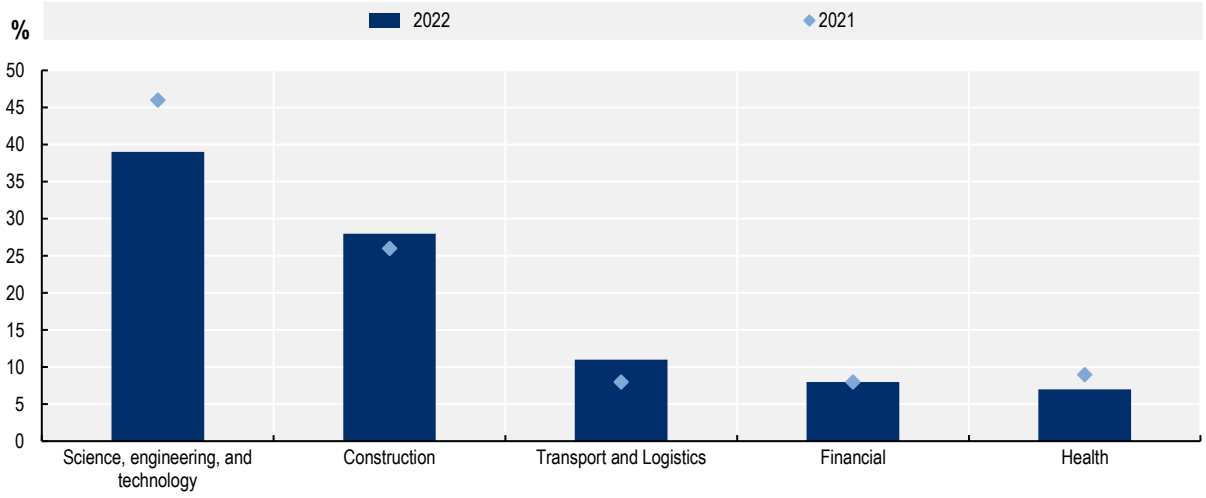
Skills imbalances in the labour market are relatively high

Skills imbalances are evident in the Irish economy. These imbalances concern not only skills shortages and surpluses but also skills mismatches, which occur when a worker's skills exceed or fall short of those required for the job under current market conditions.

Irish employers express great concern about labour and skills shortages. Strong economic growth and a large inflow of FDI have been driving an increase in demand for labour, which is not fully met by the domestic supply. In recent years, Ireland had a steadily increasing ratio of new job vacancies to

unemployed (a measure of labour market tightness) that reached a new high in Q2 2022 but which dropped slightly in more recent months (OECD, 2022[7]). While shortage pressures are significant, they are less severe than in many other EU countries. For example, the job vacancy rate (defined as the number of job vacancies as a share of total job positions) is below the EU average (1.5 versus 2.9 in Q3 2022) and far below rates in countries such as Austria (5.0) and the Netherlands (4.9) (Eurostat, 2023[37]). SOLAS' Difficult-to-fill Vacancies Survey among recruitment agencies indicates that it is especially difficult to find workers for science, engineering and technology occupations, as well as for construction occupations (Figure 1.5) (SOLAS, 2022[38]). Migrants play an increasingly important role in Ireland's skills landscape and help reduce labour pressures, especially in information and communications technology, which accounts for 34% of all employment permits issued.

Figure 1.5. Vacancies that are difficult to fill in Ireland, by sector, 2021-22



Source: SOLAS (2022[38]), *Difficult-to-fill Vacancies Survey*, www.solas.ie/f/70398/x/2702562088/solas-difficult-to-fill-vacancies.pdf.

StatLink https://stat.link/zt9m6b

In addition to an insufficient number of people available or willing to take up work in specific roles or sectors, the labour force also does not always have the skills required for available jobs. Project participants indicate there are particularly significant shortages of digital skills (e.g. software, coding, data analytics); science, technology, engineering and mathematics (STEM) skills (e.g. engineering, construction); and management skills (e.g. project management, change management and leading multicultural teams), among others.

There is also considerable evidence of qualification mismatches in Ireland leading to productivity loss and wage penalties for individuals. A certain degree of skills mismatch within Ireland's labour market had already been evident prior to the COVID-19 pandemic, and has been further reinforced by the impacts of global megatrends (e.g. the digital and green transition, etc.) (DETE, 2022[39]). In particular, a comparatively large share of workers is over-qualified (i.e. have a higher qualification than required for the job), affecting 28% of individuals, compared with 22% across the European Union. Only Greece, Türkiye and Spain have larger shares (Eurostat, 2020[40]). While some level of over-qualification appears to be voluntary (McGuinness and Sloane, 2011[41]), a large part is involuntary, and a long list of factors appears to explain cross-country variation in over-qualification rates, ranging from the demand for skills in the labour market and how workplaces are organised, to the design of the education system and the availability of career information and guidance (McGuinness, Bergin and Whelan, 2018[42]; Delaney et al., 2020[43]; Nugent, 2022[44]). This finding suggests that there is scope to make better use of the skills that Ireland is already developing.

Workplaces could be better designed to stimulate the use of workers' skills

The intensive use of employees' skills in the workplace is strongly associated with higher levels of productivity and better business performance (OECD, 2019[1]). Data from PIAAC suggest that on measures of skills use in the workplace, Ireland performs in line with the OECD average but lags behind countries like Australia, Finland, New Zealand, Norway, the United Kingdom and the United States, where firms tend to use the skills of their employees more intensively (OECD, 2019[26]).

Various factors affect the extent to which skills are effectively used in the workplace, but especially high-performance workplace practices (HPWPs) – such as work flexibility, teamwork and performance-based pay – are positively associated with skills use. Evidence suggests a mixed picture of workplace practices in Ireland. Compared with firms across the European Union, Irish firms are more likely to communicate their vision and mission to staff and to assign greater value to training. However, they are less likely to use financial levers, such as variable pay, to motivate staff or to offer employees autonomy over their time and when they schedule tasks (Eurofound, 2020[45]). Strong leadership and management capabilities are important drivers of organisational change, helping to optimise the use of skills in workplaces and drive innovation, productivity and firm performance. Previous studies have highlighted a need to improve management capability in Ireland, particularly among small and medium-sized enterprises (SMEs) (OECD, 2019[46]).

Overall, there appear to be large differences in the use of skills and the adoption of best practices between MNEs and smaller, often locally-owned SMEs. For instance, differences in the adoption of new technologies contributed to significant productivity gaps between foreign-owned and locally-owned enterprises, which translated into large wage differentials between the two types of firms (OECD, 2020[5]).

Strengthening research and innovation (R&I) is important for skills use, partly because it could help raise the demand for skills. While Ireland is classed as a strong innovator (ranked sixth out of the EU countries in 2022), there are indications that Ireland could better use its talent to drive innovation (European Commission, 2022[47]). For instance, Ireland has comparatively low rates of innovation within enterprises (43% versus 49% EU average) (Eurofound, 2020[45]). Moreover, Ireland's place in the Global Innovation Index fell from 7th in 2016 to 23rd in 2022 out of 132 countries (WIPO, 2022[48]). This decrease over time is attributed to reduced relative performance on measures of government support for business research and development (R&D), business R&D and non-R&D innovation expenditures, employment in innovative enterprises, product innovators, patent and trademark applications and environment-related technologies (European Commission, 2022[47]).

Strengthening the governance of the skills system

Sound public governance of skills systems is contingent upon a government's ability to co-ordinate, steer, monitor, communicate and work horizontally (across departments and institutions within government) and vertically (with regional and local authorities and with external public and private stakeholders) (OECD, 2019[1]).

Ireland's complex skills system requires strong collaboration and co-ordination across the government

The governance of Ireland's skills system is complex. Multiple departments and various governmental bodies and agencies at national, regional and/or local levels play a role in skills policy design, implementation, monitoring and evaluation. To manage the complexity of its skills system, compounded by the fast pace with which new skills policies, programmes and initiatives are being introduced, Ireland should apply a whole-of-government approach to skills with the active engagement of multiple departments.

While several governance structures in Ireland's skills ecosystem, such as the NSC, Regional Skills Fora (RSF), or the EGFSN (see more below), are seen as international good practices (2020[49]; 2021[50]; 2021[51]; OECD, 2019[1]), there are significant opportunities for further improvement in the governance of Ireland's skills system, which need to be seized to help realise Ireland's ambition of evolving from a strong to a top performer in terms of skills outcomes. Taking a bold approach to addressing existing skills governance challenges is equally important for setting Ireland's skills ecosystem on a path of continuous improvement and building up ample capacity to meet future skills challenges and opportunities.

According to the Bertelsmann Foundation's Sustainable Governance Indicators (SGI), Ireland ranks below the OECD average on formal inter-ministerial co-ordination, yet above the OECD average on informal inter-ministerial co-ordination (across all policy areas) (Bertelsmann Stiftung, 2022[52]). In skills policy specifically, not all departments in Ireland perceive skills from a holistic, life course perspective and, therefore, as necessitating close cross-departmental collaboration, but rather as an exclusive domain of the Department of Further and Higher Education, Research, Innovation and Science (DFHERIS). Equally, more departments should be taking a more active role in and greater ownership of addressing skills pressures (such as skills shortages) in collaboration with DFHERIS and other relevant actors. Despite the NSC's mandate to, among others, facilitate cross-departmental co-operation, co-ordination and collaboration on skills in the Irish skills ecosystem, the NSC does not sufficiently support such collaboration and co-ordination across departments. In addition, there are challenges in co-operation, co-ordination and collaboration at the regional and local levels, which arise due to overlapping mandates and lacking communication between actors who engage with employers on reskilling/upskilling on the ground, despite the existence of regional one-stop-shops (RSF) for employer engagement on skills. While it is positive that Ireland is planning to prepare a follow-up to the NSS 2025 with the view of further supporting a whole-of-government approach to skills, there are lessons to be learned from the implementation of the NSS 2025 itself to ensure effective implementation of the NSS 2025 follow-up.

Effective and efficient stakeholder engagement mechanisms are essential for a strong skills system

Ireland has developed several mechanisms for engaging non-governmental stakeholders on skills policy. These mechanisms are overseen by different departments, touch upon skills-related topics to varying extents and create opportunities for engaging stakeholders for various purposes (e.g. to shape skills policy priorities, provide input into training design, etc.).

While establishing these mechanisms is a step in the right direction, there remains ample space for further improving Ireland's approach to stakeholder engagement on skills issues. The NSC has not yet succeeded in developing an influential role and a strong voice in Ireland's skills ecosystem commensurate with skills and workforce challenges. NSC meetings, in practice, could facilitate better engagement with non-governmental stakeholders on shaping skills policy priorities. The NSC also needs more representative and diverse non-governmental membership, stronger accountability mechanisms, sufficient resourcing and visibility. Equally, the current functioning of the National Training Fund Advisory Group (NTFAG), established to support greater involvement of employers in decisions surrounding the National Training Fund (NTF), could provide more opportunities for stakeholders to provide advice and input into decisions on NTF expenditure. In addition, despite many positive examples of engaging stakeholders in the co-design of education and training programmes, such engagement could be more systematic, inclusive (particularly of SME voices), efficient and better co-ordinated.

A strong skills evidence base should inform skills policy making and individuals' and firms' skills choices

While Ireland has a rich evidence base for informing skills policy making and individuals' skills choices, there are important opportunities for further improvement. A variety of administrative and survey data are used to produce insights on Ireland's skills supply and demand, including by the Skills and Labour Market Research Unit (SLMRU) and the EGFSN, who are the key actors responsible for skills assessment and anticipation in Ireland.

The skills evidence base needs to be further strengthened, including by greater coordination between the bodies responsible for the collection of data and information in this regard. The range of information on (not only) skills needs collected from employers could be further expanded, and the granularity of such information further improved. Information on outcomes of learners in FET is not collected systematically, while available economy-wide skills forecasts are not fully reflective of the specificities of the Irish labour market. The collection of data on skills needs directly from employers requires better co-ordination to enable more effective use. At the same time, technical challenges complicate skills data exchanges within the government and with stakeholders. A strong evaluation culture is also needed to support evidence-based policy making, underpinned by well-resourced evaluation structures and a co-ordinated and collaborative approach to skills policy evaluation. Bertelsmann Foundation's SGI suggest that Ireland's *ex post* evaluation of public policies is relatively under-developed.

The policy context in Ireland

Ireland has a history of applying a strategic approach to skills policy. In 2016, Ireland launched the *National Skills Strategy: Ireland's Future* (the NSS 2025 – see Box 1.2), which sets the overall vision for skills policy for the period up to 2025 (Department of Education and Skills, 2016[18]).

A key element of the NSS 2025 was the establishment of new bodies, such as the NSC and nine RSF, which work as the single contact points in each of Ireland's regions to guide employers to find and connect with services and support available across the education and training system (Regional Skills Ireland[53]). These bodies were introduced to provide a coherent national architecture that also incorporates the regional structures (Department of Education and Skills, 2016[18]).

Implementing the NSS 2025 required co-operation and action by numerous stakeholders – government departments and agencies, employers and educational establishments, among others. For each of the six strategic objectives, the NSS identified broad action areas and concrete measures for implementation.

In addition to the NSS 2025, many governmental strategies and strategic documents cover aspects of skills policy (see Table 5.4 in Chapter 5 for an overview of these strategies). Some of these strategies address specific sectors of Ireland's education and training system. Examples are the national FET strategy for 2020-24, entitled *Future FET: Transforming Learning* (SOLAS, 2020[54]) and the *Action Plan for Apprenticeship, 2021 to 2025* (DFHERIS, 2022[55]). Other strategies highlight more specific objectives for Ireland's skills system. For instance, *Adult Literacy for Life – A 10-year Adult Literacy, Numeracy and Digital Literacy Strategy* (DFHERIS, 2021[56]) aims to strengthen adults' literacy, numeracy and digital literacy skills. Likewise, the *Digital Strategy for Schools to 2027* aims to equip students with the knowledge and skills they need to successfully navigate the evolving digital world (Department of Education, 2022[57]). Additionally, reform of the post-primary curriculum (e.g. with the redevelopment of the Senior Cycle) emphasises the acquisition of knowledge, complementing the application of skills, to best demonstrate the breadth of student learning (Department of Education, 2022[21]). Furthermore, the *National Access Plan 2022-2028* aims to ensure that the students entering, participating in and completing HE at all levels reflect the diversity and social mix of Ireland's population (Higher Education Authority, 2022[58]).

Skills policies are also touched upon in strategies that are less directly linked to the skills system. Examples are Ireland's national R&I strategy, *Impact 2030*, which describes the important role of skills to maximise

the impact of R&I in Ireland (DFHERIS, 2022[59]), and the *National Smart Specialisation Strategy for Innovation 2022-2027*, which aims to bring coherence to regional research, development and innovation (RD&I) planning and advancing its agenda both regionally and nationally (DETE, 2022[60]). Ireland's National Digital Strategy, *Harnessing Digital – The Digital Ireland Framework*, aims to advance the use of digital technology in the delivery of public services, the adoption of digital technology in enterprises and across the education and training system, and increase the share of adults with at least basic digital skills to 80% by 2030 (Department of the Taoiseach, 2022[61]). Skills are also a key part of Ireland's *White Paper on Enterprise 2022-2030*, which describes Ireland's vision for its enterprises to succeed through competitive advantage founded on sustainability, innovation and productivity, delivering rewarding jobs and livelihoods (DETE, 2022[39]). Furthermore, *Languages Connect* is Ireland's strategy for foreign languages in education for 2017-26 and aims to increase and diversify the teaching and learning of foreign languages (Department of Education, 2022[62]).

The COVID-19 pandemic also resulted in several strategic documents to support the recovery, with skills being a central element of the policy mix. Examples are the *Economic Recovery Plan* (Department of the Taoiseach, 2021[63]), which specified actions across four pillars – one of which is dedicated to helping people get back to work, including through upskilling and reskilling – and the *Recovery and Resilience Plan*, which outlined several targeted reforms and investments for several specific areas of upskilling and reskilling, with funding through the European Union's Recovery and Resilience facility (DPER, 2021[64]).

In 2020, the Department of Further and Higher Education, Research, Innovation (DFHERIS) was established. With a mandate on tertiary education and research and innovation, (functions which were previously discharged within the Departments of Education and of Enterprise), DFHERIS has responsibility for talent and skills development across the life course in Ireland.

Priority areas and recommendations

Based on the assessment of the performance of Ireland's skills system and discussions with the Government of Ireland, four priority areas have been identified for this OECD Skills Strategy project:

1. securing a balance in skills through a responsive and diversified supply of skills (Chapter 2)
2. fostering greater participation in lifelong learning in and outside the workplace (Chapter 3)
3. leveraging skills to drive innovation and strengthen firm performance (Chapter 4)
4. strengthening skills governance to build a joined-up skills ecosystem (Chapter 5).

Building on in-depth desk analysis, stakeholder workshops, online surveys, discussion groups and bilateral meetings, the OECD has made 24 recommendations (Figure 1.6), which provide high-level strategic policy directions for Ireland across these four priority areas. The recommendations are accompanied by specific actions, translating these high-level strategic policy directions into more concrete policy interventions (see Annex 1.B for an overview of the 24 recommendations and related specific actions).

The guidance contained in this report provides Ireland with a strong foundation on which to build a concrete implementation plan for further strengthening its skills system. Further work is required by Irish stakeholders to sequence and prioritise investments in the context of the fiscal framework. In addition, in some cases additional work will need to be undertaken to determine how the prioritised recommendations can best be implemented. Irish stakeholders will need to continue their fruitful collaboration to identify who will have leadership and responsibility for design and implementation of prioritised actions. The OECD stands ready to support Ireland with these next steps.

The summaries below present an overview of the key findings and recommendations, whereas Chapters 2-5 describe the assessment and recommendations for each of the four priority areas in greater detail.

Figure 1.6. OECD Skills Strategy Ireland: Overview of recommendations

1. Securing a balance in skills through a responsive and diversified supply of skills in Ireland

Opportunity 1: *Improving information and guidance for individuals on learning and career pathways*

1. Strengthen the co ordination of lifelong guidance to support a strategic approach moving forward.

2. Consolidate and improve online information on learning opportunities and careers to improve navigability, accessibility and relevance.

3. Expand and strengthen guidance services to ensure that everyone can access high-quality guidance over the life course.

Opportunity 2: *Strengthening learning and career pathways across the life course*

4. Promote and strengthen pathways from schools into further education and training and apprenticeships to develop a well-balanced tertiary system and diversified supply of skills.

5. Improve pathways between further education and training and higher education to support the move towards a truly unified tertiary system.

Opportunity 3: *Making education and training provision more responsive to changing skills needs*

6. Ensure that the provision of further education and training and higher education is aligned with strategic skills needs and responds to changes in demand.

2. Fostering greater participation in lifelong learning in and outside of the workplace in Ireland

Opportunity 1: *Strengthening incentives to participate in lifelong learning for individuals*

1. Incentivise adults to participate in lifelong learning to improve the prominence of lifelong learning in Ireland's society.

2. Provide tailored and targeted support to disadvantaged groups to address the specific barriers they face to participating in lifelong learning.

Opportunity 2: *Strengthening incentives to participate in lifelong learning for employers*

3. Establish a clear and robust lifelong learning guidance and support system for employers to efficiently match them with training that meets their needs.

4. Reform the National Training Fund to better foster lifelong learning in workplaces.

Opportunity 3: *Making lifelong learning more flexible and accessible*

5. Promote greater flexibility in the lifelong learning offer to help individuals and employers incorporate ongoing learning into daily life.

6. Improve the recognition of non-formal and informal learning for individuals and enterprises to make lifelong learning more accessible to all.

3. Leveraging skills to drive innovation and strengthen the performance of firms in Ireland

Opportunity 1: *Better utilising Ireland's research talent and public research and innovation system to drive innovation within firms*

1. Develop skills for innovation across the education system to strengthen Ireland's adaptive capacity and competitiveness.

2. Better activate the skills of graduate and doctoral researchers in the workforce to strengthen the innovation capacity of Ireland's economy.

Opportunity 2: *Promoting the continuous improvement of leadership and management skills within enterprises*

3. Extend flexible, subsidised and customisable development opportunities available to Ireland's managers to maximise the accessibility, relevance and value of support.

4. Strengthen incentives for management development to raise the motivation of Ireland's managers to upgrade their skills and participate in lifelong learning.

Opportunity 3: *Incentivising and enabling enterprises to make better use of the skills of their workers through innovative workplace solutions*

5. Reinvigorate the strategic focus on workplace innovation in Ireland as a key vehicle to improve firms productivity and performance.

6. Foster peer-to-peer learning and communities of practice to promote the diffusion of leading-edge organisational practices between Ireland's multinational enterprises and small and medium-sized enterprises.

4. Strengthening skills governance to build a joined-up skills ecosystem in Ireland

Opportunity 1: *Promoting a whole-of-government and strategic approach to skills policy*

1. Strengthen the commitment to and efficiency of adopting a whole-of-government approach to skills to help achieve a step change in Ireland's skills system.

2. Prepare a follow-up to the National Skills Strategy 2025 to help place skills at the top of Ireland's policy-making agenda and enable effective implementation.

Opportunity 2: *Supporting effective engagement with stakeholders throughout the skills policy cycle*

3. Strengthen the National Skills Council and other stakeholder bodies to enable stakeholders to more effectively shape Ireland's skills policy priorities.

4. Scale up existing good practices and promote a more inclusive, efficient and co ordinated approach to stakeholder engagement in the co-design of education and training.

Opportunity 3: *Strengthening the collection, exchange and use of skills information*

5. Improve the range and granularity of information on current skills needs, strengthen information on training outcomes and enhance skills forecasting.

6. Enable more effective exchange and use of existing skills data and promote systematic skills policy evaluation to support evidence-based skills policy making.

Priority 1: Securing a balance in skills through a responsive and diversified supply of skills (Chapter 2)

In the context of rapidly changing skills needs, it will be essential for Ireland to develop a skills system that helps secure a balance between skills demand and supply. Ireland needs to ensure that its skills system is flexible and responsive in order to address skills shortages and mismatches as they emerge, as well as to plan for future skills needs. A diversified supply of skills is also needed to build adaptability and resilience in the face of societal and economic change.

Three opportunities to better secure a balance in skills were selected based on input from the literature, desk research, discussions with the CDPT, discussions in national and regional workshops, group discussions, and several related meetings.

Opportunity 1: Improving information and guidance for individuals on learning and career pathways

Many project participants considered the need for effective career guidance as one of the main areas for improvement in the Irish skills system. Effective career guidance can help steer young people towards career or learning pathways for which they are well suited and hold good employment prospects. In addition, career guidance can help adults successfully navigate a labour market characterised by rapidly evolving skills needs. Improving career guidance is already a priority for the Government of Ireland, but despite an extensive provision of career guidance services, there are still a number of areas for improvement.

There is strong support in Ireland for strengthening a lifelong approach for career guidance. The delivery of guidance is fragmented, and more could be done to ensure everyone can access guidance at all stages in life. Work by the National Policy Group for lifelong guidance on developing a coherent, long-term strategic framework for lifelong guidance provides a good starting point. Ireland should continue actively involving all relevant actors in developing this framework and strengthen national co-ordination of lifelong guidance services, including by establishing clear roles and responsibilities. Ireland could also better consolidate and improve online information on learning opportunities and careers to improve its navigability, accessibility and relevance. To this end, Ireland should develop a centralised online portal, make information more user-friendly and tailored to individual learners' needs, and include more information on skills shortages and mismatches, learning outcomes and pathways. In addition, Ireland should expand and strengthen guidance services to ensure that everyone can access high-quality guidance over the life course. This can be achieved by better supporting guidance counsellors, making guidance counselling services in schools more widely available, and covering a wide range of possible learning and career pathways. Finally, institutional support and guidance for adults could be improved, especially for groups most distant from the labour market and at risk of unemployment.

Recommendation	Specific actions
Opportunity 1: Improving information and guidance for individuals on learning and career pathways	
1. Strengthen the co-ordination of lifelong guidance to support a strategic approach moving forward	1.1. Continue actively involving all relevant actors in developing a coherent, long-term strategic framework for lifelong guidance. 1.2. Strengthen national co-ordination of lifelong guidance services, including by establishing clear roles and responsibilities.
2. Consolidate and improve online information on learning opportunities and careers to improve navigability, accessibility and relevance	2.1. Develop a centralised online portal for all information on learning opportunities and careers by better co-ordinating and consolidating information. 2.2. Ensure that online information is user-friendly and tailored to individual learners' needs by using filters, self-assessment tools and direct access to advisors. 2.3. Improve the dissemination of information on skills shortages and mismatches, learning outcomes and pathways.

Recommendation	Specific actions
3. Expand and strengthen guidance services to ensure that everyone can access high-quality guidance over the life course	3.1. Strengthen the quality of guidance counselling services in schools by giving guidance counsellors appropriate time and resources and involving employers further in the provision of guidance services. 3.2. Strengthen guidance counselling services in schools by making them more widely available and covering a wide range of possible learning and career pathways. 3.3. Improve the availability and accessibility of independent and comprehensive career guidance services beyond initial education by strengthening institutional support for adults. 3.4. Target guidance services for adults to groups most distant from the labour market and at risk of losing jobs.

Note: Full descriptions of the recommendations and specific actions can be found in Chapter 2 and Annex Table 1.B.1.

Opportunity 2: Strengthening learning and career pathways over the life course

In addition to improving information and guidance on learning and career pathways, the pathways should be clear, flexible and accessible to all students and adults. These pathways are relevant for aligning skills demand with supply since a well-balanced education and training system with flexible and permeable pathways (i.e. the ability to progress to programmes at a higher level, regardless of the pathway already chosen) will facilitate the development of an adaptable and diversified supply of skills that will make society more responsive to changes in skills demand. Ireland provides students with a diverse range of learning pathways, but there are indications that their flexibility and permeability could be improved.

To start, Ireland should continue to promote and strengthen pathways from schools into FET and apprenticeships to develop a well-balanced tertiary system and diversified supply of skills. At present, there is arguably too much emphasis on pathways towards HE. Ireland should aim to change perceptions of FET and apprenticeships through improved guidance counselling services, more active outreach, and exposing second-level students to more practical or vocational courses and modules. The take-up of apprenticeships specifically could also be increased by identifying and overcoming financial obstacles for employers and by continuing to address non-financial obstacles for employers to take on apprentices. Ireland could also strengthen pathways between FET and HE to support the move towards a truly unified tertiary system. Overall, Ireland needs a more joined-up approach for FET and HE, where the sectors work together more actively, better align programmes and improve pathways between them. This can be achieved by developing universal and consistent criteria for facilitating transitions between FET and HE and cross-system credit recognition. In addition, building on the newly established National Tertiary Office, Ireland should expand the co-development and co-delivery of programmes by FET and HE. A joined-up approach could possibly be facilitated by more place-based networks (or partnerships) between FET and HE to strengthen local collaboration on pathways.

Recommendation	Specific actions
Opportunity 2: Strengthening learning and career pathways over the life course	
4. Promote and strengthen pathways from schools into further education and training and apprenticeships to develop a well-balanced tertiary system and diversified supply of skills	4.1. Change perceptions of further education and training and apprenticeships through improved career guidance, communication and rebranding. 4.2. Better promote pathways into further education and training and apprenticeships by strengthening work-based learning in schools and developing a unified application process. 4.3. Increase take-up of apprenticeships by identifying and overcoming financial obstacles for employers. 4.4. Continue to address non-financial obstacles for employers to take on apprentices by providing employers with practical support and information and promoting more flexible forms of apprenticeship.

Recommendation	Specific actions
5. Improve pathways between further education and training and higher education to support the move towards a truly unified tertiary system	5.1. Develop universal and consistent criteria for facilitating transitions between further education and training and higher education and cross-system credit recognition. 5.2. Expand the co-development and co-delivery of programmes by further education and training and higher education, by supporting the newly established National Tertiary Office, among other initiatives. 5.3. Better promote the development of "place-based" networks (or partnerships) between further education and training and higher education to strengthen local collaboration on improving pathways.

Note: Full descriptions of the recommendations and specific actions can be found in Chapter 2 and Annex Table 1.B.2.

Opportunity 3: Making education and training provision more responsive to changing skills needs

Education and training provision needs to respond effectively to changes in the labour market and society, providing people with the knowledge, skills, abilities and attitudes needed to be adaptable and resilient in a rapidly changing world. To this end, the responsiveness of education and training systems at all levels will need to be assessed and improved as necessary. A responsive education and training system provides adequate incentives to institutions to offer courses in areas that are currently and anticipated to be in high demand and to encourage and incentivise students to enrol in these courses.

Ireland could further strengthen the responsiveness of its FET and HE provision in various ways, including by engaging stakeholders in the co-design of education and training (see Priority 4). In addition, Ireland should establish a vision for long-term strategic skills needs. Based on high-quality skills forecasting and workforce planning, Ireland should identify its strategic skills needs and use this information to incentivise and support education and training providers to offer skills development opportunities in these areas. To improve responsiveness, Ireland should also remove incentives for education institutions to keep students in their own system for as long as possible. Instead, Ireland should make learning pathways more permeable so that students can easily adjust their learning plans in response to evolving needs and expand flexible learning opportunities (e.g. part-time learning, modular courses) to facilitate the quick acquisition of new skills in response to changing skills needs. In this context, Ireland can build on ongoing work to further improve FET and HE funding models, as described in the FET Funding Model review and the HE funding and reform framework presented in *Funding the Future*.

Recommendation	Specific actions
Opportunity 3: Making education and training provision more responsive to changing skills needs	
6. Ensure that the provision of further education and training and higher education is aligned with strategic skills needs and responds to changes in demand	6.1. Establish a vision for long-term strategic skills needs in Ireland to inform and strengthen further education and training and higher education performance frameworks and funding models. 6.2. Better incentivise education institutions to offer permeable learning pathways and flexible learning opportunities that allow individuals to acquire new skills quickly in response to changing skills needs.

Note: Full descriptions of the recommendations and specific actions can be found in Chapter 2 and Annex Table 1.B.3.

Priority 2: Fostering greater participation in lifelong learning in and outside the workplace (Chapter 3)

Encouraging a culture of lifelong learning is crucial to ensuring that individuals actively engage in adult learning after leaving the compulsory education system. In turn, participation in different forms of adult learning results in a wide range of benefits, including higher wages for individuals, higher productivity for firms and higher levels of social trust. Across countries, there is a growing need to upskill and reskill regularly over the life course to adapt to labour market and societal developments.

Opportunity 1: Strengthening incentives to participate in lifelong learning for individuals

The most direct way to foster greater participation in lifelong learning in Ireland is to encourage more individuals to participate in lifelong learning opportunities. This involves reducing barriers people face and increasing their motivation to participate. Policy makers use a number of tools to promote participation in lifelong learning by making it worthwhile for individuals to invest in learning opportunities. These include subsidies, savings or asset-building mechanisms, tax measures, subsidised loans, time accounts and training leave entitlements. While Ireland already has a number of measures in place to encourage participation in lifelong learning among individuals, there remain opportunities for improvement that are both universal and specific.

To start, Ireland could better incentivise adults to participate in lifelong learning by conducting a comprehensive study to assess the feasibility of individual learning schemes and paid training leave in Ireland's context. Moreover, Ireland could expand programmes or financial incentives that already effectively engage adults in lifelong learning (e.g. Springboard+, eCollege), and possibly, these measures could be complemented with a public awareness campaign to raise awareness about the importance and benefits of lifelong learning for all. Ireland should also aim to raise the participation of the most disengaged individuals. To better understand who these learners are, learner profiles could be developed that provide a more granular picture of the different types of adult learners or potential learners. Finally, Ireland could also improve holistic support for parents and carers to address the time-related obstacles to participation (e.g. with information, additional financial support and on-site service) and increase support for vulnerable groups by providing targeted guidance and financial supplements to address the indirect costs of learning.

Recommendations	Specific actions
Opportunity 1: Strengthening incentives to participate in lifelong learning for individuals	
1. Incentivise adults to participate in lifelong learning to improve the prominence of lifelong learning in Ireland's society	1.1. Assess the feasibility of individual learning schemes and paid training leave in Ireland's context. 1.2. Evaluate and expand programmes or financial incentives that effectively engage a wide range of individuals in lifelong learning by extending their scope, target audience and/or allocated resources (e.g. Springboard+, eCollege). 1.3. Implement a public awareness campaign to raise awareness about the importance and benefits of lifelong learning for all.
2. Provide tailored and targeted support to disadvantaged groups to address the specific barriers they face to participating in lifelong learning	2.1. Develop detailed profiles of different types of lifelong learners and potential lifelong learners. 2.2. Improve holistic support for parents and carers to participate in lifelong learning through information, additional financial support and on-site services. 2.3. Increase support for vulnerable groups to participate in lifelong learning by providing targeted guidance and financial supplements to address the indirect costs of learning.

Note: Full descriptions of the recommendations and specific actions can be found in Chapter 3 and Annex Table 1.B.4.

Opportunity 2: Strengthening incentives to participate in lifelong learning for employers

Participating in lifelong learning is beneficial not only for individuals in Ireland, no matter their employment status, but also for employers. Nonetheless, employers in Ireland and other countries face numerous challenges in providing education and training opportunities to their employees, including financial and time constraints, fears of poaching and lack of clarity about the training opportunities available to them or support for participating in such opportunities.

Ireland should establish a clear and robust lifelong learning guidance and support system for employers to efficiently match them with training that meets their needs. To this end, Ireland should move towards a more formalised and co-ordinated system for lifelong learning guidance for employers, including by evaluating the strengths and weaknesses, as well as the feasibility, of different models of service integration. As part of this broader lifelong learning guidance system, Ireland should also design an online portal tailored to employer needs. Employers should also be better supported to map out the skill set of their employees and their future skills needs (e.g. with methodological guides, manuals, tools, etc.).

Additionally, a work plan for more targeted guidance to SMEs could be developed since they face particular challenges in providing or supporting lifelong learning. The National Training Fund (NTF) could also be reformed to better foster lifelong learning in workplaces. Ireland should unlock surplus NTF funds, improve structural incentives for employers to take advantage of NTF-funded education and training, establish a discretionary fund as part of the NTF for the regional/local/sectoral level, and increase NTF support for upskilling and reskilling for SMEs.

Recommendations	Specific actions
Opportunity 2: Strengthening incentives to participate in lifelong learning for employers	
3. Establish a clear and robust lifelong learning guidance and support system for employers to efficiently match them with training that meets their needs	3.1. Formalise a system of lifelong learning guidance for employers by evaluating the strengths and weaknesses, as well as the feasibility, of different models of service integration. 3.2. Design an online portal tailored to employer needs and integrate this portal into a potential broader lifelong learning guidance system for employers. 3.3. Strengthen support to employers to map out their employees' skill set and future skills needs (e.g. methodological guides, manuals, tools, etc.). 3.4. Develop a work plan to provide targeted additional guidance to small and medium-sized enterprises, beginning with a pilot programme in sectors of national priority.
4. Reform the National Training Fund to better foster lifelong learning in workplaces	4.1. Unlock surplus National Training Fund funds to facilitate greater investment in lifelong learning in Ireland. 4.2. Improve structural incentives for employers to take advantage of education and training funded by the National Training Fund. 4.3. Establish a discretionary fund as part of the National Training Fund to be distributed at the regional/local/sectoral level. 4.4. Increase National Training Fund support specifically allocated for upskilling and reskilling for small and medium-sized enterprises.

Note: Full descriptions of the recommendations and specific actions can be found in Chapter 3 and Annex Table 1.B.5.

Opportunity 3: Making lifelong learning more flexible and accessible

Improving the flexibility and accessibility of lifelong learning is important for Ireland since many adults face time-related obstacles. International evidence suggests that flexibility in format and design helps overcome time-related barriers, especially for medium- to high-skilled workers. Recognition of prior learning (RPL) can also help adults upskill and reskill by personalising learning pathways to fit learners' individual needs and shortening the time individuals spend in a training programme (thus addressing time barriers) since learners will only focus on their specific skill gaps.

Ireland could promote greater flexibility in its lifelong learning offer to help individuals and employers incorporate ongoing learning into daily life. To this end, Ireland should encourage lifelong learning providers to offer more flexible learning opportunities (e.g. online, modular, "bite-size") and strengthen the recognition, accreditation and stackability of lifelong learning opportunities (e.g. through stackable micro-credentials, digital badges, etc.). Building on the expansion of online learning and support for online learning instructors and providers could be strengthened to improve the quality of online courses and widen their scope and reach. Moreover, since expanding incentives for non-formal and informal learning can make engaging with lifelong learning more appealing and accessible to both individuals and employers, Ireland should improve their recognition. This could involve strengthening the capacity of education and training providers to offer RPL (e.g. with national guidelines for RPL), improving awareness of and access to RPL (e.g. with tools for individuals to accumulate and display their learning experiences), as well as implementing a mechanism for stimulating on-the-job learning provided by employers.

Recommendations	Specific actions
Opportunity 3: Making lifelong learning more flexible and accessible	
5. Promote greater flexibility in the lifelong learning offer to help individuals and employers incorporate ongoing learning into daily life	5.1. Encourage lifelong learning providers to offer more flexible learning opportunities (e.g. online, modular, "bite-size" microcredentials). 5.2. Strengthen the recognition, accreditation and stackability of lifelong learning opportunities in line with the National Framework of Qualifications (e.g. through stackable micro-credentials, digital badges, etc.). 5.3. Strengthen support for online learning instructors and providers to improve the quality of online courses and enable further expansion of remote lifelong learning.
6. Improve the recognition of non-formal and informal learning for individuals and enterprises to make lifelong learning more accessible to all	6.1. Strengthen the capacity of education and training providers to offer recognition of prior learning, including by establishing national guidelines outlining the procedures and processes of RPL. 6.2. Improve awareness of and access to recognition of prior learning, including tools for individuals to accumulate and display their non-formal and informal learning. 6.3. Implement a mechanism for recognising and rewarding informal, on-the-job learning provided by employers.

Note: Full descriptions of the recommendations and specific actions can be found in Chapter 3 and Annex Table 1.B.6.

Priority 3: Leveraging skills to drive innovation and strengthen firm performance (Chapter 4)

Optimally using people's skills is associated with higher wages and job satisfaction for employees, high rates of productivity and innovation within firms and stronger growth of the economy. Better leveraging skills will therefore be central to supporting Ireland's economic growth, promoting resilience to global megatrends and ensuring Ireland can achieve its aims of digital leadership and a just transition.

Opportunity 1: Better utilising Ireland's research talent and public research and innovation system to drive innovation within firms

Investment in research, development and other knowledge-based assets, such as Higher education institutions (HEIs) and research centres, plays an important role in securing the success of advanced economies, developing high-level cutting-edge skills and supporting firms' innovation activities through knowledge transfer and spillovers. Ireland's public research system is one of its key strengths. However, R&D intensity in Ireland is still comparatively weak, and rates of innovation in firms, particularly among small, indigenous enterprises, are relatively low.

To strengthen Ireland's adaptive capacity and competitiveness, Ireland should develop skills for innovation across the education system. This involves strengthening the strategic positioning of skills and improving connectivity with wider policy domains (e.g. R&I, industrial development and regional growth). Ireland could also improve the development of transversal skills for innovation (e.g. creativity, critical thinking and communication) across the education system and strengthen and systematise the process for identifying and responding to emerging technical skills needed for innovation (e.g. by assigning this task to regional sectoral clusters supported through Ireland's new National Clustering Programme). In addition, Ireland could better activate the skills of research talent. For instance, incentives and resources for R&I institutions and highly-skilled research talent to engage with small enterprises could be strengthened. It also would be important to better understand enterprise demand for research graduates and the mobility of research talent between academia, industry, the public and voluntary and community sector. Finally, Ireland should improve career guidance for researchers and better integrate transversal skills development into research training at all levels.

Recommendations	Specific actions
Opportunity 1: Better utilising Ireland's research talent and public research and innovation system to drive innovation within firms	
1. Develop skills for innovation across the education system to strengthen Ireland's adaptive capacity and competitiveness	1.1. Strengthen the strategic positioning of skills for innovation and improve connectivity with wider policy domains. 1.2. Improve the development of transversal skills for innovation across the education system, including lifelong learning. 1.3. Strengthen and systematise the process for identifying and responding to emerging technical skills needed for innovation in areas of strategic importance to the economy.
2. Better activate the skills of graduate and doctoral researchers in the workforce to strengthen the innovation capacity of Ireland's economy	2.1. Strengthen incentives and resources for research and innovation institutions and highly-skilled research talent to engage and collaborate with smaller enterprises. 2.2. Advance further research to better understand current and future demand for research graduates and the mobility of research talent between academia, industry, the public and voluntary and community sector. 2.3. Strengthen career guidance for research graduates and better integrate transversal skills development into research training at all levels.

Note: Full descriptions of the recommendations and specific actions can be found in Chapter 4 and Annex Table 1.B.7.

Opportunity 2: Promoting the continuous improvement of leadership and management skills within enterprises

Strong management and leadership skills are vital to the success of firms. Well-managed firms tend to perform better across a range of indicators: they are more productive, grow faster and have higher survival rates. Skilled managers are also more likely to innovate, adopt quality-orientated product market strategies and implement HPWPs. In addition, managers' attitudes, particularly in small firms, have been shown to significantly influence the prioritisation of and investment in training for workers.

Promoting the continuous improvement of leadership and management skills requires actions on both the supply and demand side. Regarding the supply of learning opportunities, Ireland should extend flexible, subsidised and customisable development opportunities for Ireland's managers to maximise accessibility, relevance and value of support. Moreover, despite a well-developed landscape of management training in Ireland, there is evidence of an unmet need for management development. Ireland should address management training gaps, particularly for mid-sized, locally traded service companies and community, voluntary and social enterprises, scale up successful existing programmes (e.g. Mentors Work, Spotlight on Skills) and review how to support the expansion of flexible, subsidised and customisable management training. Regarding the demand for learning by managers, Ireland could strengthen incentives for management development to raise their motivation to participate in lifelong learning. This could involve strengthening evidence on the business benefits of management development for productivity, innovation and business performance, as well as introducing a new management standard and associated quality marks to professionalise management in Ireland.

Recommendations	Specific actions
Opportunity 2: Promoting the continuous improvement of leadership and management skills within enterprises	
3. Extend flexible, subsidised and customisable development opportunities available to Ireland's managers to maximise the accessibility, relevance and value of support	3.1. Address gaps in management training for mid-sized, locally traded service companies and community, voluntary and social enterprises. 3.2. Advance new flexible, subsidised and customisable management training and scale up successful existing programmes.
4. Strengthen incentives for management development to raise the motivation of Ireland's managers to upgrade their skills and participate in lifelong learning	4.1. Strengthen evidence on the business benefits of management development for productivity, innovation and business performance. 4.2. Introduce a new management standard and associated quality marks to professionalise management in Ireland. 4.3. Advance incentives for Irish firms to take up new management standards and quality marks.

Note: Full descriptions of the recommendations and specific actions can be found in Chapter 4 and Annex Table 1.B.8.

Opportunity 3: Incentivising and enabling enterprises to make better use of the skills of their workers through innovative workplace solutions

The way in which firms organise their workplaces has a significant impact on their ability to stimulate ideas from the workforce, transform these into innovation and facilitate the absorption of knowledge from other firms and research organisations. The positive impact of participative forms of work organisation on firm-level productivity is well documented. The mixed picture of workplace practices in Ireland, relatively poor rates of innovation in firms, and the well-evidenced uplift in the productivity and performance of firms associated with HPWPs suggest that work organisation warrants considerable focus in Ireland.

It is important for Ireland to reinvigorate its strategic focus on workplace innovation as a key vehicle to improving the productivity and performance of firms. This could be achieved by adding the modernisation of Irish workplaces as an explicit policy priority in the NSS 2025 follow-up. Ireland could also ensure that management development opportunities strengthen their focus on workplace transformation and HPWPs, and an awareness campaign for small firms could be considered to support them with the adoption of better work organisation practices. In addition, to promote the diffusion of leading-edge organisational practices between Ireland's MNEs and SMEs, Ireland should foster peer-to-peer learning and communities of practice. To this end, Ireland could better embed organisational practices and HPWPs within its well-established mechanisms for peer learning (e.g. Skillnet Ireland's Business Networks, Plato Business Development Networks, Innovation Exchange) as well as develop new programmes that seek to promote innovation diffusion between MNEs and smaller enterprises in their supply chains. Furthermore, Ireland could review the existing landscape of networks and forums to identify opportunities to strengthen collaborative business learning networks that seek to promote innovative workplace solutions.

Recommendations	Specific actions
Opportunity 3: Incentivising and enabling enterprises to make better use of the skills of their workers through innovative workplace solutions	
5. Reinvigorate the strategic focus on workplace innovation in Ireland as a key vehicle to improve firms productivity and performance	5.1. Position the modernisation of Irish workplaces as an explicit policy priority in Ireland's refreshed National Skills Strategy. 5.2. Review Ireland's portfolio of management development opportunities to strengthen its focus on workplace transformation and high-performance workplace practices. 5.3. Advance awareness campaigns that build an understanding of the steps that small firms can take to stimulate better work organisation practices.
6. Foster peer-to-peer learning and communities of practice to promote the diffusion of leading-edge organisational practices between Ireland's multinational enterprises and small and medium-sized enterprises	6.1. Review the potential to embed organisational practices and high-performance workplace practices more strongly within Ireland's well-established mechanisms for peer learning. 6.2. Develop new programmes that seek to promote innovation diffusion between multinational and smaller enterprises in their supply chains. 6.3. Strengthen collaborative business learning networks or communities of practice that seek to promote workplace innovation.

Note: Full descriptions of the recommendations and specific actions can be found in Chapter 4 and Annex Table 1.B.9.

Priority 4: Strengthening skills governance to build a joined-up skills ecosystem (Chapter 5)

Well-functioning skills governance arrangements are the bedrock of a "joined-up" skills ecosystem, where skills policy design, implementation, monitoring and evaluation are impactful, mutually reinforcing and rooted in a wide and sound evidence base. The complexity associated with skills policies, compounded by the uncertain and rapidly changing environment in which skills policy decisions are made, makes strong skills governance essential.

Opportunity 1: Promoting a whole-of-government and strategic approach to skills policy

A whole-of-government approach aims to promote horizontal (at the national level) and vertical (between national and subnational levels) co-ordination of government activity in order to improve policy coherence and use of resources and minimise overlaps and gaps in public programmes. A whole-of-government approach thus capitalises on synergies and innovation that arise from involving and engaging with a multiplicity of governmental actors while also providing seamless public service delivery to individuals and businesses. Strategies and action plans are key enabling mechanisms that support a whole-of-government approach to skills policy. They are essential for setting goals, priority groups and targets, clarifying roles for government and stakeholders in skills policy, articulating the challenges that require co-operation and allocating roles and responsibilities.

Ireland should consider establishing new processes for collaborating on the development, use and governance of skills over the life course in areas of strategic need while avoiding duplication. Departments facing strong skills pressures in their respective areas of oversight should establish processes for collaboration with DFHERIS and/or other relevant departments and agencies to work jointly to address these pressures. Ireland is planning to prepare a follow-up to the NSS 2025, which is positive. For the NSS 2025 follow-up, Ireland should apply a whole-of-government approach to the follow-up's design and implementation, prioritise a smaller number of high-impact priority areas in the NSS 2025 follow-up, consider a more flexible structure, and establish clear accountability mechanisms to support progress reporting on and evaluation of measures implemented.

Recommendations	Specific actions
Opportunity 1: Promoting a whole-of-government and strategic approach to skills policy	
1. Strengthen the commitment to and efficiency of adopting a whole-of-government approach to skills to help achieve a step change in Ireland's skills system	1.1. Adopt processes to support cross-departmental collaboration on addressing skills challenges in areas of strategic importance. 1.2. Reduce duplication and promote synergies by mapping, monitoring and raising awareness of existing processes to support cross-departmental collaboration on addressing skills challenges.
2. Prepare a follow-up to the National Skills Strategy 2025 to help place skills at the top of Ireland's policy-making agenda and enable effective implementation	2.1. Apply a whole-of-government approach to the design and implementation of the National Skills Strategy 2025 follow-up. 2.2. Prioritise a smaller number of high-impact priority areas in the National Skills Strategy 2025 follow-up and consider a more flexible structure. 2.3. Establish clear accountability mechanisms to support progress reporting on and evaluating measures implemented under the National Skills Strategy 2025 follow-up.

Note: Full descriptions of the recommendations and specific actions can be found in Chapter 5 and Annex Table 1.B.10.

Opportunity 2: Supporting effective engagement with stakeholders throughout the skills policy cycle

Engaging with stakeholders supports policy makers in dealing with the inherent complexities of skills policies. Stakeholders are uniquely positioned to provide policy makers with valuable insights into the real-world effects of skills policies. Ireland has several mechanisms for engaging stakeholders in shaping skills policy priorities (i.e. providing input into the strategic direction of skills policy). These mechanisms include public consultations run by different departments, as well as a range of bodies, with the NSC aiming to be Ireland's key stakeholder engagement mechanism dedicated to skills policy specifically, with skills policy understood holistically.

Ireland could strengthen the NSC to enable stakeholders to shape skills policy priorities more effectively. First, the role of the NSC should be clarified to primarily position it as a stakeholder advisory body to the government on skills policy instead of as a discussion forum for governmental officials. Furthermore, the visibility of the NSC should be improved, and the NSC secretariat should be adequately resourced. A wider range of relevant non-governmental stakeholders should be represented at the NSC, gender balance in

membership should be promoted, and accountability to stakeholder advice should be fostered. The workings of the NTFAG should similarly be improved to create better opportunities for stakeholder input. To better engage stakeholders in the design of education and training (i.e. in shaping the content of new courses and updating existing curricula), Ireland should scale up existing good practices and promote a more inclusive, efficient and co-ordinated approach to stakeholder engagement in the training co-design. For example, conditional upon demonstrating overall satisfactory outcomes, skills development programmes and initiatives such as Skills to Advance and Springboard+, as well as Skillnet Ireland Networks, should be further expanded. Ireland could also consider the establishment of "curriculum" hubs in selected education and training boards (ETBs) to better focus ETBs' stakeholder engagement efforts. Equally, Ireland should ensure adequate co-ordination between the plethora of actors who engage with stakeholders for the purposes of course co-design on the ground.

Recommendations	Specific actions
Opportunity 2: Supporting effective engagement with stakeholders throughout the skills policy cycle	
3. Strengthen the National Skills Council and other stakeholder bodies to enable stakeholders to more effectively shape Ireland's skills policy priorities	3.1. Revise the National Skills Council's terms of reference, improve its visibility and adequately resource its secretariat. 3.2. Ensure that a wider range of relevant non-governmental stakeholders is represented at the National Skills Council, promote gender balance in its membership and foster accountability with regard to its advice. 3.3. Convene more regular National Training Fund Advisory Group meetings and provide adequate opportunity for stakeholder input.
4. Scale up existing good practices and promote a more inclusive, efficient and co-ordinated approach to stakeholder engagement in the co-design of education and training	4.1. Expand successful skills development programmes and initiatives where collaboration with enterprises is core to the course design and/or where receiving funding is conditional upon collaboration with enterprises – and encourage input from small and medium-sized enterprises. 4.2. Consider the establishment of "curriculum hubs" in selected education and training boards to better focus their stakeholder engagement efforts in further education and training. 4.3. Ensure adequate co-ordination between actors who engage with stakeholders in course co-design.

Note: Full descriptions of the recommendations and specific actions can be found in Chapter 5 and Annex Table 1.B.11.

Opportunity 3: Strengthening the collection, exchange and use of skills information

Comprehensive, reliable and accessible skills information can help a variety of actors within and outside the government form a shared understanding of the challenges and opportunities related to skills, which helps underpin effective governmental co-ordination and stakeholder engagement. Skills information is equally essential for supporting evidence-based skills policy making, guiding individuals' skills choices and supporting the work of guidance counsellors, among others.

Ireland has a rich collection of skills information (i.e. information on skills supply and demand), but it could take steps to strengthen it further. In particular, Ireland could improve the range and granularity of information on current skills needs, strengthen the information on training outcomes and enhance quantitative skills forecasting. For example, to improve information on skills needs, the scope of the National Employer Survey could be expanded, and the emphasis on skills in the Recruitment Agency Survey could be strengthened. Ireland could also collect information on the outcomes of FET graduates more systematically and consider reinitiating the development and systematic maintenance of a regular sectoral forecasting model to produce more relevant and accurate economy-wide forecasts by occupation and level of education. In addition, Ireland should enable more effective exchange and use of existing skills data and promote systematic skills policy evaluation to support evidence-based skills policy making. Among other actions, Ireland could support the development of digital solutions to facilitate an easier exchange of skills data and support the development and adequate resourcing of dedicated evaluation structures.

Recommendations	Specific actions
Opportunity 3: Strengthening the collection, exchange and use of skills information	
5. Improve the range and granularity of information on current skills needs, strengthen information on training outcomes and enhance skills forecasting	5.1. Expand the scope of the National Employer Survey to collect more information on skills needs and skills use and implement the Survey on a regular basis. 5.2. Enable systematic collection of information on employees' skills gaps via the Skills for Growth initiative and strengthen the emphasis on skills in the Recruitment Agency Survey. 5.3. Support systematic collection of information on the outcomes of further education and training graduates. 5.4. Consider reinitiating the development and systematic maintenance of a regular sectoral forecasting model.
6. Enable more effective exchange and use of existing skills data and promote systematic skills policy evaluation to support evidence-based skills policy making	6.1. Support the development of digital solutions to facilitate easier exchange of skills data. 6.2. Enable more effective use of data from employer skills audits by promoting co-ordinated reporting and centralising the collected data. 6.3. Support the development and adequate resourcing of dedicated evaluation structures and promote a co-ordinated and collaborative approach to skills policy evaluation.

Note: Full descriptions of the recommendations and specific actions can be found in Chapter 5 and Annex Table 1.B.12.

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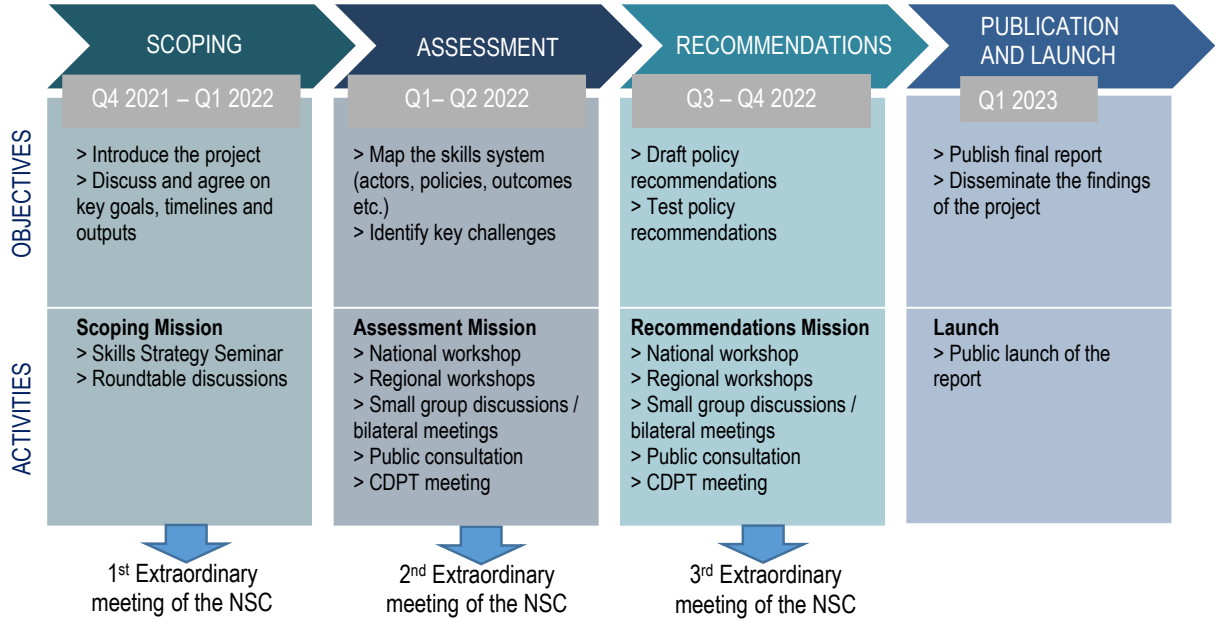
Annex 1.A. Engagement activities of the OECD Skills Strategy Ireland

The four phases of the OECD Skills Strategy Ireland project

The OECD Skills Strategy Ireland project consisted of four phases: scoping; assessment; recommendations; and publication and launch (Annex Figure 1.A.1). The National Skills Council (NSC) was engaged at the different stages of the project and played a key role in it. Three Extraordinary NSC Meetings took place during the project, in which members of the NSC, the Cross-Departmental Project Team (CDPT), and Regional Skills Fora (RSF) managers and chairs were brought together to share their input, as well as support and give guidance to the work of the OECD throughout the project.

Annex Figure 1.A.1. The four phases of the OECD Skills Strategy Ireland project



Scoping phase (Q4 2021-Q1 2022)

The objective of the scoping phase was to introduce the project to a broad group of government representatives and stakeholders in Ireland and to discuss with them the overarching priority areas, key goals, timelines and outputs. In this phase, activities took place in bilateral meetings, the 1st Extraordinary NSC meeting and two roundtable discussions with more than 30 participants each – one with managers and chairs of the RSF and one with members of the NSC. The roundtable discussions aimed to build on the outcomes of the Extraordinary NSC Meeting and facilitate a more in-depth discussion on the four priority areas.

Before the first meeting of the CDPT on 25 January 2022, the OECD sent a questionnaire to the CDPT to identify relevant stakeholders, literature, statistics, policies and practices. Additionally, stakeholders were

asked to provide input on the identified overarching priority areas for the project through an online survey, in which they shared their views on identified key policy questions.

Assessment phase (Q1-Q2 2022)

The objective of the assessment phase was to collect detailed insights into Ireland's performance and initiatives in each of the four overarching priority areas, to support the analysis in the report. It also sought to build awareness of the challenges and opportunities in each overarching priority area and mobilise stakeholders to identify the most important areas for recommendations.

During the assessment phase, the 2nd Extraordinary NSC Meeting, a national workshop and three regional workshops took place virtually. Moreover, the OECD team travelled to Ireland for two days of meetings, including five in-depth group discussions with selected experts and a meeting with the CDPT. The OECD team met with approximately 50 representatives from government departments and organisations, employer organisations, educational establishments and other interested parties.

Recommendations (Q3-Q4 2022)

The objective of the recommendations phase was to test and further refine Potential Policy Directions (PPDs) developed after the assessment phase. In a main Recommendations Mission and several complementary meetings with the CDPT and other experts, the OECD also aimed to raise support and ownership among participating sectors for the PPDs to aid the implementation of the final recommendations.

During the recommendations phase, there was the 3rd Extraordinary NSC Meeting and two meetings with the CDPT. In addition, the OECD team visited Ireland for four workshops to meet a broad range of stakeholders in person. In addition to a large national workshop on 24 October in Dublin, the OECD organised three regional workshops between 25 and 27 October in Athlone, Limerick and Cavan to meet regional stakeholders. Over 200 stakeholders joined the workshops, including from government departments, agencies, enterprises, and various other members of the NSC and RSF.

Publication and launch (Q1 2023)

A public event to launch the report was held to raise public awareness and develop a broad support base for future action in improving the skills system in Ireland.

Annex 1.B. OECD Skills Strategy Ireland: Overview of recommendations and specific actions

This annex presents the OECD's recommendations for Ireland arising from this project. These recommendations and the analysis, evidence and international examples that support them can be found in Chapters 2-5 of the full report.

As mentioned above, further work is required by Irish stakeholders to sequence and prioritise the implementation of these recommendations. In some cases, additional work will be needed to determine how the recommendations can best be implemented. Irish stakeholders will need to continue their fruitful collaboration to identify who will have leadership and responsibility for design and implementation of prioritised actions. The OECD stands ready to support Ireland with these next steps.

Priority 1: Securing a balance in skills through a responsive and diversified supply of skills (Chapter 2)

Opportunity 1: Improving information and guidance for individuals on learning and career pathways

Annex Table 1.B.1. Recommendations for improving information and guidance for individuals on learning and career pathways

Recommendation	Specific actions
1. Strengthen co-ordination of lifelong guidance to support a strategic approach moving forward	**1.1. Continue to actively involve all relevant actors in the development of the coherent, long-term strategic framework for lifelong guidance.** To ensure buy-in and ownership of recommendations of the strategic framework, all relevant Departments should be involved in its development. It is already positive that the National Policy Group for lifelong guidance comprises of senior officials from the Department of Education, DFHERIS, the Department of Children, Equality, Disability, Integration and Youth, the Department of Social Protection and the Department of Enterprise, Trade and Employment. For the implementation of the strategic framework, Ireland should involve stakeholders on the ground, including education providers, guidance counsellors, and other actors providing guidance services. **1.2. Strengthen national co-ordination of lifelong guidance services, including by establishing clear roles and responsibilities.** A strategic and integrated approach to the provision of lifelong guidance requires strong national co-ordination and leadership. Building on the National Policy Group for lifelong guidance, Ireland should develop a structure that promotes continuity for policy development, a shared understanding of Ireland's vision for lifelong guidance, and a clear set of roles of responsibilities for the different Departments to avoid duplication.
2. Consolidate and improve online information on learning opportunities and careers to improve navigability, accessibility, and relevance	**2.1. Develop a centralised online portal for all information on learning opportunities and careers through better coordination and information consolidation.** To improve the navigability of online information in Ireland, consideration should be given to creating strong interlinkages between existing portals, and better coordination among the entities managing and funding the various portals to reduce duplication of information. Ireland should move towards a "one-stop shop", based on an existing portal, that either is an entranceway portal that directs learners to other portals specific to their needs, or a one-stop shop portal that provides all of the information needed by all learners and jobseekers on a single site. The portal should be developed with active involvement of users (e.g. students, adult learners, guidance counsellors). **2.2. Ensure that online information is user-friendly and tailored to individual learner's needs by using filters, self-assessment tools, and direct access to advisors.** For both existing online portals, as well as a possible new centralised portal, Ireland should guide visitors to information that is tailored to their needs. For example, portals could ask visitors questions about their specific needs (e.g. searching for specific learning opportunities,

Recommendation	Specific actions
	support measures, etc.) or characteristics (e.g. employed vs unemployed, current student or new learners, etc.) before presenting information. Also, self-assessment tools could help to make information more personalised, for instance by helping people to identify what their skills and learning needs are. The portal should also facilitate and provide direct access to career and learning pathway advisors, either online or in-person. **2.3. Improve the dissemination of information on skills shortages and mismatches, learning outcomes, and pathways.** Consideration should be given to better integrating skills information on existing portals (especially CareersPortal and SmartChoices), and possibly on the new centralised portal, to avoid duplication and ensure that users have all the information they need to make informed choices in one place. Moreover, information on current skills mismatches and surpluses should be disseminated more widely and in a more interactive way, as well as information on the skills supply and demand by region linked to the education and training options available in the region. Finally, information on education and training outcomes (e.g. completion rates, employment outcomes of graduates) for HE and FET could be disseminated more widely.
3. Expand and strengthen guidance services to ensure that everyone can access high quality guidance across the life course	**3.1. Strengthen the quality of guidance counselling services in schools by giving guidance counsellors appropriate time and resources and by involving employers further in the provision of guidance services.** Guidance counsellors in schools should have access to relevant up-to-date information and support tools, especially on LMI, information on skills requirements, and available learning and career pathways. Consideration could also be given to increasing the number of counsellors and/or to increasing the amount of time they have available to provide guidance counselling services. Ireland should also aim to establish close links between industry and career guidance professionals by setting up the necessary governance arrangements. Employers could be more actively engaged in (e.g. in terms of mentoring, giving talks, work experience, etc.), in particular at the local level, to ensure a good link between guidance and industry needs. **3.2. Strengthen guidance counselling services in schools by making them more widely available and covering a wide range of possible learning and career pathways.** Ireland should continue to expand access to guidance at an earlier age in schools. Furthermore, through the reform of the Senior Cycle, the Transition Year programme could build on its current strengths and could play an even more important role in providing guidance to students (e.g. with workplace experiences). Ireland should also ensure that underrepresented groups, and especially learners with special education needs can access guidance services, including with additional or separate guidance support. Training and support for guidance counsellors should be strengthened to ensure they can present the wide range of learning and career pathways available to students, including for instance STEM careers, apprenticeships, and programmes in FET more generally. **3.3. Improve the availability and accessibility of independent and comprehensive career guidance services beyond initial education by strengthening institutional support for adults.** Despite the guidance services provided by INTREO offices for adult jobseekers, the Adult Educational Guidance and Information Service (AEGIS) within ETBs, and careers offices in HEIs, there would be a benefit in seeking to strengthen institutional support for adults. Ireland should make independent and comprehensive career guidance services more accessible to all adults. This could be achieved with a more joined-up service, covering all guidance services from schools to employment, and linked to could be linked to a centralised portal (see Recommendation 2) – or creating a less centralised system of providers with adequate coordination and strategic leadership. **3.4. Target guidance services for adults to groups most distant from the labour market and at risk of losing jobs.** Ireland should ensure that underrepresented groups in the labour market (e.g. people with disabilities) have access to high quality guidance services. People working in declining sectors and occupations could also be better targeted with guidance services to support them with the transition to ones that are growing, including with new skills matching tools for transitions.

Opportunity 2: Strengthening learning and career pathways across the life course

Annex Table 1.B.2. Recommendations for strengthening learning and career pathways across the life course

Recommendation	Specific actions
4. Promote and strengthen pathways from schools into FET and apprenticeships to develop a well-balanced tertiary system and diversified supply of skills	**4.1. Change perceptions of FET and apprenticeships through improved career guidance, communication, and rebranding.** Ireland should aim to change people's perspectives and about FET and apprenticeships so that they are seen as more viable and attractive learning pathways. Career guidance (see Recommendation 3) should play an important role, including by raising awareness about these pathways; their value and benefits, including the 'earn and learn' character of apprenticeships; and possible job opportunities. Building on existing promotional campaigns for FET and apprenticeships, Ireland should actively reach out to people to promote these pathways by, for example, sharing the experiences of successful graduates. For apprenticeships in particular, a rebranding may be needed to better highlight their 'earn and learn' character, change societal perceptions of these learning pathways, and thereby improve their attractiveness to learners and those who influence their decisions.

Recommendation	Specific actions
	4.2. Better promote pathways into FET and apprenticeships by strengthening work-based learning in schools and developing an unified application process. Ireland should expose second-level students to more practical or vocational courses and modules, as well as traineeships to help raise awareness about FET and apprenticeship pathways. This would involve strengthening the provision of work-based learning in schools. The ongoing reform of the Senior Cycle should continue to allow for more permeability between different Leaving Certificate programmes, to make different types and styles of learning (including work-based) attractive and available to all students. The Transition Year should also continue to expose students to potential vocational pathways, building on current good practices (e.g. apprenticeship taster offerings). Further integrating application processes for FET, HE and apprenticeships by the CAO also could help to promote more equal consideration of the different options. **4.3. Increase take-up of apprenticeships by identifying and overcoming financial obstacles for employers.** To strengthen employer demand for apprentices, Ireland should evaluate its subsidies for apprenticeships. Ireland will need to ensure that apprenticeships are financially feasible for employers and allow them to provide good quality work-based learning. Especially funding mechanisms for the New Apprenticeships need to be re-assessed, since higher cost to employers of New Apprenticeships relative to Craft Apprenticeships make apprentices less attractive to employers. As part of this re-assessment, Ireland should also evaluate the impact of the grant to employers of EUR 2000 per eligible apprentice, including if it is sufficient to incentivise employers to take on new apprentices. **4.4. Continue to address non-financial obstacles for employers to take on apprentices by providing employers with practical support and information and promoting more flexible forms of apprenticeship.** Ireland should ensure that employers have sufficient access to supports and information for engaging with apprenticeships. To this end, Ireland could consider setting up a single point of contact for employers seeking information on apprenticeships, possibly building on the recently created National Apprenticeship Office (NAO). Ireland should also address the shortage of classroom instructors of apprentices and promote more flexible models for apprenticeships, possibly by promoting that groups of enterprises with apprentices share the responsibility for apprentice training.
5. Improve pathways between FET and HE to support the move towards a truly unified tertiary system	**5.1. Develop universal and consistent criteria for facilitating transitions between FET and HE and cross-system credit recognition.** Ireland should ensure that pathways between FET and HE are more systematic with clear pathways between the two systems available at a broader level for groups of programmes and courses (e.g. a cohort-based system), which could make pathways more transparent and more widely accessible. To achieve this, Ireland should create criteria for transitions between the systems that are universal and consistent. These criteria could build on, or be an extension of, the existing arrangements of the Higher Education Links Scheme (HELS) and developing these criteria would involve strong engagement from across the tertiary education sector. Ireland should also aim to move towards cross-system recognition of credits, to ensure that FET courses and accreditations are recognised in HE. **5.2. Expand co-development and co-delivery of programmes by FET and HE, by supporting the newly established National Tertiary Office, among other initiatives.** Ireland should move ahead with operationalising the National Tertiary Office within HEA and tasked with the development of joint FET-HE programmes, where students start in FET and finish in HE. The 13 disciplines being advanced and the budget of EUR 2 million in 2023 provide a good starting point. Possibly, Ireland could consider complementary measures to strengthen collaborative programme design, development and delivery by FET and HE on a conjoint basis, for instance by making it a requirement of other funding arrangements or initiatives (e.g. developing sectoral qualifications across FET and HE). **5.3. Better promote the development of "place-based" networks (or partnerships) between FET and HE to strengthen local collaboration on improving pathways.** Ireland should develop strong governance arrangements that could help to make collaboration long-term, sustainable, and inclusive. To this end, Ireland could promote "place-based" networks (or partnerships) that bring together FET providers and HEIs at a local level. These initiatives will need to be led by the providers, but should involve employers and other key stakeholders, including non-formal and adult education and community, voluntary, charity and social enterprise (CVSE). In addition, these networks could also support bringing together other regional players (see Chapter 5). To be fully effective, they need clearly defined and agreed roles, mutual trust, dedication to clear pathways, a coordinated employer engagement, and alignment with local and national priorities.

Opportunity 3: Making education and training provision more responsive to changing skills needs

Annex Table 1.B.3. Recommendations for making education and training provision more responsive to changing skills needs

Recommendation	Specific actions
6. Ensure that the FET and HE provision is aligned with strategic skills needs and responsive to changes in demand	**6.1. Establish a vision for long-term strategic skills needs in Ireland to inform and strengthen FET and HE performance frameworks and funding models.** A more strategic approach could help to foster a long-term vision for the skills that are needed to benefit from future opportunities and to secure a balance in skills. Based on high quality skills forecasting and workforce planning, Ireland should identify its strategic skills needs and use this information to incentivise and support education and training providers to offer skills development opportunities in these areas. Both SOLAS and the HEA have an important role to play in identifying strategic skills needs and implementing the longer-term strategic vision, including by incorporating these strategic insights into performance frameworks and funding models – e.g. through Strategic Performance Agreements (SPAs) in FET. In this context, Ireland can build on ongoing work to further improve FET and HE funding models, as described in the FET Funding Model review and the HE funding and reform framework as presented in "Funding the Future". **6.2. Better incentivise education institutions to offer permeable learning pathways and flexible learning opportunities that allow individuals to acquire new skills quickly in response to changing skills needs.** Ireland should remove incentives for education institutions to keep students in their own system for as long as possible. Instead, Ireland should make learning pathways more permeable so that students can easily adjust their learning plans in response to evolving needs. Ireland should also expand flexible learning opportunities (e.g. part time learning, modular courses) (see also Chapter 3 on flexible learning opportunities for adults), to facilitate the quick acquisition of new skills in response to changing skills needs. Achieving this will require adapting FET and HE funding models to provide the right incentives to education providers. It is promising that ongoing reforms of FET and HE funding models already aim to improve the flexibility of education and training provision. However, to deliver on the objectives of these reforms, adequate funding also needs to be made available.

Priority 2: Fostering greater participation in lifelong learning in and outside the workplace (Chapter 3)

Opportunity 1: Strengthening incentives to participate in lifelong learning for individuals

Annex Table 1.B.4. Recommendations for strengthening incentives to participate in lifelong learning for individuals

Recommendations	Specific actions
1. Incentivise adults to participate in lifelong learning to improve the prominence of lifelong learning in Ireland's society	**1.1. Assess the feasibility of individual learning schemes and paid training leave in Ireland's context.** To determine whether or not Ireland should adopt an ILS and, if so, the type and characteristics most suited to its needs, DFHERIS should conduct in-depth research into the feasibility of such schemes in Ireland's context. Furthermore, DFHERIS should assess the option of establishing a statutory right to lifelong learning in Ireland and linking this right to the existing and proposed supports for engaging in lifelong learning. **1.2. Evaluate and expand programmes or financial incentives that effectively engage a wide range of individuals in lifelong learning by extending their scope, target audience and/or allocated resources (e.g. Springboard+, eCollege).** To help more individuals engage with lifelong learning and have positive experiences that encourage them to participate more in the future, programmes popular with adults in Ireland in recent years should be properly evaluated and expanded in the areas where they have had the greatest impact. As part of such an expansion, models that work well for one segment of individuals could be adapted to meet the needs of other segments (e.g. courses delivered in a format similar to eCollege could be expanded beyond National Framework of Qualifications [NFQ] Level 5). These successful programmes could point learners towards future opportunities for lifelong learning. Consideration would need to be given to the implementation of this measure so as not to eliminate individual and/or employer contributions for training, which foster buy-in to education and training outcomes. **1.3. Implement a public awareness campaign to raise awareness about the importance and benefits of lifelong learning for all.** To raise the prominence of lifelong learning in the national discourse, DFHERIS should launch a national awareness campaign about the benefits of lifelong learning, particularly highlighting different

	types of learner pathways, varying entry points into lifelong learning and many types of learning (formal, non-formal, informal) in order to send a message to the public that lifelong learning can be for all types of learners.
2. Provide tailored and targeted support to disadvantaged groups to address the specific barriers they face to participating in lifelong learning	**2.1. Develop detailed profiles of different types of lifelong learners and potential lifelong learners.** To best target disengaged lifelong learners, it is first important to have a more granular picture of the different types of adult learners or potential learners in Ireland and to understand their particular contexts and barriers to participation. DFHERIS, in partnership with SOLAS and DETE, should undertake or commission research to identify the different profiles of lifelong learners in Ireland's adult population, using the findings of such research as input for designing and implementing tailored lifelong learning policies. **2.2. Improve holistic support for parents and carers to participate in lifelong learning through information, additional financial support and on-site services.** The DSP, in collaboration with SOLAS, the Department of Children, Equality, Disability, Integration and Youth, and DFHERIS, should design and implement additional holistic support for parents and carers (e.g. on-site childcare, information about existing government support for childcare and support in the application process, stipends for living costs during studies, etc.) to make lifelong learning more accessible to parents and carers. **2.3. Increase support for vulnerable groups to participate in lifelong learning by providing targeted guidance and financial supplements to address the indirect costs of learning.** The costs of participating in lifelong learning are higher in reality than the costs of tuition to participate in a course, particularly for low-income individuals and other vulnerable groups, such as the long-term unemployed. The DSP, in collaboration with SOLAS and DFHERIS, should build on existing DSP benefits to strengthen targeted support for vulnerable groups (e.g. transportation and meal vouchers, stipends for living costs during studies, information about RPL, etc.) to offset the indirect costs of lifelong learning and make it more broadly accessible.

Opportunity 2: Strengthening incentives to participate in lifelong learning for employers

Annex Table 1.B.5. Recommendations for strengthening incentives to participate in lifelong learning for employers

Recommendations	Specific actions
3. Establish a clear and robust lifelong learning guidance and support system for employers to efficiently match them with training that meets their needs	**3.1. Formalise a system of lifelong learning guidance for employers by evaluating the strengths and weaknesses, as well as the feasibility, of different models of service integration.** DFHERIS, DETE, existing advisory bodies, employers and employers' associations and education and training providers should work together to evaluate different models of service integration for providing guidance to employers on lifelong learning and workforce development in Ireland's context. Once a model for providing guidance to employers has been chosen, a multi-phase action plan should be developed to move from the current provision of employer guidance to a more formalised and co-ordinated system and to raise awareness among employers about this new system. **3.2. Design an online portal tailored to employer needs and integrate this portal into a potential broader lifelong learning guidance system for employers.** In co-ordination with the design of a new lifelong learning guidance system for employers, DFHERIS, DETE, EI, IDA Ireland, LEOs, employers' associations and the administrators of other existing portals should work together to build on existing guidance websites for employers and develop a user-friendly online portal to complement other guidance services for employers. The portal should contain an interactive and user-friendly landing page in which employers can communicate their skills needs and be directed to relevant information and guidance as well as information about financial support available to them for upskilling their employees. This portal should be linked to the online portal for individuals to find lifelong learning opportunities (Chapter 2). **3.3. Strengthen support to employers to map out their employees' skill set and future skills needs (e.g. methodological guides, manuals, tools, etc.).** To help the broadest range of employers map out their employees' current skill set and their future skills needs, the lifelong learning advisory system for employers should build on existing best practices in skills assessment tools to develop tools and support for enterprises in Ireland, specifically indigenous and small-scale companies that do not currently have access to skills assessment resources. **3.4. Develop a work plan to provide targeted additional guidance to small and medium-sized enterprises, beginning with a pilot programme in sectors of national priority.** SMEs in Ireland face particular challenges in providing or supporting lifelong learning and therefore require particular support. Given that there are so many different types and kinds of SMEs in Ireland that may face different barriers to participation, DFHERIS and DETE should collaborate on identifying specific sectors of high national priority for reskilling and upskilling. In addition, they should consider establishing a pilot programme to help small enterprises in these sectors engage in education and training by addressing the barriers they face.

Recommendations	Specific actions
4. Reform the National Training Fund to better foster lifelong learning in workplaces	**4.1. Unlock surplus National Training Fund funds to facilitate greater investment in lifelong learning in Ireland.** To ensure that NTF funds are being used for their designated purpose of upskilling and reskilling individuals in Ireland and that spending from the NTF is in line with money collected from employers through the NTF levy, the current expenditure rules should be adapted to unlock more NTF funds to be invested in lifelong learning. This could be done, for example, by the government raising the expenditure ceiling for the NTF specifically; by changing legislation so that increased spending from the NTF is not linked to the ministerial (DFHERIS) expenditure ceiling; or by amending the rules such that an increase in the NTF levy automatically results in an equivalent increase in the NTF expenditure ceiling without a specific decision from the government on the ministerial or overall expenditure ceiling. **4.2. Improve structural incentives for employers to take advantage of education and training funded by the National Training Fund.** To improve employers' use of the NTF, which they pay into through the NTF levy, DFHERIS, along with employers' associations, should raise awareness among enterprises about the connection between the levy they pay and the subsidised training opportunities available to them and their employees. In addition, DFHERIS and NTFAG, working with employers' associations, should draft and test potential amendments to the National Training Fund Act to more directly link the funds enterprises pay into the NTF with monetary rewards they can gain from incorporating education and training into their workplaces. **4.3. Establish a discretionary fund as part of the National Training Fund to be distributed at the regional/local/sectoral level.** DFHERIS, on the advice of the NTFAG, should use NTF funds to establish annually allocated regional, local or sectoral discretionary funds to be distributed to employers on an ad hoc basis to reimburse costs related to trainings not covered by existing NTF-funded programmes, including for mapping their skill needs and creating a training plan (Recommendation 3). **4.4. Increase National Training Fund support specifically allocated for upskilling and reskilling for small and medium-sized enterprises.** To ensure that supporting education and training in SMEs is prioritised, a share of NTF funds should be designated for supplementary support to SMEs (e.g. covering indirect costs of training, providing on-the-job training and/or compensating the time employees are in education and training).

Opportunity 3: Making lifelong learning more flexible and accessible

Annex Table 1.B.6. Recommendations for making lifelong learning more flexible and accessible

Recommendations	Specific actions
5. Promote greater flexibility in the lifelong learning offer to help individuals and employers incorporate ongoing learning into daily life	**5.1. Encourage lifelong learning providers to offer more flexible learning opportunities (e.g. online, modular, "bite-size" microcredentials).** Greater provision of flexible learning opportunities can be promoted by rewarding institutions that prioritise flexible courses (e.g. through public awards or performance-based funding). In addition, flexible courses can be encouraged by removing barriers to their design and implementation. To that end, it is important to ensure that new FET and HE funding models do not penalise or disincentivise shorter-length courses (see Chapter 2). Furthermore, providers that organise company- or sector-specific trainings, such as Skillnet Ireland Business Networks, should be supported through guidelines and information to provide just-in-time learning that begins at a time of year that makes sense for specific industries (e.g. retail, hospitality, etc.). **5.2. Strengthen the recognition, accreditation and stackability of lifelong learning opportunities in line with the National Framework of Qualifications (e.g. through stackable micro-credentials, digital badges, etc.).** Shorter and more flexible courses can be better integrated into the lifelong learning offer if there are clear measures for accrediting these courses in the NFQ and stacking them to build unique learner pathways. The QQI should work together with SOLAS and HEA to create frameworks and streamline processes for determining the accreditation of short and bite-size courses. **5.3. Strengthen support for online learning instructors and providers to improve the quality of online courses and enable further expansion of remote lifelong learning.** Given that so much lifelong learning has moved on line since the COVID 19 pandemic, DFHERIS should work together with SOLAS and HEA to strengthen the online teaching skills of instructors of lifelong learning through subsidised training courses for instructors and the provision of online tools and teaching materials to help instructors adapt to remote teaching.
6. Improve the recognition of non-formal and informal learning for individuals and enterprises to make lifelong learning more accessible to all	**6.1. Strengthen the capacity of education and training providers to offer recognition of prior learning, including by establishing national guidelines outlining the procedures and processes of RPL.** Building on existing projects such as the HCI, QQI should collaborate with SOLAS and HEA to establish clear national guidelines for RPL in ETBs and HEIs. Furthermore, DFHERIS should work with SOLAS to provide additional funding and capacity to ETBs, particularly to help them better manage the RPL process within ETBs. **6.2. Improve awareness of and access to recognition of prior learning, including tools for individuals to accumulate and display their non-formal and informal learning.** As part of the one-stop-shop information portal discussed in Chapter 2, Recommendation 2, Ireland should create an online tool where individuals can accumulate and display their non-formal and informal learning achievements, which can then be shared with employers and/or integrated to work with online job boards. This online tool should be built to have compatibility with EU-wide tools for the recognition of learning and skills.

Recommendations	Specific actions
	6.3. Implement a mechanism for recognising and rewarding informal, on-the-job learning provided by employers. To encourage more employers to provide informal, on-the-job learning, DFHERIS and other relevant departments should work together to design a mechanism for rewarding employers who provide such training, for example, with public awards of excellence, certificates recognising internal trainers within enterprises, NTF contribution discounts or reimbursements. The mechanism could provide greater benefits to SMEs that provide informal, on-the-job learning.

Priority 3. Leveraging skills to drive innovation and strengthen firm performance (Chapter 4)

Opportunity 1: Better utilising Ireland's research talent and infrastructure to drive innovation within firms

Annex Table 1.B.7. Recommendations for better utilising Ireland's research talent and infrastructure to drive innovation within firms

Recommendations	Specific actions
1. Develop skills for innovation across the education system to strengthen Ireland's adaptive capacity and competitiveness	**1.1. Strengthen the strategic positioning of skills for innovation and improve connectivity with wider policy domains.** While skills are recognised as an important framework condition in a range of strategies relating to Ireland's competitiveness, stakeholders consulted emphasised the importance of articulating a stronger national narrative on the importance of skills for innovation, to ensure the prioritisation of skills in the policy discourse and secure adequate investment in skills in the years ahead. Ireland's National Skills Strategy offers an opportunity to demonstrate the centrality of skills to the realisation of a broad range of Ireland's long-term aspirations and policy objectives, including those set out in Impact 2030, Industry 4.0, Digital Ireland Framework, Climate Action Plan and new National Smart Specialisation Strategy. **1.2. Improve the development of transversal skills for innovation across the education system, including lifelong learning.** DFHERIS, DETE and DEPEDU should review the potential to expand and enhance existing STEM, creativity, innovation and entrepreneurship education programmes in Ireland, including exploring the potential for new pedagogical practices, capacity building for teachers and reforming teaching methods at primary, second and third level, as seen in other OECD countries in efforts to broaden the skills and culture for innovation. This could draw lessons from new institution-led entrepreneurship education initiatives being funded by the HEA and be considered as part of the redevelopment of the senior cycle. **1.3. Strengthen and systematise the process for identifying and responding to emerging technical skills needed for innovation in areas of strategic importance to the economy.** Regional sectoral clusters supported through Ireland's new National Clustering Programme should be given a clear mandate for anticipating future technical skills needs in their sectors or thematic areas, identifying gaps in existing provision and shaping new learning options, working with wider actors in the skills system, including EGFSN, RSF, Skillnet, FET and HE providers, R&I centres, employer representatives and sector bodies.
2. Better activate the skills of research talent to strengthen R&D intensity in the economy and innovation with firms	**2.1. Strengthen incentives and resources for R&I institutions and highly-skilled research talent to engage and collaborate with smaller enterprises.** Enterprise Ireland, Knowledge Transfer Ireland and the SFI should explore scope to further strengthen existing targets and incentives for the TTOs, EDIHs and R&I Centres for SME engagement. DFHERIS and the HEA should also work with higher education institutions to examine how best to adapt the workload model progression and promotion criteria for academic staff to better enable and incentivise industry engagement, while ensuring that the Technological Universities are adequately resourced to manage greater levels of activity envisaged in Impact 2030. **2.2. Advance further research to better understand current and future demand for research graduates and the mobility of research talent between academia, industry, the public and voluntary and community sector.** This could build on regular quantitative forecasting, including at NFQL9 by research and L10, recommended in Chapter 5, to provide more granular insight on enterprise demand for research graduates from different disciplines and by different sectors of Ireland's economy. In the short-term, DFHERIS should also examine how the CSO Higher Education Outcomes data could be better leveraged to support a longitudinal view of the mobility of research talent in the labour market, as well as scope to utilise data drawn from social and professional networks to track research graduate transitions. Over the medium-term, Impact 2030 plans to develop a research graduate tracking system in Ireland will prove vital to addressing this evidence gap, and there is scope to align national efforts with wider initiatives being led by the European Commission to develop a European graduate tracking mechanism.

Recommendations	Specific actions
	2.3. Strengthen careers guidance for research graduates and better integrate transversal skills development into research training at all levels. The HEA, IRC and SFI should work collaboratively to review career guidance of researchers (discussed further in Chapter 2) and further integrate transferable skills development into PhD programmes, EI Technology Gateways, SFI Research Centres and Centres for Research Training. There is also scope for Ireland to consider specialist doctoral schools and residential transferable skills training courses for postgraduate students; and extending collaborative doctoral programmes, including Doctoral Networks. SME engagement in these programmes must be a priority, with scope to extend jointly supervised collaborations at Masters-level and advance Doctoral Training Networks for smaller enterprises that support cost and risk sharing between small firms.

Opportunity 2: Promoting the continuous improvement of leadership and management skills within enterprises

Annex Table 1.B.8. Recommendations for promoting the continuous improvement of leadership and management skills within enterprises

Recommendations	Specific actions
3. Extend flexible, subsidised and customisable development opportunities for Ireland's managers to maximise the accessibility, relevance and value of support	**3.1. Address gaps in management training for mid-sized, locally traded service companies and community, voluntary and social enterprises.** Enterprise Ireland and Local Enterprise Offices, working with employer representative organisations such as Ibec and The Wheel, should review the relevance of existing management development programmes to these organisations and the feasibility of widening the eligibility criteria for accessing support, such as the LEO Accelerate and Mentor Programmes and Spotlight on Skills to include those outside of their traditional client groups. There is also a need to develop tailored training, customised to the distinct needs of these organisations, in the case of CVSEs, delivering commitments made in the Department for Rural and Community Development (DRCD) National Social Enterprise Policy. **3.2. Advance new flexible, subsidised and customisable management training and scale-up successful existing programmes.** Enterprise Ireland and Skillnet Ireland, working with the Regional Skills Fora, employer representative organisations, education and training providers, should review how to support the expansion of short-term, modular and blended learning, online training, and training delivered at times suited to business leaders, which can better accommodate the time and cost constraints felt most acutely by Ireland's smaller enterprises (see Chapter 3 for more recommendations on flexible and accessible learning opportunities). There is also scope to expand successful existing examples of fully-subsidised and customisable management development opportunities in Ireland, with stakeholders consulted highlighting the SFA / Skillnet Mentors Work and EI Spotlight on Skills as innovative models that could be usefully applied to other management training programmes.
4. Strengthen incentives for management development to raise the motivation of Ireland's managers to upgrade their skills and participate in lifelong learning	**4.1. Strengthen evidence on the business benefits of management development for productivity, innovation and business performance.** The EGFSN Leading the Way working group could build on the recently launched Skills for Better Business campaign, to provide stronger quantitative evidence and case studies demonstrating the 'return on investment' associated with management training. **4.2. Introduce a new management standard and associated quality marks to professionalise management in Ireland.** National and local enterprise agencies, qualifications and standards authorities such as QQI and NSAI, providers of management training, employer representative organisations such as IBEC, ISME, the SFA and The Wheel, large organisations and SMEs should work collaboratively to develop the new management standard. It will also be important for stakeholders to co-design standards with employers, to work through implementation challenges, minimise administrative burden and maximise value. Due consideration should be given to developing a 'tiered' standard – for example, with gold, silver and bronze levels – to support employers of all sizes to engage with standards as part of a journey and encourage their ongoing participation. **4.3. Advance incentives for Irish firms to take-up new management standards and quality marks**, for instance by making it a condition for accessing public funding and support. This could build on current partnership arrangements between Micro Finance Ireland and Local Enterprise Offices which offer discounted interest rates of loans and promote participation in the LEO Mentor Panel. Ireland should review the potential to extend conditionality to a wider range of financial and non-financial support for business, particularly for larger firms who have greater resources to support management development.

Opportunity 3: Incentivising and enabling enterprises to make better use of the skills of their workers through innovative workplace solutions

Annex Table 1.B.9. Recommendations for incentivising and enabling enterprises to make better use of the skills of their workers through innovative workplace solutions

Recommendations	Specific actions
5. Reinvigorate the strategic focus on workplace innovation in Ireland as a key vehicle to improve the productivity and performance of firms	**5.1. Position the modernisation of Irish workplaces as an explicit policy priority in the refreshed National Skills Strategy for Ireland.** Other strategies, such as Ireland's national R&I Strategy and Regional Development Plans, should also seek to acknowledge improvements in work organisation (or 'workplace innovation') as a distinct and valued form of innovation, for example redefining the qualification requirements for the R&D tax credit to include organisational innovation and supporting projects that seek complement new technology with staff training and job redesign to realise the productivity benefits of digitalisation. **5.2. Review Ireland's portfolio of management development opportunities to strengthen focus on workplace transformation and HPWPs.** DFHERIS and DETE, working through Enterprise Ireland, IDA, Skillnet Ireland, the RSF and LEOs and working with wider organisations such as IBEC, the SFA, ISME and The Wheel, should examine scope to scale-up existing initiatives that develop skills required to drive improvements in organisational practices, such as Mentors Work and Lean Business offer; adapt the competency frameworks or content of programmes to include work organisation and job design; or advance new pilots, that take well-established, innovative programmes, such as Skillnet Business Networks or Spotlight on Skills and apply them to improving work organisation within smaller firms. **5.3. Advance awareness campaigns that build understanding of the steps that small firms can take to stimulate better work organisation practices.** Stakeholders consulted suggested Irish firms have very low levels of awareness of what constitutes good practice when it comes to organisational practices (beyond staff training). This highlights a need for Enterprise Ireland and the Local Enterprise Offices to strengthen the evidence base on the business case for the adoption of HPWPs and to advance new awareness-building activities that demonstrate leading practices around work organisation and job design, including social media campaigns, the sharing of success stories, networking and diagnostic tools that help firms to identify where improvements can be made.
6. Foster peer-to-peer learning and communities of practice to promote the diffusion of leading-edge organisational practices between Ireland's MNEs and SMEs	**6.1. Review the potential to embed organisational practices and high performance working more strongly within Ireland's well-established mechanisms for peer learning**. This includes Skillnet Ireland's Business Networks, Plato Business Development Networks, the recently launched Innovation Exchange and the Disruptive Technologies Partner Portal, which could be expanded and extended to bring together enterprises to work collaboratively to embed wider aspects of HPWPs, such as new forms of work organisation, job redesign or mechanisms to support more direct employee participation within their organisations. **6.2. Develop new programmes that seek to promote innovation diffusion between MNEs and smaller enterprises in their supply chains.** Enterprise Ireland and the IDA could draw on international examples of supply-chain capacity-building programmes, including exploring scope for further online platforms that support matching and information exchange between Ireland's MNEs and SMEs and MNE-led leadership education and management development programmes delivered to smaller enterprises within their supply-chain, as seen in Japan and South Korea. **6.3. Strengthen collaborative business learning networks or 'communities of practice' that seek to promote workplace innovation.** These are often initiated in response to shared business challenges and take varying forms, including sector-focussed forums, supporting different professional groups and often being geographically-based. Enterprise Ireland, IDA and Skillnet Ireland should review the existing landscape of networks and forums to identify scope to further support their alignment and efficacy, by extending networking activities for alumni of existing programmes such as PLATO, Skillnet Business Networks or EI leadership programmes and IDA Innovation and Talent Forums and offering targeted funding and support to collaborative business networks that are seeking to deploy innovative workplace solutions.

Priority 4: Strengthening skills governance to build a joined-up skills ecosystem (Chapter 5)

Opportunity 1: Promoting a whole-of-government and strategic approach to skills policy

Annex Table 1.B.10. Recommendations for promoting a whole-of-government and strategic approach to skills policy

Recommendations	Specific actions
1. Strengthen the commitment to and efficiency of adopting a whole-of-government approach to skills to help achieve a step change in Ireland's skills system	**1.1. Adopt processes to support cross-departmental collaboration on addressing skills challenges in areas of strategic importance.** Ireland should consider establishing new processes for collaborating on the development, use and governance of skills over the life course in areas of strategic importance while avoiding duplication (see more below). For example, departments facing strong skills pressures in their respective oversight areas could establish collaboration processes with DFHERIS and/or other relevant departments and agencies to work jointly to address these pressures, such as has already been done between DCEDIY and DFHERIS (see Table 5.3 in Chapter 5). In addition, the importance of cross-departmental collaboration on skills should be regularly underlined by DFHERIS and other relevant departments at the ministerial level in cabinet meetings or other high-level governmental fora, such as relevant meetings of Senior Officials Groups. Equally, DFHERIS, in collaboration with other departments and DFHERIS agencies, should address the co-operation challenges and increasing competition between governmental actors who engage with employers on reskilling/upskilling at the regional and local levels (e.g. by undertaking a detailed, joint assessment of the existing overlaps in roles and responsibilities, issuing guidelines encouraging a more collaborative approach, etc.). **1.2. Reduce duplication and promote synergies by mapping, monitoring and raising awareness of existing processes to support cross-departmental collaboration on addressing skills challenges**. Ireland should establish a mapping of existing, cross-departmental collaboration processes on skills (e.g. working groups, committees, protocols, etc.), which should be regularly updated, and made accessible across departments. A single entity could be tasked with undertaking, updating and sharing the mapping. The secretariat of the NSC might be well suited to take on such responsibilities, given the secretariat's experience with cross-departmental co-ordination in the context of organising NSC meetings. However, taking on such a role would need to be met with a commensurate increase in the secretariat's capacity and resources (see Recommendation 3).
2. Prepare a follow-up to the National Skills Strategy 2025 to help place skills at the top of Ireland's policy-making agenda, and enable effective implementation	**2.1. Apply a whole-of-government approach to the design and implementation of the National Skills Strategy 2025 follow-up.** DFHERIS, who is leading the development of the NSS 2025 follow-up, should actively involve other departments and key stakeholders in the design of the follow-up. Active cross-departmental and stakeholder collaboration on the design of the NSS 2025 follow-up would help establish consensus around the identified priority areas and, therefore, greater salience of the follow-up and ownership of its implementation among all relevant parties going forward. At the same time, a collaborative approach to the design of the NSS 2025 follow-up would help ensure that identified skills priorities become accurately reflected in other departments' more specific strategies and action plans as relevant. Consideration could also be given to establishing standing, technical-level implementation groups, with members sourced from across departments and stakeholders as relevant, to support the implementation of the specific priority areas of the follow-up. **2.2. Prioritise a smaller number of high-impact priority areas in the National Skills Strategy 2025 follow-up and consider a more flexible structure.** In preparing the follow-up to the NSS 2025, DFHERIS and relevant partners should prioritise fewer yet higher impact priority areas to support effective implementation. When considering the structure of the NSS 2025 follow-up, DFHERIS and relevant partners could consider differentiating between the core of strategy and related, more flexible work programmes, such as those included in Ireland's *Impact 2030* Strategy (see Box 5.3 in Chapter 5) in order to create space for updating, as need be. **2.3. Establish clear accountability mechanisms to support progress reporting on and evaluating the measures implemented under the National Skills Strategy 2025 follow-up.** Consideration should be given to establishing clear progress-reporting guidelines, which all partners involved in the implementation of the follow-up should follow. For example, the relevant parties could report progress with the implementation to the NSC secretariat at regular intervals, allowing the secretariat to compile a report tracking implementation progress. In addition, the progress report could be regularly presented and discussed at the NSC in order to obtain stakeholders' feedback before being submitted to the government as part of a broader, regular NSC report (see also Recommendation 3). In the long term, it would be equally advisable for DFHERIS and other relevant actors to conduct an impact evaluation of the key, relevant interventions introduced under the NSS 2025 follow-up and the NSS 2025 itself. For this purpose, the evaluation capacities of the recently established EfP Unit and/or other evaluation structures in the government could be used, as relevant, while allowing stakeholders and other departments to provide feedback on the evaluation process and findings (e.g. during NSC meetings).

Opportunity 2: Supporting effective engagement with stakeholders throughout the skills policy cycle

Annex Table 1.B.11. Recommendations for supporting effective engagement with stakeholders throughout the skills policy cycle

Recommendations	Specific actions
3. Strengthen the National Skills Council and other stakeholder bodies to enable stakeholders to more effectively shape Ireland's skills policy priorities	**3.1. Revise the National Skills Council's terms of reference, improve its visibility, and adequately resource its secretariat.** DFHERIS should consider revising the NSC's terms of reference (ToRs) to primarily position the NSC as a stakeholder advisory body to the government on skills policy issues (see Figure 5.4 in Chapter 5) instead of as a discussion forum for governmental officials (see more on improving cross-departmental collaboration and co-ordination on skills under Recommendations 1 and 2) and adjust the NSC's membership accordingly (see below). In revising the ToRs, DFHERIS should determine (e.g. via the Strategic Skills Group) how the work of the SLMRU, the EGFSN and/or other relevant entities and partnerships working on/with skills data and evidence could be better leveraged and co-ordinated to advance the NSC's work. As appropriate, the collaboration between the NSC and other relevant stakeholder engagement mechanisms on skills, existing cross-departmental processes for collaboration on skills (see Recommendation 1) and/or international experts should be actively facilitated by the NSC secretariat. Equally, DFHERIS should raise better awareness of the NSC and its work, such as at potential annual Skills Summit events. In order to adequately implement the suggested changes and strengthen the overall role of the NSC, consideration should be given to better resourcing the NSC's secretariat, the role of which is currently constrained by limited resources. **3.2. Ensure that a wider range of relevant non-governmental stakeholders is represented at the National Skills Council, promote gender balance in its membership and foster accountability with regard to its advice.** DFHERIS should ensure that relevant non-governmental stakeholders, representatives of different societal interests, have a seat at the NSC. Relevant stakeholders could include social partners (i.e. representatives of employers – including SMEs – and trade unions), as well as relevant regional stakeholders (such as RSF), representatives of disadvantaged groups, private education and training providers, learners, independent experts and the community and the voluntary sector. As maximising the number of NSC members does not automatically translate into improving NSC functioning, attention should be paid to carefully identifying relevant (and less relevant) stakeholders, as well as governmental actors, to be included on the NSC. Gender balance in the NSC membership base should be equally promoted. Room should be created for NSC members to provide input into agenda setting of NSC meetings, and clear accountability mechanisms should be put in place regarding the advice provided by NSC members. NSC meetings could aim to conclude with clear, actionable items/recommendations. At the same time, the relevant parties could be asked to showcase how they had acted on the advice received or their reasons for not doing so, such as in the Netherlands (Box 5.6 in Chapter 5). NSC recommendations and subsequent responses from relevant actors and/or actions undertaken could be summarised in a regular NSC report, to be submitted to the government, together with a progress update on the implementation of the NSS 2025 follow-up (see Recommendation 2). **3.3. Convene more regular National Training Fund Advisory Group meetings and provide adequate opportunity for stakeholder input.** NTFAG meetings should be convened regularly, which is currently not the case as highlighted by project participants. The timing of convening the meetings should allow stakeholders to provide input on NTF spending at points in time when the input can be considered in NTF expenditure decisions. Sufficient space should also be set aside on the NTFAG meeting agendas for discussion and sourcing stakeholder inputs without the presentation of NTF-related updates by governmental officials dominating the meetings. Consideration should also be given to clarifying, and potentially formalising, the link between the NTFAG, NTFAG's recommendations and the NSC in NSC's revised ToRs (see above).
4. Scale up existing good practices and promote a more inclusive, efficient and co-ordinated approach to stakeholder engagement in the co-design of education and training	**4.1. Expand successful skills development programmes and initiatives where collaboration with enterprises is core to the course design and/or where receiving funding is conditional upon collaboration with enterprise – and encourage input from small and medium-sized enterprises.** Skills development programmes and initiatives such as Skills to Advance and Springboard+, as well Skillnet Ireland Networks, conditional upon demonstrating overall satisfactory outcomes, should be further expanded to incentivise further collaboration between education and training providers and employers. Where possible, incentives should be introduced to create more systematic opportunities for SMEs to provide input on co-creating FET qualifications and HE curricula to promote a more inclusive approach to course co-design. **4.2. Consider establishing "curriculum" hubs" in selected education and training boards to better focus their stakeholder engagement efforts in further education and training**. SOLAS could consider establishing dedicated "curriculum hubs" in selected ETBs to increase the efficiency with which ETBs engage enterprises in the design of FET qualifications and to further improve the quality of provision. Under such a model, a designated hub would focus on developing cutting-edge FET qualifications in specific industries and/or areas of horizontal skills needs (e.g. digital/green skills), in collaboration with employers, other ETBs and other relevant actors, including relevant RSF as well as skills data entities at the national level, among others. Existing, relevant industry RSF networks and groups, where they are in place, could be built on when

Recommendations	Specific actions
	establishing such hubs, while representatives of the hubs should be engaged in the relevant RSF to promote a co-ordinated approach to training co-design (see below). After a certain period since establishment, the functioning of the hubs should be duly evaluated. **4.3. Ensure adequate co-ordination between actors who engage with stakeholders in course co-design.** Ireland should promote a co-ordinated approach to course co-design between actors who approach employers on the ground (e.g. Skillnet Ireland Networks, ETBs, HEIs, etc.). The RSF, which bring together the relevant actors, have already established a good basis for a more co-ordinated approach and could provide such a platform going forward. At present, however, the RSF are constrained by limited capacity and resources.

Opportunity 3: Strengthening the collection, exchange and use of skills information

Annex Table 1.B.12. Recommendations for strengthening the collection, exchange and use of skills information

Recommendations	Specific actions
5. Improve the range and granularity of information on current skills needs, strengthen information on training outcomes and enhance skills forecasting	**5.1. Expand the scope of the National Employer Survey to collect more information on skills needs and skills use and implement the Survey on a regular basis.** HEA, SOLAS and QQI could consider expanding NES with additional questions, which would provide further insights into employers' skills needs (e.g. skills gaps among existing employees, etc.), the use of skills of existing employees as well as the recruitment of graduate, postgraduate and doctoral research talent at NFQ Level 8 10 specifically, as feasible. NES should be carried out on a regular basis. **5.2. Enable systematic collection of information on employees' skills gaps via the Skills for Growth initiative and strengthen the emphasis on skills in the Recruitment Agency Survey.** The SLMRU should clearly delineate space for collecting information on upskilling needs among current employees in the Skills for Growth data templates. In addition, the SLMRU could consider using digital solutions (e.g. a common online skills needs database) for capturing the data collected via the Skills for Growth initiative. The SLMRU should also consider using the Recruitment Agency Survey (RAS) to collect granular information on difficult-to-find skills not only in selected thematic areas but more broadly. In the case of both the Skills for Growth data and the RAS, the SLMRU should consider applying a common skills taxonomy. **5.3. Support systematic collection of information on the outcomes of further education and training graduates.** SOLAS should initiate a systematic collection of information on the outcome of FET graduates, regardless of the qualification awarded. Such tracking of outcomes should be undertaken on a regular basis. Where feasible, SOLAS could consider using administrative data to track outcomes of FET graduates to mitigate against potential "survey fatigue" in Ireland. **5.4. Consider reinitiating the development and systematic maintenance of a regular sectoral forecasting model.** DFHERIS could consider reinitiating the development of a regular sectoral forecasting model, which would allow to produce more relevant and accurate economy-wide skills forecasts by occupation and level of education, including graduate, postgraduate and doctoral research talent at NFQ Levels 8-10 as feasible. More robust, economy-wide skills forecasts would also prove useful in the EGFSN's sectoral and thematic skills forecasting exercises as well as for the labour market monitoring reports produced by the SLMRU and other relevant agencies. One actor should systematically maintain the sectoral forecasting model to ensure continuity. DFHERIS could consider financing the development and maintenance of the model from the NTF.
6. Enable more effective exchange and use of existing skills data and promote systematic skills policy evaluation to support evidence-based skills policy making	**6.1. Support the development of digital solutions to facilitate easier exchange of skills data**. DFHERIS, in collaboration with other relevant actors (e.g. the Data Protection Commission), could consider developing digital solutions (e.g. data exchange platforms) to facilitate easier exchange of data across the government (i.e. between relevant departments, agencies, institutes, etc.) and with stakeholders. Skills data "use cases" should be included on such a platform. **6.2. Enable more effective use of data from employer skills audits by promoting co-ordinated reporting and centralising the collected data.** DFHERIS, in collaboration with the SLMRU and with other relevant actors, should undertake a mapping of all governmental actors who carry out employer skills audits on the ground. At the national level, co-ordinated reporting should be promoted, including by contributing to the suggested online common skills needs database (see Recommendation 5) following the SLMRU's template. **6.3. Support the development and adequate resourcing of dedicated evaluation structures and promote a co-ordinated and collaborative approach to skills policy evaluation.** Relevant departments (including DEP EDU, DFHERIS, DSP, etc.) should support adequate resourcing and capacity building of the respective evaluation structures and promote a co-ordinated and collaborative approach to skills policy evaluation, in collaboration with the IGEES, as appropriate.

Note

1. The *OECD Skills Strategy 2019* identifies a broad range of skills, including: 1) foundational skills (e.g. literacy, numeracy and digital literacy); 2) transversal cognitive and meta-cognitive skills (e.g. critical thinking, complex problem solving and self-regulation); 3) social and emotional skills (e.g. responsibility, empathy and self-efficacy); and 4) professional, technical and specialised knowledge and skills needed to meet the demands of specific occupations (OECD, 2019[1]).

2 Securing a balance in skills through a responsive and diversified supply of skills in Ireland

In the context of rapidly changing skills needs, it will be essential for Ireland to develop a skills system that helps to secure a balance between skills demand and supply. Ireland needs to ensure that its skills system is flexible and responsive to address skills shortages and mismatches as they emerge and plan for future skills needs. A diversified supply of skills is also needed to build adaptability and resilience in the face of societal and economic change. This chapter provides an assessment of current and projected skills imbalances and presents three opportunities to better secure a balance in skills: 1) improving information and guidance for individuals on learning and career pathways; 2) strengthening learning and career pathways over the life course; and 3) making education and training provision more responsive to changing skills needs.

The importance of securing a balance in skills through a responsive and diversified supply of skills

Countries should aim to build skills systems that bring skills demand and supply into alignment – so as to reap the full societal and economic benefits of their skills investments. Minimising skills imbalances – comprising skills shortages and surpluses, as well as skills mismatches (Box 2.1) – is critical for the social and economic success of wider society, businesses and individuals (OECD, 2019[1]). For businesses, skills shortages and mismatches may constrain their productivity, innovation and competitiveness and increase hiring costs and staff turnover. For individuals, not having the skills required for occupations can negatively impact their well-being and career progression, while having skill levels above those required can reduce their job satisfaction and drive the attrition of their skills over time (OECD, 2016[2]). Ensuring that people's skills align well with those required to participate fully in an increasingly complex and interconnected world is also essential for inclusive societies.

Box 2.1. Definitions: Types of skills imbalances

A skills shortage refers to a condition of disequilibrium in which the demand for a specific type of skill exceeds its supply in the labour market, at the prevailing market wage rate.

A skills surplus, in contrast, comes about when the supply of a specific type of skill exceeds its demand in the labour market.

Skills mismatches occur when a worker's skills exceed or fall short of those required for the job under current market conditions. Skills mismatches can be measured in several different ways:

- **Qualification mismatch** arises when a worker's educational attainment is either higher or lower than that required by his/her job. If his/her qualification level is higher than that required by the job, the worker is classified as over-qualified; if the opposite is true, he/she is classified as under-qualified.
- **Skills mismatch** arises when a worker has higher or lower skills proficiency than that required by his/her job. If the worker's skills proficiency is higher than that required by his/her job, then the worker is classified as over-skilled; if the opposite is true, he/she is classified as under-skilled.
- **Field-of-study mismatch** arises when a worker is employed in a field different from the one in which he/she has specialised.

Source: OECD (2016[3]), *Skills Matter: Further Results from the Survey of Adult Skills*, https://doi.org/10.1787/9789264258051-en.

A dynamic and evolving economy will always experience some skills imbalances. In a context of rapidly changing skills requirements for jobs, changing labour markets and imperfect information, it is impossible to secure a perfect balance in skills. Therefore, the imperative is to ensure flexibility and responsiveness in the skills system, respond to shortages as they emerge, minimise skills mismatches, and meet the future skills needs of society and the economy.

Securing a balance in skills is now more important than ever, which is as true for Ireland as for other OECD countries. Rapid technological change, globalisation, demographic and climate change, Brexit, the coronavirus (COVID-19) pandemic and more recently, the Russian Federation's large-scale aggression against Ukraine, reshape skills supply and demand (see Chapter 1). To optimally benefit from these developments and meet its own economic and societal ambitions, Ireland needs a skills system that provides people with a diversified supply of skills that will make them more resilient and effectively adjust to changes.

The importance of securing a balance in skills is already reflected in Ireland's main strategic document for skills policy,[1] the National Skills Strategy (NSS) 2025, which was launched in 2016 (Box 2.2) (Department of Education and Skills, 2016[4]). The first objective of the strategy – "education and training providers will place a strong focus on skills development opportunities that are relevant to the needs of learners, society and economy" – is directly linked to the issue.

Box 2.2. This chapter and Ireland's National Skills Strategy 2025

This chapter on securing balance in skills through a responsive and diversified supply of skills is linked to various objectives of Ireland's NSS 2025. Given that many policies affect either the supply or demand of skills, and thereby skills imbalances, almost all objectives and key actions in the strategy could be considered relevant. These objectives range from the active participation of employers in the skills system to ensuring that more people engage in lifelong learning.

In particular, the first objective, "education and training providers will place a strong focus on skills development opportunities that are relevant to the needs of learners, society and economy", is directly linked to the issue of securing a balance in skills. Key actions identified in the strategy, and which are pertinent to securing a balance in skills, include learning 21st-century skills at all ages; raising participation in science, technology, engineering and mathematics (STEM) education; and enhancing integration, partnerships and synergy between the further education and training (FET) and higher education (HE) sectors.

Source: Department of Education and Skills (2016[4]), *Ireland's National Skills Strategy 2025 – Ireland's Future*, www.gov.ie/en/publication/69fd2-irelands-national-skills-strategy-2025-irelands-future/.

Several other opportunities described in other chapters are relevant for securing a balance in skills. Chapter 3 examines how to strengthen lifelong learning, which contributes to aligning the skills supply – through upskilling and/or reskilling – with changing skills demands. Improving the use of skills, as examined in Chapter 4, can also have an impact on reducing skills mismatches. For example, shortages and mismatches (e.g. over-qualification) could be reduced by raising the demand for skills and making more effective use of the available skills of workers. Chapter 5 explores how governance arrangements can involve employers more fully in the design of education and training (i.e. in shaping the content of new courses), which, by extension, can make education and training more responsive to changing skills needs.

This chapter begins with an overview of existing policies for ensuring a balance between skills demand and supply and an assessment of the current skills imbalances in Ireland. Subsequently, it examines three skills-related policy areas – or opportunities – for better securing a balance in skills:

1. improving information and guidance for individuals on learning and career pathways
2. strengthening learning and career pathways over the life course
3. making education and training provision more responsive to changing skills needs.

Overview and performance in securing a balance in skills through a responsive and diversified supply of skills

Overview of the current policies for securing a balance in skills

This section examines the policies that are relevant for the three identified opportunities for better securing a balance in skills in Ireland, as mentioned above.

Provision of information and guidance on learning and career pathways

Ireland has an extensive career guidance support system across the education and training system, including post-primary education, further education and training (FET) and higher education (HE). This support system covers the provision of information on careers and learning opportunities, as well as guidance counselling services in schools and career guidance services in working life.

Information on learning and careers is provided on multiple online portals that assist and inform people about available courses at all levels of education and different career pathways (see Table 2.1 in Opportunity 1 for an overview of these portals). Some of these portals aim to be one-stop-shops for all career information (most notably the CareersPortal supported by both public and private organisations), but most portals target different groups of learners and provide information on specific topics or segments of the education and training system. For instance, Fetchcourses provides information on FET programmes funded by SOLAS, the state agency overseeing FET; Generation Apprenticeship provides information on apprenticeships; Smart Choices presents labour market information (LMI) and information on available FET courses; and Smart Futures has information on STEM careers.

Various organisations provide career guidance services to youth and adults. A broad range of stakeholders are involved; an extensive overview of key organisations in the career guidance support system is described in a review of career guidance in Ireland by Indecon's Economic Consultants (2019[5]). In addition to various government departments, this includes educational organisations and training providers (e.g. universities, education and training boards [ETBs] and Skillnet Ireland); statutory agencies (e.g. SOLAS, the Higher Education Authority [HEA], Quality and Qualifications Ireland [QQI], Science Foundation Ireland and the National Disability Authority); advisory committees or non-statutory agencies (e.g. the National Skills Council [NSC], Regional Skills Fora [RSF] and the Labour Market Advisory Council); and more.

For youth in schools, the 1998 Education Act (9.C) states that all recognised schools must ensure students have access to appropriate guidance to assist them in their educational and career choices. Schools are expected to develop comprehensive guidance plans, considering the needs of students, available resources and contextual factors.

In the FET sector, guidance policies are steered by the 2020 National FET Strategy (SOLAS, 2020[6]). The sector provides career and education information, as well as one-to-one and group guidance to students. For example, ETBs offer Adult Educational Guidance and Information Services (AEGIS), which support adults who wish to return to education and training or are already registered in a FET programme, and apprentices can access training advisers located in training centres.

As the planning and policy development body for HE, the HEA is responsible for career guidance policies in the HE sector. Higher education institutions (HEIs) provide guidance services directly to students through student support services, which include careers offices, disability support and more. Current provision emphasises support to final-year students and recent graduates (Indecon Economic Consultants, 2019[5]).

Outside the education and training system, there are additional guidance services providers. For instance, the Department of Social Protection (DSP) provides guidance services to job seekers through the Intreo offices, Ireland's public employment services, and to the long-term unemployed through its network of contracted employment services as part of the National Employment Scheme and Local Area Employment Scheme. Among other activities, Intreo offices organise one-to-one meetings with job seekers with a comparatively low or medium likelihood of finding a job within 12 months and with job seekers with a high probability of exiting unemployment after 6 months (OECD, 2021[7]).

Guidance counsellors in Ireland are supported through several networks and events. The Association of Higher Education Career Services exist for guidance counsellors in HEIs; the biannual National Forum on Guidance promotes collaboration and co-operation across the guidance sectors; and the Institute of

Guidance Counsellors maintains a register of all accredited counsellors and provides continuing professional development for its members.

In line with the findings of the *Indecon Report on Career Guidance* (2019[5]), to ensure coherence in career guidance policy, a new Guidance Policy Unit has been established in the Department of Education to develop, strengthen and co-ordinate guidance policy. Additionally, strengthened structures have been established, including a new guidance team in the Professional Development Service for Teachers that provides professional learning opportunities and support to guidance counsellors in post-primary schools.

The delivery of career guidance is undergoing significant change at present. A recently established National Policy Group for lifelong guidance with senior officials from five government departments is currently working on the development of a coherent, long-term, strategic framework for lifelong guidance. As part of efforts by the Government of Ireland to strengthen coherence in guidance policy as well as relationships between the policy function and the delivery of guidance, a decision was made to cease the operations of the National Centre for Guidance in Education in September 2022, with its functions now delivered through the new structures.

While strengthening the provision of information and guidance on learning and career pathways is a priority for Ireland, there are clear areas for improvement, as will be examined in Opportunity 1.

Available learning and career pathways throughout life

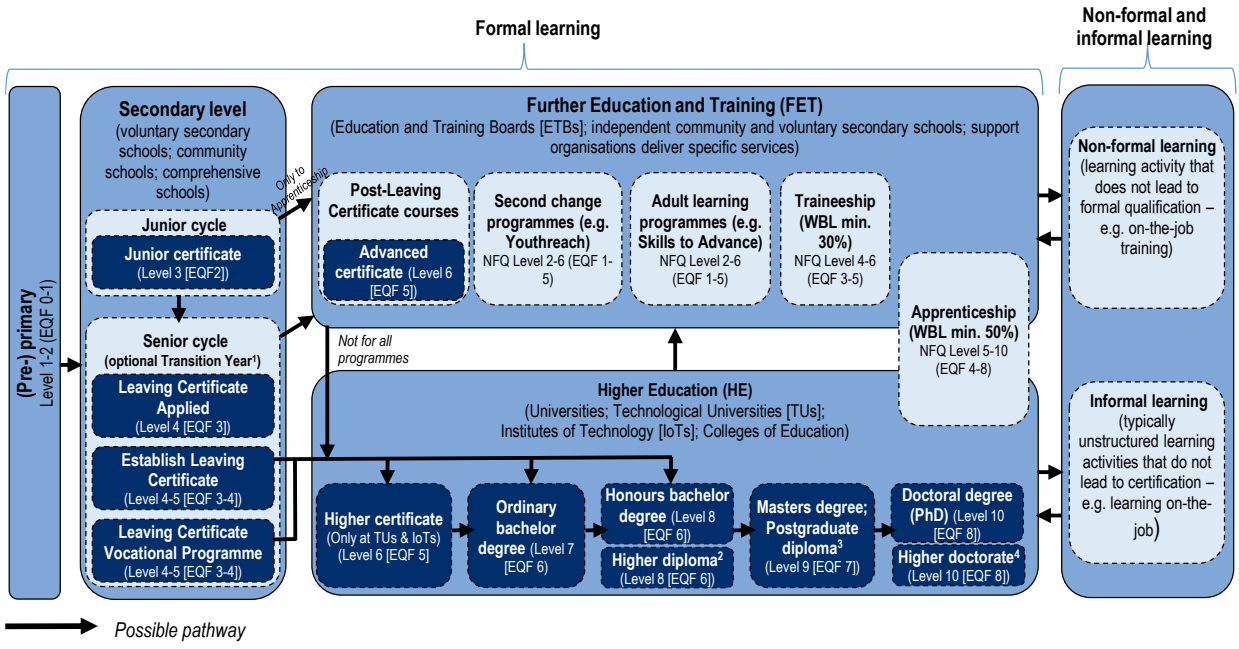
An education and training system that provides youth and adults with well-developed pathways contributes to a diversified supply of skills that can make society more responsive to changes in skills demand. At present, Ireland's education and training system already provides youth and adults with diverse routes to develop skills throughout life (see Figure 2.1 for a schematic overview of existing learning pathways).

After pre-primary and primary education, young people usually progress through both the Junior Cycle and Senior Cycle (with an optional Transition Year). In upper secondary education, there are three Leaving Certificate programmes: Established Leaving Certificate (Levels 4-5[2]), Leaving Certificate Vocational Programme (Levels 4-5) and Leaving Certificate Applied (Level 4). While the Leaving Certificate Applied only provides direct access to FET and other training options, the other two certificates provide access to both FET and HE (OECD, 2021[8]). The Senior Cycle programmes are currently being redeveloped to include the revision of subject curricula, the introduction of two new subjects, significant revisions to assessment arrangements and a focus on the progression pathways to further and higher education (Department of Education, 2022[9]).

While FET and HE are traditionally separate sectors, Ireland aims to apply a more unified approach to tertiary education to improve their complementarity and the pathways between the two sectors (DFHERIS, 2022[10]). The FET and HE sectors have their own strengths, and their diverse learning offers provide learners with a broad variety of learner pathways.

The main providers in FET are 16 ETBs that provide education and training directly or via a network of contracted training or community education and training providers. FET is also provided by approximately 25 independent community and voluntary secondary schools and support organisations that deliver specific services (e.g. the National Adult Literacy Agency) (SOLAS, 2020[6]). SOLAS oversees the system of publicly funded FET.

Figure 2.1. Pathways through Ireland's education and training system and beyond



Note: This figure aims to provide a high-level overview of the different learning pathways that exist and might simplify some parts of the education and training system. Levels refer to the National Quality Framework.
1. The optional Transition Year is a one-year programme between the Junior Cycle and the Senior Cycle that allows students to experience a wide range of educational instruction and work experience.
2. The Higher Diploma is a Level 8 qualification, which usually lasts for a year, with the majority of students already having an Honours bachelor's degree. In most cases, the Higher Diploma is in a different subject than the initial qualification.
3. The Postgraduate Diploma is a short-term academic programme after undergraduate studies with a vocational focus at the graduate level of study that is typically one year (contrary to master's degrees of 18-24 months).
4. The Higher Doctorate recognises excellent and distinguished contributions to learning and may be used for career progression to advanced levels of academia and research.
Source: Based on OECD (2021[8]), *Education GPS Ireland: Overview of the Education System*, https://gpseducation.oecd.org/Content/MapOfEducationSystem/IRL/IRL_2011_EN.pdf.

Students who progress to the FET system can choose from a range of programmes. The Post-Leaving Certificate (PLC) courses are one- or two-year full-time programmes that offer technical and practical education to students. There are also programmes in FET that provide second-chance education to youth. An example is Youthreach, a full-time programme, usually over two years, for people aged 15 to 20 who left school early and are not working. The Higher Education Links Scheme (HELS) allows FET learners with specific Level 5 or Level 6 major degrees to access a range of HE courses.

Ireland also offers traineeships and apprenticeships that strongly emphasise work-based learning (WBL). Traineeships typically last between 6-20 months and have at least 30% of learning activities in the workplace. Over 75 traineeship programmes are available nationally in a range of industries. Apprenticeships vary in length, lasting between two and four years, have at least 50% of learning activities in the workplace, and apprentices have an employment contract with a salary. There are two main types of apprenticeships: Craft Apprenticeships (e.g. for carpentry, plumbing, motor mechanics and electrical apprenticeships) and, since 2016, New Apprenticeships in other areas of industry (e.g. in information and communications technology [ICT], finance and hospitality). In addition to the different sectors, the two types of apprenticeships differ in funding and format, as will be explained in Opportunity 2. It is important to note that apprenticeships are delivered through both FET and HE at Levels 5-10. For some apprenticeships,

the first off-the-job training phase of Craft Apprenticeships takes place in an ETB training centre. The subsequent off-the-job training phases are in a technological university or institute of technology.

Students choosing to enrol in HE can go to one of the seven state-funded universities that offer degree programmes at bachelor, master and doctorate levels. In addition, the technological sector in HE comprises two institutes of technology and five technological universities.[3] Following the 2018 Technological Universities Act, technological universities were established by merging at least two institutes of technology. The technological universities emphasised programmes at Levels 6-10 and industry-focused research. The HE sector also includes Colleges of Education that offer a four-year Bachelor of Education degree and a two-year Professional Master of Education. Overall, most learners entering HE choose an Honours bachelor's degree at Level 8.

Learning pathways continue after initial education. As explained in Chapter 3, adult learning can take different forms (formal, non-formal and informal), with formal adult education and training provided by the FET and HE sectors. A range of programmes is specifically targeted to adults, especially in FET. Some examples are Springboard+, which is fully free for unemployed adults and 90% subsidised for employed adults; Skills to Advance, to strengthen the skills of adults so they can progress in their current jobs or take advantage of new job opportunities; and Skills to Compete, to support those who have lost their jobs as a result of COVID-19.

Despite the many existing learning pathways for youth and adults, they could be strengthened in several ways, as will be examined in Opportunity 2.

Responsiveness of education and training provision

The speed at which the provision of education and training can adapt to changing skills needs is affected by a variety of factors. One of them is the active engagement of employers in the development of education and training programmes, which is considered an effective strategy for ensuring that programmes reflect the current needs in the labour market. As explained in more detail in Chapter 5, Ireland already has several arrangements in place to promote better employer engagement. A notable example is Skillnet Ireland. With a mandate to strengthen skills and workforce development for enterprises, Skillnet Ireland supports businesses with identifying their skills needs and developing and delivering tailored learning opportunities.

Funding models can also be designed to ensure that skills provision is well aligned with labour market needs. For instance, funding models can incentivise education and training providers to provide and stimulate enrolment in courses that train students for shortage occupations. In Ireland, funding models for FET and HE already create these types of incentives. For example, the HE funding allocation model has both top slices (i.e. funding ring-fenced for specified purposes, such as medical education and ICT skills) and performance funding (up to 10% of the allocated block grant based on verified performance against agreed targets) that provide funding for flexible and specific courses and programmes, on top of a block grant.

The speed with which new qualifications can be developed also impacts the responsiveness of education and training provision. Extensive procedures are in place to develop new qualifications in FET and HE. In particular, the QQI – the state agency responsible for promoting the quality, integrity and reputation of Ireland's FET and HE system – has an important role in these processes.

As will be examined in Opportunity 3, there are a variety of ways in which the responsiveness of education and training provision in Ireland could be further improved.

Ireland's performance in securing a balance in skills

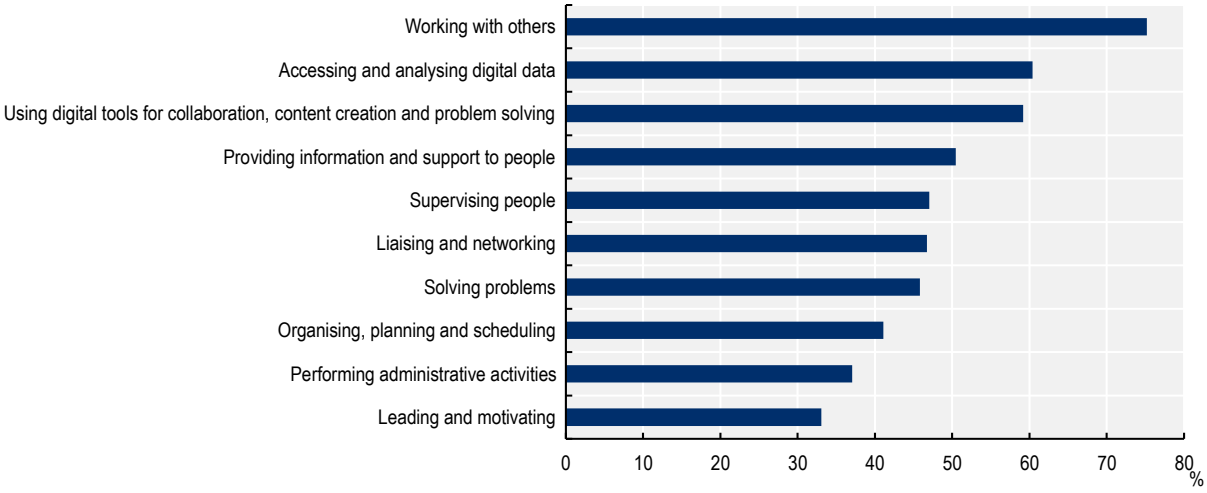
A rapidly changing society and economy drives labour and skills shortages

Strong economic growth and a large inflow of foreign direct investment in Ireland have been driving an increase in demand for labour, resulting in labour shortages in many job categories. SOLAS' Difficult-to-fill Vacancies Survey of recruitment agencies shows that it is difficult to find workers, particularly for science, engineering and technology occupations as well as construction occupations (SOLAS, 2022[11]). The domestic supply cannot meet these labour shortages, and migrants are already playing an increasingly important role in reducing labour pressures in several sectors, most prominently in the ICT sector (Department of Education and Skills, 2016[4]). While some of these labour shortages might be more short-term and driven by strong economic recovery following the COVID-19 pandemic, most shortage pressures are likely to stay for the long term.

Given global megatrends (see Chapter 1), such as globalisation and the digital and green transitions, the skills required for jobs are also changing rapidly. Data from online job postings provide up-to-date insights into the skills needed for jobs in both public and private sectors, and they show that a range of transversal skills has become more important in recent years. For instance, between 2019 and 2021, vacancies in the finance sector more frequently ask for skills such as creativity, communication and mentoring. For jobs in the transportation sector, there is a growing need for skills in health and safety, customer service and contact, and sales (SOLAS, 2022[12]). Overall, skills related to teamwork (e.g. working with others, sharing information), various digital skills (e.g. analysing digital data) and management skills (e.g. supervising people, leading and motivating) are now among the most requested skills in online job postings (Figure 2.2) (CEDEFOP, 2020[13]).

Figure 2.2. Top ten skills in online job postings in Ireland, 2020

In percentage of all online job postings



Source: CEDEFOP (2020[13]), *Skills in online job advertisements*, www.cedefop.europa.eu/en/tools/skills-intelligence/skills-online-job-advertisements.

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Labour shortage pressures and changing skills needs have resulted in skills shortages in Ireland. In addition to an insufficient number of people available or willing to work in specific roles or sectors, the labour force does not always have all the required skills for available jobs. Stakeholders consulted during this Skills Strategy project (hereafter "project participants") indicated that there are particularly significant shortages of digital skills (e.g. software, coding, data analytics), STEM skills (e.g. engineering,

construction) and management skills (e.g. project management, change management, and leading multicultural teams), among others. While measuring skills shortages presents challenges, the OECD Skills for Jobs database shows some evidence of shortages for different types of skills, including medicine knowledge, training and education, scientific knowledge and more (OECD, 2022[14]).

It is a challenge that many adults in Ireland do not have the skills required for modern-day jobs, let alone jobs of the future. As mentioned in Chapter 1, 30% of adults have less than basic digital skills (including information and data literacy, digital content creation, etc.) (Eurostat, 2022[15]). Furthermore, different surveys show that a significant share of workers in Ireland is under-qualified for their jobs – they have a qualification lower than required – although this share is not as high as in many other OECD or European Union (EU) countries (OECD, 2020[16]; CEDEFOP, 2022[17]). An additional concern is that only 27% of adults feel that their skill sets prepare them "very well" for future roles as the workplace evolves (Accenture, 2021[18]).

While these skills gaps present challenges for the labour market, societal implications should also not be forgotten. For instance, digital skills are increasingly becoming a prerequisite for full participation in society, and with the expansion of online learning, for learning itself. It will be crucial for all adults to be able to access learning opportunities throughout life to develop the skills needed for full participation in rapidly changing societies (see Chapter 3 on how to foster greater participation in lifelong learning). Providing adults with adequate upskilling opportunities will help ensure they are not left behind.

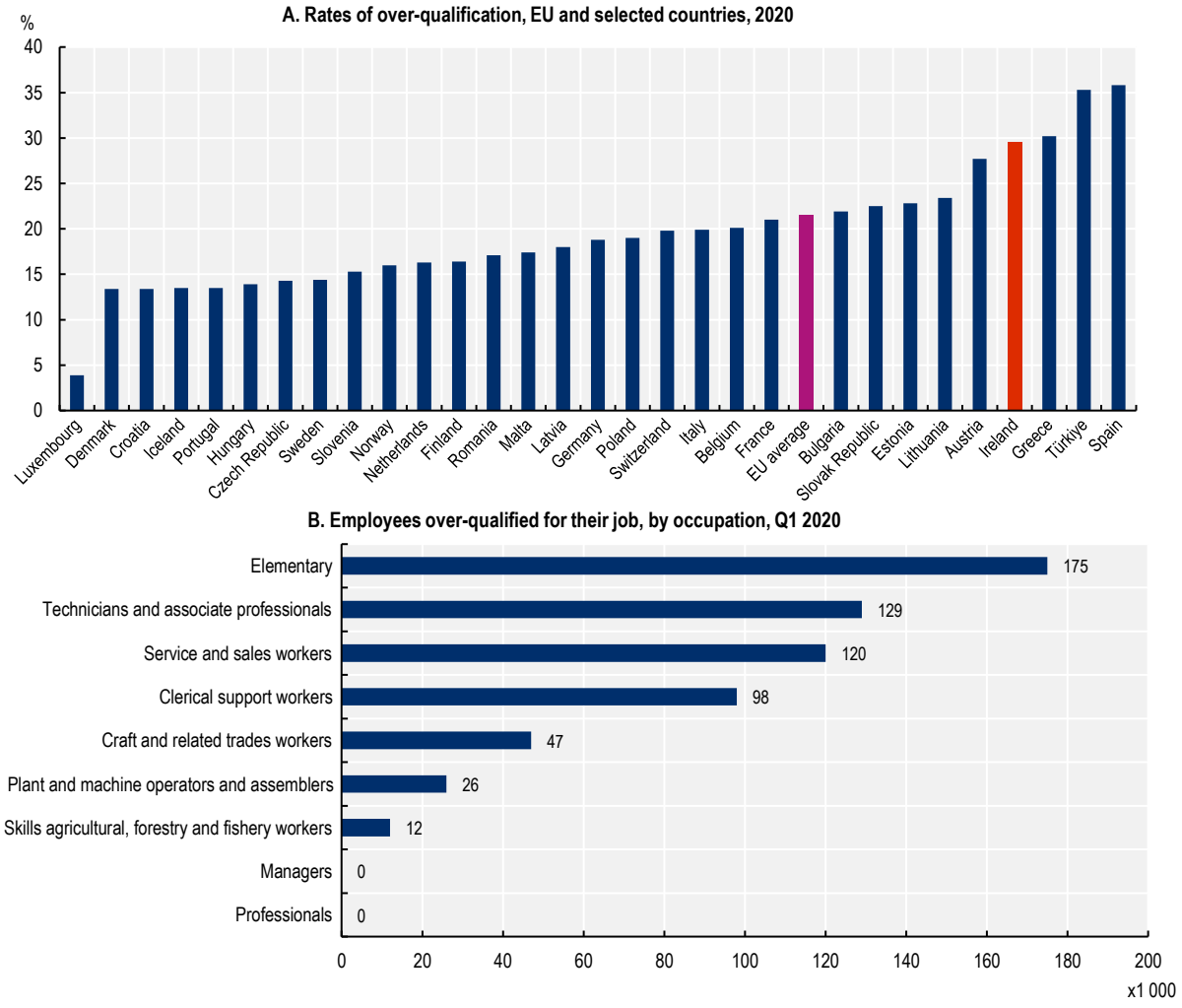
Many people are over-qualified for their jobs

Despite evidence of significant skills shortages, the skills of some people in Ireland are not being used to their full potential. There is a large share of over-qualified (or over-educated) workers – they have a higher qualification than that required for their jobs – which could suggest that many skills acquired in formal education are underutilised. A recent study found that three in ten tertiary graduates employed in Ireland are working in occupations where their qualifications are not formally required (Nugent, 2022[19]). In addition, SOLAS calculated that approximately 336 000 adults employed in mid-lower and lower-skilled occupations actually have tertiary qualifications (SOLAS, 2022[20]). It turns out that over-qualification is a larger problem in Ireland than in most other EU countries, with only Greece, Republic of Türkiye and Spain having larger shares of over-qualified workers (Figure 2.3) (Eurostat, 2020[21]). The European Skills and Jobs survey also shows that Ireland is among the EU countries with the largest shares of people indicating that they have higher qualifications than required for their job (34%), providing further evidence of skills underutilisation (CEDEFOP, 2022[17]).

A large majority of over-qualified workers studied in four broad areas: business, administration and law; arts and humanities; engineering, construction and manufacturing; and health and welfare (Nugent, 2022[19]). Better using the skills of these over-qualified workers could therefore be key to addressing shortages in sectors such as construction, health and more.

There are large differences in over-qualification across sectors, ranging from 12-13% of workers in the professional and education sectors to 55-57% in the transport and wholesale sectors (Eurostat, 2020[21]). However, in all sectors, the share of over-qualified workers is higher in Ireland than the EU average. The difference is particularly large in the health sector, where 26% of workers in Ireland are over-qualified, compared with 11% across the European Union. For occupations, it is especially in elementary occupations where many workers are over-qualified – over 175 000 employees in total – and there are large numbers of over-qualified employees found among technicians and associate professions, service and sales workers, and clerical support workers (Figure 2.3) (SOLAS, 2021[22]).

Figure 2.3. Over-qualification in Ireland, 2020



Note: Panel A: The figure shows the estimated rates of over-qualification for those aged 20-64 in 2020. Over-qualification refers to the percentage of people aged 20-64 with higher education and working in International Standard Classification of Occupations (ISCO) 4-9. Panel B: Skills and Labour Market Research Unit analysis on data by Central Statistics Office (CSO) Labour Force Survey. Excludes those who did not state their level of education.

Source: Eurostat (2020[21]), *Skills - Experimental statistics*, https://ec.europa.eu/eurostat/web/experimental-statistics; SOLAS (2021[22]), *Spring Skills Bulletin 2021: Skills Mismatch in Ireland's Labour Market*, www.solas.ie/f/70398/x/32c0cebdf4/solas_spring-skills-bulletin-2021.pdf.

StatLink https://stat.link/ws5nqh

There are diverging views on the impact of over-qualification. Some project participants noted that over-qualification is not necessarily negative and that HE levels have a broad range of benefits for both the economy and society, regardless of whether people are employed in jobs aligned with their qualifications. For instance, having a university degree is positively associated with better health outcomes, greater civic participation and the ability to adopt new technologies, among other advantages (OECD, 2023[23]). Moreover, some studies show that over-qualification can positively shape the performance of over-qualified employees and their fellow group members. For instance, human capital advantages of over-qualified workers result in a wider perspective when problem solving, and they tend to engage more in extra-role activities (van Dijk, Shantz and Alfes, 2020[24]). There are, however, clear disadvantages of over-qualification. Many studies demonstrate the negative effect of over-qualification on wages: on average, over-educated individuals earn 14% less than workers matched with similar levels of education

(McGuinness, Pouliakas and Redmond, 2018[25]). While the evidence is more mixed, there are clear indications that over-qualification is also associated with lower levels of job satisfaction (McGuinness, Pouliakas and Redmond, 2018[25]).

A number of factors drive over-qualification. To start, some level of over-qualification appears to be voluntary, with workers trading off earnings for other aspects of their jobs (McGuinness and Sloane, 2011[26]). However, a large part is involuntary, and a long list of factors appears to explain cross-country variation in over-qualification rates. These factors include the demand for skills in the labour market, the sectoral composition, as well as how workplaces are organised (see Chapter 4 for an assessment of innovation policies, workplace practices and more) (McGuinness, Bergin and Whelan, 2018[27]; Delaney et al., 2020[28]; Nugent, 2022[19]). The design of the education system also affects over-qualification. For instance, there is evidence that countries with more vocational education options and closer links to the world of work have lower over-qualification rates. However, while the significant expansion of HE is often considered the reason for the high levels of over-qualification in Ireland, there is only limited evidence for this. Across countries, there is no strong relationship between over-qualification and the share of population with tertiary education (Ordine and Rose, 2017[29]; McGuinness, Bergin and Whelan, 2018[27]; Delaney et al., 2020[28]).

People do not always choose to develop the skills in the greatest demand

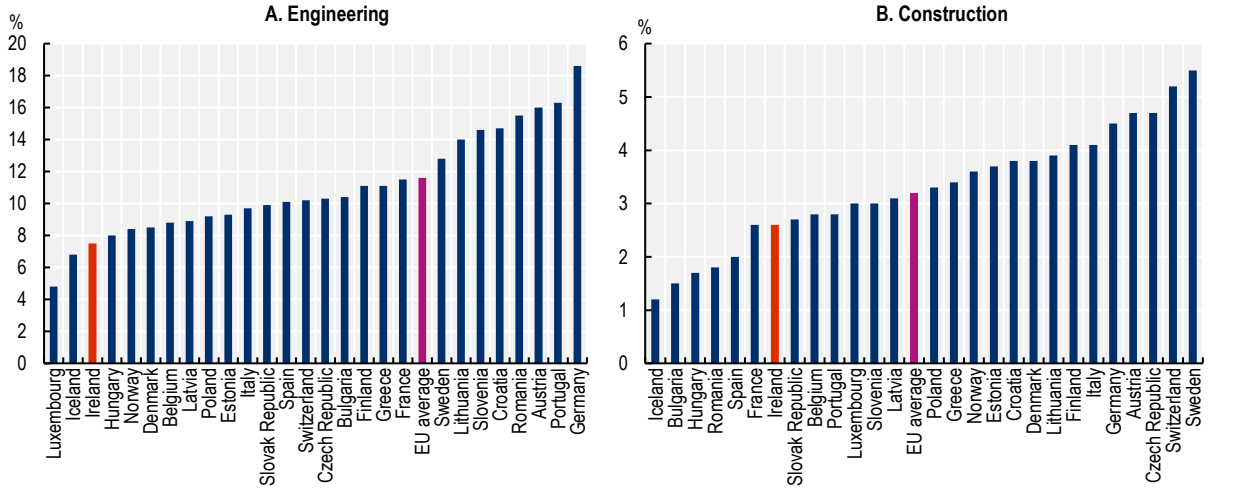
Shortages and mismatches are partly the result of many people not choosing learning pathways that are well aligned with the needs of the labour market. Consequently, graduates are sometimes forced to accept jobs that do not match their skills/qualifications.

An indication that students are not always choosing learning pathways aligned with labour market needs is that enrolment rates in fields that respond to the needs of shortage occupations are often quite low. It is positive that Ireland already has comparatively large shares of tertiary graduates in STEM studies, such as ICT (Ireland has the highest share in the European Union), which trains students directly for related shortage occupations. However, not all STEM studies are equally popular. For example, the engineering and construction sectors are facing significant shortages. However, Ireland has only a small share of students completing studies in related fields – only 8% of graduates are in engineering, compared with 15% across the European Union and less than 3% of graduates in construction (Figure 2.4) (SOLAS, 2022[30]). Indeed, for many shortage occupations, insufficient numbers of people choose related studies.

At present, many students are choosing studies that do not offer good employment prospects. The graduate outcomes survey by HEA shows large differences in employment rates for different fields of study (Higher Education Authority, 2022[31]). For instance, while 93% of Education graduates are employed nine months after graduation, only 53% of Arts and Humanities graduates are. Arts and Humanities is in the top-three most popular fields of study, representing 12% of graduates, surpassed only by Business, Administration and Law (26%), Health and Welfare (15%). Arts and Humanities graduates are also most likely from all fields of study to pursue further study (27% of graduates). Many of these people may choose these fields because it reflects their interest, but some might make other choices if they were well informed about their labour market prospects.

These findings highlight the importance of supporting people with high-quality information and guidance on learning opportunities (see Opportunity 1) and clear and permeable learning pathways (see Opportunity 2) to secure a balance in skills.

Figure 2.4. Engineering and construction graduates as a share of tertiary graduates in Ireland, 2020



Source: SOLAS (2022[30]), *Monitoring Ireland's Skills Supply 2022*, https://www.solas.ie.

StatLink https://stat.link/ut32b7

Education systems do not always provide people with the skills most in demand

Education systems will need to be responsive to changes in the labour market and provide people with the skills most in demand (see Opportunity 3). There are indications that the responsiveness of the education system could be improved in Ireland. At present, there is some level of misalignment between the skills people develop in education systems and the skills required in labour markets. For instance, in the Irish National Employer Survey from 2018, employers indicated that there are several types of skills of recent graduates that could be strengthened, including commercial awareness, entrepreneurial skills and language capability (Fitzpatrick Associates, 2019[32]). In addition, the Survey of Adult Skills (a product of the OECD Programme for the International Assessment of Adult Competencies, PIAAC) from 2012 showed that tertiary educated 25-34 year-olds in Ireland had comparatively weak problem-solving skills, which are very important for performing in technology-rich environments (OECD, 2019[33]).

However, both surveys pre-date the COVID-19 pandemic, which had a major impact on both the demand and supply of skills. It would therefore be important to conduct an up-to-date study on skills gaps (see also Chapter 5 on skills data), and the next round of the Survey of Adult Skills (PIAAC) data, available in 2024, will allow Ireland to examine if its performance has improved in the intervening years.

In the context of changing economies and societies, it will also be important that education systems future-proof people. Education systems play an important role in ensuring that students develop the skills that will allow them to be adaptable and resilient to changes yet to be foreseen.

Opportunities to secure a balance in skills through a responsive and diversified supply of skills

This section describes three main opportunities that were selected for Ireland to secure a balance in skills. The selection is based on input from literature, desk research, discussions with the Cross-Departmental Project Team and discussions with a broad range of project participants – e.g. government departments and organisations, employer organisations, educational establishments and other interested parties – during workshops, group discussions and several related meetings.

As a result, the following opportunities are considered to be the most relevant for Ireland's specific context:

1. improving information and guidance for individuals on learning and career pathways
2. strengthening learning and career pathways over the life course
3. making education and training provision more responsive to changing skills needs.

Opportunity 1: Improving information and guidance for individuals on learning and career pathways

Many project participants considered the need for effective career guidance as one of the main areas for improvement in the Irish skills system. Career guidance refers to "services intended to assist people, of any age and at any point throughout their lives, to make educational, training and occupational choices and to manage their careers" and usually covers career education; career information; and career counselling (OECD, 2004[34]). Effective career guidance can help steer young people towards careers or learning pathways for which they are well suited and hold good employment prospects (Musset and Kureková, 2018[35]). In addition, career guidance can help adults navigate a labour market characterised by rapidly evolving skills needs (OECD, 2021[7]). The benefits of effective career guidance are evident. For example, career guidance can help to reduce course switching and dropout rates, support successful educational transitions and improve social mobility. There is even evidence of wage premiums (UNESCO, 2021[36]). Furthermore, career guidance will be key to addressing skills imbalances in the Irish labour market. For example, the availability of career information and guidance is positively associated with lower levels of over-qualification (McGuinness, Bergin and Whelan, 2018[27]).

Career guidance has become more prominent in policy agendas in recent years. There has also been a move from interventions at key points in an individual's life to a more proactive lifelong guidance perspective, with better-linked interventions over the life course (European Commission, 2020[37]). This lifelong perspective reflects that individuals experience more frequent job transitions than in the past, as well as more diverse career pathways, and emphasises the need for an integrated approach to guidance that covers the life course.

Improving lifelong guidance is a priority for the Government of Ireland. For instance, Ireland's NSS 2025 included a key action on how career guidance will be strengthened significantly with employer engagement (Department of Education and Skills, 2016[4]). In addition, a major report on career guidance was published by Indecon Economic Consultants in 2019 (Indecon Economic Consultants, 2019[5]). Due to a variety of reasons (including the COVID-19 pandemic and a recent reorganisation of the Departments), progress with the implementation of the report's 18 recommendations has been slower than anticipated. However, the report provides an important starting point for ongoing efforts to strengthen career guidance. Recently, a National Policy Group for lifelong guidance was established, which will scope out the main themes, identify options for advancing the preparation of a strategic framework for lifelong guidance, and explore the best approaches and the need for additional structures.

Other chapters also cover topics related to information and guidance on learning and career pathways. For example, information and guidance for employers to support learning in enterprises are covered in Chapter 3; guidance services for researchers are examined in Chapter 4; and skills data that should serve as input into information and guidance for individuals is covered in Chapter 5.

Recommendation 1: Strengthen the co-ordination of lifelong guidance to support a strategic approach moving forward

In consultations with project participants, there was broad support for adopting a lifelong approach to career guidance. In fact, among a number of policy directions presented in an online survey for securing a balance in skills in Ireland, one on "strengthening a lifelong approach for career guidance by developing a dedicated action plan" was considered to be by far the most important among project participants.

As in many other countries, fragmentation in the delivery of guidance, with services only established for specific cohorts or targeted groups, is an ongoing challenge in Ireland (European Commission, 2020[37]). Overall, the alignment of guidance services could be further improved, and it would benefit from a more integrated approach that provides people with access to information and guidance over the life course and across the full spectrum of qualification levels in the National Framework of Qualifications (NFQ) (i.e. including Level 10 students).

Ireland has already made progress in developing an integrated approach to lifelong guidance. The National Policy Group for lifelong guidance is currently preparing a coherent, long-term strategic framework for lifelong guidance, which aims to set strategic direction and strengthen guidance provision at every stage of the life course. The OECD strongly supports this initiative and encourages Ireland to continue this work. The National Policy Group for lifelong guidance is also building on existing efforts, including progress made with implementing recommendations from the *Indecon Review of Career Guidance* (Indecon Economic Consultants, 2019[5]). Nevertheless, while this is a good start, Ireland should set up the required governance arrangements for the strategic framework to have the desired impact.

To start, involving all relevant government departments, agencies and bodies in developing the strategic framework would be important. Responsibilities for lifelong guidance services are shared across government at the national and regional level, and a range of agencies, national fora, professional bodies and other stakeholder groups are directly or indirectly involved in delivering lifelong guidance. Involving key actors for lifelong guidance in the framework's development will help ensure their buy-in. It is promising that the National Policy Group for lifelong guidance already brings together senior officials from the five departments that are considered to be key stakeholders for lifelong guidance: the Department of Education; the Department of Further and Higher Education Research Innovation and Science (DFHERIS); the Department of Children, Equality, Disability, Integration and Youth; the DSP; and the Department of Enterprise, Trade and Employment. However, when moving towards implementing the strategic framework, the National Policy Group for lifelong guidance should also engage with other relevant stakeholders on the ground, including education providers, guidance counsellors and other actors providing guidance services.

Strong co-ordination at the national level can support the implementation of lifelong guidance policies and the delivery of guidance services. Services and initiatives for lifelong guidance generally work best when standards, monitoring, support and quality control are defined centrally. Strong strategic leadership at the national level, including clearly identifying who has policy and administrative responsibility, is important for the effective co-ordination and a coherent and consistent provision of services and initiatives (European Commission, 2020[37]). One way to establish strong strategic leadership is to assign full responsibility for overseeing lifelong guidance to a single department or organisation. For example, Skills Norway (Kompetanse Norge) is an example of a formal entity in charge of strategic leadership, quality and systems development of career services at the national level (Box 2.3).

In Ireland, there is no single organisation with full responsibility for lifelong guidance. However, the National Policy Group for lifelong guidance has recently played an important role in strengthening leadership and national co-ordination on lifelong guidance. For the implementation of the long-term strategic framework, it will be important that Ireland has more permanent structures in place that could help to ensure continuity of policy design, a shared understanding of Ireland’s vision for lifelong guidance, and a clear set of roles of responsibilities for departments and other stakeholders. The National Policy Group for lifelong guidance could possibly remain active and continue to co-ordinate the delivery of lifelong guidance, as well as the broader implementation of the strategic framework.

Box 2.3. Relevant international example: Strategic leadership for lifelong guidance

Norway: Skills Norway (Kompetanse Norge)

Norway's Ministry for Education and Research has tasked Skills Norway (Kompetanse Norge), the ministry's directorate for lifelong learning, to lead the development of career services in co-operation with the Norwegian Directorate for Education and Training. It is responsible for the strategic leadership of career guidance policy, aiming to strengthen co-operation and co-ordination among stakeholders, widen access to vulnerable groups, and increase the quality of lifelong guidance services. Skills Norway established the National Unit for Lifelong Guidance as a national centre to develop and co-ordinate guidance policy and implementation and to share knowledge and resources. Skills Norway also chairs a National Forum for Career Guidance, the Future Skills Needs Committee and other expert committees. In addition, Skills Norway launched a national digital career guidance service and developed a national quality framework for career guidance services across sectors.

Source: European Commission (2020[37]), *Lifelong Guidance Policy and Practice in the EU: Trends, Challenges and Opportunities*, https://op.europa.eu/en/publication-detail/-/publication/4dfac3fa-7a0b-11ea-b75f-01aa75ed71a1/language-en.

Recommendation 1: Strengthen the co-ordination of lifelong guidance to support a strategic approach moving forward

There is strong support in Ireland for strengthening a lifelong approach to career guidance. The delivery of guidance is fragmented, and more could be done to ensure everyone can access guidance at all stages in life. Work by the National Policy Group for lifelong guidance on developing a coherent, long-term strategic framework for lifelong guidance provides a good starting point. However, Ireland should set up the required governance arrangements for the strategic framework to have the desired impact.

Ireland can undertake the following specific actions to strengthen co-ordination of lifelong guidance to support a strategic approach moving forward:

1.1. **Continue actively involving all relevant actors in developing a coherent, long-term strategic framework for lifelong guidance.** To ensure buy-in and ownership of recommendations of the strategic framework, all relevant departments should be involved in its development. It is already positive that the National Policy Group for lifelong guidance comprises senior officials from the Department of Education, DFHERIS, the Department of Children, Equality, Disability, Integration and Youth, the DSP and the Department of Enterprise, Trade and Employment. For the implementation of the strategic framework, Ireland should involve stakeholders on the ground, including education providers, guidance counsellors and other actors providing guidance services.

1.2. **Strengthen national co-ordination of lifelong guidance services, including by establishing clear roles and responsibilities.** A strategic and integrated approach to the provision of lifelong guidance requires strong national co-ordination and leadership. Building on the National Policy Group for lifelong guidance, Ireland should develop a structure that promotes continuity for policy development, a shared understanding of Ireland's vision for lifelong guidance, and a clear set of roles of responsibilities for the different departments to avoid duplication.

Recommendation 2: Consolidate and improve online information on learning opportunities and careers to improve navigability, accessibility and relevance

An important part of lifelong guidance is the provision of online learning and career information. Because of its accessibility and ability to reach many people, online information should complement other guidance services. This section will examine the provision of information on learning opportunities, career pathways, and more, for individuals specifically, whereas Chapter 3 examines the information needs of employers in the context of lifelong learning.

There is a wealth of online information on learning opportunities and careers available in Ireland, with several portals providing people with information about career and learning choices (Table 2.1). As a result, the Internet is already the most important source of information on learning and careers, and 82% of adults agree that this information is easy to find (CEDEFOP, 2020[38]). However, a consistent message in consultations was that navigating online information on learning opportunities and careers can be challenging. Some project participants described the current provision of learning and career information as a "minefield" for users. The complexity of navigating the plethora of "one-stop-shops" discouraged engagement with these portals, reducing their effectiveness. In addition, there are clear indications that Ireland could improve the information presented on the different portals, which is often considered outdated and/or incomplete and lacking granularity.

Table 2.1. Online portals with information about learning and career guidance in Ireland

Portal name	Short description	Responsible actor(s)
CareersPortal	The site was developed to create a one-stop national career information portal for students, adult learners, job seekers, parents and guardians, and career guidance providers. Durrow Communications Ltd. developed it as a direct response to a report by the Expert Group on Future Skills Needs in 2007. Supported by public and private organisations, the site has become an integral tool for guidance professionals nationwide.	Public and private partners
Central Applications Office (CAO) website	Within its role in processing applications for undergraduate courses in Irish HEIs, the CAO website provides course information to applicants, parents/guardians and schools. In addition to an overview of courses, it provides information on available places, entry to specific studies (e.g. Medicine), access routes, restrictions and more.	CAO
Fetchcourses	Fetchcourses.ie lists all SOLAS-funded FET programmes. It is a live database presenting courses currently open for registration and for which places are still available.	SOLAS
Generation Apprenticeship	Generation Apprenticeship presents all available information on apprenticeships for career seekers, career advisors and employers. It includes an overview of apprenticeship jobs, information for employers on how to employ apprentices, news and events related to apprenticeships and more.	National Apprenticeship Office
Mycareerpath.ie	Mycareerpath is a free service available to people in the workplace, returners to education, entrepreneurs looking to upskill, and people looking to accelerate their careers and progress within their organisations (Box 2.5).	Human Capital Initiative
Qualifax	Qualifax is Ireland's National Learners' Database and a one-stop-shop for learners and the public. Comprehensive, annually updated information is provided about FET and HE options in Ireland and further afield. Articles and links are also provided to assist students, job seekers, parents, guidance professionals and graduates in making informed choices for education, training and career pathways.	QQI
SmartChoices	The SmartChoices platform provides accessible LMI and analysis, FET information and other resources. In addition, the platform allows different user groups to explore information from two dashboards and other interactive tools to assist career choices and pathways.	SOLAS
Smart Futures	Co-ordinated and managed by Science Foundation Ireland, in partnership with 200+ organisations from research and academia, as well as many other partners, Smart Futures aims to provide STEM career resources to students, teachers, guidance counsellors and parents in Ireland and stimulate an interest in STEM subjects in secondary school and at tertiary level.	Science Foundation Ireland
The Right Course	The Right Course has been developed as an initial step as a one-stop-shop for the online provision of career information and tools. It describes courses and training opportunities available to employers and employees, as well as information on grants, other financial supports and career guidance.	DFHERIS

Note: The portals are listed in alphabetical order. The table aims to provide an overview, not an exhaustive list.

Ireland should improve linkages between portals to consolidate online information. While each of the existing portals provides important information and has its strengths, the portals tend to target specific but overlapping groups and often present relatively comparable information. For example, lists of available learning opportunities can be found on the CareersPortal, the Central Applications Office (CAO) website, Fetchcourses, Qualifax, Generation Apprenticeship and the Right Course. There are already some links between these websites – e.g. the CAO website has a direct link to Fetchcourses – but generally, these interlinkages could be further improved. Better co-ordination between the entities that are managing and funding the various portals will be key to reducing duplication of information.

While improving linkages would be a good start, merging online information could be the next step. Project participants broadly supported the objectives of better centralising information by moving towards a centralised portal. To this end, Ireland could map the existing provision and develop a clear plan on how the information could be consolidated, ideally on a one-stop-shop portal. In consultations, there were diverging views on whether consolidation should result in: 1) an entranceway portal that directs learners to other portals specific to their needs (the Citizens Information website was considered to be a good example of a central portal bringing together multiple resources); or 2) a one-stop-shop website that absorbs all information, i.e. guidance tools, LMI, learning opportunities in both FET and HE and more (also see the section on the services continuum in Chapter 3). There was broad consensus among project participants that existing websites should be used as a basis for a centralised portal rather than developing a new website. Ireland should also take into consideration OECD best practice principles for one-stop-shops, including the importance of political commitment and leadership, communication, and monitoring and evaluation (OECD, 2020[39]). The Government of Ireland acknowledges the need for a centralised portal, and DFHERIS recently established an oversight group for a single portal on career guidance.

Online information on learning and career information could also be made more accessible and user-friendly to improve navigability (Indecon Economic Consultants, 2019[5]). This is important for existing online portals and a possible new centralised portal. Online information should be “learner-centred”, i.e. driven by the needs of the final user, and learners should be guided on their journey to find the information they need as quickly as possible. This could involve making the information more tailored to their specific needs by allowing visitors to filter results better and creating multiple points of access for different groups. For example, portals could ask visitors questions about their specific needs (e.g. searching for specific learning opportunities, support measures, etc.) or characteristics (e.g. employed versus unemployed, current student or new learners, etc.) before presenting more targeted information. In consultations, the portal Knowledge Transfer Ireland and its Research Development and Innovation (RD&I) Funding Tool was mentioned as a good example. The provision of interactive tools could also make information more accessible and user-friendly. In particular, self-assessment tools could help people identify their skills and learning needs and the courses and programmes most relevant to them (see Box 2.4 for an example of a website with these tools in Flanders, Belgium).

Box 2.4. Relevant international example: Interactive career guidance tools

Flanders, Belgium: My Career (Mijn Loopbaan) and interactive tests

The Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding (VDAB), the Flemish public employment service, plays the role of career planner for all adults in Flanders. It operates the website My Career (Mijn Loopbaan), which provides tips on how to look for a job and how to take stock of skills, information on occupations with good labour market prospects, and information on how to train for these occupations via VDAB programmes and partners. An interesting element of the VDAB website is several interactive tests for visitors. For example, there is a test to see which jobs people might like (https://orientatie.vdab.be/); a tool that automatically extracts people’s skills from their Curriculum Vitae

(CVs) and then shows them the jobs most aligned with these skills (https://jobbereik.vdab.be/); and a test for career pathways that help people identify relevant next steps in their careers (https://loopbaantest.webleren.be/). The website also steers people towards in-person guidance, including by allowing people to apply for career guidance vouchers (*loopbaancheques*). These vouchers offer seven hours of subsidised career guidance every six years with a mandated career coaching centre, resulting in a personal development plan.

Source: VDAB (2023[40]), *Welcome to VDAB*, www.vdab.be/.

Portals should also facilitate contact with counsellors either on line or in person as a second line of support. The use of blended tools that combine online information with access to counsellors was also recommended in the Indecon *Review of Career Guidance* (Indecon Economic Consultants, 2019[5]). There are good examples of this already in Ireland, such as Mycareerpath, which combines an interactive website with direct access to a career and learning pathway advisor (Box 2.5). A smart, centralised portal could help reduce the workload of guidance counsellors, allowing them to focus their energies on those most in need, or could enable counsellors to provide support to greater numbers of individuals. Project participants noted that the ideal centralised portal would also be useful to learners and guidance counsellors by presenting information that could be used as input for their services.

Box 2.5. Relevant national example: Career guidance websites providing access to advisors

Ireland: Mycareerpath.ie

Mycareerpath is a free service available to people in the workplace, returners to education, entrepreneurs looking to upskill, and people looking to accelerate their careers and progress within their organisations. After registering, learners can meet with a career and learning pathway advisor and access various interactive tools, career assessments and short e-learning courses. The services available to employers include identifying employees' upskilling and training needs and developing learning pathways, including potential courses at the Atlantic Technological University. Project participants frequently mentioned Mycareerpath as a good example of how, by combining online information and access to career advisors, guidance services can be more effective and better tailored to the needs of individuals. Mycareerpath is supported by funding from the Human Capital Initiative.

Source: Mycareerpath (2023[41]), *Home page*, https://mycareerpath.ie/.

Another area for improvement is the dissemination of LMI on online portals (see also Chapter 5 on improving skills data). LMI includes a range of data on the labour market that can be qualitative (i.e. career pathways, vacancy information, job descriptions, etc.) or quantitative (i.e. employment statistics, occupational forecasts, etc.) (European Commission, 2020[37]).

The two main online portals for LMI are CareersPortal and SmartChoices. CareersPortal provides career information and resources to a broad range of target end-users. It offers a wide range of career guidance resources, including LMI on key sectors of the economy and over 1 000 occupations, including their skills requirements, entry routes and more. It also provides information on jobs in high demand, including the education and training options that can lead to employment in those occupations (CareersPortal, 2022[42]). SmartChoices was developed by SOLAS and includes an interactive LMI portal, which provides information on employment prospects for occupations (e.g. employment rates, growth rates, etc.) alongside an overview of FET training options (SOLAS, 2022[43]). While both portals provide a wide range of useful skills information, the information on the two portals could be better integrated to avoid duplication. Currently, there is considerable overlap in the LMI presented on the two websites, and the information is often based on the same sources.

Project participants also noted that some important skills information is currently missing from both websites, including information on skills mismatches, skills and labour shortages/surpluses, as well as information on the skills supply and demand by region linked to relevant education and training options. Existing granular information on the specific skills in demand (e.g. from RSF, CEDEFOP, etc.) could also be made available in a more interactive, user-friendly way (e.g. with interactive dashboards and short infographics). There was strong agreement on the need to improve the dissemination and user-friendliness of information on education and training outcomes in both HE and FET (e.g. completion rates and employment outcomes of graduates). At present, information on HE graduates' outcomes from both the Graduates Outcomes Survey and administrative data are visualised on HEA's and CSO's websites (Higher Education Authority, 2022[31]). However, information is not integrated into SmartChoices or CareersPortal.

Efforts to consolidate and improve online information on learning opportunities and careers could support the overall lifelong guidance system, as described in Recommendation 1. As with that recommendation, involving all relevant departments and stakeholders in better consolidating and improving online information would be important. The final users (e.g. students, adult learners and guidance counsellors) should also be involved in consolidating and improving online information to ensure it meets their needs.

Recommendation 2: Consolidate and improve online information on learning opportunities and careers to improve navigability, accessibility and relevance

A wealth of online information on learning opportunities and careers is available in Ireland. Nonetheless, navigating the plethora of online portals is challenging for people searching for information. There are also clear indications that the information on the different portals could be improved (e.g. information is outdated and/or incomplete, insufficiently granular, etc.).

Ireland can undertake the following specific actions to consolidate and improve online information on learning opportunities and careers to improve navigability, accessibility, and relevance:

2.1. **Develop a centralised online portal for all information on learning opportunities and careers by better co-ordinating and consolidating information.** To improve the navigability of online information in Ireland, consideration should be given to creating strong interlinkages between existing portals and better co-ordination among the entities managing and funding the various portals to reduce duplication of information. Ireland should move towards a "one-stop-shop" based on an existing portal that either is an entranceway portal that directs learners to other portals specific to their needs or a one-stop-shop portal that provides all the information needed by all learners and job seekers on a single site. The portal should be developed with the active involvement of users (e.g. students, adult learners and guidance counsellors).

2.2. **Ensure that online information is user-friendly and tailored to individual learners' needs by using filters, self-assessment tools and direct access to advisors.** For both existing online portals and a possible new centralised portal, Ireland should guide visitors to information tailored to their needs. For example, portals could ask visitors questions about their specific needs (e.g. searching for specific learning opportunities, support measures, etc.) or characteristics (e.g. employed versus unemployed, current student or new learners, etc.) before presenting the information. Also, self-assessment tools could help personalise information, for instance, by helping people identify their skills and learning needs. The portal should also facilitate and provide direct access to career and learning pathway advisors, either on line or in person.

2.3. **Improve the dissemination of information on skills shortages and mismatches, learning outcomes and pathways**. Consideration should be given to better integrating skills information on existing portals (especially CareersPortal and SmartChoices) and possibly on the new centralised portal to avoid duplication and ensure that users have all the information they need in one place to make informed choices. Moreover, information on current skills mismatches and surpluses should be disseminated more widely and more interactive, as well as information on the skills supply and demand by region linked to the education and training options available in the region. Finally, information on education and training outcomes (e.g. completion rates, employment outcomes of graduates) for HE and FET could be disseminated more widely.

Recommendation 3: Expand and strengthen guidance services to ensure that everyone can access high-quality guidance over the life course

In addition to providing learning and career information, guidance services such as in-person meetings with advisors will help ensure that all people are aware of available learning and career pathways. However, the reach of online information is restricted by the fact that their use requires a certain level of digital skills. As mentioned, 30% of adults have less than basic digital skills in Ireland (Eurostat, 2022[15]). Moreover, the use of online information depends on people's willingness to search for information. In Ireland, the share of adults actively seeking information on learning activities is only middling in international comparison (Eurostat, 2020[44]). To ensure everyone can access education and career guidance, a wide variety of career guidance services are already available to youth and adults in Ireland, as described in this chapter's overview and performance section. However, there are clear indications that this provision of career guidance services could be further improved.

To start, the quality of guidance counselling services in schools could be further strengthened by providing appropriate support to guidance counsellors. Currently, counsellors are typically teachers with a postgraduate guidance counselling qualification at Level 8/9; it is positive that these specific qualifications are a legal requirement for providing counselling services (European Commission, 2020[37]). Guidance counsellors should receive high-quality and up-to-date information and tools to support them in providing effective guidance to learners. Especially up-to-date LMI is relevant for counsellors, as well as information on the skills requirements of different jobs and possible learning pathways for students. Some project participants noted that there are currently insufficient guidance counsellors (sometimes only 1 for every 500 students in non-DEIS [Delivering Equality of Opportunity in Schools] schools). This means that not enough time is dedicated to guidance counselling and that students do not have good access to guidance (even though recently, the number of guidance hours allocated to schools for guidance counselling has been increased). A question raised by some is whether a more diversified approach with guidance provided by more different actors, i.e. less relying on teacher-led provision, could be a way forward.

Guidance counselling services in schools should also make better use of employers' insights. Establishing close links between industry and career guidance professionals could make guidance counsellors better informed about the current and future skills needs of industry. In particular, engagement between career advisors and enterprises at the local level (e.g. with site visits) is important to better understand career opportunities and skills needs in the area. Representatives from industry could also be involved more directly in guidance activities (e.g. mentoring, giving talks, providing work experience, etc.). Consideration should be given to the necessary governance arrangements to facilitate employer engagement (see also Chapter 5). For example, project participants suggested that RSF could be more active in linking enterprises with guidance counselling services.

Project participants broadly supported starting guidance at an earlier age in schools. It could help inform important school decisions already made in the second year of secondary school. Various studies also describe the need for early action since children typically begin to form their career preferences in early childhood, and guidance counselling services in schools could help to further develop and solidify these preferences. In recent years, an increasing number of schools in Ireland have already introduced modular guidance in the Junior Cycle under the well-being umbrella.

The Transition Year programme could also play an important role in providing guidance to students. Approximately 73% of students in the Senior Cycle take a Transition Year (Department of Education, 2021[45]), which is designed to provide students with skills beyond traditional academic skills, and does include work experience or social engagement. The Transition Year is currently being revised as part of the ongoing broader redevelopment (herein referred to as the reform) of the Senior Cycle (Department of Education, 2022[9]). The revised Transition Year programme will build on the current programme's strengths and offers the scope to include the offering of diverse experiences to help young people decide what they are good at and what they want to do. In particular, obtaining workplace experience and developing transversal skills could support students at this age.

Guidance counselling services in schools appear to often place much emphasis on the Leaving Certificate. While guidance counselling services are already intended to be holistic in Ireland – i.e. covering not only career guidance but also educational guidance and personal guidance – project participants mentioned that in practice, there is an over-emphasis on progression from Senior Cycle to HE. Consideration should be given to ensuring that guidance counsellors consider and present the wider range of learning and career pathways available to students, including, for instance, STEM careers, apprenticeships, and programmes in FET more generally (see also Recommendation 4).

Ireland should also consider the accessibility and inclusion of guidance counselling services in schools. Although four out of five students in schools accessed one-on-one guidance and lessons in schools (Indecon Economic Consultants, 2019[5])**,** there are indications that some groups are left behind. The Indecon Economic Consultants report noted the need to pay particular attention to learners with special education needs who currently have no additional or separate guidance support.

In FET and HE, there is an extensive provision of services in the ETBs and HEIs for their students and prospective learners. However, this segregated provision is not supportive of Ireland's objective to move towards a more unified tertiary system (see also Recommendation 5) (DFHERIS, 2022[10]). Services in FET and HE are considered to be essential to help steer students to the right learning and career pathways, but ideally, there would be a service that looks at the system in a more integrated way.

Improving the accessibility and availability of guidance services for adults should be one of the most important priorities for Ireland's lifelong guidance system. Adults need to be supported with the transitions resulting from a rapidly changing labour market and the nature of work. In recent years, there has been an increase in the demand for career guidance for adults across OECD countries (OECD, 2021[7]). For Ireland, a main challenge is that institutional support and guidance for adults could be strengthened. There are the Intreo offices, which only provide guidance to job seekers and the long-term unemployed, and the AEGIS within ETBs. However, project participants mentioned that AEGIS still needs to be significantly developed, linked more closely to online resources, and there is a lack of awareness about their services. In addition, it could be argued that the ETBs are not the ideal entity for providing guidance services to all adults since their information might be biased towards their own education and training offers. More broadly, there is a need for independent and comprehensive career guidance services accessible to all adults. There is a clear role for the National Policy Group for lifelong guidance to address this issue.

Ireland could consider a more joined-up service as part of a lifelong guidance approach. The service would cover all guidance services from schools to employment, could be linked to a centralised portal (see Recommendation 2), and would result in a whole-of-life guidance system (see Box 2.6 for an example of an all-age career service in Scotland [United Kingdom]). The *Indecon Review of Career Guidance*

recommended integrating services in a consistent learner guidance and support service (Indecon Economic Consultants, 2019[5]). While this would be ideal, developing such a centralised service would require significant resources and might not be viable in the short term.

Box 2.6. Relevant international example: A whole-of-life guidance system

Scotland (United Kingdom): Skills Development Scotland (SDS)

Skills Development Scotland is Scotland's national skills body, which also provides all-age career services throughout individual life paths from school into further learning opportunities and employment. SDS has careers information, advice and guidance services that connect people with professionally qualified careers advisors. In addition, SDS runs local career centres across Scotland and manages "My World of Work", Scotland's career information and advice website. SDS also promotes the continuous professional development of career practitioners, collects national sustainable data to monitor the quality of services, and co-operates with a wide range of agencies and stakeholders in the provision of services. The careers guidance service also builds on a robust evidence base to support its website and to improve the relevance and quality of its advice. SDS also promotes the involvement of employers in education through national development programmes and regional employer groups.

Source: Skills Development Scotland (2022[46]), *Home page*, www.skillsdevelopmentscotland.co.uk/.

A lifelong guidance system can also comprise multiple services as long as co-ordination and strategic leadership are provided. There are examples of countries with a patchwork of guidance centres that are part of a broader lifelong guidance system (e.g. in Denmark), with varying levels of continuity between providers (European Commission, 2020[37]). However, in some countries, the provision is more cross-sectoral, with a strong mandate for linking the provision with lifelong learning and offering a degree of continuity between different guidance contexts. Within the European Union, systems in Finland and France resemble this system the most (Box 2.7) (European Commission, 2020[37]). Furthermore, experiences from Germany and Flanders (Belgium) show how public employment services can also have a more proactive role in providing guidance to both unemployed and employed workers (OECD, 2021[7]).

Box 2.7 Relevant international example: Co-ordinated guidance centres

Finland: Regional Centres for Economic Development, Transport and the Environment

In Finland, co-ordination and collaboration of lifelong guidance and policy development at the national level is managed through a National Lifelong Guidance Working Group, and work is led by the Finnish National Lifelong Guidance Strategy 2020-2023. Regional Centres for Economic Development, Transport and the Environment have been tasked with co-ordinating the lifelong guidance provision and development work in their own region by means of regional lifelong guidance working groups with representatives of both the service providers and key stakeholders. With this initiative, Finland has supported establishing regional one-stop guidance centres with targeted in-service training programmes focusing on multi-professional and cross-disciplinary teamwork. The centres have been implemented in accordance with national strategic goals for lifelong guidance, and the 15 regional working groups report their activities to the National Lifelong Guidance Working Group.

Source: European Commission (2020[37]), *Lifelong Guidance Policy and Practice in the EU: Trends, Challenges and Opportunities*, https://op.europa.eu/en/publication-detail/-/publication/4dfac3fa-7a0b-11ea-b75f-01aa75ed71a1/language-en.

Ireland should aim to target those groups of adults who would benefit the most from access to guidance services. To start, Ireland should ensure that under-represented groups most distant from the labour market have access to high-quality guidance services. Ireland has a comparatively high long-term

unemployment rate (29.9% vs 28.4% in the OECD in 2021), and while the inactivity rate (19.7%) is below the OECD average (22%), it is still 9 percentage points above that of a top performer such as Sweden (10.9%) (OECD, 2022[47]; 2022[48]). People with disabilities are broadly considered to be an important under-represented group in need of more support (Kelly and Maître, 2021[49]; OECD, 2021[50]). The Pathways to Work Strategy 2021-2025 already re-emphasised Ireland's ambition to expand labour market participation among under-represented groups, including with employment rate targets for people with disabilities and the plan to implement an Early Engagement Roadmap for job seekers with disabilities, among other proposed actions (Department of Social Protection, 2021[51]).

Ireland could also consider targeting more guidance to people working in declining sectors and occupations (e.g. due to automation risks) to support them in transitioning to ones with better prospects. New guidance tools could be used to identify possible career pathways for these adults. The main jobs website in Ireland, JobsIreland.ie, which Intreo manages, already offers a free job advertising service that enables job seekers to create a profile to match their skills and experience with available jobs while helping employers to promote jobs and match their requirements to job seeker profiles using the latest technology. These tools could potentially be expanded to identify possible transitions from jobs in low- to high-demand jobs (e.g. by examining overlap in education, skills requirements and salaries) (SOLAS, 2022[12]). In the Pathways to Work Strategy 2021-2025, efforts to support just transitions and better outreach are medium- to long-term priorities (2023-25) (Department of Social Protection, 2021[51]).

Recommendation 3: Expand and strengthen guidance services to ensure that everyone can access high-quality guidance over the life course

Guidance services by education and training providers and other entities help ensure that all people are aware of available learning and career pathways. In Ireland, a wide variety of career guidance services are already available to youth and adults, but there are indications that the provision of career guidance services could be further improved.

Ireland can undertake the following specific actions to expand and strengthen guidance services to ensure that everyone can access high-quality guidance over the life course:

3.1. Strengthen the quality of guidance counselling services in schools by giving guidance counsellors appropriate time and resources and involving employers further in the provision of guidance services. Guidance counsellors in schools should have access to relevant, up-to-date information and support tools, especially on LMI, skills requirements, and available learning and career pathways. Consideration could also be given to increasing the number of counsellors and/or increasing the time available to provide guidance counselling services. Ireland should also aim to establish close links between industry and career guidance professionals by setting up the necessary governance arrangements. Employers could be more actively engaged (e.g. mentoring, giving talks, work experience, etc.), particularly at the local level, to ensure a good link between guidance and industry needs.

3.2. **Strengthen guidance counselling services in schools by making them more widely available and covering a wide range of possible learning and career pathways.** Ireland should continue to expand access to guidance at an earlier age in schools. Furthermore, through the reform of the Senior Cycle, the Transition Year programme could build on its current strengths and play an even more important role in providing guidance to students (e.g. with workplace experiences). Ireland should also ensure that under-represented groups, and especially learners with special education needs, can access guidance services, including additional or separate guidance support. Finally, training and support for guidance counsellors should be strengthened to ensure they can present the wide range of learning and career pathways available to students, including, for instance, STEM careers, apprenticeships and programmes in FET more generally.

3.3. **Improve the availability and accessibility of independent and comprehensive career guidance services beyond initial education by strengthening institutional support for adults.** Despite the guidance services provided by Intreo offices for adult job seekers, AEGIS within ETBs, and careers offices in HEIs, there would be a benefit in seeking to strengthen institutional support for adults. Ireland should make independent and comprehensive career guidance services more accessible to all adults. This could be achieved with a more joined-up service, covering all guidance services from schools to employment and linked to a centralised portal (see Recommendation 2) – or creating a less centralised system of providers with adequate co-ordination and strategic leadership.

3.4. **Target guidance services for adults to groups most distant from the labour market and at risk of losing jobs.** Ireland should ensure that under-represented groups in the labour market (e.g. people with disabilities) can access high-quality guidance services. People working in declining sectors and occupations could also be better targeted with guidance services to support them in transitioning to growing ones, including new skills-matching tools for transitions.

Opportunity 2: Strengthening learning and career pathways over the life course

In addition to improving information and guidance on learning and career pathways, the pathways should be clear, flexible and accessible to all students and adults. Furthermore, these pathways should not only exist within the education and training system (e.g. from schools to FET and HE and within the tertiary system) but also after leaving initial education (e.g. the transition from education towards employment and returning from employment to education).

These pathways are relevant for aligning skills demand with supply since a well-balanced education and training system with flexible and permeable pathways (i.e. the ability to progress to programmes at a higher level, regardless of the pathway already chosen) will facilitate the development of an adaptable and diversified supply of skills that will make society more responsive to changes in skills demand. In addition, well-developed pathways can help to effectively address labour and skills shortages. For example, by improving the flexibility of pathways, people can respond faster to signals of changing skills needs in a way that reduces the duration and magnitude of shortages.

Ireland provides students with a diverse range of learning pathways (Figure 2.1), but there are indications that their flexibility and permeability could be improved. Creating clearer pathways was a recurring topic in conversations with project participants, and especially the need for pathways into FET and apprenticeships, was considered important, as well as pathways between FET and HE (Department of Education, 2021[45]).

Recommendation 4: Promote and strengthen pathways from schools into further education and training and apprenticeships to develop a well-balanced tertiary system and diversified supply of skills

Project participants highlighted that there is arguably too much focus on pathways towards HE, pushed by schools, parents and broader society. Cultural values around HE, limited exposure to vocational education in schools, and high retention rates in upper secondary education, all contribute towards a greater emphasis on HE admission over other routes, such as FET. This is also reflected in transition rates from schools to FET and HE. Transition rates from post-primary to HE have steadily increased (from 64% in 2016 to 66% in 2020), and transition rates from post-primary to FET have dropped (27% in 2016 to 24% in 2019) (Department of Education, 2021[45]). At present, Ireland has one of the largest shares of young people with a tertiary degree among OECD countries (OECD, 2023[52]).

Ireland should aim to move towards fostering a balanced tertiary system that is capable of developing a more diversified supply of skills, one which is better aligned with the needs of the labour market. While FET, HE and apprenticeships (in both FET and HE) complement each other and each has its strengths, developing a more diversified supply of skills with more diverse, flexible and permeable pathways is important for several reasons.

First, a more diversified supply of skills could help address shortages. There are currently shortages in occupations such as science, engineering and technology, construction, health, financial services, transport and logistics. Although many of the required skills will need to be met by HE, FET and apprenticeships also have an important role to play in meeting this demand (SOLAS, 2022[11]). For instance, FET and apprenticeships are well-positioned to respond to some of the most urgent skills pressures in the construction and health sectors. In addition, the demand for workers in sectors and occupations linked to FET pathways and apprenticeships is projected to remain high. For example, construction and the health and social care sectors are among the sectors projected to expand the most in the upcoming decade (CEDEFOP, 2022[53]).

Second, promoting more diverse pathways can help ensure that people choose pathways for which they are best suited. Because of societal pressures and a perceived higher value of HE, some young people might be directed towards education for which they are perhaps not best suited. Some project participants expressed concern about HE completion rates, particularly by students who were not among the top performers in the Leaving Certificate. A study by the HEA on completion rates for undergraduate entrants to HE in 2008/09, 2009/10 and 2010/11 showed that for those who entered with less than 300 Leaving Certificate points, only 49% completed, compared with 93% of those that entered with over 500 points, and 76% for all students on average (Higher Education Authority, 2021[54]). While students with less than 300 Leaving Certificate points represent only 16% of all new entrants, they represent 33% of those not completing their studies. Some project participants argued that FET or apprenticeships would have been a better fit for many of these students.

Third, more diverse learning pathways might help reduce skills mismatches in Ireland. As described earlier, Ireland has a comparatively large share of employees that are over-qualified for their jobs, with only Greece, Türkiye and Spain having larger shares in the European Union (Eurostat, 2020[21]). There is evidence that countries with more vocational education options and closer links to the world of work have lower over-qualification rates (Nugent, 2022[19]; McGuinness, Bergin and Whelan, 2018[27]; Delaney et al., 2020[28]).

Driven by a renewed interest in workplace learning in recent years, many improvements have been made to the FET sector and apprenticeships. The FET sector has moved towards a more strategic, integrated, quality and outcomes-focused system, and a new comprehensive strategy for FET was published in 2020 (SOLAS, 2020[6]). In addition, the expansion of the formal apprenticeship system across both FET and HE is possibly one of the most significant changes in Ireland's vocational education and training (VET) system

in recent years (Condon and Burke, 2020[55]). Between 2016 and 2020, the number of programmes increased from 27 to 60 (with an additional 18 in the application process), and the apprenticeship population doubled (DFHERIS, 2021[56]). The Action Plan for Apprenticeship 2021-2025 sets out the current vision for the apprenticeship system (DFHERIS, 2021[56]). Despite these positive developments, there are various areas for improvement.

To start, Ireland could do more to foster a cultural shift that would have FET and apprenticeships seen as more viable and attractive learning and career paths. In an online survey among stakeholders in Ireland for this project, 52% of respondents considered this essential – only a policy direction for lifelong guidance was seen to be more important. FET and apprenticeships are often considered less desirable career paths, even though they offer good career opportunities and could be a better fit for the interests and skills of many students.

Career guidance (see also Opportunity 1) could play an important role in changing perceptions of FET and apprenticeships, including by raising awareness about the available learning options and informing students, parents and schools about the diverse types of available programmes. More importantly, career guidance could help to better demonstrate the value and benefits of FET and apprenticeships, including possible pathways to HE, the stackable nature of programmes in FET, and the "earn and learn" nature of apprenticeships. Guidance should also highlight the strong labour market outcomes – e.g. qualification holders at Level 6 have a higher labour participation rate than graduates with HE qualifications at Level 6/7, resulting from a strong labour market orientation of FET Level 6 programmes (e.g. craft apprenticeship, healthcare assistants, etc.) (SOLAS, 2022[30]). Possible job opportunities and salaries could also be highlighted, for example, with occupational route maps (see Box 2.8 for an example from the United Kingdom). As also described under Recommendation 3, engaging employers and bringing industry into schools would be key to raising the profile of FET and apprenticeships in schools.

Box 2.8. Relevant international examples: Mapping apprenticeships and routes for progression

United Kingdom: Occupational route maps for apprenticeships

In 2017, the UK Department for Education established the Institute for Apprenticeships and Technical Education. One of its first actions was to develop a common framework of 15 occupational route maps, documenting all the skilled occupations that can be achieved through an apprenticeship or T-level qualification. In these maps, occupations are grouped to show linkages between them and possible routes for progression. The route maps are owned and regularly reviewed by Route Panels, made up of industry and assessment experts to ensure that they remain accurate, up-to-date and forward-looking. These Route Panels maintain a strategic overview of their sectors, using occupational maps to identify potential skills gaps or overlaps and ensure that new qualifications work together to provide clear pathways for career progression. Panel members meet every eight weeks to consider submissions from trailblazer groups (groups of employers who come together to create new apprenticeships) and T-level panels (groups of employers and training experts who work together to create new technical qualifications).

Source: Institute for Apprenticeships and Technical Education (2023[57]), *Occupational maps*, www.instituteforapprenticeships.org/occupational-maps/.

Learning and career information on FET and apprenticeships could be complemented with more active and targeted outreach. To start, existing public relations campaigns could be expanded. Exposing students to the experiences of past graduates of FET and apprenticeships could help raise the profile and attractiveness of these pathways. For example, the National FET Strategy introduced FET ambassadors, who could more actively share their experiences and provide inspiration and insights (SOLAS, 2020[6]). For apprenticeships in particular, project participants mentioned the possibility of a broader rebranding to

make them more attractive and to better highlight their "earn and learn" character. Some stakeholders even proposed to drop the word "apprenticeship" altogether since the current terminology has many unfortunate connotations, including that it is only for men, which does not help to overcome the current challenge of under-representation by women. At present, however, rebranding apprenticeships is not a policy objective of the Government of Ireland.

Increased exposure to more WBL in schools could positively impact secondary-level students' perspectives on the learning pathways available to them. As highlighted in the FET Strategy, exposing second-level students to practical courses and modules with a vocational nature could help raise awareness about FET options and vocational pathways (SOLAS, 2020[6]). VET in schools could come in different forms, including inviting volunteers into schools to bring the world of work into the classroom, job shadowing, workplace visits, work placements, enterprise competitions and more (UNESCO, 2021[36]).

The Senior Cycle could be designed to provide students with more real, work-based experience. The current Senior Cycle is perceived to have a narrow focus and mainly functions as a filter to tertiary education (OECD, 2020[58]). There is little emphasis on vocational learning. A large and growing majority of students pursue the Leaving Certificate Established programme (LCE) (71.2% of students), with much smaller shares pursuing the Leaving Certificate Vocational Programme (LCVP) (23.0%) and the Leaving Certificate Applied programme (LCA) (5.8%), with the latter being the programme with the most vocational (Department of Education, 2022[59]). A recent OECD assessment of the Senior Cycle noted that stakeholders questioned the extent to which the LCVP, in particular, is a real vocational option as it "only" offers two vocational modules as add-ins (OECD, 2020[58]). Among the plans for the reform of the Senior Cycle, however, is to make it more flexible so that the different types and styles of learning (including work-based) are made available to all students. Some initial steps towards such an integrated Leaving Certificate have been made. For example, since 2022, students pursuing the LCA programme have been able to access mathematics from the LCE. The Transition Year could also play an important role in increasing exposure to vocational options. There are already good examples of schools piloting apprenticeship taster offerings in the Transition Year.

The design of mechanisms for assessing applications should also be considered when promoting pathways outside HE. In the current system, the CAO processes applications for undergraduate courses in Irish HEIs by matching students' results with HEIs' requirements and places available for each subject. However, the CAO does not accept applications for FET and apprenticeships; students need to apply individually to each FET institution and, as apprenticeships are employment contracts, to employers directly. This distinction reinforces the widespread belief that FET and apprenticeships do not deserve the same consideration as more traditional academic options (OECD, 2020[58]). A positive development is that information on FET programmes and apprenticeships has been included on the CAO website since 2021, with links to Fetchcourses and Generation Apprenticeship (SOLAS, 2020[6]). The *Progressing a Unified Tertiary System for Learning, Skills and Knowledge* report proposed a reform of the CAO to ensure that further connections into FET and apprenticeships are made available (DFHERIS, 2022[10]).

The complexity of the FET system is its own obstacle to greater participation in FET. It can be difficult to navigate the various options of FET, ranging from PLCs to traineeships, and provided by ETBs, the independent community, voluntary secondary schools and more. As outlined in the FET Strategy, simplifying its structure and learning pathways, including by consolidating programmes, is an objective (SOLAS, 2020[6]). At present, there is arguably also too much emphasis on accreditation and certification in FET – e.g. aiming to maximise the number of graduates. The quality of services, as well as its responsiveness to changing skills, could be further improved. The FET Strategy highlights the need to modernise the FET system (e.g. building and equipment), which could help to address these quality concerns (SOLAS, 2020[6]).

With respect to apprenticeships, both their demand by students and supply by employers create obstacles to its continued expansion. To this end, the incentives currently in place for both apprentices and employers will need to be evaluated.

Some project participants noted that student demand is low not only due to negative perceptions about apprenticeships but also the relatively low pay apprentices receive. Apprentices have employment contracts in Ireland, and pay rates are mostly determined by employers and sectoral employment orders, which may vary depending on the occupation and employer. While they increase each year of the programmes, overall, the pay rates are generally considered to be quite low. For example, in a first year of a construction apprenticeship, the pay is one third of the fully qualified pay, at EUR 6.84 per hour, compared with a minimum wage of EUR 10.50 per hour. This raises as a percentage (75%) of the qualified rate for each subsequent year of the apprenticeship. In addition, across OECD countries, it is not uncommon that compensation for apprentices is below the minimum wage, which reflects the comparatively low productivity of apprentices and the training investments on the employer side.

Employer demand for apprentices can also be strengthened since many people willing to do an apprenticeship cannot find a company. This is partly driven by a lack of awareness about the benefits of apprenticeships, which could be shared more actively with employers, and insufficient knowledge of the ten-step process to set up apprenticeships.

Financial obstacles are often a reason for employers not to set up apprenticeships. This is especially the case for New Apprenticeships (e.g. in ICT, finance and hospitality), which complement the Craft Apprenticeships (e.g. for carpentry, plumbing, motor mechanics and electrical apprenticeships). This new model for apprenticeships in new sectors was introduced in 2016 after a review of the Craft Apprenticeships model. Both models are currently operational and not only differ in terms of sectors but also in how they are organised (e.g. all Craft Apprenticeships are four years long, while New Apprenticeships vary between two and four years). A key feature of the New Apprenticeships is that the development and rollout are overseen by industry-led groups, called consortia, working with education and training providers and other partners. Because of the active role of enterprises and other stakeholders in designing apprenticeships in specific sectors, the New Apprenticeships are diverse in terms of training models, delivery models and target groups.

A major change compared to the Craft Apprenticeships is that the employer pays the apprentice for the duration of the programme. In contrast, for Craft Apprenticeships, the employer only pays during the on-the-job phases of the training (the relevant ETB pays for the off-the-job training periods). Project participants indicated that the higher cost to employers of New Apprenticeships relative to Craft Apprenticeships presents a stark contrast for employers and that the cost of New Apprenticeships should be reduced. Since 2022, employers of New Apprentices have received a grant of EUR 2 000 per eligible apprentice to compensate for these higher costs. In a way, this employer grant for New Apprenticeships plays a similar role as training allowances do for Craft Apprenticeships (which are payments by the state to ETBs to compensate for the off-the-job training provided by them), insofar as they both intend to reduce the costs to employers of hiring apprentices. However, many project participants, and in particular employers, commented that this grant is insufficient, noting that it does not cover the costs associated with training the apprentice and, as a result, often makes apprentices financially unfeasible.

However, evidence of the effectiveness of subsidies for apprenticeships is mixed (Kuczera, 2017[60]). Financial incentives for apprenticeships often only have modest effects and usually involve substantial deadweight losses, i.e. they subsidise apprenticeships that would have been provided anyway. If introduced, it is important to ensure that employers provide good quality WBL, and the incentives should be carefully monitored and evaluated (Kuczera, 2017[60]). It is therefore important that Ireland carefully evaluates the funding mechanisms for the New Apprenticeships, including the impact of the EUR 2 000 grant for employers.

Promoting apprenticeships among employers requires not only financial incentives but also non-financial measures that improve the cost-benefit balance of apprenticeships (e.g. the programme duration, support structures for employers, etc.) (OECD, 2019[1]). The design of the New Apprenticeships was another topic of discussion, with project participants indicating that apprentices now often have off-the-job training (i.e. in the classroom) for long periods of time (e.g. six months of training was mentioned for ICT apprenticeships), creating staffing issues for employers, for example when they rely on apprentices for day-to-day operations. Consulted employers indicated that it would be better if off-the-job training were offered over longer periods but with shorter durations (e.g. four days of work, one day of learning). This would make it easier for employers to manage the periods when they are not on the work site. The design of New Apprenticeships, including the length of on-the-job and off-the-job training, is agreed upon during the development of a New Apprenticeship by the consortia and could be changed by these industry-led groups if they are creating practical difficulties for employers. Given the large diversity in approaches of these consortium-led apprenticeships, a recent review by QQI highlighted that flexible and bespoke supports are needed to foster their development and growth (QQI, 2022[61]).

The need for a single point of contact for employers to support them with setting up and managing apprenticeships was also discussed in consultations. The Government of Ireland has established a National Apprenticeship Office (NAO) with responsibility for all aspects of the management, oversight development and review of the apprenticeship system and for implementing the Action Plan for Apprenticeship 2021-2025 (DFHERIS, 2021[56]). The NAO has brought together the apprenticeship offices of SOLAS and HEA, and the two organisations have shared responsibility for the NAO. In addition, the NAO will co-develop an integrated communications and marketing strategy and support the provision of apprenticeships in various ways, including by planning and managing capacity for apprenticeship programmes, providing support for the operation and development of consortia-led apprenticeship programmes and more. However, while this Office is a great step forward and will help to create a single unified and valued apprenticeship system, it will not function as a single point of contact for employers, with practical support and information on how to engage with apprenticeships, as responsibility for craft programmes currently remains with SOLAS.

Another obstacle to the continued expansion of apprenticeships is the system's overall capacity. There is a lack of instructors, particularly for apprenticeships in sectors with large shortages (e.g. construction). Possibly, a more flexible model for apprenticeships could help reduce pressure. For example, Ireland could consider mechanisms where groups of enterprises that employ apprentices share the responsibility for apprentice training (see Box 2.9 for an example of such an approach in Norway).

While this section has focused on FET and apprenticeships, Ireland should also explore other ways to produce more graduates exposed to WBL and work environments. Several project participants expressed that WBL should be promoted at all levels. For example, this could involve making apprenticeships available at the secondary level, developing tertiary vocational qualifications pathways for Levels 5-8 for priority skills and occupations (e.g. nursing, engineering), as well as strengthening intermediate-level sub-degree technical and vocational qualifications in both initial and continuing VET (QQI, 2020[62]). Ireland might also consider expanding internships at all levels of education.

Box 2.9. Relevant international example: Enterprises sharing responsibility for apprentice training

Norway: Training offices supporting employers with apprenticeships

Training offices in Norway (*opplæringskontor*) are sector-specific, cross-company intermediary organisations that assist enterprises in recruiting and training apprentices. They are separate legal training institutions owned and operated by a group of enterprises (often small and medium-sized enterprises [SMEs]) that employ apprentices and share the responsibility for apprentice training.

Training offices were established in the mid-1990s in response to the need to encourage employer participation in apprentice training. They can help to reduce the administrative burden on individual enterprises by assisting them with apprenticeship administration. This is especially useful for individual SMEs who may struggle to meet the minimum requirements and quality for apprentice training. The offices are funded by government training subsidies.

Over the last two decades, the use of training offices in Norway has shown strong growth, reflecting employers' willingness to join. The number of training offices reached over 300 in 2020, accounting for approximately 80% of all apprenticeship contracts. The role of training offices in administrative and training matters is pivotal to deepening links between schools, young apprentices and employers. In addition, the model has given employers a greater role and influence in training.

Source: OECD (2022[63]), *Good Practices in Europe for Supporting Employers to Promote Skills Development*, www.oecd.org/skills/Good-practices-in-Europe-for-supporting-employers-to-promote-skills-development.pdf.

Recommendation 4: Promote and strengthen pathways from school into further education and training and apprenticeships to develop a well-balanced tertiary system and diversified supply of skills

Ireland should aim to move towards a balanced tertiary system producing a more diversified supply of skills. More diverse, flexible and permeable pathways can improve the system's responsiveness, thereby allowing it to address shortages and reduce mismatches. At present, there is arguably too much emphasis on pathways towards HE in Ireland. Ireland needs to better promote pathways into FET and apprenticeships to create a more diversified supply of skills.

Ireland can undertake the following specific actions to promote and strengthen pathways from school into FET and apprenticeships to develop a well-balanced tertiary system and diversified supply of skills:

4.1. **Change perceptions of further education and training and apprenticeships through improved career guidance, communication and rebranding.** Ireland should aim to change people's perspectives about FET and apprenticeships so that they are seen as more viable and attractive learning pathways. Career guidance (see Recommendation 3) should play an important role, including by raising awareness about these pathways; their value and benefits, including the "earn and learn" character of apprenticeships; and possible job opportunities. Building on existing promotional campaigns for FET and apprenticeships, Ireland should actively reach out to people to promote these pathways by, for example, sharing the experiences of successful graduates. For apprenticeships in particular, a rebranding may be needed to better highlight their "earn and learn" character, change societal perceptions of these learning pathways, and thereby improve their attractiveness to learners and those who influence their decisions.

4.2. **Better promote pathways into further education and training and apprenticeships by strengthening work-based learning in schools and developing a unified application process.** Ireland should expose second-level students to more practical or vocational courses, modules, and traineeships to help raise awareness about FET and apprenticeship pathways. This would involve strengthening the provision of WBL in schools. The ongoing reform of the Senior Cycle should continue to allow for more permeability between different Leaving Certificate programmes, to make different types and styles of learning (including work-based) attractive and available to all students. The Transition Year should also continue to expose students to potential vocational pathways, building on current good practices (e.g. apprenticeship taster offerings). Further integrating application processes for FET, HE and apprenticeships by the CAO also could help promote equal consideration of the different options.

4.3. **Increase take-up of apprenticeships by identifying and overcoming financial obstacles for employers.** Ireland should evaluate its subsidies for apprenticeships to strengthen employer demand for apprentices. Ireland will need to ensure that apprenticeships are financially feasible for employers and allow them to provide good quality WBL. Especially funding mechanisms for the New Apprenticeships need to be reassessed since the higher cost to employers of New Apprenticeships relative to Craft Apprenticeships makes apprentices less attractive to employers. As part of this reassessment, Ireland should also evaluate the impact of the grant to employers of EUR 2 000 per eligible apprentice, including if it is sufficient to incentivise employers to take on new apprentices.

4.4. **Continue to address non-financial obstacles for employers to take on apprentices by providing employers with practical support and information and promoting more flexible forms of apprenticeship.** Ireland should ensure that employers have sufficient access to support and information for engaging with apprenticeships. To this end, Ireland could consider setting up a single point of contact for employers seeking information on apprenticeships, possibly building on the recently created NAO. Ireland should also address the shortage of classroom instructors of apprentices and promote more flexible models for apprenticeships, possibly by promoting that groups of enterprises with apprentices share the responsibility for apprentice training.

Recommendation 5: Improve pathways between further education and training and higher education to support the move towards a truly unified tertiary system

Ireland should aim for a more joined-up approach to FET and HE, whereby the sectors work together more actively to better align their programmes and improve pathways between them. The objective of better integrating the FET and HE systems has been mentioned in several strategic documents and is a policy priority for Ireland. The restructuring of the departments in Ireland and, more specifically, the creation of DFHERIS has already contributed to bringing together the two sectors (alongside the research and innovation [R&I] sector). *Progressing a Unified Tertiary System for Learning, Skills and Knowledge* also describes how to develop a well-functioning, unified tertiary system for knowledge and skills, composed of complementary FET, HE and R&I sectors (DFHERIS, 2022[10]). Several other strategies and studies highlight the need for an integrated system, including the NSS 2025, Future Funding in Higher Education, the National FET Strategy and an action plan by the Transitions Reform FET-HE working group, among others (Department of Education and Skills, 2016[4]; SOLAS, 2020[6]; DFHERIS, 2022[64]).

A particularly important aspect of an integrated tertiary system is smooth pathways between FET and HE. Greater permeability between these pathways provides students with more diverse and flexible learning

options, contributing to a more diversified skills supply, and could help to make the education and training system more responsive to needs in the labour market.

Currently, the tertiary system's pathways are predominantly moving in one direction, from FET to HE. Project participants noted that pathways from HE to FET are effectively non-existent, while studies show that between 27% and 30% of FET graduates are in HE a year after completing programmes (SOLAS, 2020[65]; CSO, 2019[66]). Studies also demonstrate that students from FET do comparatively well in HE, with, for instance, higher retention rates (SOLAS, 2020[6]). Overall, the number of applicants to HE from FET has grown significantly but remains relatively low. While FET should not just become a stepping stone to HE, the permeability between FET and HE is needed to allow FET students to enrol in HE if they choose to do so. In this way, what Ireland needs is a tertiary system where there are no dead ends.

Pathways between FET and HE are already supported by the HELS, which allows FET learners with specific degrees to apply to a wide range of third-level courses in most of Ireland's HEIs. There are, however, some conditions, including that the learner needs to have a full Level 5 or Level 6 Major Award, with at least 120 credits. Individual HEIs might also ask for more specific requirements, including a specific Major Award, specific grades in specific courses, an additional Award requirement (e.g. mathematics), and/or that all credits used as part of the score were achieved in one "single sitting". If these requirements are met, the learner can apply for a place in the first or second year of a HE programme through the CAO.

HELS has strengthened pathways between FET and HE, but the pathways could be still further improved. To start, current pathways consist of individual FET courses providing access to specific HE courses, but a more systematic approach is needed with clear pathways between the two systems and at a broader level for groups of programmes and courses (e.g. a cohort-based system). A more systematic approach will help make pathways more transparent and widely accessible. In addition, it still happens that some FET courses and credentials are not recognised in HE, and as a result, students cannot always skip certain parts of HE programmes that were already covered in FET. In this context, recognition of prior learning (see Chapter 3) could also be strengthened to ensure that skills acquired in FET are recognised in HE. Furthermore, some programmes in HEIs have quotas for the number of places for FET students, which limits these pathways.

Addressing these challenges will require greater collaboration between the two systems. In recent years, progress has been made in bringing the two systems together, building trust between the systems, but obstacles still exist to collaboration. The Government of Ireland has been trying to overcome this with awareness-raising measures and soft policies that aim to link the systems (e.g. including FET on the CAO website). However, various project participants showed support for going beyond awareness raising and looking at more tangible measures, and perhaps even bodies and institutions to strengthen co-ordination across FET and HE. Since decisions made in each system have implications for the other (e.g. increasing HE places has knock-on effects on FET demand and vice versa), and with an overlap in provision at Level 6, there is a clear argument for co-ordinated decision making and collaboration.

Much work is underway in Ireland to strengthen the pathways between FET and HE. In *Progressing a Unified Tertiary System for Learning, Skills and Knowledge*, a range of specific short-term actions are listed that provide a good starting point for moving towards a truly unified tertiary system. It is particularly promising that the government is planning to develop a set of principles and an overarching policy framework to strengthen FET-HE transitions, as well as a set of recommendations for the next steps in delivering on this objective (DFHERIS, 2022[10]). There is also a Pathways Advisory Group in the FET system working on how to improve FET and HE pathway models, among other activities (SOLAS, 2020[6]).

The criteria for allowing transitions between the two systems must be universal and consistent to ensure that pathways between FET and HE are more systematic. These criteria could build on or be an extension of the existing arrangements of the HELS. Further efforts to develop these criteria should involve strong engagement from across the tertiary education sector, as well as mechanisms to ensure that the criteria remain relevant and up to date in a continuously evolving tertiary sector. Ireland should also aim to move

towards cross-system recognition of credits and ensure that courses and credits obtained in FET are also recognised by HE.

The co-development and co-delivery of programmes by FET and HE could support pathways between the two sectors. This is one of the objectives listed in *Progressing a Unified Tertiary System for Learning, Skills and Knowledge* (DFHERIS, 2022[10]) and an area for which there was much support among project participants. In December 2022, the Government of Ireland made concrete steps to deliver on this objective by announcing the establishment of the National Tertiary Office. Tasked with developing joint FET-HE programmes with 13 disciplines being advanced in its first year, the Office will be created within the HEA and jointly managed by the HEA and SOLAS. The programmes that will be developed will allow students to commence their third-level experience in FET and complete the remainder in HE colleges. For 2023, the Office will have a budget of EUR 2 million to develop these courses. While the Office was not discussed in consultations for this project, its objectives are very well aligned with views shared by project participants. In particular, the Office puts into practice a proposed Tertiary Fund in *Progressing a Unified Tertiary System for Learning, Skills and Knowledge*, which was extensively discussed in consultations. Despite the introduction of the National Tertiary Office, Ireland should still review if there are additional ways it could support the co-development and co-delivery of programmes. For instance, it could explore if co-development could be a requirement of other funding arrangements and initiatives (e.g. developing sectoral qualifications across FET and HE).

More broadly, the funding models of the FET and HE sectors are limiting co-operation, and their competitive funding models and their role in facilitating pathways should be examined (see also Recommendation 6) (DFHERIS, 2022[64]). At present, funding mechanisms create incentives to keep students in their own systems, which restricts co-operation on transitions where, for instance, FET provides access to a second or third year of HE programmes. The HE funding strategy, “Funding the Future”, already aims to address this issue (DFHERIS, 2022[64]).

Collaboration between FET and HE to strengthen pathways can take other forms, for example, by sharing expertise and infrastructure. This could involve the shared use of physical spaces, co-ordinated investment in digital infrastructure, as well as promoting knowledge sharing for staff development and creating cross-FET-HE career pathways (e.g. with secondments and joint posts). In addition, collaboration on student planning could be considered. This is already happening to some extent. For example, Ireland aims to develop an integrated plan for a coherent tertiary response to meet residential construction skills needs (DFHERIS, 2022[64]). Nevertheless, it is important to recognise that FET and HE enrolment impact each other, and student planning could be a relevant next step. Some project participants noted, however, that Ireland should not move towards a cap-based system.

Developing a unified tertiary system with universal and consistent criteria for transitions, cross-system recognition of credits, co-development and co-delivery of programmes, and other types of collaboration between FET and HE, would require strong governance arrangements. One way of doing so is by building these partnerships at the local level with “place-based” approaches. In the United Kingdom, place-based political agendas are increasingly gaining traction in various policy areas (Alway et al., 2022[67]) (see Box 2.10 for an example from Wales [United Kingdom]). An advantage of this approach is that FET providers and HEIs are well placed to identify local and regional needs and align their priorities with national objectives, and it could help to reduce competition between providers. These initiatives will need to be led by the providers but should involve employers and other key stakeholders. In addition, there are a number of elements that are considered to make these partnerships effective, including clearly defined and agreed roles, mutual trust between leaders and institutions, dedication to clear pathways, a co-ordinated approach for employer engagement, and alignment with local socio-economic needs and national priorities (Alway et al., 2022[67]).

Box 2.10. Relevant international example: Place-based approaches

Wales (United Kingdom): Implementing a place-based approach

The Partnership for Innovation and Engagement brought together universities, colleges and industry in South Wales to create a regional cluster to support curriculum development in multiple FE and HE institutions and graduate employment, develop new cross-sector relationships and encourage new strategic joint projects. Funded with GBP 1.2 million (British pound sterling) from the Higher Education Funding Council Wales, the partnership works to develop regional resources, expertise, resilience and industry engagement across the creative industries; compound and semiconductor projects; and design. As a result of the project, HE, FE and WBL have a more connected and clearer offer, and there is now a mechanism in place for identifying and tackling gaps and changes in requirements. FE partners are connected with HE staff, who are leading in their industry and academic field, and industry and HE are more aware of FE talent, expertise and how the sectors can support and complement each other.

Source: Alway et al. (2022[67]), *Going Further and Higher: How Collaboration Between Colleges and Universities Can Transform Lives and Places*, www.collegecommission.co.uk/going-further-and-higher.

Project participants responded favourably to the development of these place-based approaches. Some noted, however, the importance of involving not only the formal FET and HE sectors but also non-formal and adult education and community, voluntary, charity and social enterprise (CVSE). In addition, these networks could also support bringing together other regional players (e.g. Skillnet, Intreo offices) (see also Chapter 5 for a section on these arrangements). Project participants responded favourably to the development of these place-based approaches. Some noted, however, the importance of involving not only the formal FET and HE sectors but also non-formal and adult education and community, voluntary, charity and social enterprise (CVSE). In addition, these networks could also support bringing together other regional players (e.g. Skillnet, Intreo offices) (see also Chapter 5 for a section on these arrangements).

Recommendation 5: Improve pathways between further education and training and higher education to support the move towards a truly unified tertiary system

Ireland needs a more joined-up approach for FET and HE, where the sectors work together more actively, better align programmes and improve pathways between them. While the number of applicants to HE from FET has grown, the numbers remain relatively low. Good examples of effective pathways between FET and HE already exist, but Ireland needs a more systematic approach, as well as more co-development and co-delivery of programmes and other types of collaboration.

Ireland can undertake the following specific actions to improve pathways between FET and HE to support the move towards a truly unified tertiary system:

5.1. **Develop universal and consistent criteria for facilitating transitions between further education and training and higher education and cross-system credit recognition.** Ireland should ensure that pathways between FET and HE are more systematic, with clear pathways between the two systems available at a broader level for groups of programmes and courses (e.g. a cohort-based system), which could make pathways more transparent and more widely accessible. To achieve this, Ireland should create criteria for transitions between the systems that are universal and consistent. These criteria could build on, or be an extension of, the existing arrangements of HELS, and developing these criteria would involve strong engagement

from across the tertiary education sector. Ireland should also aim to move towards cross-system recognition of credits to ensure that FET courses and accreditations are recognised in HE.

5.2. **Expand the co-development and co-delivery of programmes by further education and training and higher education by supporting the newly established National Tertiary Office, among other initiatives.** Ireland should move ahead with operationalising the National Tertiary Office within HEA tasked with developing joint FET-HE programmes, where students start in FET and finish in HE. The 13 disciplines being advanced and the budget of EUR 2 million in 2023 provide a good starting point. Ireland could possibly consider complementary measures to strengthen collaborative programme design, development and delivery by FET and HE on a conjoint basis, for instance, by making it a requirement of other funding arrangements or initiatives (e.g. developing sectoral qualifications across FET and HE).

5.3. **Better promote the development of "place-based" networks (or partnerships) between further education and training and higher education to strengthen local collaboration on improving pathways.** Ireland should develop strong governance arrangements that could help make collaboration long-term, sustainable and inclusive. To this end, Ireland could promote "place-based" networks (or partnerships) that bring together FET providers and HEIs at a local level. These initiatives will need to be led by the providers but should involve employers and other key stakeholders, including non-formal and adult education and community, voluntary, charity and social enterprise (CVSE). In addition, these networks could also support bringing together other regional players (see Chapter 5). To be fully effective, they need clearly defined and agreed roles, mutual trust, dedication to clear pathways, co-ordinated employer engagement and alignment with local and national priorities.

Opportunity 3: Making education and training provision more responsive to changing skills needs

The skills required for jobs and participation in society are changing rapidly and are expected to continue to do so. The digital and green transitions, in particular, will have important implications for the types of skills required to participate fully in societies and economies in the future (see also Chapter 1). Digital skills are fast becoming a prerequisite to actively participate in more complex, interconnected societies. They are needed in most professions, while new skills are demanded to adapt to climate change and to limit global warming, loss of biodiversity and pollution. In addition to informing and guiding learners towards suitable learning opportunities (see Opportunity 1) and strengthening pathways across learning opportunities (see Opportunity 2), there is also a need to adapt education and training provision itself to prepare people to respond effectively to changing skills needs.

Education and training provision needs to respond effectively to these changes, providing people with the knowledge, skills, abilities and attitudes needed to be adaptable and resilient in a rapidly changing world. To this end, the responsiveness of education and training systems at all levels will need to be assessed and improved as necessary. A responsive education and training system provides adequate incentives to institutions to offer courses in areas currently and anticipated to be in high demand and encourages and incentivises students to enrol in these courses.

Improving education and training provision responsiveness has been highlighted as an objective in several of Ireland's strategic documents. Ireland can already build on an extensive range of programmes and initiatives that aim to improve the flexibility and responsiveness of the provision (Department of Education and Skills, 2016[4]; SOLAS, 2020[6]; DFHERIS, 2022[64]). However, there are still areas for improvement.

In this section, the main emphasis will be on strategic planning and funding models to strengthen the responsiveness of FET and HE. Engaging employers more fully in the design and delivery of courses and

programmes is also important for improving the responsiveness of the education and training system. This latter topic is examined in Chapter 5 as part of a broader discussion on employer engagement.

Recommendation 6: Ensure that the provision of further education and training and higher education is aligned with strategic skills needs and responds to changes in demand

Ireland will need to establish a long-term, strategic vision for the skills that need to be developed in FET and HE. These objectives can serve as the basis for assessing and improving the responsiveness of education and training provision. For instance, Ireland should consider the need for interventions to boost enrolment in programmes of strategic importance. A long-term strategic vision would also allow Ireland to link the skills agenda to the broader vision for Ireland's economy and society, including, for instance, its ambition to achieve the twin aims of digital transformation and a just transition (DPER, 2021[68]) (see also Chapter 4 for a section on skills as part of the innovation agenda). In addition, having a clear overview of strategic skills needs will help ensure that skills remain at the top of the policy agenda.

Applying a more strategic approach to the development of skills could contribute to securing a long-term balance in skills. Project participants noted that a lack of planning for skills and the graduate supply contributed to existing skills imbalances. For example, the move away from Craft Apprenticeships post-2008 contributed to the critical shortage of workers in construction and craft professions that Ireland is now experiencing. Longer-term, strategic planning could have foreseen that demand for these Craft Apprenticeships would not fully disappear and resulted in steps being taken to ensure that apprenticeship opportunities did not disappear during periods of economic downturn.

High-quality skills forecasting and workforce planning should be key inputs for such a long-term strategic approach. However, Ireland will need to strengthen its methods for assessing trends in skills needs (see also Chapter 5 on improving the relevance and granularity of skills forecasts). Some skills will become more important, for example, digital skills across all disciplines – as is recognised in Ireland's digital framework (Department of the Taoiseach, 2022[69]) – as well as STEM skills, 21st-century skills, such as critical thinking, working with others, communicating and more (Department of Education and Skills, 2016[4]). However, it would be important to understand at a more granular level what the skills gaps are nationally, regionally and locally, for both the short-, medium- and long-term. In addition, better workforce planning in both the short-, medium- and long-term is needed to inform objectives for the graduate supply.

Both SOLAS and the HEA have an important role to play in identifying strategic skills needs and implementing a longer-term strategic vision for skills. Not only do these agencies lead the strategic dialogue with FET and HE providers, but they are also responsible for allocating funding to education institutions.

In the FET sector specifically, longer-term strategic objectives for the skills that need to be developed could be embedded in existing Strategic Performance Agreements (SPAs). These three-year SPAs between SOLAS and each of the 16 ETBs set out the context, strategic priorities, key commitments, the ETB's role in delivering relevant policies and strategies and more. The agreements are the product of extensive dialogue and engagement between SOLAS and each ETB (SOLAS, 2019[70]). Based on a recent FET funding model review, Ireland already plans to adapt the current model to further encourage growth and reform in key strategic areas, as well as to apply a simpler, fairer and more transparent approach to defining levels of funding for individual ETBs (SOLAS, 2022[71]).

In the HE sector, Ireland can build on a system performance framework, which describes national priorities and key objectives for HE; the HEA manages institutional performance through strategic dialogue and performance funding. The funding model of HEIs also plays an important role in ensuring that HEIs align their offers with a long-term strategic vision. At present, the funding model comprises three separate but related elements – a block grant, top slices and performance funding – and is based on a system of agreed three-year, mission-based compacts with targets set by the HEI, subject to challenge by an external expert panel, and formally agreed in a dialogue process (Higher Education Authority, 2022[72]). The system performance framework, supported by strategic dialogue and performance funding, has strengthened

dialogue and co-ordination between HEIs and national-level policy makers. The framework's objectives are broadly supported in HEIs.

However, there are various areas for improvement. For instance, there is little evidence of the direct effects of the framework on long-term institutional behaviour in HEIs (OECD, 2022[73]; O'Shea and O'Hara, 2020[74]). Ireland already launched a HE funding and reform strategy, "Funding the Future", which describes the characteristics of Ireland's HE funding and reform framework (DFHERIS, 2022[64]). The framework considers the level of core funding required to deliver enhanced performance, identifies reform and performance priorities, commits to reviewing the appropriateness of the current funding distribution model and reflects the role of HEA in steering the strategic process and institutional priorities.

Furthermore, Ireland could build on several existing and planned initiatives that facilitate a more long-term approach to skills and student planning. In particular, Ireland plans to expand the development of sectoral qualifications frameworks by QQI across FET and HE (DFHERIS, 2022[10]). These sectoral qualifications frameworks describe the key skills, standards and qualifications required by specific sectors and link these to FET and HE programmes. By doing so, the sectoral qualifications frameworks create a link between workforce planning initiatives and the provision of education and training.

A longer-term, strategic vision for meeting skills demand will need to be complemented with a skills system that effectively responds to both immediate skills pressures and anticipated skills needs. To start, this means that the programmes and courses' content reflects current and future skills needs. At present, there is evidence of some misalignment between the skills that people develop in education systems and the skills that are required in labour markets. For instance, employers report that there are several types of skills of recent graduates that could be strengthened, including commercial awareness, entrepreneurial skills and language capability (Fitzpatrick Associates, 2019[32]). Engaging employers more fully in the design and delivery of courses and programmes is crucial for ensuring that the content of programmes and courses reflects current and future skills needs (see Chapter 5 for a related recommendation on employer engagement). Consideration should also be given to the processes behind adapting curricula and the content of programmes and courses. In consultations, it was also mentioned that the design, accreditation and approval of courses in post-secondary education would need to be accelerated to keep pace with changing skills needs. Funding arrangements for education institutions are important for ensuring the responsiveness of provision (e.g. by making funding conditional on performance metrics). As described above, Ireland already makes use of performance funding and is currently working on further improving its FET and HE funding models.

A responsive skills system concerns not only the content of programmes and courses (i.e. ensuring that they are reflective of current and future skills needs) but also the delivery of programmes and courses. People need to be able to access flexible learning opportunities that help them quickly acquire the skills needed to respond to changing demands. To this end, learning pathways should be permeable to allow students to adjust their learning trajectory based on evolving trends. In addition, flexibility in format (e.g. part-time, online) and design (micro-credentials, modular courses) are important since modular and "bite-size" courses provide opportunities for quick responses to more immediate skills needs (see also Chapter 3 for a section on flexible learning opportunities for adults).

There are various indications that the flexibility of education and training provision could be further improved in Ireland. For example, education institutions currently have incentives to keep students in their own system for as long as possible, thereby limiting flexibility and pathways between different systems (e.g. between HE and FET; see Recommendation 5) and, by extension, reducing opportunities to adjust learning pathways along the way.

The funding approach should be designed to support flexibility in the provision of, and pathways between, FET and HE programmes (OECD, 2017[75]; 2017[76]). At present, funding approaches in Ireland often impede the responsiveness of education and training provision. For example, in the FET sector, resources and operational regulations currently reinforce programme silos, thereby reducing flexibility in learning

pathways (SOLAS, 2020[6]). In addition, in the HE sector, there are not enough resources available for part-time learning (DFHERIS, 2022[64]; OECD, 2022[73]). Again, it is promising that Ireland already aims to address these issues. SOLAS expressed the ambition to reform the funding model to move away from approaches that reinforce programme silos (SOLAS, 2020[6]). Moreover, Ireland is working on implementing a new five pot funding model for FET, which aims to simplify the current model with 34 programme-specific funding streams, providing ETBs with greater flexibility to respond to learner needs (SOLAS, 2022[71]). For HE, the ongoing "Funding the Future" reform intends to extend support to more flexible forms of learning, including blended/online and part-time (DFHERIS, 2022[64]).

Resource constraints are an overarching challenge for education and training provision and planned reforms of funding models that will make FET and HE more responsive to changing skills needs. Underfunding in the sector can have unintended consequences for education and training provision. For example, inadequate core funding in the HE sector incentivises HEIs to provide places in programmes with lower running costs (DFHERIS, 2022[64]). Moreover, project participants emphasised the need for sufficient funding to deliver on the objectives of ongoing reforms, such as "Funding the Future". There are some indications that funding could indeed be increased. For instance, spending on tertiary education (in USD per student) is just below the OECD average in Ireland, and (in purchasing parity terms) spending falls below other high-performing countries (e.g. Finland is 3% higher, Netherlands 19% higher, and the United Kingdom 64% higher) (OECD, 2022[73]). Spending per full-time-equivalent student also decreased in recent years. In terms of a positive development, EUR 307 million has recently been identified and agreed for increasing core funding to deliver enhanced performance, strategic reforms and strengthened quality of outcomes (DFHERIS, 2022[64]). This funding will be prioritised and invested through the budgetary process over the coming years.

Recommendation 6: Ensure that the provision of further education and training and higher education is aligned with strategic skills needs and responds to changes in demand

Education and training provision should allow people to develop the skills relevant for full participation in economies and societies and make them more resilient to future changes. The provision should therefore be responsive to the changing skills needs of the economy and society, both in terms of content and delivery. Ireland could do more to improve the responsiveness of FET and HE provision. In particular, FET and HE funding models can play an important role in incentivising the education and training system to respond to changing skills needs.

Ireland can undertake the following specific actions to ensure that the provision of FET and HE is aligned with strategic skills needs and responds to changes in demand:

6.1. Establish a vision for long-term strategic skills needs in Ireland to inform and strengthen further education and training and higher education performance frameworks and funding models. A more strategic approach could help foster a long-term vision for the skills needed to benefit from future opportunities and secure a balance in skills. Based on high-quality skills forecasting and workforce planning, Ireland should identify its strategic skills needs and use this information to incentivise and support education and training providers to offer skills development opportunities in these areas. Both SOLAS and the HEA have an important role to play in identifying strategic skills needs and implementing the longer-term strategic vision, including by incorporating these strategic insights into performance frameworks and funding models – e.g. through SPAs in FET. In this context, Ireland can build on ongoing work to further

improve FET and HE funding models, as described in the FET Funding Model review and the HE funding and reform framework presented in "Funding the Future".

6.2. **Better incentivise education institutions to offer permeable learning pathways and flexible learning opportunities that allow individuals to acquire new skills quickly in response to changing skills needs.** Ireland should remove incentives for education institutions to keep students in their own system for as long as possible. Instead, Ireland should make learning pathways more permeable so students can easily adjust their learning plans in response to evolving needs. Ireland should also expand flexible learning opportunities (e.g. part-time learning, modular courses) (see also Chapter 3 on flexible learning opportunities for adults) to facilitate the quick acquisition of new skills in response to changing skills needs. Achieving this will require adapting FET and HE funding models to provide the right incentives to education providers. It is promising that ongoing reforms of FET and HE funding models already aim to improve the flexibility of education and training provision. However, to deliver on these reforms' objectives, adequate funding must also be made available.

Summary of policy recommendations

Table 2.2. Summary of policy recommendations for securing a balance in skills through a responsive and diversified supply of skills

Recommendation	Specific actions
Opportunity 1: Improving information and guidance for individuals on learning and career pathways	
1. Strengthen the co-ordination of lifelong guidance to support a strategic approach moving forward	1.1. Continue actively involving all relevant actors in developing a coherent, long-term strategic framework for lifelong guidance. 1.2. Strengthen national co-ordination of lifelong guidance services, including by establishing clear roles and responsibilities.
2. Consolidate and improve online information on learning opportunities and careers to improve navigability, accessibility and relevance	2.1. Develop a centralised online portal for all information on learning opportunities and careers by better co-ordinating and consolidating information. 2.2. Ensure that online information is user-friendly and tailored to individual learners' needs by using filters, self-assessment tools and direct access to advisors. 2.3. Improve the dissemination of information on skills shortages and mismatches, learning outcomes and pathways.
3. Expand and strengthen guidance services to ensure that everyone can access high-quality guidance over the life course	3.1. Strengthen the quality of guidance counselling services in schools by giving guidance counsellors appropriate time and resources and involving employers further in the provision of guidance services. 3.2. Strengthen guidance counselling services in schools by making them more widely available and covering a wide range of possible learning and career pathways. 3.3. Improve the availability and accessibility of independent and comprehensive career guidance services beyond initial education by strengthening institutional support for adults. 3.4. Target guidance services for adults to groups most distant from the labour market and at risk of losing jobs.
Opportunity 2: Strengthening learning and career pathways over the life course	
4. Promote and strengthen pathways from schools into further education and training and apprenticeships to develop a well-balanced tertiary system and diversified supply of skills	4.1. Change perceptions of further education and training and apprenticeships through improved career guidance, communication and rebranding. 4.2. Better promote pathways into further education and training and apprenticeships by strengthening work-based learning in schools and developing a unified application process. 4.3. Increase take-up of apprenticeships by identifying and overcoming financial obstacles for employers. 4.4. Continue to address non-financial obstacles for employers to take on apprentices by providing employers with practical support and information and promoting more flexible forms of apprenticeship.

Recommendation	Specific actions
5. Improve pathways between further education and training and higher education to support the move towards a truly unified tertiary system	5.1. Develop universal and consistent criteria for facilitating transitions between further education and training and higher education and cross-system credit recognition. 5.2. Expand the co-development and co-delivery of programmes by further education and training and higher education by supporting the newly established National Tertiary Office, among other initiatives. 5.3. Better promote the development of "place-based" networks (or partnerships) between further education and training and higher education to strengthen local collaboration on improving pathways.
Opportunity 3: Making education and training provision more responsive to changing skills needs	
6. Ensure that the provision of further education and training and higher education is aligned with strategic skills needs and responds to changes in demand	6.1. Establish a vision for long-term strategic skills needs in Ireland to inform and strengthen further education and training and higher education performance frameworks and funding models. 6.2. Better incentivise education institutions to offer permeable learning pathways and flexible learning opportunities that allow individuals to acquire new skills quickly in response to changing skills needs.

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Notes

1. In this report, "skills policies" are understood to encompass all policies governing skills development and use over the life course, which contrasts with how skills policies are typically understood in Ireland (i.e. only those policies governing higher education HE and further education and training).

2. In this chapter, "Levels" refer to Ireland's National Framework of Qualification Framework (NQF). Please note that there are differences with the European Qualification Framework (EQF).

3. Technological University Dublin, established January 2019; Munster Technological University (MTU), established January 2021; Technological University of the Shannon: Midlands Midwest, established October 2021; Atlantic Technological University, established April 2022; South East Technological University, established May 2022.

3 Fostering greater participation in lifelong learning in and outside the workplace in Ireland

Across countries, there is a growing need for people to upskill and reskill regularly over their life course so they can adapt to developments in the labour market and society. Lifelong learning results in a wide range of benefits, including higher wages for individuals, higher productivity for firms and higher levels of social trust. This chapter explains the importance of fostering greater participation in lifelong learning in and outside the workplace in Ireland and provides an overview of current practices and performance. It then explores three opportunities to improve participation in lifelong learning: 1) strengthening incentives to participate in lifelong learning for individuals; 2) strengthening incentives to participate in lifelong learning for employers; and 3) making lifelong learning more flexible and accessible.

The importance of fostering greater participation in lifelong learning in and outside the workplace

Fostering greater participation in lifelong learning, or learning over the life course, is very important in Ireland's current context and will only increase in importance in the coming years. Around the world, the digital transformation, demographic changes, climate change and sudden shocks, such as the coronavirus (COVID-19) crisis and the Russian Federation's war of aggression against Ukraine, are rapidly transforming the skills individuals need to effectively participate in work and society. In Ireland, where population ageing, skills shortages, and the future demand for high-level qualifications in the labour market outpace the OECD average (see also Chapter 1), upskilling and reskilling are particularly important.

As policy interventions relating to youth are generally outside the scope of this report or addressed in Chapter 2 on skills imbalances, the interventions in this chapter will primarily focus on learning by adults who are no longer engaged in initial education (the terms "lifelong learning" and "adult learning" will be used interchangeably). Upskilling and reskilling for adult learners can be pursued through formal, non-formal and informal learning opportunities (Box 3.1).

Box 3.1. Definitions of formal education, non-formal education and informal learning

Formal education/learning: Formal education/learning is provided in schools, colleges, universities or other educational institutions and leads to a certification recognised by the national educational classification.

Non-formal education/learning: Non-formal education/learning is an education or training activity that does not necessarily lead to a formal qualification, such as on-the-job training, open or distance education, courses or private lessons, and seminars or workshops.

Informal learning: Informal learning relates to typically unstructured, often unintentional, learning activities that do not lead to certification. In the workplace, this is more or less an automatic by-product of the regular production process of a firm.

Source: OECD (2011[1]), *PIAAC Conceptual Framework of the Background Questionnaire Main Survey*, www.oecd.org/skills/piaac/PIAAC(2011_11)MS_BQ_ConceptualFramework_1%20Dec%202011.pdf.

Encouraging a culture of lifelong learning is crucial to ensuring that individuals actively engage in adult learning after leaving the compulsory education system. In turn, participation in different forms of adult learning positively impacts individuals, firms and society.

For individuals, participation in formal adult education and training can lead to better employment prospects, higher wages and upward social and/or occupational mobility (Midtsundstad, 2019[2]). For firms, training leads to higher productivity growth and is often a complement to innovation in the workplace (Acemoglu, 1998[3]; Reenen, Reed and Dearden, 2006[4]; Konings and Vanormelingen, 2015[5]; Dearden, Reed and Van Reenen, 2006[6]). Participation in adult learning can also generate strong social benefits: higher-skilled adults typically report better health, feel more included in political processes and trust others more than low-skilled adults. Adult learning opportunities can help individuals achieve these higher levels of skills (OECD, 2016[7]).

Increasing engagement in lifelong learning has been identified as one of the primary objectives of Ireland's National Skills Strategy (NSS) 2025 (Box 3.2) (Department of Education and Skills, 2016[8]). Promoting learning over the life course is also a component of a range of other strategies in Ireland in areas including digitalisation, unemployment, COVID-19 recovery, apprenticeships, further education and training (FET), higher education (HE), literacy and climate change.

Box 3.2. This chapter and Ireland's National Skills Strategy 2025

Four of the six main objectives of Ireland's NSS 2025 relate to the provision of and/or demand for lifelong learning opportunities. All the opportunities in this chapter are primarily designed to address the fourth objective in the strategy ("people in Ireland will engage more in lifelong learning, especially those in employment"). Yet some of the opportunities address other objectives as well.

In addition to driving more engagement with lifelong learning, the analysis and recommendations in this chapter related to strengthening incentives for individuals and making lifelong learning opportunities more accessible should help promote the NSS 2025 objective to put "a specific focus on active inclusion to support participation in education and training". Furthermore, the analysis and recommendations on strengthening incentives for employers and supporting employers to be more active participants in guiding employees to lifelong learning help to progress the objective that "employers will participate actively in the development of skills and make effective use of skills in their organisations". Lastly, the analysis and recommendations on making the lifelong learning offer more flexible could contribute to the objective that education and training providers develop opportunities "that are relevant to the needs of learners, society and the economy," ensuring that opportunities are not only relevant to learners' lives in terms of the skills offered but also in terms of the way they are designed and delivered.

More specific key actions in the NSS 2025 relevant to this chapter include enhancing the skills development capabilities of small and medium-sized enterprises (SMEs), building greater capacity for recognition of prior learning (RPL) and designing specific support for disadvantaged and under-represented groups to participate in lifelong learning.

Source: Department of Education and Skills (2016[8]), *Ireland's National Skills Strategy 2025 – Ireland's Future*, www.gov.ie/en/publication/69fd2-irelands-national-skills-strategy-2025-irelands-future/.

This chapter focuses on opportunities to foster greater participation in lifelong learning among adults of working age (18-65 years) from Ireland, both in and outside the workplace, by exploring policy interventions that target the supply and demand of lifelong learning opportunities. The analysis touches on a number of issues that are expanded upon in other chapters in the report, which are referenced accordingly. Guidance for both youth and adults on learning opportunities and careers is primarily covered in Chapter 2 on securing a balance in skills. Lifelong learning opportunities related specifically to increasing firms' management capabilities and improving high-performance work practices are addressed in depth in Chapter 4 on driving innovation and strengthening firm performance. Finally, governance arrangements related to lifelong learning (e.g. engaging employers in designing lifelong learning programmes) are discussed extensively in Chapter 5.

Participation in lifelong learning can be boosted in Ireland in both the short and long term by making lifelong learning opportunities more flexible and easier to navigate and by reducing barriers to participation, such as scheduling, family responsibilities and cost. Supporting employers in mapping out their employees' skill sets and improving employers' awareness of the lifelong learning opportunities and benefits available to them and their employees can promote greater employer participation in creating a culture of lifelong learning in Ireland. Similarly, strengthening financial incentives can make Ireland's lifelong learning system more robust and strengthen its economy.

This chapter begins with an overview of the lifelong learning system and its performance in Ireland. It then articulates three opportunities for fostering greater participation in lifelong learning:

1. strengthening incentives to participate in lifelong learning for individuals
2. strengthening incentives to participate in lifelong learning for employers
3. making lifelong learning more flexible and accessible.

Overview and performance of the lifelong learning system

For Ireland, strengthening its lifelong learning system is already a key objective. It has been described in various recent strategies, including the NSS 2025 (Department of Education and Skills, 2016[8]). Ireland has also launched many initiatives to strengthen lifelong learning. The result is an extensive range of policies, incentives and programmes targeting both individuals and employers. Outlining the characteristics of these policies and analysing their performance to date provides a snapshot of Ireland's current lifelong learning ecosystem and can help identify areas where the system can be improved.

Overview of the current lifelong learning system

Relevant strategies and policies for lifelong learning

Adult learning forms a key part of a number of Irish strategies, and not only in the NSS 2025 (Table 3.1). These include strategies relating to further and higher education, strategies responding to global trends such as digitalisation and climate change, and strategies aimed at recovering from the COVID-19 pandemic. Together these strategies show that promoting lifelong learning is a high policy priority in Ireland when planning for the future. Furthermore, Ireland's strategies are quite bold in relation to EU-wide strategies. For example, Ireland's 2030 target rate for adult participation in education and training (64.2%) surpasses the European Union (EU) target of 60% (European Commission, 2022[9]).

Table 3.1. Ireland's strategies and policy plans related to lifelong learning

Strategy or policy	Description	Specific objectives related to lifelong learning
Adult Literacy for Life (2021)	A ten-year adult literacy, numeracy and digital literacy strategy	• Decrease the share of adults in Ireland with unmet literacy needs, i.e. Programme for the International Assessment of Adult Competencies (PIAAC) Level 1 or below, from 18% to 7% • Decrease the share of adults in Ireland with unmet numeracy needs, i.e. PIAAC Level 1 or below, from 25% to 12% • Decrease the share of adults in Ireland without basic digital skills from 47% to 20% (as measured by the Digital Economy and Society Index [DESI])
Climate Action Plan 2021	Plan to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and to reach net-zero emissions by 2050	• Provide reskilling and lifelong learning to individuals, so they are equipped with the necessary skills to participate in Ireland's future climate-neutral economy • Deliver the Programme for Government commitment to develop a Green Further Education and Skills Development Plan • Promote timely and tailored activation and training responses for workers whose jobs are at risk by the decarbonisation process
Further Education and Training Strategy 2020-2024	A strategy for the future of further education and training (FET), building on the first FET Strategy from 2014-2019	• Increase the number of upskilling and reskilling opportunities • Provide pathways for a diverse group of learners to engage in lifelong learning • Develop new strategic performance agreements between SOLAS and the education and training boards (ETBs)
Harnessing Digital – The Digital Ireland Framework	A strategy intended to improve the digital skills provision across the skills spectrum	• Increase the share of adults in Ireland with at least basic digital skills to 80% by 2030 (as measured by DESI), which is intrinsically linked to improving lifelong learning participation • Focus particularly on low-skilled workers whose jobs are exposed to the risk of automation
Higher Education Strategy to 2030	A strategy to improve the higher education system	• Take further action in the areas of quality assurance and qualifications frameworks and quality assurance of lifelong learning • Expand the National Framework of Qualifications (NFQ) for delivering lifelong learning objectives • Review and reform the first-year curricula of Irish higher education institutions so they serve as "a foundation of learning activities entailing more inquiry-based formats and engendering employability and lifelong learning outcomes" • Further develop postgraduate diplomas and master's courses to provide workers with further professional development or new skills

Strategy or policy	Description	Specific objectives related to lifelong learning
National Access Plan 2022-2028	Plan in collaboration between the Department of Further and Higher Education, Research, Innovation and Science (DFHERIS) and the Higher Education Authority (HEA) towards the goal of creating an inclusive, diverse higher education sector	• Make pathways to higher education available to all who seek to upskill • Increase more flexible ways of learning • Support students to study on a flexible basis, including part-time and blended learning • Improve the use of recognition of prior learning
National Economic Recovery Plan (2021)	Supports Ireland's recovery from the COVID-19 pandemic	• Help people get back to work, including by reskilling/upskilling
National Recovery and Resilience Plan (2021)	Plan to underpin EU funding to Ireland as part of its national recovery from the COVID-19 pandemic	• Support the digital transformation of Irish education at all levels, including lifelong learning, through the Addressing the Digital Divide and Enhancing Digital Skills project • Support flexible course provision in higher education, including lifelong learning, through the Technological Universities Transformation Fund project
National Skills Strategy 2016-2025	Ireland's ten-year national skills strategy, building on the previous strategy, Towards Tomorrow's Skills	• Encourage employers to participate in skills development through active collaboration with education and training providers • Enhance the capability of small and medium-sized enterprises through skills development • Strengthen the promotion and communication of career opportunities through improved employer participation • Promote and communicate the benefits of lifelong learning to the full population of Ireland • Create more and easier opportunities for those in employment to engage in education and training • Strengthen recognition of workplace learning and develop the capacity for recognition of prior learning • Significantly strengthen career guidance with the aid of employer engagement • Support disadvantaged and under-represented groups to participate in education and training
National Training Fund Implementation Plan (2019)	Plan aiming to support the training of those in employment and those who wish to take up employment	• Provide greater investment to support enterprise-focused higher education programmes, which include lifelong learning • Provide expenditure on training for those seeking employment, training for persons in employment, training on literacy and numeracy, and training for those in the community and voluntary sector
Pathways to Work 2021-2025	Strategy to assist people in getting back to work as the economy and labour market recovers from COVID-19	• Ensure seamless referral to relevant upskilling opportunities • Increase the number of training programme places by funding 50 000 additional places in further and higher education by the end of 2021 • Support 50 000 long-term unemployed people to enrol in FET by 2025 • Tailor bespoke job promotion and local recruitment events for young job seekers, as well as older workers, where reskilling and upskilling options will be outlined and referrals made to the ETBs
White Paper on Enterprise 2022-2030	Policy document with implications for Ireland's Enterprise Policy	• Increase investment in high-level digital skills as well as transversal skills • Adopt more widespread lifelong learning to equip the labour market with appropriate skills • Invest in skills and training in research development and innovation • Attract and retain skilled workers with affordable housing and updated infrastructure and through tax policy • Improve management skills in firms

Note: The table aims to provide an overview, not an exhaustive list. Strategies are listed in alphabetical order.

Roles and responsibilities in the lifelong learning system

Promoting lifelong learning is a complex and cross-cutting priority area that involves a wide range of governmental and non-governmental stakeholders (see also Chapter 5 for an overview of related governance arrangements). On the policy side, principal actors in Ireland's lifelong learning system include the Department of Education (DEP EDU), the Department of Further and Higher Education, Research, Innovation and Science (DFHERIS), the Department of Enterprise, Trade and Employment (DETE) and the Department of Social Protection (DSP).

The DEP EDU is responsible for lifelong learning through initial education in Ireland, while DFHERIS is involved in lifelong learning policy related to higher and FET for adults. DFHERIS's responsibilities include overseeing a number of bodies that play an active role in lifelong learning, such as SOLAS, the Higher Education Authority (HEA), Quality and Qualifications Ireland (QQI), and Regional Skills Fora (RSF). SOLAS, as the FET Authority of Ireland, manages and funds a range of FET programmes and, through the Skills and Labour Market Research Unit (SLMRU), provides analysis on skills needs. HEA overseas lifelong learning opportunities provided through the higher education system. The QQI is responsible for ensuring the quality of lifelong learning opportunities, approving accreditation, and developing RPL policies. RSF are often employers' primary contacts for information and guidance about lifelong learning opportunities and feed data on lifelong learning into the policy sphere (data on lifelong learning are explored in more depth in Chapter 5 on governance).

The relevant responsibilities of DETE include overseeing Enterprise Ireland (EI) and the Local Enterprise Offices (LEOs), which are responsible for enterprise development and, in that capacity, also play a role in signposting enterprises towards lifelong learning provision, guidance and support to address key business needs. DETE also houses the secretariat that supports Ireland's Expert Group on Future Skills Needs, which advises the government on current and future skills needs. Meanwhile, the DSP is responsible for Intreo, the public employment service, and for social protection and active labour market policies, which include job seeker training and guidance programmes.

To ensure high-quality and relevant lifelong learning opportunities, these entities work with additional stakeholders such as employers, representative enterprise and trade organisations and lifelong learning providers.

Main providers in the lifelong learning system

In Ireland, a variety of providers offer formal and non-formal adult learning opportunities. Formal education and training providers include higher education institutions (HEIs), education and training boards (ETBs), eCollege, sector-specific agencies or organisations and private providers delivering accredited courses. There are over 20 HEIs in Ireland, including 7 universities as well as technological universities, institutes of technology and colleges of education. There are 16 ETBs in Ireland, which were established by the Education and Training Boards Act of 2013 to deliver FET throughout Ireland (Citizens Information, 2022[10]). Non-formal education and training providers include ETBs, Skillnet Ireland Business Networks and private providers. In addition, non-formal learning opportunities may be provided directly by employers. A more detailed explanation of adult learning providers in Ireland is outlined in Table 3.2.

Table 3.2. Adult learning providers in Ireland

Provider or programme	Responsible/funding body	Target group	Description
eCollege	SOLAS	General public	A completely online institution that delivers online training courses on demand in business, project management, information technology, graphic design, web design, digital marketing, software development, and basic computer literacy. Courses are delivered through the eCollege website directly, and all courses lead to industry certification.
Education and training boards (ETBs)	SOLAS, Education and Training Boards Ireland (ETBI)	FET learners (NFQ 1-6)	ETBs are active in the different regions of Ireland, providing further education and training (FET) to learners over age 16, including apprenticeships, traineeships, Post Leaving Certificate (PLC) courses, community and adult education, and core literacy and numeracy services. The ETBs establish and operate second-level schools, FET colleges, training centres, PLC centres, Vocational Training Opportunities Scheme (VTOS) centres, Youthreach centres, and various other adult and FET centres throughout Ireland. FET enrolments for those aged 25 or over were about 97 700 in 2020 (64% of total FET enrolments).
Higher education institutions (HEIs)	Higher Education Authority (HEA)	Individuals (NFQ 6-10)	The higher education sector in Ireland comprises seven traditional universities, three technological universities, seven institutes of technology, and several smaller institutions providing programmes across a wide range of disciplines. HEA reports that 84 500 students aged 24+ enrolled in HEIs in 2021/22 (about 34% of total enrolments), about half of whom were part-time students.
Ibec Academy	Ibec	Enterprises	The Ibec Academy provides members with a wide range of professional services and management training on all aspects of human resource management, occupational health and safety, employee relations and employment law.
Local Enterprise Offices (LEOs)	Enterprise Ireland (EI)	Enterprises	LEOs act as local first-stop-shops for providing support with starting, growing and developing a business. They offer mentoring and training programmes for developing business and management skills.
Private providers	n/a	Individuals and enterprises	Private providers in Ireland offer a range of lifelong learning education and training programmes.
Sector-specific agencies or organisations	n/a	Enterprises	Agencies or organisations supporting specific industries in Ireland offer adult education and training opportunities. Examples include Teagasc in the agriculture industry and BIM in the seafood industry.
Skillnet Business Networks	SkillNet Ireland, funded by the National Training Fund through the Department of Further and Higher Education, Research, Innovation and Science	Enterprises	The Skillnet Business Networks, located throughout Ireland, engage directly with companies to identify their needs and develop customised training across Ireland and across sectors. They provide a number of specific programmes, including MentorsWork, Skills Connect, and Climate Ready.

Note: The table aims to provide an overview, not an exhaustive list. Providers are listed in alphabetical order. NFQ stands for National Framework of Qualifications.
Source: SOLAS (2021[11]), *This is FET: Facts and figures 2020*, www.solas.ie/f/70398/x/cdfb3456d9/15665-fet_facts_report_2020.pdf; HEA (n.d.[12]), *Key Facts and Figures*, https://hea.ie/statistics/data-for-download-and-visualisations/key-facts-figures/.

Ireland's performance in lifelong learning

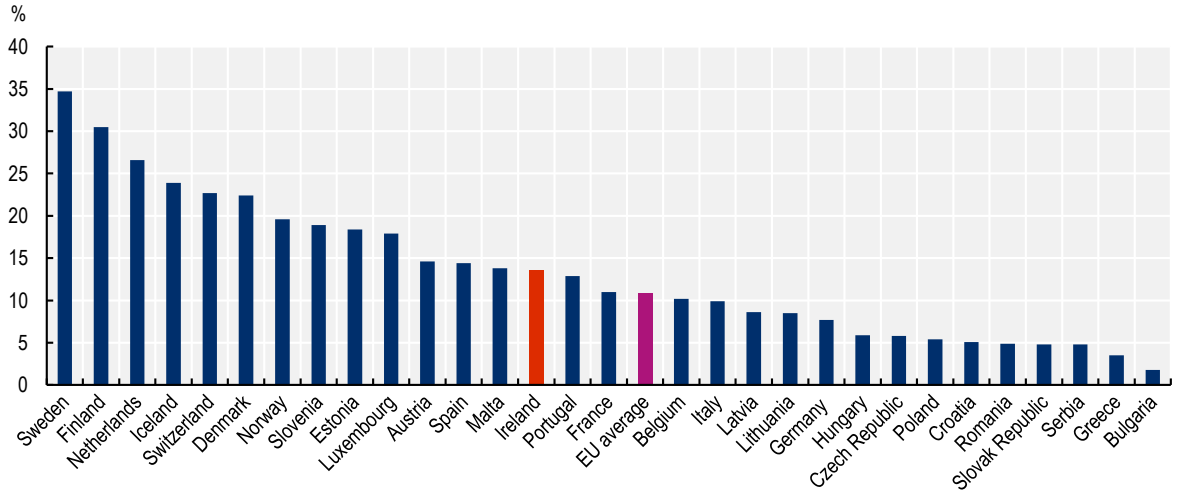
By international comparison, Ireland's lifelong learning system appears robust. First, lifelong learning opportunities in Ireland are generally perceived as high quality. Ireland ranks among the top countries with regard to the share of individuals (32%, second only to Malta) who rated the adult learning system in general as being "very good", and the share reporting that the most recent training in which they participated was "very good" (52%, second only to Malta) (CEDEFOP, 2020[13]). Nonetheless, participation in lifelong learning in Ireland is not as high as expected, given these favourable perceptions.

Participation in learning by adults could be further expanded

The participation of the adult population (25-64 year-olds) in education and training (in the last four weeks) in Ireland (13.6%) was above the EU average (10.8%) in 2021, but lags behind top EU performers, such as Sweden (34.7%) and Finland (30.5%) (Figure 3.1) (Eurostat, 2022[14]). While participation dropped in 2020, as it did across the European Union (given COVID-19 lockdowns), Ireland appears to have recovered in 2021 faster than the EU average. However, this recovery is not uniform – while levels of non-formal education and training, which experienced a 30% drop in participants during the pandemic, have not yet returned to their pre-COVID level, participation in formal education and training increased beyond pre-COVID levels.

Figure 3.1. Participation in adult learning in Ireland and selected European countries, 2021

Percentage of adults aged 25-64 who participated in formal and/or non-formal education and training in the past four weeks



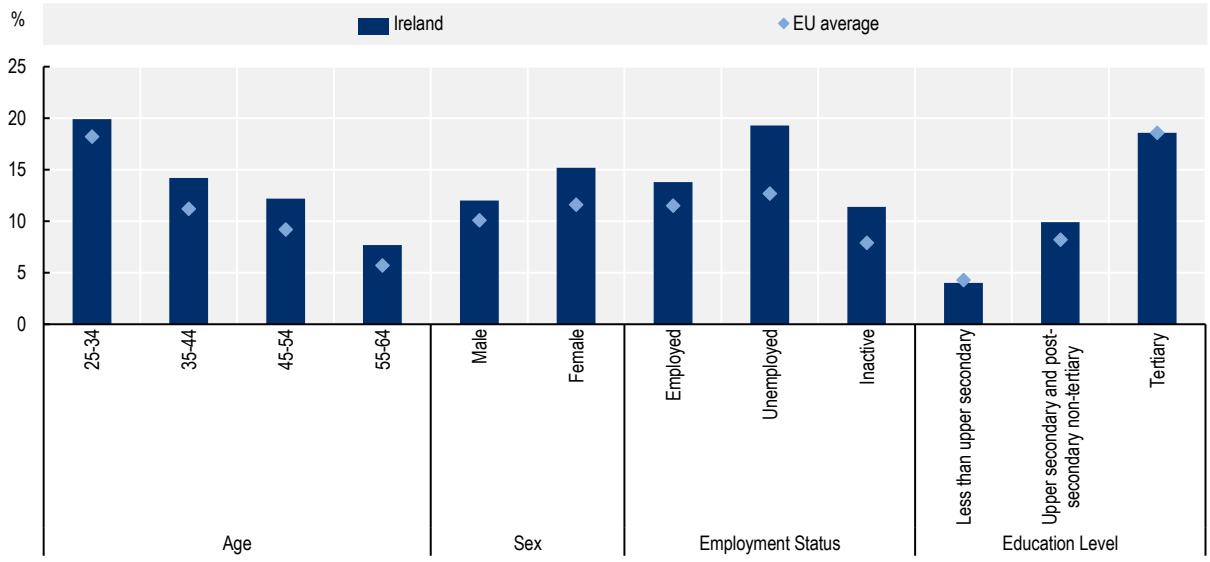
Source: Eurostat (2022[14]), *Labour Force Survey: Participation rate in education and training (last 4 weeks) by sex, age and labour status*, https://ec.europa.eu/eurostat/databrowser/view/trng_lfs_03/default/table?lang=en.

StatLink https://stat.link/fyx9he

Furthermore, there are differences in participation rates in non-formal and formal adult education and training across demographic characteristics. As can be seen in Figure 3.2, participation rates in lifelong learning are lower as age increases, with the participation rate for adults aged 55-64 less than half of the participation rate of 25-34 year-olds (8% and 20%, respectively) (Eurostat, 2022[14]). In addition, the adults with the lowest skill levels are often not participating in learning activities in Ireland. For example, while 19% of adults with a tertiary degree participate in education and training, only 4% of adults with less than upper secondary education do. Also, men participate less frequently than women, and those who are economically inactive less than those who are economically active (though participation is relatively high among the unemployed) (Eurostat, 2022[14]). These trends are comparable with those in other EU countries. However, for most sub-groups, the participation rate is slightly higher in Ireland than in the European Union on average, particularly for unemployed adults.

Figure 3.2. Participation rate in formal and non-formal education and training across different demographic characteristics, Ireland and EU average, 2021

Share of adults aged 25-64 who participated in formal and/or non-formal education and training over the last four weeks



Source: Eurostat (2022[14]), *Labour Force Survey: Participation rate in education and training (last 4 weeks) by sex, age and labour status*, https://ec.europa.eu/eurostat/databrowser/view/trng_lfs_03/default/table?lang=en.

StatLink https://stat.link/6vmzqa

With regard to informal learning (e.g. learning on the job; interacting with a family member, friend or colleague; or visiting libraries), over 60% of adults in Ireland report engaging in informal learning in the last 12 months (Eurostat, 2022[15]). This figure is similar to but slightly surpasses the EU average. However, just as with formal and/or non-formal education and training, while informal learning in Ireland is slightly above the EU average, it falls below the EU average for those with less than upper secondary education.

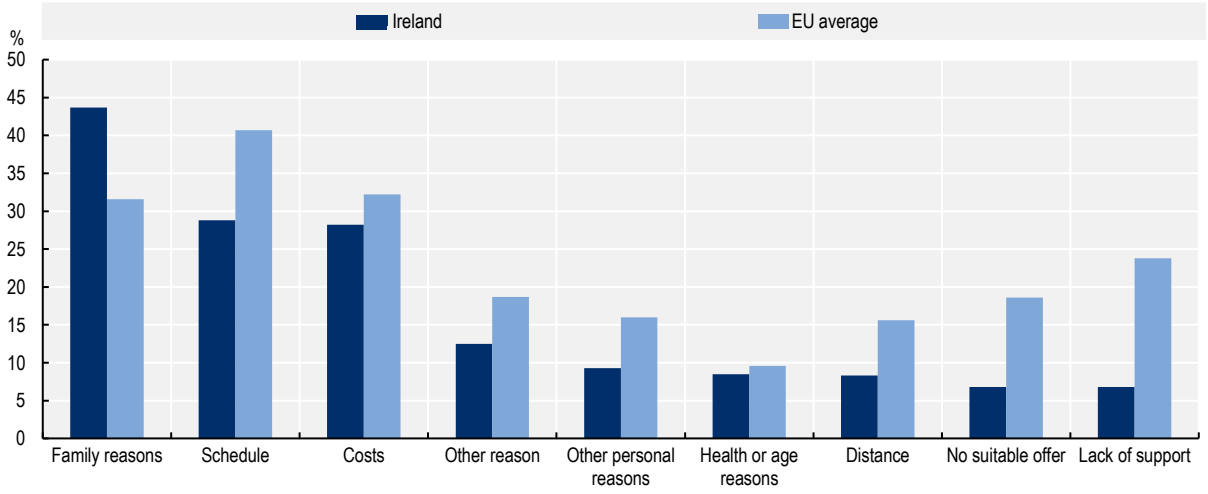
A comparatively large share of adults in Ireland is motivated to learn

By international comparison, the motivation to participate in lifelong learning in Ireland is quite high. The percentage of individuals in Ireland who did not and did not want to participate in education and training in 2016 (32.4%) was among the lowest in the European Union (Eurostat, 2022[16]).

While, for most countries, the lack of a willingness to participate in adult learning is the leading reason for not participating, this is not the case in Ireland. At 49%, Ireland tops the list of only five countries where individuals report difficulty fitting in training with other commitments as a greater barrier to participating in adult learning than not needing such training (CEDEFOP, 2020[13]). The three main reasons adults in Ireland who do want to participate in lifelong learning cite for not participating are family reasons, schedule and costs (Figure 3.3) (Eurostat, 2022[16]). Compared with other EU countries, family reasons are, in particular, frequently mentioned as an obstacle in Ireland (44% versus 32% across the European Union of adults wanting to but not participating).

Figure 3.3. Obstacles to participation in adult education and training, Ireland and EU average, 2016

Percentage of adults aged 25-64 who did not participate but wanted to participate in adult education and training



Source: Eurostat (2016[17]), *Adult Education Survey 2016: Population wanting to participate in education and training, by reason for not participating and sex*, https://ec.europa.eu/eurostat/databrowser/view/trng_aes_176/default/table?lang=en.

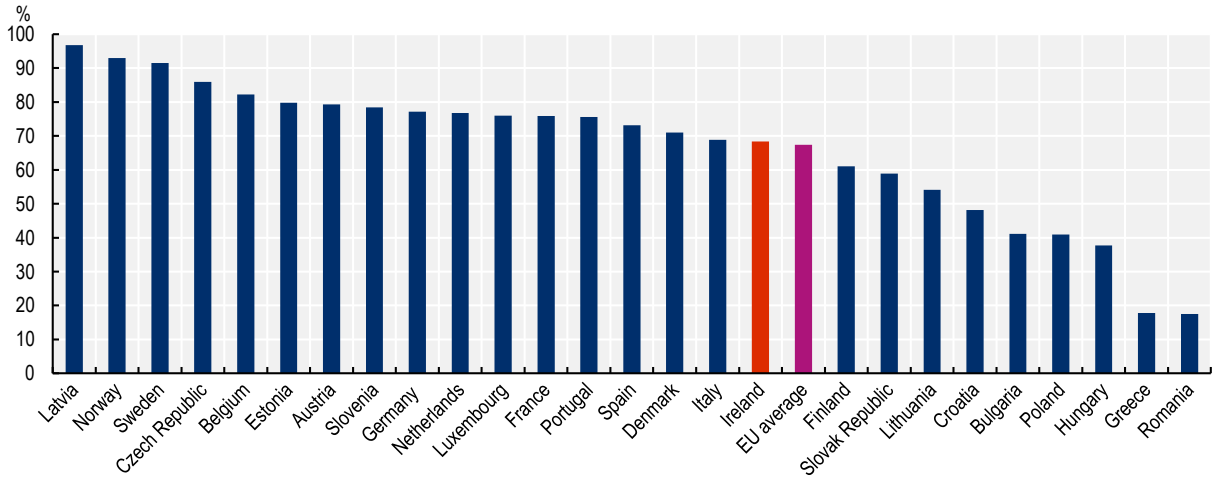
StatLink https://stat.link/45qw7b

Not all employers are actively supporting a culture of lifelong learning among employees

Employers in Ireland also seem to agree that lifelong learning is worthwhile. A higher share of employers in Ireland (53%) than in the European Union on average (35%) rate the value of training as "high" (Eurofound, 2019[18]). Employers in Ireland provide their workers with training opportunities at a similar level to the EU average, but far behind the rates of the best-performing countries. According to the EU Continuing Vocational Training Survey, about 68% of enterprises in Ireland provide continuing vocational training, compared to an EU average of 67% (Figure 3.4). A slightly older Irish National Employer Survey shows even higher rates with 86% of employers reporting they provide some support to staff to engage in continuing professional development, lifelong learning, upskilling or reskilling. Of the companies supporting lifelong learning opportunities, 73% say they provide in-company training, 46% report that they fully fund the cost of learning, 38% report partially funding the cost of learning, and 35% report providing paid study leave.

Figure 3.4. Training provision in enterprises in Ireland and selected European countries, 2020

Percentage of enterprises providing continuing vocational training (CVT)



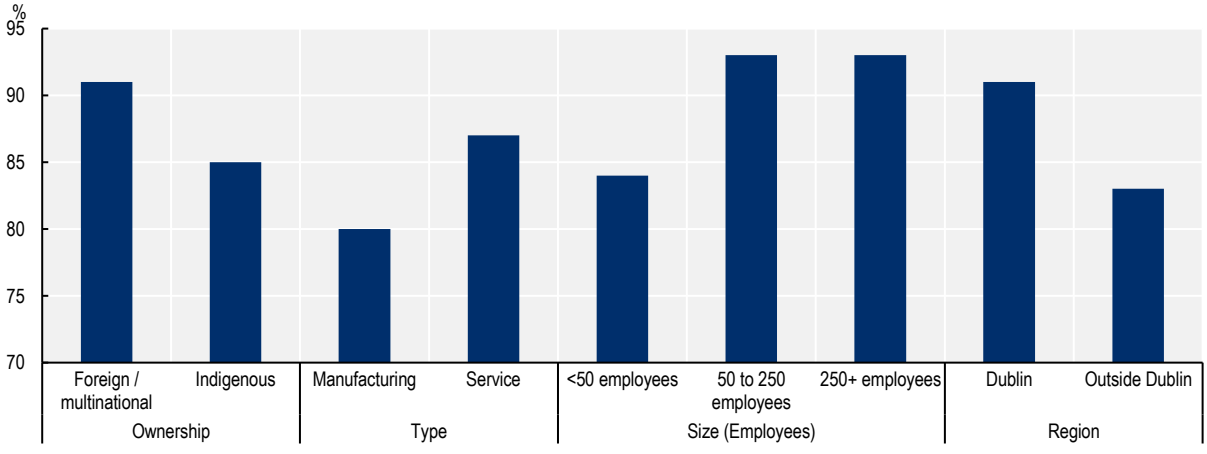
Source: Eurostat (2020[19]), *Continuing Vocational Training Survey 2020*: *Enterprises providing training by type of training and size class - % of all enterprises*, https://ec.europa.eu/eurostat/databrowser/view/TRNG_CVT_01S/default/table?lang=en&category=educ.educ_part.trng_cvt.trng_cvt_00.

StatLink https://stat.link/jge2vk

While a relatively high share of employers in Ireland provides continuing training to employees, provision is not uniform. As can be seen in Figure 3.5, employer support is lower in indigenous companies (85%) compared to multinationals (91%), in manufacturing (80%) compared to service (87%) industries, in small enterprises (84%) compared to larger ones (93%), and outside of Dublin (83%) compared to in Dublin (91%). Time limitations are cited by enterprises that provide training as the primary barrier they face to providing more training (66%) and is cited by enterprises not providing training as a central reason for doing so (29%), following only that existing employees or recruits already having the requisite skills (Eurostat, 2020[19]).

Figure 3.5. Share of companies supporting continuing professional development in Ireland, 2018

Percentage of enterprises supporting continued professional development by type



Source: Fitzpatrick Associates (2019[20]), *Irish National Employer Survey 2018*, www.solas.ie/f/70398/x/ba617d5d3d/irish-national-employer-survey-final-report-3.pdf.

StatLink https://stat.link/b7cheg

Opportunities to foster greater participation in lifelong learning in and outside the workplace

Ireland's performance in lifelong learning results from several factors, including individual, institutional, system-level and societal characteristics. However, three critical opportunities for improvement have been identified based on a review of the literature, desk research, discussions with the Cross-Departmental Project Team and a broad range of stakeholders consulted during this Skills Strategy project (hereafter "project participants") – e.g. government departments and agencies, employer organisations, educational establishments and other interested parties – during workshops, group discussions and several related meetings. The following opportunities are considered to be the most relevant for Ireland's specific context:

1. strengthening incentives to participate in lifelong learning for individuals
2. strengthening incentives to participate in lifelong learning for employers
3. making lifelong learning more flexible and accessible.

Opportunity 1: Strengthening incentives to participate in lifelong learning for individuals

The most direct way to foster greater participation in lifelong learning in Ireland is to encourage more individuals to participate in lifelong learning opportunities. Individuals have much to gain from engaging with learning throughout life, including personal development and the acquisition of skills that can improve their employability, wages and career development in the labour market (OECD, 2021[21]). Yet, despite these benefits, even countries with the highest levels of interest and motivation among individuals to participate in adult education and training have a large portion of the population who remain uninterested and whose interest in lifelong learning could still be engaged. For example, out of the OECD countries, Switzerland has the lowest share of individuals who did not and did not want to participate in education and training, and even in this case, one-fifth of the population remains unmotivated. Though Ireland ranks fairly well by international comparison on individuals' motivation to participate in lifelong learning, one-third of the population remains unmotivated (Eurostat, 2016[17]).

While all individuals can benefit from lifelong learning, the individuals who tend to participate most in adult learning in OECD countries are those who face low barriers to participation, can expect high individual returns to participation, and whose participation results in relatively low social returns (OECD, 2021[21]). In practice, individuals in OECD countries who participate in lifelong learning at high rates tend to be young, employed, have high levels of education, and come from high socio-economic backgrounds (OECD, 2021[21]). Trends in lifelong learning participation in Ireland follow similar patterns to those seen in other OECD countries. A key challenge for policy makers looking to maximise the societal returns of skills policy (as opposed to individual returns) is to determine what measures would most successfully encourage lifelong learning uptake among groups of individuals whose participation in such learning would lead to the greatest societal returns (OECD, 2021[21]). This includes reducing the barriers these groups face and increasing their motivation to participate.

There are both intrinsic and extrinsic motivations that lead individuals to participate in lifelong learning. Intrinsic motives may include, among others, being interested in the subject matter of a course, believing a course will contribute to one's personal development, and wanting to feel a sense of fulfilment and progress. Extrinsic motives may include, among others, believing that the economic benefits of participating in training will outweigh the costs, being offered training by an employer or required by the employer to participate, and being advised that acquiring a given skill will make one eligible to apply for a new job (Rothes, Lemos and Gonçalves, 2014[22]). A useful tool at the disposal of policy makers for raising intrinsic motives is raising awareness about the benefits of lifelong learning. However, generally, policy makers are more involved in addressing extrinsic motives. A central reason that individuals invest in lifelong learning is that they expect to see returns to this learning in the future. Policy makers use a number of tools

to tip this calculation in favour of participating in lifelong learning by making it worthwhile for individuals to invest in lifelong learning. These include subsidies, savings or asset-building mechanisms, tax measures, subsidised loans, time accounts and training leave entitlements (OECD, 2017[23]).

Project participants highlighted the importance of promoting the benefits of lifelong learning on a society-wide level, as well as particularly encouraging the participation of disadvantaged groups who are under-represented in lifelong learning. These goals are reflected in a number of national strategies, including, among others, the NSS 2025, the Pathways to Work and Adult Literacy for Life strategies.

While Ireland already has a number of measures in place to encourage participation in lifelong learning among individuals, there remain opportunities for improvement that are both universal and specific. Thus, it will be important for Ireland to simultaneously improve the perception and prominence of lifelong learning in Ireland's society to strengthen all individuals' motivation to participate in lifelong learning and provide tailored and targeted support to disadvantaged groups to address the specific barriers they face to participating in lifelong learning.

Recommendation 1: Incentivise adults to participate in lifelong learning to improve the prominence of lifelong learning in Ireland's society

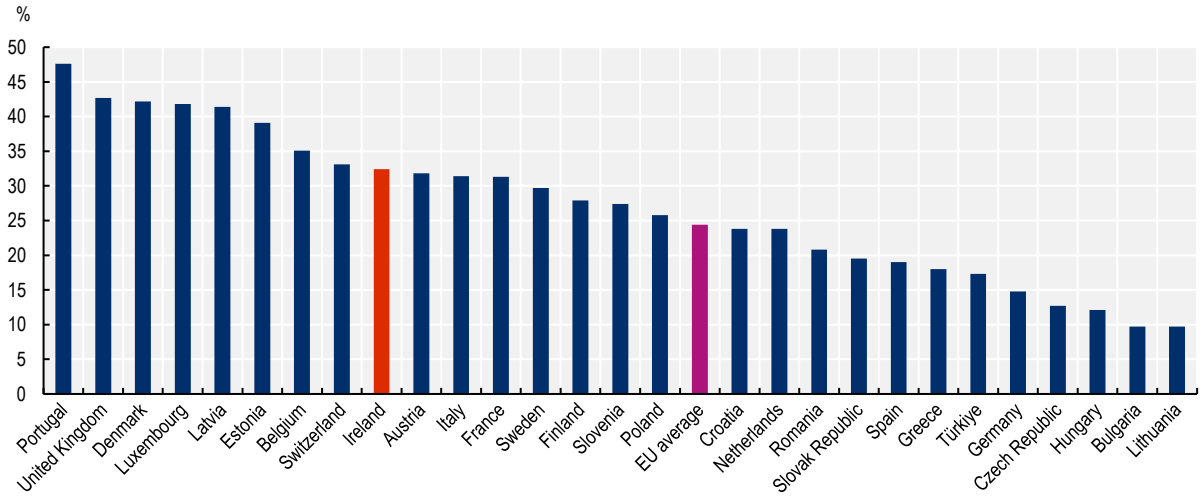
In Ireland, adult participation in lifelong learning is above the EU average but falls well below top performers such as Finland, Iceland, the Netherlands, Sweden and Switzerland. To become a world leader in lifelong learning, it will be important for Ireland to raise the profile of lifelong learning. This may include measures to make lifelong learning a greater part of the public discourse as well as exhibiting that lifelong learning is a national priority through the political promotion of and commitment to improving Ireland's performance on lifelong learning indicators.

While motivation to participate in lifelong learning is relatively high in Ireland by international comparison, as discussed above, the share of individuals in Ireland who face obstacles to participating in lifelong learning experiences is also relatively high, particularly when compared to top lifelong learning performers (Eurostat, 2016[17]). As can be seen in Figure 3.6, the share of individuals in Ireland facing obstacles to participating in lifelong learning – that is, those who either did not participate in education and training but wanted to participate or those who did participate but wanted to participate more – is higher than the EU average and than other top performers.

Thus, there appears to be a significant amount of untapped potential for participation in lifelong learning in Ireland. As mentioned above, other OECD countries use a range of incentives to encourage individuals to participate in lifelong learning, including subsidies, tax incentives, loans, savings and asset-building mechanisms, study/training leave and time accounts (OECD, 2017[23]). Schemes that are attached to individuals (as opposed to specific employers or employment status) fall into the category of individual learning schemes (ILSs) and have gained much attention in recent years due, in large part, to EU initiatives to promote the adoption of individual learning accounts (ILAs) in member countries (OECD, 2019[24]; European Commission, 2021[25]; CEDEFOP, 2021[26]). While the term "individual learning accounts" is often used more broadly to refer to all different types of individual learning schemes, pure ILAs are quite rare and most ILSs, in practice, take the form of vouchers or other subsidies (Box 3.3).

Figure 3.6. Individuals facing obstacles to participating in education and training in Ireland and selected European countries, 2016

Percentage of adults aged 25-64 who either did not participate but wanted to participate in adult education and training or who did participate but wanted to participate more



Source: Eurostat (2016[17]), *Adult Education Survey 2016: Population by will to participate in education and training*, https://ec.europa.eu/eurostat/databrowser/view/TRNG_AES_175/default/table?lang=en&category=educ.educ_part.trng.trng_aes_12m3.

StatLink https://stat.link/nm37wo

Box 3.3. Individual learning schemes

A common characteristic across individual learning schemes is that the benefit is linked to individuals instead of employers and is not dependent on the individual's employment status.

While most individual learning schemes implemented across OECD countries are called "individual learning accounts" (ILAs), in practice, these ILAs encompass a number of different types of individual learning schemes, with the most frequently implemented scheme being voucher schemes.

Individual learning accounts

Individual learning accounts are "virtual" accounts in which training rights are accumulated over time. The accounts are virtual because their resources are only activated if and when an individual undertakes education or training.

Individual Savings Accounts for Training (ISAT)

Individual Savings Accounts for Training are physical savings accounts in which individuals accumulate funds over time that can be used towards education and training at a later point. Employers and public authorities may, in some cases, also deposit funds in these accounts. Funds that are not used for training are owned by the individual and, in some cases, may be used for other purposes.

Training vouchers

With training vouchers, individuals receive direct subsidies for participating in education and training, which often require co-funding by the education or training participant. Training vouchers usually do not allow for rights or resource accumulation over time.

Time accounts

Time accounts allow individuals to accumulate time, rather than money, to be used towards education and training at a later point. The accumulated time can be linked to overtime hours.

Source: OECD (2019[24]), *Individual Learning Accounts: Panacea or Pandora's Box?*, https://doi.org/10.1787/203b21a8-en; OECD (2017[23]), *Financial Incentives for Steering Education and Training*, https://doi.org/10.1787/9789264272415-en.

Ireland already has in place a number of financial incentives targeting individuals to participate in lifelong learning, none of which are traditional ILSs. Ireland's current schemes, outlined in Table 3.3, generally tend to encourage participation in lifelong learning by making specific courses free or reducing their cost and enabling specific groups of individuals to apply to participate in these subsidised/free courses (e.g. eCollege, Human Capital Initiative [HCI], Springboard+, Back to Education Initiative [BTEI], Skills to Advance, Skills to Compete). None of these existing schemes are classic ILAs, ISATs, training vouchers, or time accounts, and none provide an entitlement directly to individuals that is theirs to use as they please, within certain parameters.

ILAs, or ILSs more broadly, have gained more prominence following the 2022 European Council recommendation on individual learning accounts to boost the training of working-age adults (European Council, 2022[27]). Member states will be evaluated on their progress in implementing this recommendation five years after it was adopted. Ireland welcomed the European Council recommendation and is committed to advancing the framework conditions set out in the recommendation (DFHERIS, 2022[28]).

ILSs have a number of characteristics that make them very attractive options for policy makers. However, they can also be expensive and ineffective when designed poorly or without a country's specific context in mind. Some of the advantages of ILSs are that they can inspire "ownership" of lifelong learning among individuals by increasing individuals' choice and responsibility in their education and training decisions (OECD, 2019[24]). The schemes are seen by many as a promising way to extend access to lifelong learning to all, including low-income and other disadvantaged groups, to improve the skill levels and employability of individuals, and to promote healthy competition among education and training providers given that individuals have a substantial choice in the providers they choose (OECD, 2019[24]). ILSs are also a promising way to extend access to lifelong learning to workers in non-standard forms of work (e.g. temporary work, self-employment, "gig economy" workers) who have only tenuous or non-continuous relationships with an employer (OECD, 2019[24]). Non-standard forms of work are on the rise across countries, as well as in Ireland, where the share of self-employment is similar to the OECD average (Seitani and Westmore, 2020[29]). Therefore, it is advisable for Ireland to review and consider amending regulations that place limitations on individuals who want to work in the gig economy (Seitani and Westmore, 2020[29]). Furthermore, ILSs are seen by policy makers as reflecting individuals' "right" to lifelong learning and in tackling the challenges of individuals' lack of motivation, lack of time and lack of funding for participating in lifelong learning (CEDEFOP, 2021[26]). Given that time obstacles are particularly strong barriers to participation in lifelong learning in Ireland, Ireland may want to implement an ILS that directly addresses this obstacle.

Table 3.3. Main financial incentives in Ireland for individuals to participate in lifelong learning

Scheme	Type	Target group	Description
Back to Education Initiative (BTEI)	Subsidy	Young people and adults who did not gain the Leaving Certificate and are social welfare benefit recipients	These are flexible, part-time learning opportunities offered free of charge and aimed to help participants return to learning while balancing family, work and other responsibilities.
eCollege	Subsidy (for target groups)	NFQ Levels 5 and below	eCollege provides online, on-demand courses available free of charge to the unemployed, that have been temporarily made available free of charge to the entire population in the wake of the COVID-19 pandemic.
Human Capital Initiative (HCI)	Subsidy	Higher education students (NFQ Levels 8-9)	HCI offers free and subsidised courses at NFQ Levels 8-9.
Learner Fund	Subsidy	Workers in early childcare	Staff in early childcare can receive a grant to participate in education and training activities towards Level 6 (NFQ) awards in childcare to meet new minimum qualification requirements as of 2016. Grants cover 75% of costs.
Skills Connect	Subsidy	Unemployed individuals	Skills Connect is a labour market activation programme that provides free education and training courses for unemployed individuals that are offered through Skillnet Business Networks.
Skills to Advance	Subsidy	Employed individuals, particularly those with below Level 5 NFQ	Subsidised upskilling and reskilling opportunities are provided for employees in vulnerable sectors through education and training boards (ETBs) or eCollege.
Skills to Compete	Subsidy	Employees displaced by COVID-19	Free reskilling courses are offered to individuals displaced or at risk of displacement from their employment due to the COVID-19 pandemic. The courses are offered through ETBs.
Springboard+	Subsidy	Higher education graduates (NFQ Levels 6-9)	The programme provides free (for unemployed) and subsidised (for employed) upskilling and reskilling higher education opportunities in areas of identified skills need.
Student Grant Scheme	Subsidy	Disadvantaged students in higher education and further education and training	A means-tested grant is provided to full-time students in further and higher education courses to cover fees and living costs. Funding streams available to part-time students include the Student Assistance Fund, Higher Education Access Route and Disability Access programmes.
Tax relief for tuition fees in respect of tertiary education	Tax incentive	Students in third-level education	Students can claim tax relief for their education and training fees for approved courses. Eligible courses include certain undergraduate and postgraduate courses and certain training courses in foreign languages and information technology.
Vocational Training Opportunities Scheme (VTOS)	Subsidy	Unemployed individuals, particularly early school leavers	Provides full-time basic education and training and advanced vocational training for up to two years at NFQ Levels 3-6.

Note: Schemes are listed in alphabetical order. NFQ stands for National Framework of Qualifications.
Source: CEDEFOP (2022[30]), *Financing adult learning* (database), www.cedefop.europa.eu/en/tools/financing-adult-learning-db; DFHERIS (2021[31]), *Learn new skills or retrain*, www.gov.ie/en/publication/89b3c-learn-new-skills-or-retrain/.

On the other hand, there are many trade-offs and potential pitfalls when implementing ILSs. For example, these types of schemes can create deadweight loss when not targeted sufficiently (e.g. the scheme would be used by people who also would have participated without the incentive). Furthermore, they can be relatively ineffective without substantial matching funding from the government. They can also have limited participation if the scheme is too complex. Finally, they can be less effective if not combined with other measures to promote lifelong learning (OECD, 2019[24]). In addition, ILSs are often costly and can be administratively burdensome to set up and should thus be regarded with caution.

In the specific context of Ireland, the advantages and disadvantages of implementing ILSs would need to be considered before implementing such a measure. As discussed above, individuals in Ireland who wish to participate in lifelong learning face primarily family, schedule, and cost barriers to participation in adult education and training (Figure 3.3). Many project participants emphasised that an entitlement tied to the individual and/or one ensuring a "right" to lifelong learning could help individuals overcome these barriers

and justify participation in lifelong learning. Furthermore, project participants noted that instituting an ILS could send a symbolic message to the public that lifelong learning is a national priority for Ireland, which can impact the public's perception of lifelong learning. On the other hand, having a requirement to accommodate employees' guaranteed right to training can be very challenging for employers, particularly in a tight labour market such as Ireland's. Furthermore, Ireland already has a number of incentives for individuals in place, and introducing an ILS could further complicate a crowded policy space. Many project participants, including those representing employers, expressed caution about implementing such a measure.

Because instituting an ILS is such a big and costly step, and its outcomes depend greatly on it being implemented in a tailored way that fits a country's specific context, it would be important to, as a first step, conduct in-depth research into possible outcomes of ILSs, as well as other measures of establishing individual rights for training, specifically in the Irish context.

Another way to promote individuals' optimal participation in lifelong learning is to expand existing programmes and incentives that are particularly successful in engaging individuals in learning, especially in attracting new learners and introducing them to a positive lifelong learning experience. Two programmes that seem to reach broad audiences and are fairly distinct from one another are Springboard+ and eCollege. Springboard+ provides free (for the unemployed) or subsidised (for the employed) courses in HE in areas of labour market importance. While Springboard+ aims to incentivise more individuals to participate in HE, eCollege provides online courses for the FET sector. In the wake of the COVID-19 pandemic, both programmes were expanded (Springboard+ by supplementing additional learning spots and eCollege by making the courses free of charge for all) to meet additional upskilling needs exacerbated by the crisis (Box 3.4). As project participants reflected, this increased supply has been met with increased demand, indicating that expanding these successful programmes could help more adults engage with lifelong learning.

As discussed, although motivation to participate in lifelong learning is relatively high in Ireland, nearly one-third of the adult population in Ireland still does not and does not want to participate in education and training (Eurostat, 2016[17]). Ireland's NSS 2025 has very little mention of engaging with public awareness campaigns to promote lifelong learning. It is mentioned only as one of several measures under Action 4.1, "Promote lifelong learning" (Department of Education and Skills, 2016[8]). Nonetheless, while education and training providers run their own public awareness campaigns, there has not yet been a broad-scale national campaign to promote lifelong learning across Ireland, such as in other countries including Switzerland (Box 3.5). Perhaps the most effective awareness-raising campaign in Ireland related to lifelong learning has been the National Adult Literacy and Numeracy Awareness Campaign funded by SOLAS as part of the FET Strategy 2014-19. An independent evaluation of the latest phase of this campaign (Phase 5) found that 78% of individuals who themselves have literacy and numeracy difficulties reported being aware of free literacy classes in local ETBs, an 18% increase from before the implementation of this phase of the campaign (SOLAS, 2021[32]).

Box 3.4. Relevant national example: Expanding programmes that successfully engage individuals

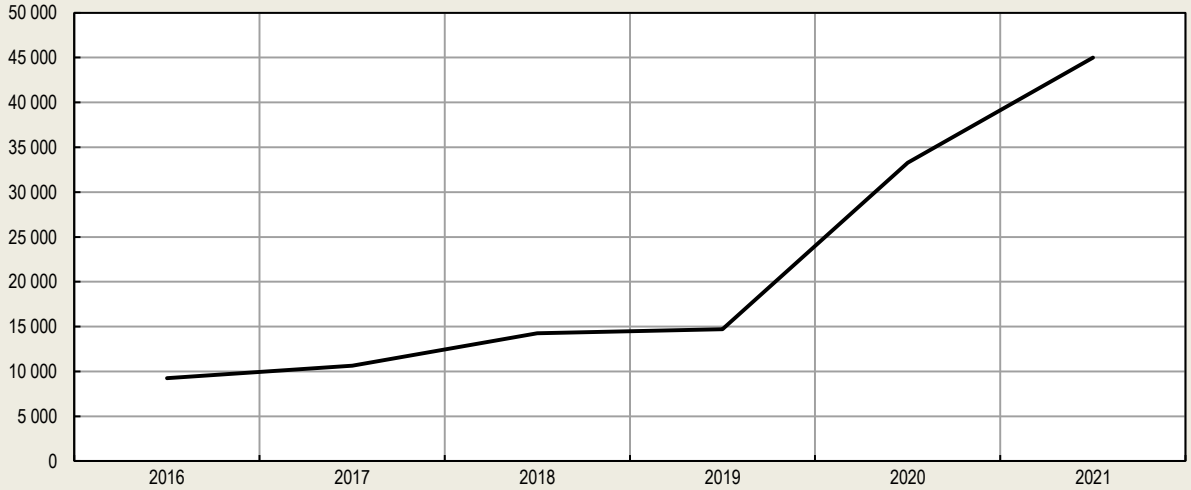
Ireland: Extending eCollege during the COVID-19 pandemic

eCollege is an online learning platform and service funded by SOLAS. It offers FET courses in areas with high labour market demand, including project management and digital and business skills. Furthermore, the courses offered by eCollege can be accessed on a continuous intake basis, as opposed to having one start date, and have flexible completion timelines. All courses on eCollege lead to industry certification.

The eCollege programme was launched in Ireland in 2005 to provide more flexible online training, specifically in the agri-food industry, but later evolved into an online training service offered free of charge to unemployed individuals in Ireland, with paid access available to employed individuals. While courses were open to employed individuals willing to pay, the use of eCollege among those not receiving the service for free was quite limited, standing at under 10% of participants in 2016-19. In 2019, free access to eCollege was expanded to include vulnerable individuals in employment. This expansion did not lead to any substantial increase in the number of learners in 2019.

Following the onset of the COVID-19 pandemic in 2020, eCollege was made available free of charge to all individuals in Ireland over age 18. As can be seen in Figure 3.7, the number of eCollege learners increased substantially in 2020 and 2021 following this policy change. While there has not been research on who these individuals are and whether or not they are first-time lifelong learners, this trend is promising in showing: 1) that there is more demand for a service like eCollege than was previously being tapped into; and 2) this could provide a more flexible and accessible training option that could introduce more individuals in Ireland to lifelong learning.

Figure 3.7. Number of eCollege learners, 2016-21



Source: SOLAS (2022[33]), *Annual Report and Accounts 2021*, www.solas.ie/f/70398/x/9a0af12b29/solas_annual-report-2021_english.pdf; SOLAS (2021[34]), *Annual Report and Accounts 2020*, www.solas.ie/f/70398/x/78309d67cb/15514_solas_annual_report_2020_web.pdf; SOLAS (2020[35]), *Annual Report and Accounts 2019*, www.solas.ie/f/70398/x/c755bd73ba/solas-annual-report-english.pdf; SOLAS (2019[36]), *Annual Report and Accounts 2018*, www.solas.ie/f/70398/x/d21ad1190d/annual-report-english.pdf; SOLAS (2018[37]), *Annual Report and Accounts 2017*, www.solas.ie/f/70398/x/dcb57e6b9e/14438_solas_annual_report_2017_english_web.pdf; SOLAS (2017[38]), *Annual Report 2016*, www.solas.ie/f/70398/x/1590e1d822/solas-annual-report-2016.pdf.

StatLink https://stat.link/wbg8za

Box 3.5. Relevant international examples: Encouraging widespread participation in lifelong learning

Canada: The Lifelong Learning Plan (LLP)

The Lifelong Learning Plan in Canada allows individuals to withdraw up to CAD 10 000 (Canadian dollars) a year (with a maximum total cap at CAD 20 000) from their Registered Retirement Savings Plans (RRSPs) to be used towards training or education for themselves or a spouse/common-law partner. The LLP funds can only be used for full-time education or training programmes. Unlike other RRSP withdrawals, the funds withdrawn under the LLP scheme are exempt from taxes. Individuals who withdraw funds under LLP must repay these funds within ten years, or the funds do indeed become subject to tax. In this sense, the LLP acts as a no-interest loan to individuals to be used for the specific purpose of education and training. While both the RRSP beneficiary and the beneficiary's spouse/common-law partner can benefit from LLP (even at the same time as one another), the LLP benefit cannot be applied towards the education and training of either's children. LLP is part of a larger scheme to encourage retirement savings in Canada but provides more flexibility around individuals' needs by allowing them to withdraw funds early for specific purposes.

Switzerland: National #LifelongLearning campaign

In 2019, the national #LifelongLearning campaign was launched in Switzerland on the third annual Swiss Digital Day. The campaign, which aims to raise awareness about lifelong learning among employers and employees, was jointly launched by the digitalswitzerland initiative, a cross-industry initiative to promote digital skills in Switzerland, and the Union Patronal Suisse, the Swiss Employers' Association. The campaign's goals are to increase public awareness about the importance and benefits of lifelong learning and to increase participation in lifelong learning, particularly in digital skills. As part of the campaign, over 125 employers pledged to support their employees to participate in adult education and training. Simultaneously, over 100 videos of employees sharing their stories and positive experiences with lifelong learning were disseminated.

The campaign has a website (www.lifelonglearning.ch/) which houses information on the importance of lifelong learning alongside lifelong learning stories in both video and text format, the employer pledge to support lifelong learning and numbers showing how many employers have made the pledge, and information on lifelong learning offers with a link to Switzerland's neutral web platform (www.formationcontinue.swiss/) that provides information on courses from different providers.

The formationcontinue.swiss website has a homepage with a user-friendly advanced search box that allows perspective participants to search across lifelong learning providers by various characteristics at once, including start date, price, topic, keyword, region/platform of learning (e.g. online), certified providers, courses that accept continuing education vouchers, etc. in order to find courses matching one's needs. The search results are then displayed in a chart that shows many options "at a glance" with key information such as start date, price, and other characteristics listed. Each option result can then be clicked on to find further information.

Thus, the #LifelongLearning campaign website (www.lifelonglearning.ch/) provides information on both the "why" and "how" of lifelong learning in one place and was launched on an already recognised national day to give the campaign prominence and strengthen its impact.

Source: Government of Canada (2022[39]), *Lifelong Learning Plan (LLP)*, www.canada.ca/en/revenue-agency/services/forms-publications/publications/rc4112/lifelong-learning-plan.html; Sun Life (2022[40]), *Lifelong Learning Plan (LLP)* www.sunlife.ca/en/investments/rrsp/llp/; digitalswitzerland (2023[41]), *#LifelongLearning*, https://lifelonglearning.ch/.

Recommendation 1: Incentivise adults to participate in lifelong learning to improve the prominence of lifelong learning in Ireland's society

Project participants indicated broad support for raising the profile of lifelong learning in Ireland and fostering a culture that values learning throughout life. However, despite various programmes available to individuals to support their participation in lifelong learning, Ireland does not yet have widespread national messaging or a comprehensive national policy around lifelong learning to reflect the importance of lifelong learning for individuals and society at large.

Ireland can undertake the following specific actions to improve the perception and prominence of lifelong learning in Ireland's society to strengthen all individuals' motivation to participate in lifelong learning:

1.1. **Assess the feasibility of individual learning schemes and paid training leave in Ireland's context**. To determine whether or not Ireland should adopt an ILS and, if so, the type and characteristics most suited to its needs, DFHERIS should conduct in-depth research into the feasibility of such schemes in Ireland's context. Furthermore, DFHERIS should assess the option of establishing a statutory right to lifelong learning in Ireland and linking this right to the existing and proposed supports for engaging in lifelong learning.

1.2. **Evaluate and expand programmes or financial incentives that effectively engage a wide range of individuals in lifelong learning by extending their scope, target audience and/or allocated resources (e.g. Springboard+, eCollege).** To help more individuals engage with lifelong learning and have positive experiences that encourage them to participate more in the future, programmes popular with adults in Ireland in recent years should be properly evaluated and expanded in the areas where they have had the greatest impact. As part of such an expansion, models that work well for one segment of individuals could be adapted to meet the needs of other segments (e.g. courses delivered in a format similar to eCollege could be expanded beyond National Framework of Qualifications [NFQ] Level 5). These successful programmes could point learners towards future opportunities for lifelong learning. Consideration would need to be given to the implementation of this measure so as not to eliminate individual and/or employer contributions for training, which foster buy-in to education and training outcomes.

1.3. **Implement a public awareness campaign to raise awareness about the importance and benefits of lifelong learning for all.** To raise the prominence of lifelong learning in the national discourse, DFHERIS should launch a national awareness campaign about the benefits of lifelong learning, particularly highlighting different types of learner pathways, varying entry points into lifelong learning and many types of learning (formal, non-formal, informal) in order to send a message to the public that lifelong learning can be for all types of learners.

Recommendation 2: Provide tailored and targeted support to disadvantaged groups to address the specific barriers they face to participating in lifelong learning

Within Ireland, participation in lifelong learning varies widely between different groups of individuals. This phenomenon is, of course, not unique to Ireland. As seen in Figure 3.2, in both Ireland and other EU countries, participation in adult education and training is lower among older individuals, men, individuals who are inactive in the labour market, and those with lower education levels. Nonetheless, engaging these groups in Ireland and other countries, particularly the low-skilled, is becoming more critical since low-skilled individuals are more likely to work in jobs affected by climate change and digitalisation. These individuals would therefore benefit from reskilling and upskilling but are at the same time less likely to participate in adult education and training (OECD, 2019[42]). Furthermore, in Ireland, the participation of vulnerable groups in lifelong learning in the wake of the COVID-19 pandemic was particularly affected (SOLAS, 2022[43]).

Ireland could benefit from a better understanding of different types of learner profiles within the country in order to provide more tailored and targeted support to disengaged groups. There are already some indications of who these groups are and how their participation in lifelong learning has changed in recent years. For example, recent data show that the pandemic led to a more substantial drop in learners among women; that participation is lower as NFQ level declines; and that individuals who work from home are more likely to participate in lifelong learning (SOLAS, 2022[43]).

However, even with this information, project participants noted that a significant barrier to developing more tailored lifelong learning policies is not understanding in enough detail which individuals in Ireland are or are not participating in lifelong learning currently and the reasons driving those trends. One step towards better understanding and targeting disengaged groups in terms of incentives, awareness and guidance would be to conduct research into the specific adult learning profiles of individuals in Ireland, similar to those developed in the *OECD Skills Strategy Implementation Guidance for Flanders, Belgium* project (OECD, 2022[44]) described in Box 3.6.

In Ireland, particular population groups that could benefit from targeted lifelong learning policies include individuals with low education and skill levels, parents and carers, and the inactive or long-term unemployed. With regard to education and skill levels, 70% of lifelong learning participants in Ireland have NFQ Levels 6-10, or the equivalent of third-level qualifications. There has been a greater decline in participation in lifelong learning among those with lower NFQ levels since the pandemic than those with higher NFQ levels (SOLAS, 2022[43]). Individuals participating in lifelong learning in Ireland are mostly (over 50%) either working in professional or associate professional occupations (as opposed to elementary, operative, and sales occupations). They are most likely to work in the health and education sectors (SOLAS, 2022[43]). A strong indication that parents and carers need further support to participate in lifelong learning is that family reasons are the biggest barrier to participation across education levels. This trend stands out compared to other EU countries (Figure 3.3). Equally, as shown in Figure 3.2, the share of inactive individuals in Ireland who participate in adult education and training surpasses the EU average but is still low relative to employed individuals and has declined in Ireland compared to before the pandemic.

Individuals with low education and skill levels in Ireland tend to face greater barriers to participation in lifelong learning than their more educated peers. Despite the financial incentives already in place in Ireland, including those meant specifically to target individuals with lower education or skill levels, cost remains a barrier for many individuals in Ireland to participate in lifelong learning. About 28% of individuals in Ireland who want to participate in adult education and training but do not are unable to participate due to costs (Eurostat, 2016[17]). Ireland's existing incentives for individuals include a number of schemes that particularly target lower-educated or lower-skilled individuals (e.g. Student Grant Scheme, Skills to Compete, eCollege, BTEI; see Table 3.3). Furthermore, most of these schemes are subsidised or offered free of charge (eCollege, BTEI).

Box 3.6. Relevant international examples: Profiling tools for adult learners

Flanders (Belgium): Adult learner profiles

In 2022, through an Implementation Guidance project, the OECD worked with Flemish stakeholders to develop a segmentation of the adult learning population in Flanders that identifies nine distinct adult learner profiles that can be used to help Flanders better target and tailor its lifelong learning policies in the future.

The study uses Latent Class Analysis, which makes it possible to identify sub-groups of adults with a shared set of motivations to learn and obstacles to participation in lifelong learning. Furthermore, for each of the nine profiles, the study identifies the characteristics of the individuals in this profile (e.g. age, education level, type of job). Creating profiles in this style helps to call attention to groups of adults who have been overlooked or under-engaged by previous skills policies. Learner profiles can also aid policy makers in refining existing policies or designing new policies tailored to different types of learners.

United Kingdom: Profiling tools for awareness-raising strategies

In the United Kingdom, the Department for Education commissioned Kantar Public and Learning and Work Institute (L&W) to research adults' relationships with lifelong learning. L&W developed an attitudinal typology dividing adult learners into six categories based on the purpose of learning for potential participants. These categories are: lifelong learners; defiant learners; outcome-focused learners; tentative learners; exhausted learners; and stuck-in status-quo learners. The study found that lifelong, defiant and outcome-focused learners likely had an easier time overcoming barriers to training because they had a clear purpose for learning. The research also found that tentative, exhausted and stuck-in-the-status-quo learners lacked a strong purpose for learning, making it harder to encourage their participation in learning, and would therefore require more targeted, tailored and intensive government support.

Source: OECD (2022[44]), *OECD Skills Strategy Implementation Guidance for Flanders, Belgium: The Faces of Learners in Flanders*, https://doi.org/10.1787/7887a565-en; Kantar Public and Learning and Work Institute (2018[45]), *Decisions of Adult Learners*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/742108/DfE_Decisions_of_adult_learners.pdf.

However, despite these generous incentives, low-skilled individuals in Ireland still seem to contribute quite a bit to their ongoing learning. For example, while the largest source of funding for community education groups in ETBs, which target low-skilled individuals, is from the ETBs themselves through funding from SOLAS (29%), the second largest source of funding is individual learner fees, standing at 10.5% (AONTAS, 2020[46]). Project participants noted that vulnerable individuals might pay more than they are required to for adult education and training because they are not aware of the financial support available to them. Confusion around costs, grants and entitlements can be a major barrier for prospective learners from vulnerable groups to finding suitable and affordable courses (see Chapter 2 for recommendations on information on learning opportunities). Potential learners also noted that better information about the costs of courses, the grants available, and payment plans could help learners spread the cost of courses over a longer period (Mooney and O'Rourke, 2017[47]).

Furthermore, in Ireland, and particularly for disadvantaged groups, indirect costs, such as time, childcare, and transportation, serve as additional barriers to participation in lifelong learning. According to a recent CEDEFOP (2020[13]) study, Ireland is only one of a handful of countries where individuals report time issues as a greater barrier to participating in adult learning than not believing they need such training. Furthermore, individuals in Ireland report that family reasons keep them from participating in lifelong learning (43.7%) at a substantially higher rate than the EU average of 31.6% (Eurostat, 2016[17]). With

regard to incentives in Ireland specifically addressing time constraints, almost none of the financial incentives outlined in Table 3.3, except the BTEI (which is only available to social welfare benefit recipients), directly address individuals' primary barriers to participating in lifelong learning – family reasons and scheduling or time barriers. As discussed in Recommendation 1, paid training leave could help address the time barriers faced by vulnerable groups of individuals in Ireland, as could policies that address the indirect costs of learning (Box 3.7).

Box 3.7. Relevant international example: Covering indirect costs of training

British Columbia (Canada): Adult Upgrading Grant (AUG)

The Adult Upgrading Grant in British Columbia covers the indirect costs of participating in education and training programmes. In addition to providing tuition-free Adult Basic Education and English-Language Learning programmes at public post-secondary institutions, low-income learners are eligible for additional monetary benefits. The AUG covers indirect learning costs, including registration fees, books and supplies, transportation and unsubsidised childcare. The AUG Emergency Access Grant is an additional one-time sum that participants can receive to invest in hardware, software or home Internet access to facilitate learning.

Source: OECD (2019[48]), *Getting Skills Right: Future-Ready Adult Learning Systems*, https://doi.org/10.1787/9789264311756-en.

Childcare also serves as a major barrier to participating in lifelong learning for parents and carers in Ireland. A recent survey showed that even women who were highly motivated to participate in training in Ireland found childcare to be a prohibitive barrier to participation, and female respondents reported that having a child reduced their ability to participate in full-time formal education and training (Mooney and O'Rourke, 2017[47]). Thus, good-quality, accessible and affordable childcare is necessary to allow young women, in particular, to participate in lifelong learning. Ireland's Community Childcare Subvention Plus (CCSP) programme subsidises childcare for children of disadvantaged parents and parents participating in education, training or low-paid employment. Parents can either choose between this scheme or the broader National Childcare Scheme (NCS), which has largely replaced previous interventions like CCSP (Citizens Information, 2022[49]). However, these schemes do not necessarily address the needs of parents participating in education and training. For example, the NCS has been criticised for being complicated and difficult for parents to navigate, which can be particularly challenging for parents with low literacy and digital literacy skills (OECD, 2021[50]).

Furthermore, childcare challenges for adult learners include: the rigidity and limited eligibility for a childcare allowance; the fact that costs are only partially covered by the allowance; and the absence of on-site childcare at adult learning facilities, particularly in community education where, project participants noted, on-site childcare was more common in the past (Mooney and O'Rourke, 2017[47]; AONTAS, 2020[46]). Many participants in FET and community education reported needing additional support for childcare as well as other basic support, such as transportation and meals (AONTAS, 2022[51]; 2020[46]). Furthermore, learners lack awareness about the financial support available to them. In fact, lone parents were the learners least likely to be aware of available childcare support (AONTAS, 2022[51]).

Improving access to education and training for the inactive and long-term unemployed is a priority in Ireland's strategic documents, and particularly in Pathways to Work 2021-2025 (Department of Social Protection, 2021[52]). The Pathways to Work strategy sets out a goal to support 50 000 long-term unemployed people to commence FET by 2025. According to state experts, as of the end of 2022, a little over 23 000 long-term unemployed had begun training programmes. This shows that Ireland is generally on the right track but has more improvements to make, particularly given current skills and labour shortages.

Ireland has a number of relatively successful initiatives that could be further strengthened to improve the participation of the inactive and long-term unemployed in lifelong learning. Two programmes of note are the Vocational Training Opportunities Scheme (VTOS) and the Specific Skills Training (SST) programme, both delivered through the ETBs.

VTOS provides training courses to long-term unemployed individuals (over six months) over age 21 to help them gain skills to re-enter the labour force and/or to spur them to participate in FET (CEDEFOP, 2022[30]). In addition to unemployment benefits, VTOS participants receive a training allowance; courses are provided free of charge (including course materials); and additional support is provided for meals, transportation and childcare, depending on a learner's specific situation (CEDEFOP, 2022[30]). The outcomes of VTOS have been quite positive, with close to one-quarter of those completing the programme continuing on to employment and over half of those completing the programme progressing to FET (Indecon International Research Economists, 2018[53]).

The SST programme provides vocational training at NFQ Levels 4-6 for the unemployed and job seekers, over half of whom are long-term unemployed, at a lower cost than most other FET programmes (Indecon International Economic Consultants, 2020[54]). Unlike apprenticeships and traineeships, SST focuses on formal learning opportunities (not work-based learning) in areas that are specifically relevant for employment. The SST programme has had quite positive outcomes, with an evaluation showing an increase of 3.5-5.6% in the probability of employment one year after completing the SST programme (Indecon International Economic Consultants, 2020[54]). However, the evaluation showed that the impact of the SST programme on employment was lower for the long-term unemployed (Indecon International Economic Consultants, 2020[54]). Other shortcomings were found in the SST programme as well. For example, ETB staff noticed a need to include greater numeracy and literacy resources for learners in SST programmes, having identified a lack of these skills as a barrier to better programme outcomes (Indecon International Economic Consultants, 2020[54]).

Furthermore, financial support, the geographical location of courses and the learning difficulties of potential participants are still seen as major barriers to participation in SST programmes by participants and SST Training Centre and ETB management (Indecon International Economic Consultants, 2020[54]). At the same time, participation in SST has been declining while increasing for apprenticeships and traineeships, which involve a substantial amount of work-based training (Indecon International Economic Consultants, 2020[54]). This may indicate a need to incorporate greater work-based learning into the SST programme. To improve participation in lifelong learning among this group of learners, it appears that greater holistic support specific to learners' needs could contribute to better learning outcomes.

Recommendation 2: Provide tailored and targeted support to disengaged individuals to address the specific barriers they face to participating in lifelong learning

Project participants stressed the specific and heightened barriers to participating in lifelong learning faced by vulnerable population groups. While Ireland has relatively good adult participation rates in education and training by international comparison, specifically engaging these vulnerable groups could be a key to becoming a top performer in lifelong learning. Effectively engaging vulnerable groups involves better understanding why they are not participating and designing policies specific enough to meet their needs while limiting unnecessary and inefficient costs.

Ireland can undertake the following specific actions to provide tailored and targeted support to disengaged individuals to address the specific barriers they face to participating in lifelong learning:

2.1. **Develop detailed profiles of different types of lifelong learners and potential lifelong learners.** To best target disengaged lifelong learners, it is first important to have a more granular picture of the different types of adult learners or potential learners in Ireland and to understand their particular contexts and barriers to participation. DFHERIS, in partnership with SOLAS and DETE, should undertake or commission research to identify the different profiles of lifelong learners in Ireland's adult population, using the findings of such research as input for designing and implementing tailored lifelong learning policies.

2.2. **Improve holistic support for parents and careers to participate in lifelong learning through information, additional financial support and on-site services.** The DSP, in collaboration with SOLAS, the Department of Children, Equality, Disability, Integration and Youth, and DFHERIS, should design and implement additional holistic support for parents and carers (e.g. on-site childcare, information about existing government support for childcare and support in the application process, stipends for living costs during studies, etc.) to make lifelong learning more accessible to parents and carers.

2.3. **Increase support for vulnerable groups to participate in lifelong learning by providing targeted guidance and financial supplements to address the indirect costs of learning.** The costs of participating in lifelong learning are higher in reality than the costs of tuition to participate in a course, particularly for low-income individuals and other vulnerable groups, such as the long-term unemployed. The DSP, in collaboration with SOLAS and DFHERIS, should build on existing DSP benefits to strengthen targeted support for vulnerable groups (e.g. transportation and meal vouchers, stipends for living costs during studies, information about RPL, etc.) to offset the indirect costs of lifelong learning and make it more broadly accessible.

Opportunity 2: Strengthening incentives to participate in lifelong learning for employers

Participating in lifelong learning is beneficial not only for individuals in Ireland, no matter their employment status, but also for employers. For employers, providing education and training opportunities for their employees can improve firm performance, lead to greater productivity and profitability, help fill skill gaps, improve competitiveness and boost employee retention (OECD, 2022[55]; 2021[56]). Nonetheless, employers in Ireland as well as in other countries, face a number of challenges in providing education and training opportunities to their employees, including financial and time constraints, fears of poaching and lack of clarity about the training opportunities available to them or support for participating in such

opportunities (OECD, 2021[56]). In addition, employers' decisions around lifelong learning for their employees are impacted by a number of factors, including whether or not they have a dedicated training manager/specialist, whether or not they use training needs assessments, whether they want to provide training in-house or outsource training, and if or how to provide time to participate in training during work hours (OECD, 2021[56]).

Policy makers have a role to play in encouraging employers to be more active partners in promoting lifelong learning among their employees and potential employees. Policy interventions can help overcome employers' attitudinal, informational, time or financial barriers as well as their co-ordination problems (OECD, 2021[56]). Some of the tools policy makers can employ to address these barriers are information and guidance, capacity building, financial incentives, the direct provision of training and regulatory instruments (OECD, 2021[56]).

Project participants emphasised the importance of involving employers more actively in supporting, providing and promoting lifelong learning. The importance placed on the employer's role is reflected in Ireland's various strategies that discuss lifelong learning. Not only is the role of the employer very present in the NSS 2025, but it also features in other strategic documents, such as the National Training Fund Implementation Plan and the White Paper on Enterprise (Table 3.1). While stakeholders representing government bodies, education and training providers, and employers' organisations all stressed the importance of getting employers more involved in Ireland's skills ecosystem, including by supporting their employees to engage in ongoing education and training, the employers themselves who participated in consultations expressed that they are time poor, which affects their ability to play an active role in driving upskilling and reskilling. While skills shortages further drive the need for employers to develop and retain a skilled workforce to survive in today's economic climate, these shortages also make it harder for employers to dedicate time to investing in their employees' continued development. Thus, employers participating in the consultations expressed frustration with the overload and complexity of information on skills and a lack of guidance to navigate the system.

By international comparison, Ireland is already a leader in engaging employers in skills-related strategy and policy (see also Chapter 5). Nonetheless, employers could be better and more effectively engaged in Ireland by establishing clear and robust lifelong learning guidance (lifelong guidance for individuals is covered extensively in Chapter 2) and a support system for employers to efficiently match their employees with training that meets their needs. Greater support and guidance could incentivise employers to be more active partners in lifelong learning and access the many training opportunities and financial mechanisms already designed in Ireland for their benefit.

Recommendation 3: Establish a clear and robust lifelong learning guidance and support system for employers to efficiently match them with training that meets their needs

Even if employers in Ireland want to provide education or training to their employees, they often do not know where to turn to find objective information and guidance about courses and training providers who may fit their needs and about the public support or benefits available to them. Throughout consultations, employers, employers' representatives, and policy makers repeatedly discussed this challenge as an often insurmountable obstacle for employers in engaging with lifelong learning. While Ireland already has some structures in place to provide guidance to employers, there is currently not one solution in place that has all of the characteristics project participants say are needed for this employer guidance to be effective. Furthermore, employers lack access to tools and resources that can help them assess their employees' skill sets and the skills needed to develop their workforce to maintain a competitive edge in their industries. In all of these areas, the challenges faced by SMEs[1] are greater than for larger companies, as SMEs rarely have the capacity to have staff dedicated to internal skills development and often face greater time and cost constraints than larger employers.

One of the project participants' most consistent messages was that employers in Ireland, many of whom face time constraints, need help navigating the very complex landscape of education and training offers and determining which offering is most suitable to their needs. There are a few different structures or bodies in place whose mandates address these needs, yet all have limitations to the degree to which they can accomplish this. In addition to each of the education and training providers themselves reaching out to employers to pitch their own offerings (e.g. ETBs, HEIs, among others), the main entities in Ireland that currently serve the role of guiding employers to appropriate education and training across providers include RSF managers, Skillnet Ireland and LEOs (more discussion on the specific roles of each of these bodies in Ireland's skills ecosystem can be found in Chapter 5 on governance).

The key criteria for an entity providing lifelong learning guidance to employers that emerged from stakeholder consultations during the OECD assessment were: 1) an independent body that is impartial and does not have an incentive to promote one provider or type of provider over another; 2) a body with the regional/local/sectoral reach to connect with employers "on the ground"; 3) a body with the capacity to scale up engagement with employers to reach the largest possible number and range of employers; 4) a body that can provide support for employers to conduct assessments of their skill needs; 5) a body with credibility and/or branding recognition among employers; and 6) a body that can provide an online portal for employers to find education and training opportunities for their businesses. As seen in Table 3.4, although the skills policy landscape is busy and many entities engage with employers (see Chapter 5), no one entity among the three mentioned above meets all these criteria.

One criterion of particular note is the ability to provide an online portal for employers to improve their ability to navigate the education and training offer(s) that meet their needs. While online navigation of the education and training offer for *individuals* is discussed in Chapter 2, employers have different needs when engaging with lifelong learning. They would therefore benefit from a portal tailored specifically for them. An online portal for employers must be considered in tandem with consideration of the entity or entities providing lifelong guidance to employers, as the two complement one another and are necessary to improve employer engagement in lifelong learning.

While there are a number of online portals available in Ireland for navigating education and training options, most are geared towards potential learners or other target groups, with only a few having tailored information for employers (see Table 2.1 in Chapter 2 for information on portals targeted at individuals in Ireland). The existing portals for individuals with curated information for employers are Generation Apprenticeship, Mycareerpath.ie, SmartChoices and The Right Course. SmartChoices and The Right Course redirect employers to other platforms without providing additional tailored information for employers. The information provided for employers on the Generation Apprenticeship portal is, unsurprisingly, related to apprenticeships and not to broader skills resources for employers. Mycareerpath.ie, supported by HCI funding, provides information and guidance services for employers to help them identify their employees' upskilling and training needs and develop learning pathways with customised courses, yet focuses primarily on HE rather than FET opportunities. None of these portals has a landing page that asks employers questions about their needs and then directs them to relevant education and training options according to their answers.

Portals that specifically target employers include the LEOs website (Table 3.4) and the Supporting SMEs Portal (https://supportingsmes.gov.ie/), a new platform developed by DETE that provides information on various support available for SMEs, including but not limited to, those related to upgrading management skills. The Supporting SMEs Portal was set up under the SME and Entrepreneurship Growth Plan to reduce administrative burdens for SMEs to access government support available to them and as a tool that EI and the LEOs (indigenous agencies of DETE) can refer SMEs to for relevant information. However, the portal lacks detailed information on specific education and training offerings.

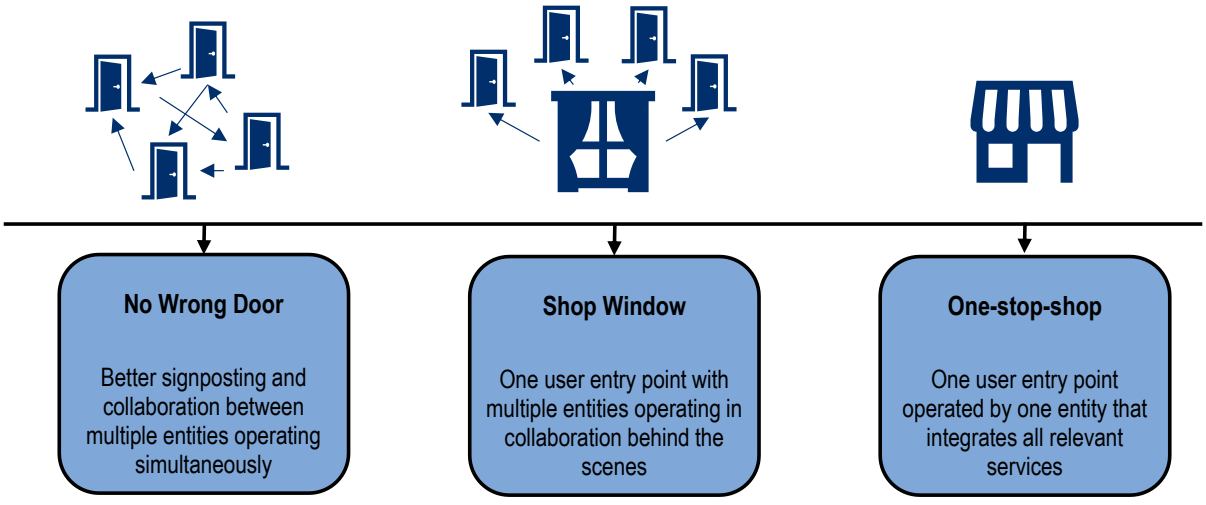
Table 3.4. Sources of education and training guidance for employers in Ireland

Entities providing education and training guidance for employers evaluated alongside key criteria for employer guidance that emerged during consultations

	Impartiality	Direct connection with employers	Capacity to scale	Skills assessment support	Credibility/branding recognition	Online portal for employers	Description
Regional Skills Fora (RSF) managers	X	X		X	X		The nine RSF managers (one per region) are the main point of contact for many employers on lifelong learning and skills policy matters. In addition to managing the Regional Skills Forum (which convenes employers, education and training providers and other regional actors) in each of their regions, RSF managers provide employers with skills auditing tools and help them navigate the education and training offer, as well as the available government supports for which they are eligible. Many project participants greatly praised the work of the RSF managers. In particular, project participants discussed the importance of the RSF manager's impartiality in allowing them to provide employers with unbiased advice to help them meet their skills needs. However, project participants, including the RSF managers themselves, noted that they do not currently have the capacity to scale their services and meet the needs of a larger share of the employers in their regions. They would need significantly more resources to do so. In 2022, RSF engaged with about 1 400 enterprises, including one-on-one engagements (e.g. relationship-building, signposting regarding courses, etc.), skills needs assessments, forum or sub-group meetings, regional promotional events, and RSF-led pilot programmes.
Skillnet Ireland		X	X	X	X		Skillnet Ireland is an international best practice example of involving employers in designing employee education and training. Skillnet Ireland's more than 70 Business Networks work with external providers (universities, training providers, etc.) to deliver upskilling and workforce development courses to employers and employees through their network, including facilitating the design of courses where there are gaps in the existing provision. Though Skillnet Ireland Business Networks are primarily education and training providers, the role of Business Network Managers is also to advise enterprises in their network on courses best suited to their needs. While there are Skillnets in all of Ireland's regions, they are formed at the will of enterprises rather than top-down, such that they are not necessarily evenly spread across localities and sectors. Furthermore, as Skillnet Business Networks are also education and training providers themselves, Skillnet Ireland may not be able to be fully impartial when advising employers. Skillnet programmes have a broad reach, engaging 19 000 businesses and 85 000 individuals in 2022.
Local Enterprise Offices (LEOs)		X	X	X		X	LEOs and the Department of Enterprise, Trade and Employment (DETE)'s other agencies, such as Enterprise Ireland, are tasked with promoting enterprise development and are not specifically focused on education and training. Nonetheless, LEOs serve as sign posters of education and training opportunities related to enterprise development. While only focusing on the specific target population of micro-enterprises (though in the future this will be expanded to enterprises with 11-49 employees as well), LEOs are self-proclaimed first-stop-shops, providing mentorship and guidance to help micro-enterprises navigate government benefits available to them and a range of education and training services that can help them grow their businesses. In-depth support to create a company skills report is provided to the micro-enterprises that qualify for the Enterprise Ireland Spotlight on Skills programme, which supports enterprises through a comprehensive, multi-step workforce development process. However, Spotlight on Skills is intended for scaling companies with a strategic plan already in place and reaches only a very small number of enterprises. LEOs also provide education and training, so they may not be able to be a fully impartial advisory body to employers. The infrastructure and staff of 31 LEOs are already in place across localities in Ireland, which indicates a capacity to scale. However, the current reach of LEOs remains relatively low, at about 7 158 micro-enterprises in 2021. This may be due, at least in part, to the more limited target audience of LEOs compared with other employer guidance providers.

With regard to an online portal, employers stressed during consultations that they often find it too difficult to navigate the education and training offer(s), which can impede their uptake of education and training for their staff. This navigability problem could be addressed in several ways that might be described on a continuum from better referral between the existing entities to a one-stop-shop lifelong guidance solution for enterprises (Figure 3.8). On one end of the continuum, Ireland could adopt a "No Wrong Door" policy in which there is no one online portal for employers to access, but rather there is better signposting and collaboration between existing resources available for employers and/or better-tailored information for employers on portals that primarily target individuals. In the middle of the continuum might be a "Shop Window" style portal in which there is one user-facing online portal that employers can engage with in order to navigate the education and training offer(s), but behind the scenes, there are multiple entities feeding information into this portal. On the other end of the continuum would be a one-stop-shop online portal, which would be a fully integrated online information hub with one clear "owner" responsible for monitoring that its content is consistent and updated.

Figure 3.8. Lifelong guidance solutions: A continuum



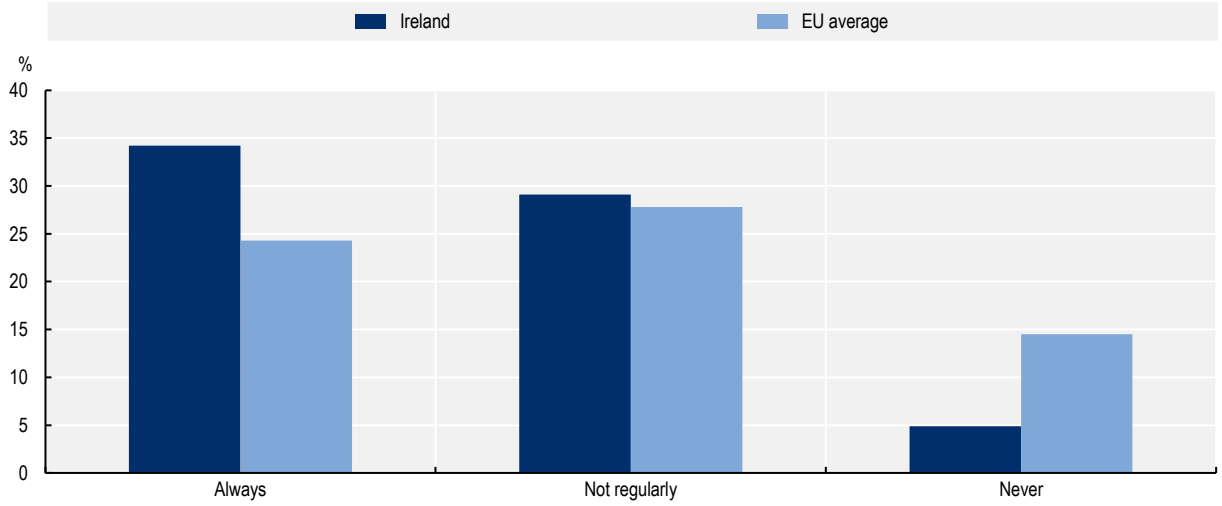
Similar to the different models of online portals, a system for providing broader, more holistic lifelong learning guidance for employers could be considered on a similar spectrum to that outlined in Figure 3.8. On one end, the three existing providers of guidance for employers on lifelong learning and reskilling/upskilling – RSF managers, Skillnet Ireland and LEOs – could all continue to operate similarly to how they do today as multiple "entry points" for employers to navigate lifelong learning opportunities. However, if so, signposting and co-ordination between the entities would need to be greatly improved, given that employers find the current status quo confusing. Another option in the middle of the continuum would be to establish or identify one clear "entry point" for employers, but these entities are all operating behind the scenes to provide guidance to employers, playing on each of their relative strengths. The third option would be to create a one-stop-shop entity or agency to provide lifelong learning guidance for employers, whether from among the existing guidance entities or by establishing a new entity. In this case, the one-stop-shop agency should be built or adapted to address all six key lifelong learning criteria that project participants identified. For optimal outcomes, a portal to support employers in promoting lifelong learning should be integrated with other forms of skills-related guidance and linked to a portal to support individuals seeking lifelong learning opportunities (Box 3.8 and Chapter 2).

Another challenge for employers in Ireland that emerged from consultations and desk research is that employers find it difficult to assess the current skill set of their employees and their skills and training needs, an important precursor and motivator for supporting their participation in lifelong learning. In Ireland,

a higher share of enterprises that assess their future skills needs provide continuing vocational training to employees than the share of enterprises that do not assess their future skills needs (Figure 3.9). While this trend is the same in Ireland as in the European Union, on average, the situation in Ireland is even starker than in the European Union. That is, enterprises in Ireland that always assess their future skills needs are more likely to provide continuing vocational training to employees than enterprises that always assess their future skills needs in the European Union, on average. At the same time, enterprises in Ireland that never assess their skills needs are less likely to provide continuing vocational training to employees than enterprises in the European Union that never assess their skill needs, on average. This makes a good argument for the importance of encouraging more employers in Ireland to assess their future skill needs to motivate them to actively engage in their employees' lifelong learning.

Figure 3.9. Share of enterprises providing training to employees in Ireland by frequency of skills assessment, 2020

Percentage of enterprises providing continuing vocational training by frequency of assessing future skill needs



Source: Eurostat (2020[19]), *Continuing Vocational Training Survey 2020*: *Enterprises which assess their future skill needs by type of training provided and size class - % of all enterprises,* https://ec.europa.eu/eurostat/databrowser/view/trng_cvt_33s/default/table?lang=en.

StatLink https://stat.link/qshepr

Yet, employers in Ireland and beyond find it difficult to understand their skills needs for a variety of reasons. For example, many enterprises do not create workforce strategies or training plans because they lack capacity, including human resources capacity; this kind of planning is not part of the culture of the enterprise (particularly in family businesses); or they are expanding the size of their businesses (OECD, 2021[56]). Furthermore, the most common barrier to assessing skills needs in Ireland raised during consultations was a lack of time and capacity, particularly among SMEs.

There are currently a number of measures in Ireland to aid employers in mapping out their future skills needs, but these measures are limited in scope and would need to be greatly expanded to have the desired impact (for more on assessing skills needs for the Irish economy as a whole, see Chapter 5, Recommendation 5). The programme that received the most attention and praise for helping employers identify their skills needs from project participants was the Spotlight on Skills programme. Spotlight on Skills is part of the Skills for Growth initiative led by DFHERIS and is carried out by EI in partnership with DFHERIS, the Irish Management Institute, and RSF managers. The programme takes enterprises along a comprehensive process in which they define company aspirations, state company goals, determine key

success factors, clarify strategic priorities, identify strategic capabilities, diagnose the skills gaps to build organisational capabilities and create a skills plan to address skills gaps (Enterprise Ireland, 2022[57]). While enterprises who participated in Spotlight on Skills, as well as a wide range of government stakeholders, had very positive perceptions of the outcomes of the Spotlight on Skills programme, the current scale of the programme is quite limited, reaching only 124 companies in 2020-21. This raises the question of how the benefits of a programme like this can be scaled to reach more employers (and what the budget implications of scaling the programme would be), even if the full in-depth process continues only for a smaller, more targeted group of enterprises. Furthermore, the Spotlight on Skills programme is only available to enterprises with a strategic growth plan, making this in-depth assistance unavailable to many SMEs who need it most (Enterprise Ireland, 2022[57]). In addition to Spotlight on Skills, RSF managers provide additional skills assessment support to enterprises in their regions on an ad hoc basis. However, they reported using varying methods and not having formal, unified tools to share with employers to conduct such assessments.

Given that SMEs in Ireland face particularly acute challenges when it comes to understanding their own skills needs, choosing appropriate education and training, and releasing staff for training, it is worth considering designing additional support measures for this target group of enterprises. As is shown in Figure 3.5, enterprises in Ireland with fewer than 50 employees provide continuous training at lower rates than bigger firms. Furthermore, it is critical to engage SMEs as they make up 99.8% of enterprises in Ireland, and employees in SMEs make up 67.5% of the engaged persons in the labour market (Central Statistics Office, 2021[58]). However, given that SMEs are such a broad category, it may be beneficial to explore and test methods for specifically engaging SMEs with a pilot programme that employs test methods for SMEs in select sectors of national priority.

Box 3.8. Relevant international examples: Lifelong learning guidance for employers

Germany: Information Portal for Employers

The Information Portal for Employers (Informationsportal Arbeitgeber) in Germany was established through an iterative approach, including consecutive project phases and involving relevant political actors and stakeholders. The process was initiated in 2011 by the Federal Cabinet that commissioned the Federal Ministry of Labour and Social Affairs. The project's first phase involved identifying an information portal as a possible solution, creating a baseline scenario, and identifying areas for improvement through a feasibility study. The project's second phase involved creating a prototype of the information portal, which was designed based on a similar platform from the Irish Health and Safety Authority (http://besmart.ie/). In the third phase, the Federal Ministry for Labour and Social Affairs created a more comprehensive description of the required functionalities of the portal, including organisational and technical requirements. Finally, the full one-stop-shop portal was developed following the blueprint outlined by the Federal Ministry for Labour and Social Affairs.

Multiple organisations maintain Germany's Information Portal for Employers. Importantly, the portal's content can be updated by content experts without any programming or technical skills through a programme created to automatically convert the content into the format required for the website. Another important element contributing to the portal's success is its user-oriented design and language to make the content as broadly accessible as possible.

France: Competence Operators (Opérateurs de compétences, OPCOs)

OPCOs are French competence operators that help SMEs holistically identify and meet their training needs. The 11 OPCOs in France, established in 2019, are jointly governed by employers and employees. They help enterprises carry out skills assessment and anticipation exercises; provide information and access to vocational training for enterprises; and support enterprises in analysing and defining their professional training needs, particularly in response to ongoing economic and technical changes in specific sectors.

Source: OECD (2022[55]), *Good practices in Europe for supporting employers to promote skills development*, www.oecd.org/skills/Good-practices-in-Europe-for-supporting-employers-to-promote-skills-development.pdf; OECD (2021[59]), *Incentives for SMEs to Invest in Skills: Lessons from European Good Practices*, https://doi.org/10.1787/1eb16dc7-en; OECD (2020[60]), *One-Stop Shops for Citizens and Business*, https://doi.org/10.1787/b0b0924e-en; ITSG (n.d.[61]), *Informationstechnische Servicestelle der Gesetzlichen Krankenversicherung GmbH*, www.itsg.de/; Employers' responses to OECD Skills Studies survey 2019.

Recommendation 3: Establish a clear and robust lifelong learning guidance and support system for employers to efficiently match them with training that meets their needs

Employers in Ireland, as well as other project participants, acknowledge that further aid is required to match employers of all sizes, particularly SMEs, with the education and training most suited to their needs and the needs of their employees. While there are many high-quality education and training opportunities in Ireland and many government supports available to enterprises, enterprises may not be able to fully take advantage of them without additional support to help them navigate all that is available.

Ireland can undertake the following specific actions to establish a clear and robust lifelong learning guidance and support system for employers to efficiently match them with training that meets their needs:

3.1. **Formalise a system of lifelong learning guidance for employers by evaluating the strengths and weaknesses, as well as the feasibility, of different models of service integration.** DFHERIS, DETE, existing advisory bodies, employers and employers' associations and education and training providers should work together to evaluate different models of service integration for providing guidance to employers on lifelong learning and workforce development in Ireland's context. Once a model for providing guidance to employers has been chosen, a multi-phase action plan should be developed to move from the current provision of employer guidance to a more formalised and co-ordinated system and to raise awareness among employers about this new system.

3.2. **Design an online portal tailored to employer needs and integrate this portal into a potential broader lifelong learning guidance system for employers.** In co-ordination with the design of a new lifelong learning guidance system for employers, DFHERIS, DETE, EI, IDA Ireland, LEOs, employers' associations and the administrators of other existing portals should work together to build on existing guidance websites for employers and develop a user-friendly online portal to complement other guidance services for employers. The portal should contain an interactive and user-friendly landing page in which employers can communicate their skills needs and be directed to relevant information and guidance as well as information about financial support available to them for upskilling their employees. This portal should be linked to the online portal for individuals to find lifelong learning opportunities (Chapter 2).

3.3. **Strengthen support to employers to map out their employees' skill set and future skills needs (e.g. methodological guides, manuals, tools, etc.).** To help the broadest range of employers map out their employees' current skill set and their future skills needs, the lifelong learning advisory system for employers should build on existing best practices in skills assessment tools to develop tools and support for enterprises in Ireland, specifically indigenous and small-scale companies that do not currently have access to skills assessment resources.

3.4. **Develop a work plan to provide targeted additional guidance to small and medium-sized enterprises, beginning with a pilot programme in sectors of national priority.** SMEs in Ireland face particular challenges in providing or supporting lifelong learning and therefore require particular support. Given that there are so many different types and kinds of SMEs in Ireland that may face different barriers to participation, DFHERIS and DETE should collaborate on identifying specific sectors of high national priority for reskilling and upskilling. In addition, they should consider establishing a pilot programme to help small enterprises in these sectors engage in education and training by addressing the barriers they face.

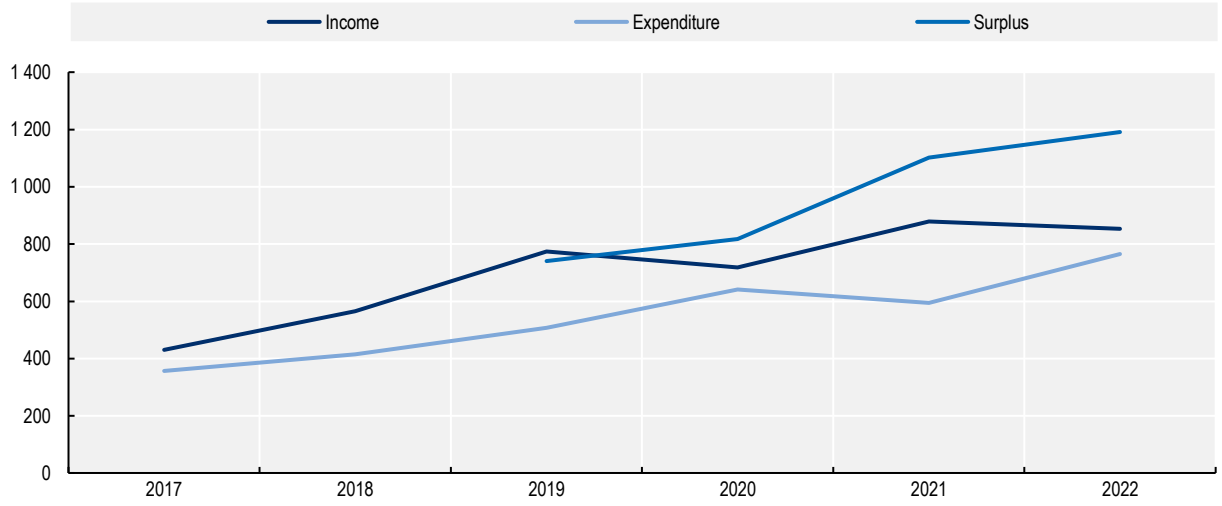
Recommendation 4: Reform the National Training Fund to better foster lifelong learning in workplaces

A recurring theme in consultations and the literature is that the current use of NTF funds to encourage the adoption of lifelong learning in workplaces does not sufficiently encourage or enable employers in Ireland to support education and training for their employees. Currently, financial incentives to encourage employers to provide or support lifelong learning for their employees are largely funded by Ireland's National Training Fund (NTF), established by the National Training Fund Act (2000), or by SOLAS matching funding to NTF-funded programmes. However, many project participants noted that the NTF as it is currently structured has a number of shortcomings, including surplus funds that cannot be unlocked for use; a lack of structural incentives for employers to provide education or training; a lack of discretionary funds; and not enough targeted funding for SMEs.

Concerns about NTF funds in Ireland not being used to their greatest potential are related to the large and increasing NTF surplus that is not being used to fund initiatives to promote education and training. Over 95% of funds in Ireland's NTF are raised through the National Training Fund levy on employees' earnings for about 75% of insured employees in Ireland, with some small supplements from the European Social Fund and other sources. The NTF levy was raised from 0.7% in 2017 to 0.8% in 2018, to 0.9% in 2019, and to 1.0% in 2020 (DFHERIS, 2022[62]). As seen in Figure 3.10, the income of the NTF over the past few years has increased substantially due to the rise in the levy as well as the strong performance of the Irish economy in recent years which led to greater income from the levy unrelated to the levy rate. It is important to note that expenditure from the NTF has also increased since 2017, but not in keeping with the NTF income. Thus, the gap between income and expenditure has grown, creating an increasingly large surplus. While during the preceding decade (2007-17), the NTF surplus remained relatively stable at between EUR 100 million and EUR 300 million, the surplus has increased greatly in the years since, jumping to EUR 740 million at the end of 2019 and then to over EUR 1.1 billion by the end of 2021 (DFHERIS, 2022[62]; Ibec, 2022[63]).

Figure 3.10. Ireland's National Training Fund finances, 2017-22

In EUR millions



Note: 2022 data are forecasts.
Source: DFHERIS (2022[62]), *National Training Fund: 2020 and 2021 Report*; www.gov.ie/en/publication/f9390-national-training-fund-annual-expenditure-report-2020-and-2021; DFHERIS (2020[64]), *National Training Fund Expenditure Report 2019*, https://assets.gov.ie/24754/c42908b6a02a4d9298418f9cdfe129d4.pdf; Ibec (2022[63]), *Future of the National Training Fund*, www.ibec.ie/-/media/documents/media-press-release/future-of-the-national-training-fund---ibec.pdf.

StatLink https://stat.link/3d8qhp

The NTF surplus has accrued in large part because of expenditure rules. As experts from Ireland's Department of Public Expenditure, National Development Plan Delivery & Reform (DPENDPDR) explained during consultations, the Government of Ireland has set a Medium-Term Expenditure Strategy that aims to invest in the economy and society while reducing the deficit. The strategy has set a Government Expenditure Ceiling (GEC) and links overall core expenditure growth to the trend rate of the economy, setting the expenditure ceiling at a growth rate of approximately 5% over the 2023-26 period. Any expenditure increase, including in the key priorities of housing, health and climate action, or any increased expenditure from the NTF, must be managed within the parameters set by the strategy. The GEC must be the aggregate of individual ministerial expenditure ceilings, and therefore expenditure from the NTF is included within the ministerial ceiling of DFHERIS, where the NTF is housed. This means that an increase in expenditure from the NTF, all other things being equal, would require an increase in the DFHERIS and overall GECs. Therefore, despite active measures to increase revenue from the NTF levy (i.e. raising the levy from 0.7% to 1.0% between 2017 and 2020), money paid out of the NTF cannot subsequently be increased without a decision from the Government of Ireland on the expenditure ceiling.

With regard to the relationship between employers and the functioning and allocation of the NTF, reforms were made in recent years, but employer awareness and involvement continue to be low. An external review of the NTF conducted by Indecon (Indecon International Research Economists, 2018[53]) led to the formation of a National Training Fund Advisory Group (NTFAG) in 2019 to spur greater employer involvement in decisions surrounding the NTF. The NTFAG, consisting of employer representatives, departmental officials and agency representatives, meets quarterly to discuss the priorities of the NTF (DFHERIS, 2022[62]). However, a recent paper on the NTF published by Ibec, Ireland's largest employers' group, finds that the NTFAG does not adequately involve employers in the decision making about the NTF's annual expenditures (Ibec, 2022[63]). There is also a limit on the degree to which the NTFAG can

impact NTF spending. While the NTFAG could potentially have a greater voice in how NTF funds are allocated, overall NTF expenditure levels are determined by the expenditure rules put in place by the Government, DPENDPDR, and Ireland's larger fiscal policies. Nonetheless, enterprises could be more engaged with the NTF than they are in the current landscape. Many enterprises, particularly SMEs, are not aware of the NTF's existence or that they pay into the levy that funds it (UNESCO, 2022[65]). The National Training Fund Implementation Plan that followed the 2018 Indecon review expressed a commitment to improving the branding of the NTF and promoting the Fund's activities and offerings (Indecon International Research Economists, 2018[53]). However, multiple employers who participated in workshops during the OECD consultations did not know about the existence of the NTF.

The way Ireland's NTF is currently structured does not specifically incentivise employers to use the funds in the NTF, even though they are required to contribute to financing the fund through the training levy. This is because the NTF in Ireland is a revenue-generating levy scheme, which acts as an earmarked tax (Table 3.5). That is, the levy is compulsory for employers in Ireland, but the scheme does not include an additional incentive for employer investment in education and training. This may also be connected to low awareness about the NTF among employers, specifically SMEs. Other types of levy schemes, such as levy-grant schemes or train-or-pay schemes, allow employers to either get their contributions returned or reduced if they invest in training themselves (Box 3.9).

Table 3.5. Types of levy schemes

Levy scheme	Description
Revenue-generating schemes	These are the simplest form of levy. In essence, they collect funds by operating more like a tax. Generally, they are aimed more at raising funds for publicly provided training. Because the use of the funds is not usually clearly hypothecated with the business community contributing to the fund, visibility of value for money and relevance is limited. As such, their strength as incentives to change employers' training behaviour is constrained.
Levy exemption schemes or train-or-pay schemes	These usually impose a fee or tax on employers to fund training within a business community, which is reduced if the employer undertakes their own training activities. The reduction is usually proportionate to the scale of their own training investment. An alternative form of the scheme is the cost-reimbursement scheme, in which firms pay a compulsory levy but can claim expenses for any training costs they incur annually.
Levy-grant schemes	These collect funds from business communities which are then reallocated to the contributing community. Due to this, the incentive for employers to invest in training is strong. This means not only can employers see ways to get their contributions back if they apply to the fund for resources, but they also can get grants larger than the levy they paid, where the allocations are proportionate to need. As such, the schemes can also help address labour market needs by making grants conditional on training in specific skills. One example of this model is the training funds in Italy.
Hybrid schemes	While there are three broad types of levy schemes – based on the principle of collecting funding contributions from many within a community and then pooling those to finance initiatives and services for that community – many countries often have hybrid schemes drawing on features of many schemes.

Source: Based on OECD (2017[23]), *Financial Incentives for Steering Education and Training*, https://doi.org/10.1787/9789264272415-en.

The idea to take a step toward changing the incentive structure of Ireland's levy scheme was proposed in the 2018 Indecon review of the NTF and the subsequent Review of the National Training Fund Implementation Plan. The Implementation Plan discusses launching a pilot programme targeting SMEs engaging in upskilling for the first time (Indecon International Research Economists, 2018[53]). Nonetheless, there appears to still be relatively high disengagement of employers in the functioning of the NTF. It would be worthwhile to revisit this and more drastic changes to the NTF structure to incentivise greater engagement in education and training among employers.

Box 3.9. Relevant international examples: Cost-reimbursement training levy

Hungary: Training sub-fund of the National Employment Fund – Vocational Training Contribution

In Hungary, employers are legally required to make a "training contribution" of 1.5% of payroll to a training fund. However, they are not required to make this contribution for the employment of specific groups, such as career starters, beneficiaries of childcare support or the formerly unemployed.

Enterprises in Hungary can fulfil their obligation to contribute to the training fund in three ways:

1. by paying into the development and training sub-fund of the National Employment Fund
2. by providing practical training for students in vocational training schools or tertiary education
3. by providing training for their own employees.

Enterprises can deduct the costs of contributions to the training fund (Option 1) if they provide the alternative options (Options 2 or 3).

Enterprises that provide training to their employees are exempt from contributing to the training fund up to the amount paid for internal training. If enterprises pay more for internal training than their required contribution to the training fund, they are eligible for reimbursement from the training fund. The costs enterprises can deduct for providing in-house training are greater for micro and small enterprises, for medium and large enterprises that provide practical training to at least 45 students a month, and enterprises that provide training to disadvantaged individuals, including individuals with disabilities. Costs that are eligible for deduction include those that support in-house training, such as wage and travel costs for instructors, materials needed for the training, and the costs of exams to validate the training.

Korea: The Training Consortium Pilot Programme

In 2001, Korea began a pilot programme to encourage SMEs to use training fund resources more in order to upskill and reskill employees. SMEs in the same sector were organised into training consortiums (TCs), each of which had a dedicated staff of two training managers to assess the training needs of the SMEs; make them aware of the education and training options available to them and their staff; and advise them on the training opportunities best suited to their needs. These dedicated staff were financed through public funds. Furthermore, each TC had an operating committee made up of SME members, representatives from the local Chamber of Commerce and Industry, local Ministry of Labour officials and training experts.

The results of the pilot were very positive, showing that the initiative led more SMEs to make use of available funding for upskilling and reskilling. The pilot programme increased the number of SMEs participating in education and training from 11% to 50% within a year of the pilot launch in areas where the pilot programme operated. In a 2002 survey, 81% of employers reported improved job performance and productivity; 72% reported that waste and defective products had declined; 88% reported increased use of factory machinery; and 67% reported savings in maintenance and repair expenses.

Source: CEDEFOP (2022[66]), *Training sub-fund of the National Employment Fund - Vocational Training Contribution*, www.cedefop.europa.eu/en/tools/financing-adult-learning-db/search/training-sub-fund-national-employment-fund-vocational-training-contribution; UNESCO (2022[65]), *Training Sub-Fund of the National Employment Fund (Nemzeti Foglalkoztatási Alap – NFA)*, https://unevoc.unesco.org/countryprofiles/docs/UNESCO_Funding-of-Training_Hungary.pdf; OECD (2019[67]), *Adult Learning in Italy: What Role for Training Funds?*, https://doi.org/10.1787/9789264311978-en; ILO (2017[68]), *Case Study: Training Levy in South Korea*, www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-jakarta/documents/presentation/wcms_565074.pdf.

Project participants reflected that employers across Ireland would benefit from greater flexibility in NTF funding and, particularly, in the establishment of discretionary funds as part of NTF expenditure. The project participants argued that it is important for Ireland's NTF to be flexible and responsive to quickly changing labour market needs, as discussed in the Indecon report, and to the ever-changing and specific needs of particular employers. The suggested reform would involve creating limited discretionary budgets financed by the NTF, to be distributed to employers *only* when training is not provided by an existing education or training programme. These discretionary funds could be distributed on a case-by-case basis by local, regional or sectoral entities, such as those providing employers with lifelong learning guidance and information (see Recommendation 3). Furthermore, guidelines could be distributed to local entities to encourage using discretionary funds in appropriate cases where there is no available solution to employers' reskilling and upskilling needs. During consultations, both employers and RSF managers cited past experiences in which no appropriate subsidised education or training opportunity met the employer's needs, and a discretionary fund such as the one described here would have been useful.

While the 2018 Indecon report emphasises the importance of ensuring that the NTF provides more funding targeted specifically at SMEs, it appears that little has been done in practice towards this end. Given the increased challenges in providing or supporting education and training faced by SMEs as described above, changes should be made to the structure of the NTF to ensure that the needs of SMEs are met, including supporting them in mapping out their future skill needs, as discussed in Recommendation 3.

Recommendation 4: Reform the National Training Fund to better foster lifelong learning in workplaces

Ireland's NTF is paid into by employers in Ireland and provides funding to be used both in and outside the workplace for education and training purposes. However, the fund is currently not being used as effectively as it could be for a number of reasons. First, there are surplus funds in the NTF not being used towards education and training, as fiscal rules limit the use of such funds. Second, many employers are not aware of the NTF and do not take advantage of the education and training it funds. Third, employers sometimes need trainings that are not offered by NTF-funded programmes and end up paying out of pocket. Finally, the needs of SMEs are insufficiently met under the current NTF funding.

Ireland can undertake the following specific actions to reform NTF funding to better foster lifelong learning in workplaces:

4.1. **Unlock surplus National Training Fund funds to facilitate greater investment in lifelong learning in Ireland.** To ensure that NTF funds are being used for their designated purpose of upskilling and reskilling individuals in Ireland and that spending from the NTF is in line with money collected from employers through the NTF levy, the current expenditure rules should be adapted to unlock more NTF funds to be invested in lifelong learning. This could be done, for example, by the government raising the expenditure ceiling for the NTF specifically; by changing legislation so that increased spending from the NTF is not linked to the ministerial (DFHERIS) expenditure ceiling; or by amending the rules such that an increase in the NTF levy automatically results in an equivalent increase in the NTF expenditure ceiling without a specific decision from the government on the ministerial or overall expenditure ceiling.

4.2. **Improve structural incentives for employers to take advantage of education and training funded by the National Training Fund.** To improve employers' use of the NTF, which they pay into through the NTF levy, DFHERIS, along with employers' associations, should raise awareness among enterprises about the connection between the levy they pay and the subsidised training opportunities available to them and their employees. In addition, DFHERIS and NTFAG, working with employers' associations, should draft and test potential amendments

to the National Training Fund Act to more directly link the funds enterprises pay into the NTF with monetary rewards they can gain from incorporating education and training into their workplaces.

4.3. **Establish a discretionary fund as part of the National Training Fund to be distributed at the regional/local/sectoral level.** DFHERIS, on the advice of the NTFAG, should use NTF funds to establish annually allocated regional, local or sectoral discretionary funds to be distributed to employers on an ad hoc basis to reimburse costs related to trainings not covered by existing NTF-funded programmes, including for mapping their skill needs and creating a training plan (Recommendation 3).

4.4. **Increase National Training Fund support specifically allocated for upskilling and reskilling for small and medium-sized enterprises.** To ensure that supporting education and training in SMEs is prioritised, a share of NTF funds should be designated for supplementary support to SMEs (e.g. covering indirect costs of training, providing on-the-job training and/or compensating the time employees are in education and training).

Opportunity 3: Making lifelong learning more flexible and accessible

Improving the flexibility and accessibility of lifelong learning provision is crucial to improving access to these types of learning opportunities. International evidence suggests that flexibility in format (e.g. part-time, online) and design (micro-credentials, modular courses) helps overcome time-related barriers, especially for medium- to high-skilled workers (OECD, 2019[69]). These kinds of measures can help individuals in Ireland fit education and training around personal and work commitments and make them accessible to a broader range of people.

Flexibility is particularly important in Ireland, where motivation to participate in lifelong learning is already relatively high, yet barriers to participation remain strong. The main barriers to participation faced by individuals who want to participate in adult education and training are family reasons and schedule (Figure 3.3), both of which could be eased by promoting greater flexibility in the education and training offer (for more on incentivising education institutions to offer flexible learning pathways, see also Chapter 2, Recommendation 6). Furthermore, employers in Ireland also struggle with time constraints and difficulty in releasing employees to participate in education and training. As project participants stressed, Ireland already has a variety of high-quality education and training offers. It could benefit from focusing on how to adapt those existing offers and other incentives to enable and encourage a greater share of individuals to take advantage of those opportunities.

Using the RPL to shorten and simplify learning pathways is another way to make adult education and training more accessible to a wider range of individuals and to encourage greater participation in adult learning. RPL helps adults upskill and reskill by personalising learning pathways to fit their specific learning needs and reduces the time individuals need to spend in training programmes by allowing them to focus on addressing skills gaps rather than engaging in training for skills they have already acquired (OECD, 2021[21]).

Recommendation 5: Promote greater flexibility in the lifelong learning offer to help individuals and employers incorporate ongoing learning into daily life

There is much evidence that greater flexibility in the lifelong learning offer could help more individuals and employers engage in education and training. First, the main obstacles cited by both individuals and employers include time constraints. A range of project participants consistently raised the need for more flexible options. Furthermore, flexibility has been a major theme in Ireland's strategies that relate to lifelong learning.

There are a number of initiatives in Ireland that are underway to make learning more micro- or bite-sized. The Modular Skills Provision programme was enacted as part of the 2020 July stimulus programme to offer shorter, flexible upskilling and reskilling courses while not taking employees away from work for too long. The MicroCreds programme, funded under the HCI project and co-ordinated by the Irish Universities Association (IUA), also provides flexible and bite-sized upskilling and reskilling opportunities in partnership with seven Irish universities.

However, there is still much to be done in terms of expanding micro- or bite-sized courses to all types of institutions and disciplines; making these micro-credentials stackable; designing quality assurance measures for these courses; and ensuring their recognition, including by raising awareness about micro-credentials among employers and individuals. Project participants often mentioned the potential of micro-credentials to make lifelong learning relevant and accessible to more people and to increase uptake in lifelong learning activities.

In addition to ensuring that funding models do not *disincentivise* the creation of flexible learning options, education and training providers of lifelong learning could be positively rewarded for being top performers in providing education and training in flexible formats and times. Across OECD countries, common tools for rewarding top-performing education and training institutions are publicly recognised performance awards and performance-based funding (OECD, 2017[23]). While both of these mechanisms are usually used as a way to reward education and training institutions providing courses that align with labour market needs (whether based on the types of courses that are offered or graduate outcomes), the tools could also be applied to reward education and training institutions providing courses of a desired flexible mode and/or format.

Project participants emphasised that flexibility lies in the length of an education or training course and its timing. For example, many courses are offered only with start times according to a traditional academic annual calendar. This may not suit individuals or employers in industries where certain times of year are busier than others, making it difficult to release staff for training. Furthermore, as project participants noted, if learners are motivated to participate in lifelong learning but have to wait a long time to enrol in a course of interest, they may lose motivation before the course is available. To this end, more "just-in-time learning", or having access to learning when one needs it, seems more appropriate for the context in Ireland and should be promoted.

Project participants emphasised the importance of ensuring the stackability of micro-credentials to strengthen both the flexibility and effectiveness of micro-credentials to facilitate upskilling and reskilling in Ireland. Indeed, studies from the United States and Canada indicate that stacking micro-credentials improves participants' later labour market outcomes (OECD, 2021[70]). A study of Community College graduates in Virginia found that individuals receiving multiple short-duration credentials in the same field of study between 2000 and 2019 were 4 percentage points more likely to be employed than those who received only one credential; they also earned USD 570 (US dollars) more in quarterly wages (Meyer, Bird and Castleman, 2020[71]). A Canadian study looked at individuals with a bachelor's degree who also have short-duration credentials and found that the share of individuals working in low-value-added service industries decreased from 22% before participating in the short-duration credentials to 10% after participating (Ntwari, 2020[72]).

Ireland has started to introduce stackable micro-credentials through programmes such as MicroCreds in HEIs; the Skillnet Ireland and University of Limerick partnership on micro-credentials related to climate action; and Ireland's joining the cross-country Stacking Credits and the Future of the Qualification (STACQ) project (IUA, 2020[73]; University of Limerick, 2022[74]; QQI, 2021[75]). However, project participants noted that there is still much room for Ireland to learn from other countries and progress to become an international leader in the realm of stackable micro-credentials (Box 3.10).

Box 3.10. Relevant international example: Stackable micro-credentials

Sweden: "Free-standing" courses

Universities in Sweden offer "free-standing" courses that range from 7.5 to 30 ECTS (European Credit Transfer and Accumulation System). These courses are given across study areas and are designed to appeal to different types of learners, from those taking a one-off course to those requiring more time to study. The courses are flexible in other ways besides being standalone. For example, in the University of Gothenburg, these courses can be offered at different times of day, including the evening; can be distanced courses or in person; can be transferred across certain HEIs; and some are offered continuously throughout the academic year rather than starting at one specific time. The courses can be stacked in accordance with other complementary courses where they meet certain conditions to build towards a degree.

Source: OECD (2021[70]), *"Micro-credential innovations in higher education: Who, What and Why?"*, https://doi.org/10.1787/f14ef041-en.

At the same time, online learning has become more prevalent in Ireland in the past few years in the wake of the COVID-19 pandemic and should be leveraged to increase the flexibility of lifelong learning offer in years to come (Box 3.11). Before the pandemic, in 2019, the percentage of individuals in Ireland reporting doing an online course or using online learning material stood at a mere 24%, falling behind many EU countries, including Iceland (73%), Sweden (38%), Finland (35%) and the United Kingdom (35%). In 2021, the share of individuals in Ireland participating in these online learning activities nearly doubled to 46%, surpassing all countries but Iceland (Eurostat, 2021[76]).

Box 3.11. Relevant national example: Developing online instruction resources for teachers

Ireland: The National Forum for the Enhancement of Teaching and Learning in Higher Education (NFETL)

The NFETL is a national body in Ireland responsible for leading and advising on the enhancement of teaching and learning in HEIs in Ireland. One of the focuses of NFETL is to prepare teachers for adapting to teaching in the digital world. Towards this end, NFETL provides a number of resources and tools for digital teaching and learning on their website (www.teachingandlearning.ie/), including a national survey on digital engagement in teaching and learning; a guide on developing institutional policies for digital and open teaching and learning; and a number of teaching resources that are openly licensed and can be easily searched and shared among teachers.

Source: National Forum for the Enhancement of Teaching and Learning in Higher Education (n.d.[77]), *Home page*, www.teachingandlearning.ie/.

Online or blended learning has many benefits, including accessibility from any location with a broadband connection; saving time commuting to and from education and training opportunities; and more time flexibility in completing modules. In addition, strategies such as the Universal Design of Learning, which provides instructors with techniques and digital tools to facilitate equal learning opportunities for students of different ability levels in an online setting, could both promote flexible learning and improve participation in education and training among vulnerable groups (see Recommendation 2) (Europass, 2023[78]). However, the benefits of the shift to more online lifelong learning opportunities are not equally accessible to all because these courses are only available to those with the digital skills to access them.

People in Ireland generally have relatively high digital skills by international comparison. According to the Digital Economy and Society Index 2022, 70% of people have at least basic digital skills, 40% have above basic digital skills, and 77% have at least basic digital content creation skills (all higher than the EU average) (European Commission, 2022[79]). Ireland has committed to increasing the share of adults with at least basic digital skills to 80% by 2030, such that these findings suggest that Ireland is doing very well

in making progress towards meeting this target (European Commission, 2022[79]). Nonetheless, those in Ireland with lower digital skills include groups who already participate less in lifelong learning, such as individuals with lower levels of educational attainment and older individuals (SOLAS, 2021[80]). Furthermore, many individuals in industries particularly affected by the pandemic, such as hospitality and retail, have low digital skills (SOLAS, 2021[80]).

As online learning expands, there are a number of infrastructure issues that both providers and learners will need to address to make online learning smooth and beneficial. Providers need to find suitable online learning platforms and train teachers in online teaching. As project participants mentioned, broadband issues throughout the country can also make it difficult for learners to access online courses and materials from specific areas.

Building on measures already in Ireland's Harnessing Digital strategy to improve the digital literacy of the population in Ireland in general, policy makers in Ireland can initiate measures that would set the stage for an expansion of online lifelong learning in the coming years. Countries can harness the potential of online learning for adults by creating a broader range of online courses across institutions and disciplines; training online teachers; establishing quality assurance mechanisms for online courses; and strengthening digital infrastructure (OECD, 2020[81]).

Recommendation 5: Promote greater flexibility in the lifelong learning offer to help individuals and employers incorporate ongoing learning into daily life

In Ireland, one of the central barriers to participation in lifelong learning for both individuals and employers is time. Project participants repeatedly highlighted the importance of developing more flexible education and training opportunities that fit more naturally into the lives of individuals and the flow of the workplace. This means education and training opportunities that are short or bite-sized; delivered in an online or blended fashion; can be accessed on demand or at multiple times of the day, week or year; and build on one another to lead toward larger credentials.

Ireland can undertake the following specific actions to promote greater flexibility in the lifelong learning offer to help individuals and employers incorporate ongoing learning into daily life:

5.1. Encourage lifelong learning providers to offer more flexible learning opportunities (e.g. online, modular, "bite-size" microcredentials). Greater provision of flexible learning opportunities can be promoted by rewarding institutions that prioritise flexible courses (e.g. through public awards or performance-based funding). In addition, flexible courses can be encouraged by removing barriers to their design and implementation. To that end, it is important to ensure that new FET and HE funding models do not penalise or disincentivise shorter-length courses (see Chapter 2). Furthermore, providers that organise company- or sector-specific trainings, such as Skillnet Ireland Business Networks, should be supported through guidelines and information to provide just-in-time learning that begins at a time of year that makes sense for specific industries (e.g. retail, hospitality, etc.).

5.2. Strengthen the recognition, accreditation and stackability of lifelong learning opportunities in line with the National Framework of Qualifications (e.g. through stackable micro-credentials, digital badges, etc.). Shorter and more flexible courses can be better integrated into the lifelong learning offer if there are clear measures for accrediting these courses in the NFQ and stacking them to build unique learner pathways. The QQI should work together with SOLAS and HEA to create frameworks and streamline processes for determining the accreditation of short and bite-size courses.

5.3. Strengthen support for online learning instructors and providers to improve the quality of online courses and enable further expansion of remote lifelong learning. Given that so much lifelong learning has moved on line since the COVID-19 pandemic, DFHERIS should work together with SOLAS and HEA to strengthen the online teaching skills of instructors of lifelong learning through subsidised training courses for instructors and the provision of online tools and teaching materials to help instructors adapt to remote teaching.

Recommendation 6: Improve the recognition of non-formal and informal learning for individuals and enterprises to make lifelong learning more accessible to all

Non-formal and informal learning are an important part of the adult learning system because they tend to be more flexible in format and delivery than formal learning and more accessible to a broader group of individuals than formal learning. Non-formal courses tend to be shorter than formal courses, using more of an approach of modular rather than full courses, and are often focused on acquiring specific competencies. These courses can take place via on-the-job training, remote learning, courses and private lessons, seminars and workshops, as well as in vocational and HEIs (OECD, 2019[48]).

However, non-formal learning in Ireland was disproportionately affected by the COVID-19 pandemic. While formal adult learning declined only slightly in 2020, there was a 30% drop in the number of non-formal learning participants that same year. While the number of individuals participating in formal adult learning in Ireland in 2021 already surpassed pre-pandemic numbers, non-formal adult learning has not yet recovered to pre-COVID levels (SOLAS, 2022[43]). The same could also be said for informal learning, as most informal learning happens between colleagues in the workplace. While it is difficult to collect data on the exact effect, fewer colleagues gathering in workplaces due to the COVID-19 pandemic has resulted in fewer opportunities for this informal learning to take place.

Promoting more non-formal and informal learning in Ireland can get more individuals and employers involved with lifelong learning. However, non-formal and informal learning is more attractive for both individuals and employers if it is adequately recognised. Recognising non-formal and informal learning is not simple, and many countries find it challenging to do so. Strengthening processes for RPL is one of the main ways countries acknowledge and reward skills that individuals have gained through non-formal and informal learning and strengthen further lifelong learning by doing so.

RPL, or the recognition of prior learning, is an important mechanism for helping individuals engage with lifelong learning. RPL is the process by which knowledge and skills acquired through experience, non-formal and/or informal learning, as well as those acquired through formal learning, are recognised formally (e.g. with a certificate or qualification). RPL can improve lifelong learning outcomes for individuals by improving their employability by recognising acquired skills, making them eligible to enrol in a learning opportunity for which a skill they acquired informally is a prerequisite, or making a learning process shorter if they can use RPL to get an exemption from courses or credits providing a skill they already have (OECD, 2021[82]). RPL can also help create flexible and customised learning pathways for individuals in Ireland.

RPL appears in various laws and strategic documents in Ireland related to skills. The basis for Ireland's RPL system is laid out in the 2012 Qualifications and Quality Assurance (Education and Training) Act, which specifically cites the importance of being able to accumulate and transfer formally recognised competencies (OECD, 2021[82]). Ireland's NSS 2025 identifies RPL as an important priority to bring about the strategic objective of increasing engagement across Ireland in lifelong learning. The specific goals laid out in the strategy that relate to RPL are: 1) to provide for the recognition of awards that are consistent with Ireland's NFQ system and ensure quality assurance of courses that result in recognised awards; and 2) to develop a common understanding of RPL and explore good practices in RPL (Department of Education and Skills, 2016[8]). Ireland's FET and HE strategies also call for the need to implement an RPL framework within and between these sectors (QQI, 2023[83]).

The process to obtain RPL in Ireland is fairly straightforward. The processes include the RPCL (Recognition of Prior Certified Learning) and the RPEL (Recognition of Prior Experiential Learning). These processes involve completing an RPL application; being assigned a mentor or facilitator from the Quality Assurance Unit of the ETB to guide individuals through the process; presenting a portfolio of evidence of prior learning to RPL Assessors appointed by the ETB, who assess the portfolio and inform learners of the outcome; and an appeals process for learners who are dissatisfied with the outcome (OECD, 2021[82]; ETBI, 2019[84]). However, beyond this general process, institutions providing RPL have a great deal of autonomy and generally follow separate internal guidelines, leading to variations in RPL across institutions in several areas (Table 3.6).

Table 3.6. Ireland's performance with regard to good practice principles in the validation of prior learning

	Principles on validation	Status of Ireland	Notes
1	Validation arrangements in place	Yes	Recognition of prior learning (RPL) leading to both full and partial qualifications and providing access to other education and training programmes are in place (except in the general education sector).
2	Guidance and counselling are readily available	Varies	While guidance and counselling are available, the widespread view is that more is needed.
3	Information and guidance on benefits, opportunities and procedures are available and accessible	Varies	In Ireland, this information and guidance are provided by the institutions conducting the validation who provide information on their own services. Ireland lacks an information and guidance system across institutions.
4	Validation arrangements are linked to a national qualification framework (NQF) and in line with the European Qualifications Framework (EQF)	Yes	Ireland's RPL system is linked to Ireland's NQF and the EQF.
5	Qualifications or parts of qualifications obtained through validation comply with agreed standards that are the same or equivalent to those for qualifications obtained through formal education programmes	Yes	The RPL process in Ireland uses the same standards as those used for qualifications obtained through formal education programmes.
6	Provision is made for the development of the professional competencies of validation practitioners	Varies	Because the development of validation practitioners is left to the institutions carrying out the validation, the degree to which staff are provided with professional development opportunities varies across institutions.
7	Transparent quality assurance (QA) measures support reliable, valid and credible assessment methods and tools for validation	Yes	QA measures for RPL are overseen by Quality and Qualifications Ireland (QQI), similar to QA for formal education programmes.
8	Synergies between validation and credit systems exist	Yes	Ireland's RPL system is synergised with the NFQ and EQF.
9	Disadvantaged groups are particularly likely to benefit from validation	No	While disadvantaged groups certainly are able to benefit from RPL in Ireland, they are not particularly likely to do so in the current environment.
10	Skills audits are available for individuals who are unemployed or at risk of unemployment	Varies	The use of skills audits for individuals, as well as individual education and training plans, varies across relevant institutions in Ireland.
11	EU/national transparency tools are promoted to facilitate the documentation of learning outcomes	Yes	EU transparency tools like Europass and Youthpass are used and promoted in Ireland.

Note: The European Union developed these 11 good practice principles to validate prior learning following an EU Council Recommendation on the validation of non-formal and informal learning in 2012.
Source: OECD assessment based on CEDEFOP (2019[85]), *European inventory on validation of non-formal and informal learning 2018: Final synthesis report*, www.cedefop.europa.eu/en/country-reports/european-inventory-on-validation; Murphy (2019[86]), *European inventory on validation of non-formal and informal learning 2018 update: Ireland*, http://libserver.cedefop.europa.eu/vetelib/2019/european_inventory_validation_2018_Ireland.pdf.

Many steps have already been taken to strengthen Ireland's RPL system by promoting and standardising the RPL process across institutions. For example, the National RPL Project was established as part of the HEA's HCI Pillar 3 (Innovation and Agility) for 2020-25 (Box 3.12). Ireland also has an RPL Practitioner Network that focuses on networking, sharing knowledge and experience, raising awareness about RPL and contributing to policy related to RPL (RPL Practitioner Network Ireland, 2022[87]).

Box 3.12. Relevant national example: An initiative on recognition of prior learning in higher education

Ireland: The National RPL in Higher Education Project

The National RPL in Higher Education project is a four-year collaboration between 14 publicly funded HEIs in Ireland to build a consistent and coherent approach to RPL across the institutions. The project is funded by the HCI Pillar 3 (Innovation and Agility) and co-sponsored by the Technological Higher Education Association and the IUA. The project is advanced by 18 project leads who work on the project across HE universities and receives strategic guidance from a Project Steering Group made up of sectoral leaders, enterprise and learner representatives and RPL experts. The three central goals of the project are to: 1) streamline and promote RPL across the HE sector; 2) collaborate with employers to increase access and progression opportunities in areas of skills needs, and 3) strengthen the HE sector's capacity to conduct RPL by developing relevant tools, materials, resources and professional development opportunities for staff. The project's website (www.priorlearning.ie) includes access to resources, tools and information about the project.

Source: Recognition of Prior Learning (2022[88]), *Home page*, www.priorlearning.ie/.

However, a number of challenges remain in Ireland's RPL system. First, there is no commonly agreed definition of RPL in Ireland, which makes it difficult to create coherent national standards around it. Second, RPL is still not widespread and is not offered by all education and training providers. Furthermore, guidance websites for learners, such as Qualifax, warn learners that many education and training providers do not apply RPL or may have a wide variety of ways they deal with RPL (Qualifax, 2022[89]).

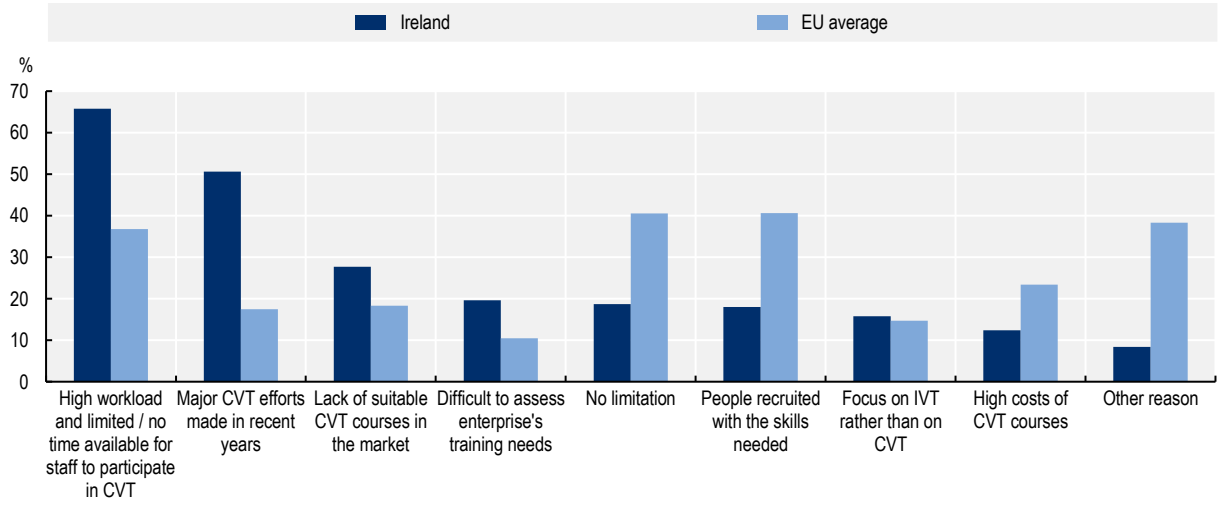
When asked about the greatest challenges to implementing RPL in ETBs, the most commonly identified challenges were lack of time and money resources. ETB staff's top suggestions for overcoming these challenges were led by the recommendation to create more consistent procedures and processes (Goggin, O'Leary and Sheridan, 2017[90]). The second most common suggestion was to provide more resources.

Furthermore, there is generally a lack of awareness about RPL – what it is, its importance to lifelong learning, and how to engage in the process – among lifelong learning providers, employers and individual learners. The limited knowledge about RPL may, at least in part, be related to a lack of data collection and reporting in this area (Goggin, O'Leary and Sheridan, 2017[90]). An established tool for documenting and presenting recognition of prior learning, including the use of digital technologies for this purpose (Box 3.13), might help raise the profile of RPL and promote its broader uptake in Ireland.

Just as recognising prior learning could encourage and facilitate more interested individuals in participating in FET opportunities by easing the process, the same can be said of employers. Project participants stressed that the most common and challenging barrier for SMEs in participating in or supporting lifelong learning was releasing staff for training. Indeed, among enterprises in Ireland that provided training, high workload and no time for staff to participate in training was the primary reason enterprises did not provide more training, much surpassing the EU average (Figure 3.11) (Eurostat, 2020[19]). This has likely intensified further due to recent labour shortages.

Figure 3.11. Factors limiting more provision of training among enterprises in Ireland, 2020

Share of enterprises that provided training, by reasons for not providing more training



Note: CVT: Continuing vocational training; IVT: Initial vocational training.
Source: Eurostat (2020[19]), *Continuing Vocational Training Survey*, https://ec.europa.eu/eurostat/web/microdata/continuing-vocational-training-survey.

StatLink https://stat.link/fivg0c

Yet, more informal on-the-job training is already happening in enterprises in Ireland. Among enterprises providing training in Ireland, 52% provide on-the-job training, compared to 43% in the European Union on average (Eurostat, 2020[19]). Given their time constraints, employers in Ireland may be more likely to provide more informal on-the-job learning to upskill employees if there were a mechanism by which on-the-job training could be recognised and rewarded, for example, through public recognition or financial rewards (Box 3.13). Measures like these could be particularly helpful in addressing the challenges faced by SMEs in Ireland. Like strengthening RPL for individuals, bringing more training into the workplace rather than encouraging employees to leave the workplace to seek training could ease access to employee education and training for employers in Ireland.

Box 3.13. Relevant international examples: Recognising prior learning

Italy: Bestr

The digital platform Bestr (www.bestr.it.) in Italy was launched in 2015 as a way to collect and present open badges to certify the acquisition of competencies. The platform is used primarily by HEIs, and the most common certifications reflected in the badges are language skills, though they can also be used to certify soft skills. European-wide standards, such as the Common European Framework of Reference for Languages, help standardise open badges in Italy and across Europe.

France: The AFEST programme

The AFEST (Action de formation en situation de travail) programme in France recognises informal on-the-job learning and allows employers to access public funding, usually available only for formal education and training. The programme, which aims to promote continuing training, especially in small enterprises and among low-skilled workers, was introduced into the labour code in 2018 after a two-year pilot (Duclos, 2021[91]). The AFEST programme only recognises informal learning that meets four conditions: the work activity that is utilised in the on-the-job training is modified as needed to match the

specific purpose of the training; the training provider is appointed before the training begins; the training includes reflection outside of the workplace to reinforce the lessons learned; and an assessment of training outcomes is carried out after the training. The assessment involves an evaluation by both the learner and the trainer. OPCOs (Opérateurs de compétences) or "skills operators", which are organised by different sectors (Box 3.8), validate the informal learning through the AFEST programme and can cover part or all of the learning costs or connect employers with other financial support.

Evaluation results from the pilot programme in 2015-18 demonstrated overall positive results. Of the 50 companies that participated in the pilot, 100% of managers and learners reported that the skills acquired were useful for their current jobs (Le reseau Anact-Aract, 2018[92]). However, in the same report, some employers questioned whether formalised on-the-job training would be effective for low-skilled workers, who are sometimes hesitant about participating in structured education.

Source: OECD/European Union (2019[93]), *Supporting Entrepreneurship and Innovation in Higher Education in Italy*, https://doi.org/10.1787/43e88f48-en.

Recommendation 6: Improve the recognition of non-formal and informal learning for individuals and enterprises to make lifelong learning more accessible to all

Expanding incentives for non-formal and informal learning can make engaging with lifelong learning more appealing and accessible to both individuals and employers. In addition, improving the recognition of informal learning can be a mechanism to engage first-time lifelong learners or employers that have previously not been involved in providing education and training.

Ireland can undertake the following specific actions to improve the recognition of non-formal and informal learning for individuals and enterprises to make lifelong learning more accessible to all:

6.1. **Strengthen the capacity of education and training providers to offer recognition of prior learning, including by establishing national guidelines outlining the procedures and processes of RPL.** Building on existing projects such as the HCI, QQI should collaborate with SOLAS and HEA to establish clear national guidelines for RPL in ETBs and HEIs. Furthermore, DFHERIS should work with SOLAS to provide additional funding and capacity to ETBs, particularly to help them better manage the RPL process within ETBs.

6.2. **Improve awareness of and access to recognition of prior learning, including tools for individuals to accumulate and display their non-formal and informal learning.** As part of the one-stop-shop information portal discussed in Chapter 2, Recommendation 2, Ireland should create an online tool where individuals can accumulate and display their non-formal and informal learning achievements, which can then be shared with employers and/or integrated to work with online job boards. This online tool should be built to have compatibility with EU-wide tools for the recognition of learning and skills.

6.3. **Implement a mechanism for recognising and rewarding informal, on-the-job learning provided by employers.** To encourage more employers to provide informal, on-the-job learning, DFHERIS and other relevant departments should work together to design a mechanism for rewarding employers who provide such training, for example, with public awards of excellence, certificates recognising internal trainers within enterprises, NTF contribution discounts or reimbursements. The mechanism could provide greater benefits to SMEs that provide informal, on-the-job learning.

Summary of policy recommendations

Table 3.7. Summary of policy recommendations for fostering greater participation in lifelong learning in and outside the workplace

Recommendations	Specific actions
Opportunity 1: Strengthening incentives to participate in lifelong learning for individuals	
1. Incentivise adults to participate in lifelong learning to improve the prominence of lifelong learning in Ireland's society	1.1. Assess the feasibility of individual learning schemes and paid training leave in Ireland's context. 1.2. Evaluate and expand programmes or financial incentives that effectively engage a wide range of individuals in lifelong learning by extending their scope, target audience and/or allocated resources (e.g. Springboard+, eCollege). 1.3. Implement a public awareness campaign to raise awareness about the importance and benefits of lifelong learning for all.
2. Provide tailored and targeted support to disadvantaged groups to address the specific barriers they face to participating in lifelong learning	2.1. Develop detailed profiles of different types of lifelong learners and potential lifelong learners. 2.2. Improve holistic support for parents and carers to participate in lifelong learning through information, additional financial support and on-site services. 2.3. Increase support for vulnerable groups to participate in lifelong learning by providing targeted guidance and financial supplements to address the indirect costs of learning.
Opportunity 2: Strengthening incentives to participate in lifelong learning for employers	
3. Establish a clear and robust lifelong learning guidance and support system for employers to efficiently match them with training that meets their needs	3.1. Formalise a system of lifelong learning guidance for employers by evaluating the strengths and weaknesses, as well as the feasibility, of different models of service integration. 3.2. Design an online portal tailored to employer needs and integrate this portal into a potential broader lifelong learning guidance system for employers. 3.3. Strengthen support to employers to map out their employees' skill set and future skills needs (e.g. methodological guides, manuals, tools, etc.). 3.4. Develop a work plan to provide targeted additional guidance to small and medium-sized enterprises, beginning with a pilot programme in sectors of national priority.
4. Reform the National Training Fund to better foster lifelong learning in workplaces	4.1. Unlock surplus National Training Fund funds to facilitate greater investment in lifelong learning in Ireland. 4.2. Improve structural incentives for employers to take advantage of education and training funded by the National Training Fund. 4.3. Establish a discretionary fund as part of the National Training Fund to be distributed at the regional/local/sectoral level. 4.4. Increase National Training Fund support specifically allocated for upskilling and reskilling for small and medium-sized enterprises.
Opportunity 3: Making lifelong learning more flexible and accessible	
5. Promote greater flexibility in the lifelong learning offer to help individuals and employers incorporate ongoing learning into daily life	5.1. Encourage lifelong learning providers to offer more flexible learning opportunities (e.g. online, modular, "bite-size" microcredentials). 5.2. Strengthen the recognition, accreditation and stackability of lifelong learning opportunities in line with the National Framework of Qualifications (e.g. through stackable micro-credentials, digital badges, etc.). 5.3. Strengthen support for online learning instructors and providers to improve the quality of online courses and enable further expansion of remote lifelong learning.
6. Improve the recognition of non-formal and informal learning for individuals and enterprises to make lifelong learning more accessible to all	6.1. Strengthen the capacity of education and training providers to offer recognition of prior learning, including by establishing national guidelines outlining the procedures and processes of RPL. 6.2. Improve awareness of and access to recognition of prior learning, including tools for individuals to accumulate and display their non-formal and informal learning. 6.3. Implement a mechanism for recognising and rewarding informal, on-the-job learning provided by employers.

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Note

1. It is important to note that the term SMEs, here and throughout the discussion of enterprises in Ireland, refers to all enterprises in Ireland that have under 250 employees, regardless of whether they are considered SMEs in other policy contexts in Ireland.

4 Leveraging skills to drive innovation and strengthen firm performance in Ireland

Optimally using people's skills is associated with higher wages and job satisfaction for employees, high rates of productivity and innovation within firms, and stronger economic growth. Better leveraging skills is therefore central to supporting Ireland's economic renewal, promoting resilience to global megatrends and ensuring the country can achieve its aims of digital leadership and a just transition. This chapter assesses how Ireland leverages skills to drive innovation and strengthen firm performance and presents three opportunities to improve performance by: 1) better utilising Ireland's research talent and public research and innovation system to drive innovation within firms; 2) promoting the continuous improvement of leadership and management skills within enterprises; and 3) incentivising and enabling enterprises to make better use of the skills of their workers through innovative workplace solutions.

The importance of leveraging skills to drive innovation and strengthen firm performance

The degree to which skills are used in the workplace, across the economy and in society has important implications for the returns countries can expect to receive from their investments in skills. Previous studies have shown that better skills use[1] is associated with higher wages and job satisfaction for employees; high rates of productivity and innovation within firms; and stronger economic growth (OECD, 2016[1]; OECD/ILO, 2017[2]).

In the context of dramatic changes in the world of work, as set out in Chapter 1, countries must strive to ensure skills are used as intensively as possible in the economy, workplaces and society. Technological advancement, globalisation, demographic change, the green transition and, more recently, Brexit and the coronavirus (COVID-19) pandemic continue to challenge Ireland to raise productivity, innovative capacity and competitiveness.

To respond to these challenges and position economies to move to higher value-added and innovation-intensive activities, education, lifelong learning and labour-market-related policies need to be accompanied by policies supporting firms' research and development[2] (R&D), innovative activities and entrepreneurship (OECD, 2019[3]). This enables countries to simultaneously stimulate both the demand for skills among employers and ensure they can find the talent they need in the labour market.

Rising to this challenge is crucial to Ireland's future success. Better leveraging skills to drive innovation and strengthen firm performance will be central to supporting its economic renewal, promoting resilience to global megatrends and ensuring Ireland can achieve the twin aims of digital transformation and a just transition (DPER, 2021[4]).

While skills utilisation is often overshadowed by a policy focus on skills development (Keep, 2016[5]), Ireland has quickly recognised the importance of using skills in the workplace. The National Skills Strategy (NSS) 2025 identifies "the effective use of skills to support economic and social prosperity and to enhance the well-being of our country" as a key component of its vision (Department of Education and Skills, 2016[6]).

The analysis included in this chapter enables an assessment of progress towards this ambition and considers developments in the economic backdrop and policy landscape since the NSS 2025 was launched in 2016. It further offers examples of international practice and recommendations to inform the NSS 2025 follow-up, particularly concerning the NSS 2025' second objective on employer participation in developing and using skills to drive improvements in productivity and competitiveness (see Box 4.1).

In reviewing how Ireland can better leverage skills to drive innovation and strengthen firm performance, a wide range of policy areas is relevant, spanning education; economic; industrial; research and innovation; and regional growth policy. This chapter focusses on three skills-related policy areas: the utilisation of Ireland's research talent and public research and innovation (R&I) system to drive innovative capacity in the economy, management and leadership capability, and workplace practices that make effective use of skills. These three policy areas were selected based on an examination of relevant literature, feedback from the public consultation and insights from stakeholders consulted during this Skills Strategy project (hereafter "project participants") shared through bilateral interviews, workshops and roundtables.

Policy areas discussed in other chapters will also be important in better leveraging skills in Ireland. Effective skills use requires strong alignment between workers' skills and those needed in their roles. This "skills match" is predicated on granular and forward-looking labour market information (LMI) (discussed in Chapter 5), an agile and responsive skills system and strong career guidance to inform decisions on what skills to develop and which employment opportunities to pursue (discussed in Chapter 2). Ongoing investment in workforce skills is vital to ensure firms can adapt to changes in the market and innovate, which is discussed in Chapter 3 on lifelong learning.

Box 4.1. This chapter and Ireland's National Skills Strategy 2025

The analysis and recommendations included in this chapter assess progress and offer further insight into Objective 2 of Ireland's National Skills Strategy 2025: "Employers will participate actively in the development of skills and make effective use of skills in their organisations to improve productivity and competitiveness."

In particular, the first opportunity examines the scope and levers to promote greater connectivity between enterprises, particularly small and medium-sized enterprises (SMEs), and Ireland's tertiary education and research capability to support knowledge transfer and enhance the innovative capacity of firms (Action 2.4 of the NSS 2025).

The NSS 2025 identifies enhancing management practices as an important prerequisite to improving skills use, innovation and productivity in the economy (Action 2.2). The final two opportunities set out in this chapter explore how Ireland can promote a culture of continuous improvement in management capability and drive sharper focus on high-performance workplace practices (HPWPs),[1] which have a demonstrable impact on productivity and business performance.

1. High-performance workplace practices include both organisation factors (i.e. teamwork, autonomy, task discretion, mentoring, job rotation and applying new learning) and management practices (i.e. employee participation, incentive pay, training practices and flexibility in working hours).

Source: Department of Education and Skills (2016[6]), *Ireland's National Skills Strategy 2025 – Ireland's Future*, www.gov.ie/en/publication/69fd2-irelands-national-skills-strategy-2025-irelands-future/.

This chapter begins with an overview of current arrangements and performance indicators on the extent to which Ireland is leveraging skills. Subsequently, it examines three skills-related policy areas – or opportunities – for better leveraging skills to drive innovation and strengthen firm performance:

1. better utilising Ireland's research talent and public research and innovation system to drive innovation within firms
2. promoting the continuous improvement of leadership and management skills within enterprises
3. incentivising and enabling enterprises to make better use of the skills of their workers through innovative workplace solutions.

Overview and performance of leveraging skills to drive innovation and strengthen firm performance

Overview of arrangements to leverage skills to drive innovation and firm performance

When considering how skills are put to use in the economy, relevant strategies and policies span a range of policy domains and connect with the mandate of various agents within and beyond Ireland's skills system.

The formation of the Department of Further and Higher Education, Research, Innovation and Science (DFHERIS) and the transfer of national R&I policy responsibility from the Department of Enterprise, Trade and Employment (DETE) into DFHERIS brought the portfolios for skills, R&I under the umbrella of the same department. Ireland has also adopted a whole-of-government approach to developing and implementing policy initiatives (see Chapter 5 for a broader discussion on collaboration and co-ordination between departments). In developing key strategies, such as Impact 2030, there is strong collaboration between DFHERIS, DETE and the Department of Education (DEP EDU), for instance, on issues such as

entrepreneurship education at primary and post-primary levels, enterprise innovation and regional economic development. These departments have a range of arms-length government agencies charged with policy design and implementation. They also engage with a wide range of stakeholders in carrying out their mandates, including representative and advocacy bodies for education providers and businesses and regional agencies responsible for skills. Table 4.1 provides an overview of the key actors concerned with skills, R&I and enterprise in Ireland and details their roles and responsibilities.

Relevant strategies and programmes advanced by these agents are discussed further under the opportunities below, and Chapter 5 provides a comprehensive review of governance arrangements in Ireland.

Table 4.1. Overview of key actors with roles and responsibilities for skills, research and innovation, and enterprise in Ireland

Actor	Brief description of roles and responsibilities
Governmental departments	
Department of Further and Higher Education, Research, Innovation and Science (DFHERIS)	Designs and implements higher and further education and research policy. Oversees the Higher Education Authority, the Irish Research Council, the Science Foundation Ireland, the National Training Fund, Quality and Qualifications Ireland, Regional Skills Fora, Skillnet Ireland and SOLAS.
Department of Education (DEP EDU)	Designs and implements education policy in early childhood education, at early primary and post-primary levels, and special education. Oversees the Education and Research Centre, the National Council for Curriculum and Assessment, the National Council for Special Education and the State Examinations Commission, among others.
Department of Enterprise, Trade and Employment (DETE)	Designs and implements policies for stimulating foreign direct investment, indigenous enterprise development, international trade, enterprise innovation, fair competition in the marketplace, protection of consumer standards and workers' rights. Oversees Enterprise Ireland, the Industrial Development Agency, Local Enterprise Offices, and the development of Regional Enterprise Plans, which outline strategies for supporting regional enterprise growth, competitiveness, innovation and job creation across Ireland's nine regions. Provides secretariat to the Expert Group of Future Skills Needs (EGFSN).
Governmental agencies	
Enterprise Ireland (EI)	Enterprise Ireland is the government organisation responsible for developing and growing Irish enterprises in world markets. EI works in partnership with Irish enterprises to help them start, grow, innovate and win export sales in global markets. In this way, EI supports sustainable economic growth, regional development and secure employment. In addition, through EI's Centre of Excellence, EI works with the network of 31 Local Enterprise Offices to support micro-enterprises.
Higher Education Authority (HEA)	Governs and regulates Ireland's higher education (HE) system. Leads the strategic development of Ireland's HE and research system with a mandate that includes building research capacity, promoting the responsiveness of HE institutions to the needs of the economy and wider society, and developing the evidence base to underpin strategic planning at the institutional, regional and national level.
Industrial Development Agency (IDA) Ireland	Encourages investment in Ireland by foreign-owned companies. Works as a strategic partner with its existing client base to help them transform their operations in Ireland and successfully grow, working through many partners across the state.
Irish Research Council (IRC)	Funds research and supports the education and skills development of researchers. Provides policy advice on postgraduate education and research to the HEA and other national and international bodies, with a particular focus on the arts, humanities and social sciences.
Knowledge Transfer Ireland (KTI)	Supports business and the research base to maximise innovation from state-funded research, enabling businesses to access research and innovation (R&I) expertise and facilities, promoting industry-academia partnerships and research commercialisation.
Local Enterprise Offices (LEOs)	Act as local first-stop-shops to support starting, growing and developing a business. There are 31 LEOs, which offer mentoring and training programmes for developing business and management skills among small and micro-sized businesses.
Regional Skills Fora (RSF)	Act as regional one-stop-shops for supporting enterprises with reskilling/upskilling. Raise awareness of the range of services and programmes available across Ireland's education and training system among employers, help employers identify their skills needs, refer employers to suitable education and training providers and help design tailor-made reskilling/upskilling programmes reflecting employers' needs.
Science Foundation Ireland (SFI)	Funds basic and applied research in science, technology, engineering and mathematics (STEM). Promotes and supports STEM education and engagement, creating awareness and understanding of the value of STEM to the economy and society.

Actor	Brief description of roles and responsibilities
Skillnet Ireland	Runs sectoral and regional enterprise learning networks to increase education and training participation within enterprises and, thereby, enterprise competitiveness. Operates under a joint investment model, where government funding of on-the-job training is matched by contributions from enterprises.
Skills Labour Market Research Unit (SLMRU)	Carries out analysis of Ireland's skills supply and demand to inform the work of the National Skills Council and the public. Supports the development and review of policies and practices by the RSF, the EGFSN and other government bodies, including SOLAS and the education and training boards.
SOLAS	Manages or oversees a range of further education and training programmes (e.g. Skills to Advance, apprenticeships, traineeships, etc.) and houses the SLMRU.
Non-governmental stakeholders	
Irish Universities Association	Represents and advocates for the interests of Ireland's research-intensive universities.
Technological Higher Education Association	Represents and advocates for the interests of Ireland's technological universities and institutes of technology.
Higher Education Colleges Association	Represents and advocates for the interests of Ireland's independent HE sector.
Ibec	Business membership organisation representing businesses of all sizes and with 39 trade associations covering a range of industry sectors. Advocates for members' interests and offers members professional services and management training.
Chambers Ireland	Business network, representing the interests of member companies, supporting SMEs and facilitating trade. Umbrella group for local affiliated chambers, which are comprised of local business representatives.
Small Firms Association (SFA)	Subsidiary of Ibec, representing small firms in Ireland with fewer than 50 employees. Advocates for members' interests and offers members professional services and management training.
Irish SME Association	Business membership organisation representing SMEs. Advocates for members' interests and provides advice and information, learning and development programmes, business development and promotion opportunities.
The Wheel	National association of community and voluntary organisations, charities and social enterprises in Ireland. Advocates for members' interests and provides resources, advice, training and other opportunities for those working in the voluntary and community sector.
Technology, Research and Enterprise Centres	Including EI/IDA Technology Centres, SFI Research Centres and EI Incubation Centres, which promote collaboration between businesses and the public R&I infrastructure and provide support for R&D, business start-up and development.
Education and training providers	Include schools, colleges, universities, institutes of technology, technological universities, education and training boards, and others.

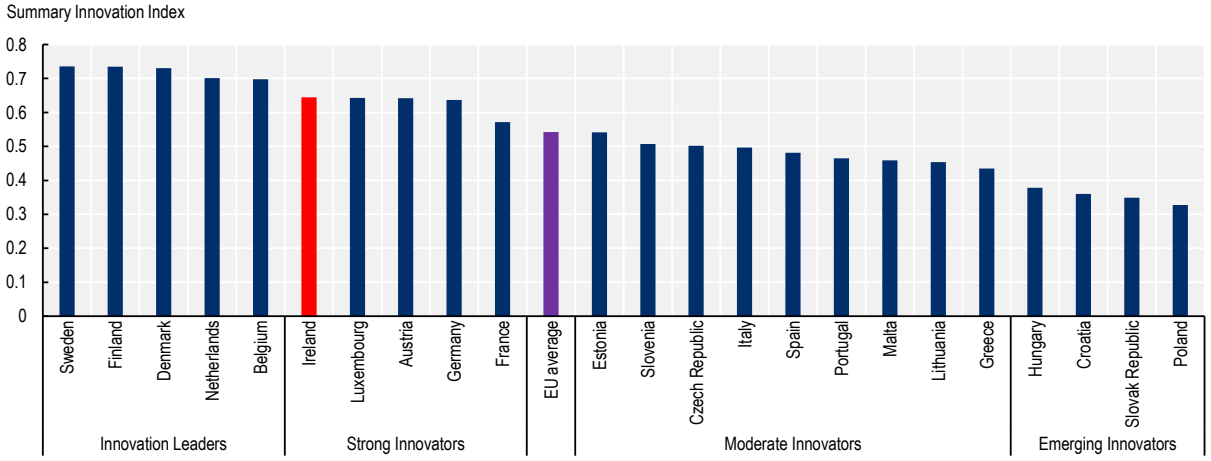
Note: The table presents key actors responsible for skills, R&I and enterprise. The mandates of other agents in the Ireland skills ecosystem may also be relevant; please refer to Table 5.1 in Chapter 5. The table aims to provide an overview, not an exhaustive list.

Ireland's performance in leveraging skills to drive innovation and strengthen firm performance

Ireland is considered a strong innovator but is losing ground

The European Innovation Scoreboard classes Ireland as a strong performer, ranked 6th out of 27 EU member states (see Figure 4.1) (European Commission, 2022[7]). In 2022, Ireland exceeded the EU average across several domains of the Innovation Index but lagged leading innovation economies, such as Sweden, Finland, Denmark and Belgium. Further, Ireland's performance lead over the EU average is weakening, attributed to reduced relative performance on measures of government support for business R&D, and non-R&D innovation expenditures, employment in innovative enterprises, product innovators, patent and trademark applications and environment-related technologies (European Commission, 2022[7]). Ireland's place in the Global Innovation Index has also fallen from 7th place in 2016 to 23rd place in 2022 out of 132 countries, with significant deterioration in relative performance across a range of human capital and research indicators, including expenditure on education, gross expenditure on R&D and research talent in the business enterprise sector (WIPO, 2022[8]).

Figure 4.1. Performance of Ireland's innovation system compared to other EU countries, 2022



Note: The EU Innovation Scoreboard summary innovation index is based on 32 different indicators.
Source: European Commission (2022[7]), *European Innovation Scoreboard 2022*, https://ec.europa.eu/docsroom/documents/46013/attachments/1/translations/en/renditions/native

StatLink https://stat.link/hgy4tr

Human capital is a key strength of Ireland's R&I system. As discussed in Chapter 1, the share of the population with tertiary education is relatively high and positions Ireland ahead of other European countries. Ireland also benefits from a strong stock of doctoral graduates and above-average rates of lifelong learning (although still significantly below that of top performers in the European Union) (European Commission, 2022[7]). In Ireland, collaboration rates between enterprises and between academia and industry are also significantly above average. For example, data from the Community Innovation Survey 2020 suggest that more than 40% of innovative enterprises in Ireland had collaborated with other enterprises or organisations when undertaking R&D or other innovation activities – among the highest collaboration rates in Europe (Eurostat, 2020[9]).

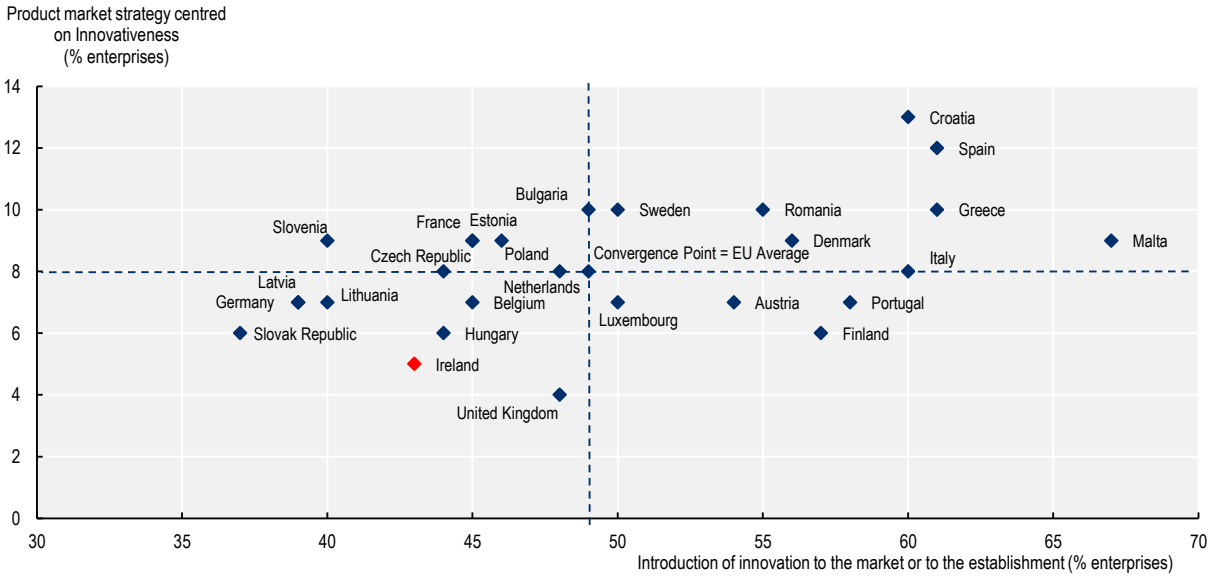
On other measures, Ireland's innovation system performs less strongly. Gross expenditure on R&D (GERD) in Ireland falls short of the EU and OECD average, including when based on gross national income[3] (GNI) (DFHERIS, 2021[10]). At 0.92%, the R&D intensity rate in Ireland is also below the EU average (1.39%) and around half the rates of leading innovators, such as Sweden (2.40%), Austria (2.14%) and Germany (2.11%). Private expenditure on R&D is also heavily concentrated among larger firms, with the top 100 largest firms in Ireland accounting for 81.8% of spending, 78.1% of which is attributed to foreign-owned enterprises. Investment in R&D is considerably lower among SMEs, who account for 99% of all businesses in Ireland, but only one-third (33.9%) of total business expenditure on R&D (BERD) (Central Statistics Office, 2021[11]; OECD, 2022[12]).

Rates of innovation within enterprises are relatively low in Ireland

Evidence from the Community Innovation Survey suggests that between 2016 and 2018, firms in Ireland were less likely to have introduced new or improved products (28.6%) or business process innovation (38.5%) than their European counterparts (29.8% and 41.0%, respectively). When exploring the factors that hamper innovation, enterprises in Ireland are less likely to report constraints to innovation, across almost all categories, including a lack of qualified employees within the enterprise, and a lack of collaboration partners. The only exception is "different priorities within the enterprise", which might suggest a need for Irish firms to attach greater priority to innovation (Eurostat, 2018[13]).

Further evidence from the European Company Survey suggests Irish enterprises are less likely to have introduced an innovation that is new to the market or to their establishment (43% of enterprises) compared to the EU average (49%) and are also less likely to have a product market strategy orientated around innovation (Figure 4.2) (Eurofound/CEDEFOP, 2019[14]). Just 5% of firms view developing products, services or processes that are new to the market as the most important factor for the competitive success of their business.

Figure 4.2. Innovation within enterprises in Ireland, 2019



Source: Eurofound/Cedefop (2019[14]), *European Company Survey 2019*, www.eurofound.europa.eu/surveys/2019/european-company-survey-2019.

StatLink https://stat.link/vkm52w

Ireland is a strong digital performer, but there is a need to improve business take-up of productivity-enhancing systems

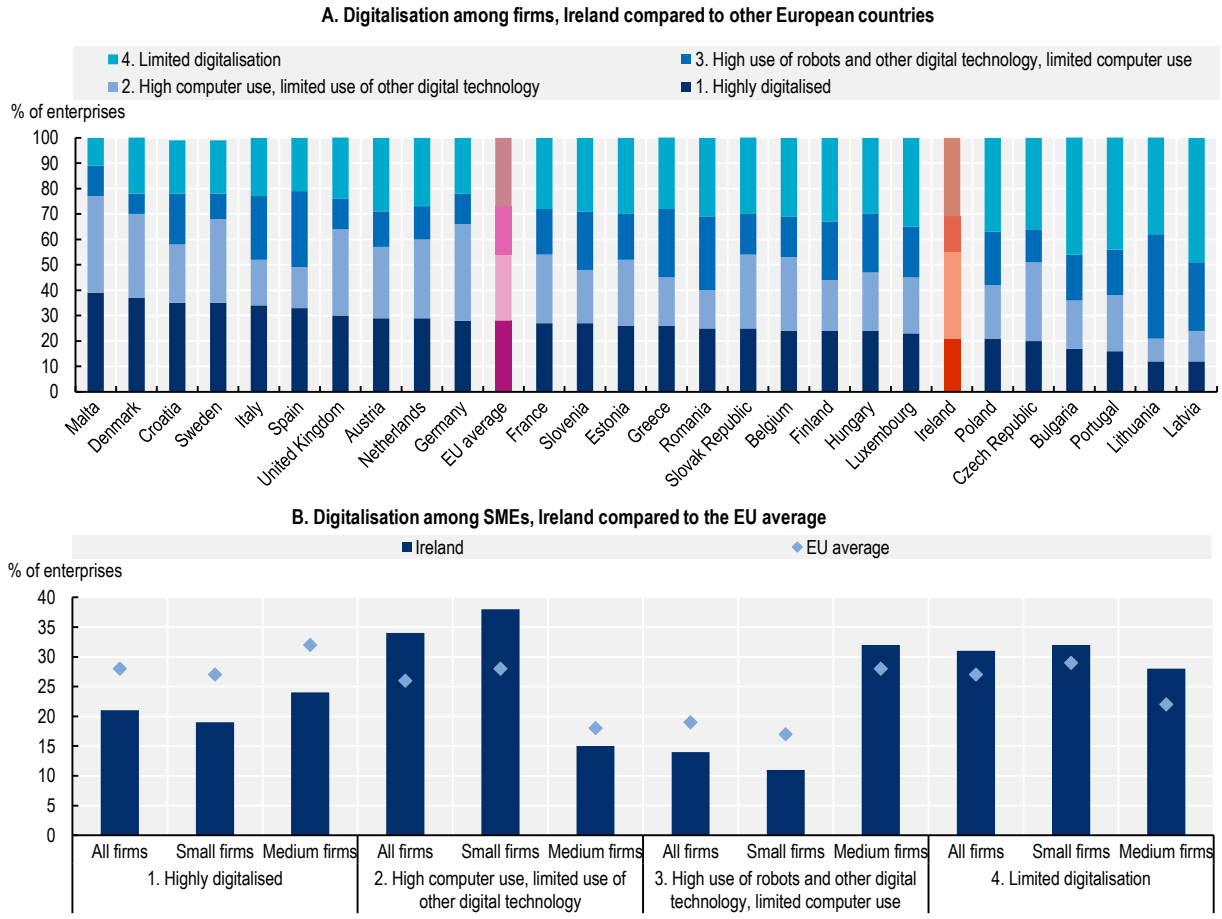
Ireland has been a strong and consistently improving digital performer in Europe, ranking 5th out of 27 EU member states in the Digital Economy and Society Index (DESI) 2022 (Eurostat, 2022[15]). Ireland is ranked as a top performer for human capital, ranked 3rd and exceeding the EU average across all metrics, with strengths grounded in its information and communications technology (ICT) graduates and ICT specialists. Ireland also scores well for its digital public services (ranked 6/27), including services for citizens and business and open data, and for its connectivity (ranked 6/27), reflecting coverage of fast broadband, very high capacity networks and 5G (Eurostat, 2022[15]).

The integration of digital technology in business is also above average in Ireland, particularly in areas such as e-commerce, cloud services, social media and big data. However, there is room to further improve the adoption of advanced digital technology and systems to support e-business. Ireland lags behind other EU nations in adopting a range of advanced systems to support internal processes (e.g. enterprise resource planning and customer relationship management software); supply chain management (e.g. e-invoicing software); and production (e.g. 3D printing, robots, Internet of Things) (Eurostat, 2021[16]).

Data from the European Company Survey categorises enterprises based on their use of a range of digital technologies, grouping firms based on the extent of digitalisation, ranging from highly digitalised firms (defined as having high computer use and being likely to have purchased customised software) to limited

digitalisation (defined as having below-average computer use and being less likely to have purchased customised software or to use robots). The survey confirms earlier findings that the use of advanced digital technologies is more limited in Ireland (Eurofound/CEDEFOP, 2019[14]). Ireland has a relatively low share of highly digitalised enterprises (21% of firms, compared with 28% in the European Union) and businesses that have a high use of robots and other digital technology but limited computer use (14% versus 19% in the European Union) and a higher share of firms that have high computer use, but limited use of other technology (34% versus 26% in the European Union) and that have limited digitalisation (31% versus 27% in the European Union) (see Figure 4.3).

Figure 4.3. Use of digital technologies by firms in Ireland and other European countries, 2019



Note: Panel B: small firms have 10-49 employees, and medium firms have 50-249 employees. Data for large firms (250+ employees) have been suppressed, given the limited sample size for Ireland.
Source: Eurofound/Cedefop (2019[14]), *European Company Survey 2019*, www.eurofound.europa.eu/surveys/2019/european-company-survey-2019.

StatLink https://stat.link/ahzgcf

Like other countries, the adoption of digital technology is lower among SMEs, but disparities between Ireland and the EU average are most pronounced for small firms (10-49 employees). For instance, 28% of small firms in Ireland have high computer use but limited use of other digital technology – a 10 percentage-point difference compared to small firms across Europe (Eurofound/CEDEFOP, 2019[14]).

Therefore, there is room for further enhancing digital adoption and innovation across large and small enterprises. A key challenge will be to ensure that these issues are viewed as an important priority within

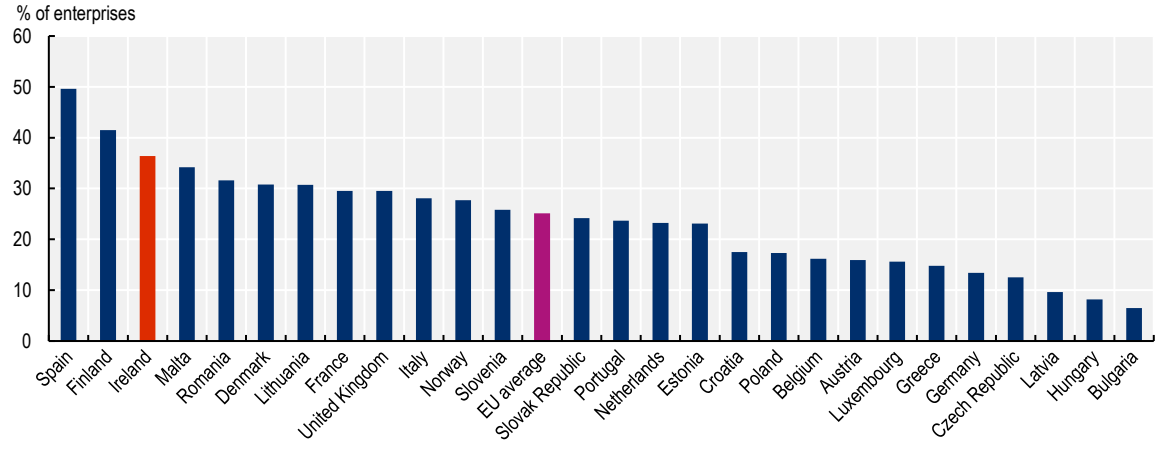
organisations, that there is an appropriate pipeline of skills to meet employer needs and sufficient expertise within enterprises to successfully implement new technologies and advance new products, services and business processes that strengthen firm competitiveness and performance.

Firms need stronger leadership and management capabilities

Strong leadership and management capabilities are important drivers of organisational change, helping to optimise the use of skills in workplaces and drive innovation, productivity and performance of firms. Previous studies have highlighted a need to improve management capability in Ireland, particularly among smaller enterprises (OECD, 2019[17]). While the share of firms with professional management, defined as managers chosen for merit and qualifications, is comparatively high in Ireland (World Economic Forum, 2018[18]), data from the Survey of Adult Skills (a product of the OECD Programme for the International Assessment of Adult Competencies, PIAAC) from 2012 suggests that the numeracy, literacy and problem-solving skills of managers are slightly below the OECD average (OECD, 2019[19]).

Evidence from the Continuing Vocational Training Survey suggests that the demand for management skills among enterprises in Ireland is higher than in most other European countries (see Figure 4.4). Just under one-third (32%) of enterprises in Ireland identify management skills among the top-three skills needed for developing their organisations, compared to 23% of firms across the European Union. Analysis of the skill requirements of companies participating in Enterprise Ireland's Spotlight on Skills also identified people management as among the most highly sought skills (Enterprise Ireland, 2022[20]). Further, up-to-date job postings data suggests that in 2020, management skills were among the most requested skills in online job postings (CEDEFOP, 2020[21]).

Figure 4.4. Management skills among the top-three skills needed for the development of enterprises in Ireland and other European countries, 2020



Source: Eurostat (2022[22]), *Continuing Vocational Training Survey 2020*, https://ec.europa.eu/eurostat/databrowser/view/TRNG_CVT_10S__custom_4180659/default/table?lang=en.

StatLink https://stat.link/wi2nzr

The quality of management practices in Ireland has also been found to lag other advanced economies. For example, data from the World Management Survey place Ireland 13th out of 15 nations – significantly behind the highest-performing countries, such as the United States, Germany and Sweden (World Management Survey, 2014[23]).

In part, weak management and leadership capability reflect the structural features of Ireland's economy. While the strong presence of multinational enterprises (MNEs) acts to drive up average managerial

performance, Ireland has a relatively large share of SMEs that typically display weaker management skills and practices. Past research has shown that structural factors – including firm size, ownership type, skills and qualifications and labour market flexibility – account for 38% of the gap between management practices in Irish firms compared to firms in the top performer (the United States). Remaining disparities in managerial performance were found to relate to non-structural factors, such as operational, performance and people management (McKinsey & Company, 2009[24]).

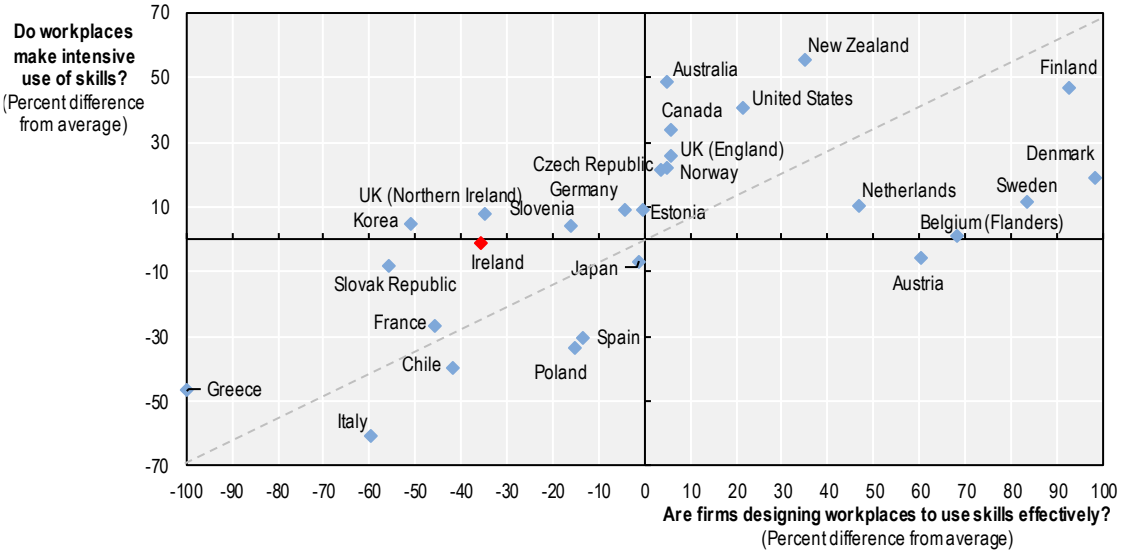
Stronger organisational practices are needed to strengthen the use of skills, adopt new technology and drive innovation

There is evidence that employers in Ireland could be more effectively using the skills of their workers. Data from the Survey of Adult Skills (PIAAC) suggest that on measures of skills use in the workplace, Ireland performs in line with the OECD average but lags economies like Australia, Finland, New Zealand, Norway, the United Kingdom and the United States, where firms tend to use the skills of their employees more intensively (OECD, 2019[19]).

Various factors influence the extent to which skills are effectively used in the workplace. These include macroeconomic conditions, labour market demand, skills supply and the extent of skills imbalances. In addition, organisational practices are an important but often overlooked determinant of how effectively skills are deployed in the workplace. The adoption of HPWPs, including staff training, autonomy, teamwork, performance incentives and mechanisms to promote strong employee voice are vital in enabling employees to fully apply their skills at work, promoting strong employee engagement and eliciting discretionary effort that drives innovation, productivity and performance of firms (OECD/ILO, 2017[2]).

Across the OECD, a little more than one in four workers are employed in jobs with high HPWPs. In high-productivity, high-innovation economies like Denmark, Finland and Sweden, the share of jobs in the economy adopting HPWPs is considerably higher, with around 40% of jobs displaying high HPWPs (Figure 4.5). In Ireland, one in five jobs adopts high HPWPs, below the OECD average (26%).

Figure 4.5. High-performance workplace practices and the use of skills in the workplace



Note: The figure is based on indicators from the Skills Strategy Dashboard, using normalised scores of the following aggregated indicators: "Do workplaces make intensive use of skills?" and "Are firms designing workplaces to use skills effectively?" both based on PIAAC scores.
Source: OECD calculations based on OECD (2019[19]), *Survey of Adult Skills (PIAAC), 2012/15*, www.oecd.org/skills/piaac/.

StatLink https://stat.link/y5xurb

Once again, the structural makeup of the Irish economy is a factor at play, given that SMEs tend to have weaker management capability and often lack dedicated human resources functions. Wider evidence also suggests a more mixed picture of workplace practices in Ireland, with strong performance on some metrics but scope to improve on others – which is discussed in greater depth in Opportunity 3. However, Ireland's performance suggests that a stronger focus on work organisation and management practices could be an important lever for driving innovation and strengthening firm performance.

Opportunities to better leverage skills to drive innovation and strengthen firm performance

To better leverage skills to drive innovation and strengthen firm performance, Ireland could consider a number of policy actions. The selection of such policy actions below is based on input from literature, desk research, discussions with the Cross-Departmental Project Team and discussions with a broad range of project participants – e.g. government departments and organisations, employer organisations, educational establishments and other interested parties – during workshops, group discussions and several related meetings. As a result, the following opportunities are considered to be the most relevant for Ireland's specific context:

1. better utilising Ireland's research talent and public research and innovation system to drive innovation within firms
2. promoting the continuous improvement of leadership and management skills within enterprises
3. incentivising and enabling enterprises to make better use of the skills of their workers through innovative workplace solutions.

Opportunity 1: Better utilising Ireland's research talent and public research and innovation system to drive innovation within firms

Investment in research, development and other knowledge-based assets, such as higher education institutions (HEIs) and research centres, plays an important role in securing advanced economies' success, developing high-level, cutting-edge skills and supporting firms' innovation activities through knowledge transfer and spillovers.

Ireland's public R&I system is one of its key strengths. As noted earlier, Ireland benefits from a strong base of research talent relative to the size of its labour force. Its quality-of-life offer attracts leading academic researchers from all over the world. International collaboration, measured in terms of co-inventions and co-authorship, is also high.

Despite these knowledge assets, R&D intensity in Ireland is comparatively weak, and rates of innovation in firms in Ireland, particularly among small, indigenous enterprises, are relatively low.

Project participants regularly identified a need to better leverage Ireland's public R&I system to drive innovation within firms. This is also identified as a key priority in Impact 2030, Ireland's Research and Innovation Strategy published in 2022 (DFHERIS, 2022[25]).

There is a range of potential avenues for driving innovation among Irish firms, many of which have been the subject of previous OECD reviews; see OECD (2019[17]) and OECD/European Union (2017[26]). The skills and knowledge vested in Ireland's research talent and public R&I system can be better leveraged to improve the innovative capacity of the Irish economy and strengthen the performance of firms in Ireland, including by developing skills for innovation across the education system to strengthen Ireland's adaptive capacity and competitiveness, as well as by better activating the skills of graduate and doctoral researchers in the workforce to strengthen the innovation capacity of Ireland's economy.

Recommendation 1: Develop skills for innovation across the education system to strengthen Ireland's adaptive capacity and competitiveness

Skills are vital for innovation. Skilled people generate new knowledge, adopt and evolve existing ideas; can adapt to changing circumstances, learn new skills and develop new approaches; and complement and make use of other inputs, such as digital technology, to spur innovation (OECD, 2011[27]).

The interplay between skills, R&D and innovation is well acknowledged in Ireland's economic and R&I strategies. For instance, "Talent" is a central pillar of Impact 2030, including strengthening emphasis on the careers, mobility, inclusion and impact of research talent in Ireland. The strategy also seeks to better leverage Ireland's knowledge assets to broaden and deepen enterprise innovation capacity (DFHERIS, 2022[25]). Skills feature as an important input across a wide range of other strategies in Ireland, particularly those concerned with ensuring Ireland's economy remains competitive, is well-positioned to respond to global megatrends and capitalise on opportunities to expand knowledge-based industries. This includes Ireland's Industry 4.0 Strategy (DBEI, 2019[28]), the Digital Ireland Framework (Department of the Taoiseach, 2022[29]) and the Climate Action Plan (Government of Ireland, 2021[30]).

Despite this good practice, project participants suggested there was scope to further strengthen strategic connectivity and alignment between skills policy and other policy domains. In particular, this related to the skills needed to support the development and adoption of emerging technology and the need to promote alignment with Ireland's new National Smart Specialisation Strategy (S3) (Government of Ireland, 2022[31]), to ensure the skills system is well placed to deliver the skills required to support sectoral specialisms identified in different regions. In addition to ensuring wider economic and innovation strategies to acknowledge skills as an important framework condition, project participants emphasised a vital role for the NSS 2025 in demonstrating the centrality of skills, crucial to delivering a broad range of Ireland's long-term aspirations and policy objectives. This was seen as important to ensure the prioritisation of skills in the policy discourse and to secure adequate investment in skills in the years ahead.

Ireland, like other OECD countries, also requires an in-depth understanding of the skills and attributes that are needed to support innovation, smart specialisation, digitalisation and climate transition and how these can best be developed through the skills system (see also Chapter 2 for a section on identifying skills of strategic importance, and Chapter 5 on improving skills data). The literature identifies a wide range of skills that contribute to innovation, emphasising the specific importance of technical, transversal and social skills (OECD, 2011[27]; 2015[32]).

Project participants suggested that nurturing an "innovation mindset" and developing transversal skills needed for innovation was an important priority for Ireland. Research examining international surveys of tertiary graduates five years after graduation found that the transversal skills that most distinguish workers that innovate were creativity, critical thinking and communication (Avvisati, Jacotin and Vinvent-Lancrin, 2013[33]). A range of social skills is also considered important, including self-confidence, risk-taking, leadership and teamwork (OECD, 2016[34]). The development of these skills is an integrated part of learning in Ireland, featuring in the Key Skills Frameworks for both the Junior and Senior Cycle (NCCA, 2015[35]; 2009[36]). In addition, Science Foundation Ireland (SFI) runs a range of programmes to inspire interest in science, technology, engineering and mathematics (STEM) subjects and promote high-quality, inquiry-based teaching, for example, through its Curious Minds (previously Discover Primary, Science and Maths) programme (Box 4.2). The Creative Ireland Programme, now extended to 2027, features a number of initiatives to support the arts, culture and creativity in education at every level. This includes the Creative Schools Programme, which supports the development of tailored projects to reinforce creative education in schools; the Creative Clusters scheme, where schools work together to shape arts and cultural projects; continuing professional development (CPD) programmes for teachers and creativity programmes for young people in disadvantaged communities; and a new Creative Youth Plan 2023-2027, which will facilitate collaboration between early years and school-age education and childcare professionals, those involved in youth and community work and relevant support services to promote the development of creativity

among children and young people (Government of Ireland, 2018[37]). Entrepreneurship education is incorporated into curriculum time, as well as through project-based activities, including during the Transition Year (OECD, 2019[17]). Ireland also offers a range of entrepreneurship initiatives at the primary and secondary levels, including the Junior Entrepreneur Programme and Student Enterprise Programme delivered by Local Enterprise Offices (LEOs) in partnership with local schools.

Box 4.2. Relevant national example: Developing transversal skills for innovation

Ireland: Curious Minds

Curious Minds is part of SFI's Education and Public Engagement Programme, which aims to increase interest in STEM among students, teachers and members of the public. Launched in 2003 as the Discover Primary Science and Maths, the programme aims to introduce primary school students to science in a practical, hands-on, enjoyable and interactive way. This is through awards to celebrate STEM achievements, resources to support inquiry-based teaching of STEM, free CPD training for primary school teachers and a network of Discover Centres that offer accredited workshops and outreach programmes for primary schools.

Source: SFI (2023[38]), *Curious Minds*, www.sfi.ie/engagement/curious-minds/.

However, given evidence that three-quarters of adults in Ireland lack the problem-solving skills required for technology-rich environments (OECD, 2019[19]) and that one-third of Irish employers are not satisfied with the entrepreneurial skills of higher education (HE) and further education and training (FET) graduates (Fitzpatrick Associates, 2019[39]), there remains scope to further strengthen the development of these skills across the education system in Ireland. DFHERIS, DETE and DEP EDU should review how best to extend existing innovation and entrepreneurship initiatives, including exploring the potential for new pedagogical practices, capacity building for teachers or reforming teaching methods, as seen in many OECD countries in efforts to broaden the skills and culture for innovation (OECD, 2016[34]; 2016[40]). One example is Germany's STEM education initiative, Little Scientists' House, which blends participatory learning for primary-aged children with a CPD programme for early-years educators (see Box 4.3), which is now available in 73% of primary schools in Germany. There may also be scope to draw on new entrepreneurship education initiatives being led by HEIs and funded by the Higher Education Authority (HEA), which seeks to expand and enhance existing institution-led activities (Higher Education Authority, 2022[41]). Furthermore, the redevelopment of the Senior Cycle also offers a timely opportunity for Ireland to consider how best to nurture transversal skills crucial to innovation across the second-level curriculum through Transition Year and wider entrepreneurship initiatives (NCCA, 2022[42]).

Box 4.3. Relevant international example: Developing transversal skills for innovation

Germany: Little Scientists' House

"Haus der kleinen Forscher" (or Little Scientists' House) is Germany's largest early childhood STEM education initiative. Established in 2006, run by a non-profit foundation and sponsored by the Federal Ministry of Education and Research, the programme aims to equip children aged 3-10 with the skills they need to be resilient, act responsibly and successfully meet global challenges. The pedagogic vision of the foundation is based on co-construction, where children are able to shape their learning processes. Central to these learning processes are exploration and inquiry, through which children develop problem-solving skills, find their own answers and develop self-confidence.

The foundation also offers a nationwide CPD programme to support primary school teachers and childhood educators in nurturing children's spirit of discovery, exploration and inquiry. The education initiative makes an important contribution to improving educational opportunities, fostering the next generation of professionals in STEM disciplines and professionalising pedagogical staff. Through its network of 196 local partners, the education initiative is now available to 73% of primary schools in Germany. Some 86 000 early childhood educators and primary teachers have participated in the initiative's CPD programme.

Source: Haus der kleinen Forscher (2023[43]), *About Germany's largest early childhood education initiative*, www.haus-der-kleinen-forscher.de/en.

Alongside developing transversal skills, Ireland also needs an in-depth understanding of the academic and technical skills required for innovation. Ireland's ability to exploit emerging technologies and other innovations will largely depend on an adequately skilled labour force and the adoption and utilisation of these skills within enterprises. Past research suggests that both tertiary and vocational education produces skills valuable for innovation but that there is also significant sectoral variation (Jones and Grimshaw, 2012[44]). For instance, despite the common focus on STEM, the importance of different fields of study varies by type of innovation and sector of activity. This emphasises the need to complement efforts to forecast changing skills needs across the economy (for example, research progressed by the Expert Group on Future Skills Needs [EGFSN], discussed further in Chapter 5) with more granular insight on the job roles, skills and competencies required in different sectors, occupations or with regard to specific innovations. This is particularly important for frontier innovation and, more generally, where skills needs are changing rapidly, often as a consequence of the disruptive effects of global megatrends.

National or regional sectoral clusters can serve as an important vehicle for promoting collaboration between employers, providers and wider actors in the skills system to identify and respond to changing skills needs. Project participants highlighted several examples of where clusters in Ireland had successfully worked together to refine existing or develop new education and training provisions in response to emerging regional or national skill shortages. Sometimes this activity was led by the government and initiated in response to policy needs, as in the Modern Methods of Construction Leadership and Integration Group (Box 4.4). Other clusters had developed more organically, reflecting regional sectoral specialisms and networks – some dependent on voluntary staff time, some with formalised management structures funded by county councils, and others supported through Enterprise Ireland's Regional Technology Clustering Fund. Ireland's forthcoming National Clustering Programme will provide a platform to promote a more strategic approach to cluster development, greater consistency and sustainability of funding and stronger strategic oversight of regional sectoral clusters. This also offers the opportunity to sharpen focus on the role of clusters in shaping Ireland's skills system.

Box 4.4. Relevant national example: Developing technical skills for innovation

Ireland: Modern Methods of Construction Leadership and Integration Group

Modern methods of construction (MMC) have been identified as a key measure to address the different housing needs in Ireland in Housing for All, Ireland's Housing Plan to 2030. DETE has recently overseen the establishment of an inter-departmental MMC Leadership and Integration Group. This group will ensure the cohesive integration and co-ordination of various government-supported MMC-relevant initiatives to support innovation in the construction industry, including the Construction Technology Centre; Demonstration Park; National Construction Training Centre; the "Build Digital Project"; and the "Built to Innovate" awareness campaign.

DETE is currently examining a range of issues and potential barriers to MMC adoption in residential construction, with a view to strengthening the broader MMC ecosystem, including a focus on required skillsets across regulatory structures (e.g. Building Control Authorities); public procurement; professional bodies (architects, engineers, surveyors, etc.); business leadership; offsite manufacturing; and other areas. In 2023, the group will work with the EGFSN on identifying skills needs for MMC.

Source: DETE , *Modern Methods of Construction Leadership and Integration Group*, https://enterprise.gov.ie/en/publications/mmc-leadership-and-integration-group.html.

Regional sectoral clusters supported through the new National Clustering Programme could have a clear mandate for strengthening and systematising the process of identifying and responding to emerging technical skills needed to support innovation in their specialist areas, working with wider actors in the skills system, including the EGFSN, the Regional Skills Fora (RSF), Skillnet Ireland, FET and HE providers, R&I centres, employer representatives and sector bodies. There are international examples from which Ireland can draw lessons, including the development of "cluster pacts" by "Spearhead" clusters in Flanders, Belgium, and the activity of the United Kingdom's "Catapults" across the skills value chain, supporting collaborative foresighting exercises, identifying gaps or a need to update current provision, shaping and supporting the uptake of new learning options (Box 4.5).

Box 4.5. Relevant international examples: Developing technical skills for innovation

Flanders (Belgium): Spearhead clusters

Spearhead clusters are partnerships between companies, knowledge institutions and the government that develop a long-term strategy to remain competitive. The cluster plays an important role in identifying skills needs. With support from the European Social Fund, they can initiate skills prognosis exercises and co-operate with innovation and education partners. Each cluster negotiates a cluster pact, which can include initiatives to increase training. There are currently six clusters that have been approved by Flanders Innovation and Entrepreneurship (VLAIO): Catalisti (chemistry); Flux50 (energy); VIL (logistics); Flanders' Food (agri-food); SIM (materials); and Blue (North Sea economic development).

England (United Kingdom, UK): Emerging skills project, Department for Education, UK Research and Innovation (UKRI), Gatsby Foundation

In 2021, the UK Department for Education launched the first Emerging Skills Project with the High-Value Manufacturing Catapult and Institutes of Technology, building on work supported by the Gatsby Foundation. This pilot project is attempting to future-proof the skills system by driving the adoption by industry of the skills needed to exploit emerging technologies and other innovations (known as the Skills Value Chain approach). The Skills Value Chain is comprised of three activities, delivered in sequence: 1) convening centres of innovation, employers, and providers to undertake "foresighting", which establishes emerging skills needs in a sector and analyses the gap in current provision; 2) developing course content and modular training to meet the need identified through foresighting; 3) delivering skills diffusion by training trainers, delivering funded learner uptake to employees in the sector, and working with high-quality providers to make the courses widely available.

As part of the new UK Innovation Strategy, UK Research and Innovation (UKRI) announced the intent to launch a second project and to explore further how the Skills Value Chain could be adopted by the government and the innovation ecosystem – including by Catapults and Innovate UK.

Source: VLAIO (2023[45]), Spearhead clusters, www.vlaio.be/nl/vlaio-netwerk/flanders-innovation-entrepreneurship/innovation-clusters-flanders/spearhead-clusters; UKRI (2022[46]), *UKRI Strategy 2022 to 2027: Transforming tomorrow together*, www.ukri.org/publications/ukri-strategy-2022-to-2027.

Recommendation 1: Develop skills for innovation across the education system to strengthen Ireland's adaptive capacity and competitiveness

Skills are vital for innovation and sit at the intersection of various policy domains, including R&I, industrial development and regional growth. Ensuring strategic connectivity and policy alignment is therefore important. Ireland requires an in-depth understanding of the transversal, technical and soft skills needed for innovation and how these can best be developed through the skills system.

Ireland can undertake the following specific actions to develop skills for innovation across the education system to strengthen the country's adaptive capacity and competitiveness:

1.1. **Strengthen the strategic positioning of skills for innovation and improve connectivity with wider policy domains**. While skills are recognised as an important framework condition in a range of strategies relating to Ireland's competitiveness, project participants emphasised the importance of articulating a stronger national narrative on the importance of skills for innovation to ensure the prioritisation of skills in the policy discourse and secure adequate investment in skills in the years ahead. Ireland's NSS 2025 offers an opportunity to demonstrate the centrality of skills to the realisation of a broad range of Ireland's long-term aspirations and policy objectives, including those set out in Impact 2030, Industry 4.0, the Digital Ireland Framework, the Climate Action Plan and the new National Smart Specialisation Strategy.

1.2. **Improve the development of transversal skills for innovation, such as creativity, critical thinking, and communication, across the education system, including lifelong learning**. DFHERIS, DETE and DEP EDU should review the potential to expand and enhance existing STEM, creativity, innovation and entrepreneurship education programmes in Ireland, including exploring the potential for new pedagogical practices, capacity building for teachers and reforming teaching methods at primary, second and third level, as seen in other OECD countries in efforts to broaden the skills and culture for innovation. This could draw lessons from new institution-led entrepreneurship education initiatives being funded by the HEA and be considered as part of the redevelopment of the Senior Cycle.

1.3. **Strengthen and systematise the process for identifying and responding to emerging technical skills needed for innovation in areas of strategic importance for the economy**. Regional sectoral clusters supported through Ireland's new National Clustering Programme should be given a clear mandate for anticipating future technical skills needs in their sectors or thematic areas, identifying gaps in existing provision and shaping new learning options, working with wider actors in the skills system, including EGFSN, RSF, Skillnet, FET and HE providers, R&I centres, employer representatives and sector bodies.

Recommendation 2: Better activate the skills of graduate and doctoral researchers in the workforce to strengthen the innovation capacity of Ireland's economy

Ireland's public R&I system provides high-level, cutting-edge technical skills for innovation, but mechanisms that enable access to talent and promote collaboration between public, private and academic sectors are vital to foster knowledge transfer and maximise innovation.

Past research suggests that these mechanisms for knowledge exchange and innovation diffusion are relatively well developed in Ireland (EGFSN, 2020[47]; OECD, 2019[17]; OECD/European Union, 2017[26]). Knowledge Transfer Ireland (KTI), established in 2013, promotes business engagement with the state-funded research base through Technology Transfer Offices (TTOs), enabling access to expertise, equipment and facilities in Ireland's HEIs and supporting university spin-outs. Ireland also benefits from a strong network of R&I centres, including 16 academic-led research centres supported by Science Foundation Ireland (SFI), 9 enterprise-led technology centres and 15 technological gateways, both supported by Enterprise Ireland, which offer access points for industry-focused researchers and specialist equipment and facilities across a range of key technologies. The forthcoming European Digital Innovation Hubs (EDIHs), part of the European Commission's Digital Europe Programme and led by the DETE through Enterprise Ireland, will further strengthen this landscape, supporting the digital transformation of smaller enterprises and public sector organisations in key technologies such as cybersecurity, artificial intelligence and high-performance computing. Enterprise Ireland and SFI also offer funding for specific R&I projects; for instance, the Enterprise Ireland Innovation Partnerships Programme provides expertise and financial support to offset the cost of developing new or improved products, processes or services (see Table 4.2 for a more detailed list).

Table 4.2. Initiatives to support knowledge exchange and innovation diffusion in Ireland

Programme	Organisation	Short description
Knowledge Transfer Ireland (KTI)	Enterprise Ireland / Irish Universities Association	The national central point that helps businesses benefit from Irish expertise and technology. KTI operates a national network of TTOs in Ireland's HEIs and research organisations to help companies and investors access the expertise and state-of-the-art equipment. KTI also helps businesses and spin-outs from academic research to identify and license new technologies and intellectual property relevant to their business and assists with R&D funding support.
Innovation Partnership Programme (IPP)	Enterprise Ireland	Allows organisations to access the latest skills and expertise from a network of research institutes throughout Ireland. The IPP can provide up to 80% of the cost of research towards developing new and improved products, processes or services.
Disruptive Technology Innovation Fund	DETE	Open to consortia of small and large companies working together or with research institutions on projects that have the potential to significantly alter markets or the way businesses operate.
Technology Centres	Enterprise Ireland / IDA Ireland	Allow Irish companies and multinationals to collaborate on market-focused strategic R&D projects with research institutions. The eight Technology Centres span a range of sectors, including food and beverage, pharmaceuticals, medical devices, engineering, ICT, education/training and finance.
Technology Gateways	Enterprise Ireland	In partnership with the institutes of technology and technological universities, EI has established a nationwide network of Technology Gateways that allow SMEs access to over 300 industry-focused researchers with specialist equipment and facilities. Technology Gateways also feature three clusters to further encourage collaboration within the technology gateway network (Internet of Things, engineering, material and design and food and beverage technologies).
Incubation Centres	Enterprise Ireland	EI funds both business and bio-incubation centres on college campuses across Ireland that provide space and support for start-up companies. Supports include access to mentoring on key aspects of business development, such as market research and finance; proximity to research teams in the college and the use of R&D facilities on campus.
European Digital Innovation Hubs	Enterprise Ireland	The network of European Digital Innovation Hubs will support businesses and organisations in their digital transformation and disseminate the latest advances in digital technologies, cybersecurity, artificial intelligence and high-performance computing. They will provide access to research infrastructure, technical expertise and experimentation in order that these organisations can "test before invest".

Programme	Organisation	Short description
Innovation Scorecard	IDA Ireland	Offers a free online assessment of strengths and areas for development across all areas of the Innovation Management Guide 560002. The output can be supported by IDA through a training grant or Innovate Programme.
Innovate Programme	IDA Ireland	Worth up to EUR 30 000, IDA Ireland offers Innovate Start and Innovate Plus Programmes to encourage multinational corporations to engage with introducing and managing innovation across their enterprises.
Innovation Vouchers	Enterprise Ireland	Worth EUR 5 000, innovation vouchers assist a company in exploring a business opportunity or problem with a registered knowledge provider. They can be used for new product/process development, new business model development, new service delivery and customer interface; new service development; and tailored training in innovation management and innovation/technology audit.
Career-FIT	Enterprise Ireland	Career-FIT offers experienced researchers the opportunity to develop their careers in market-focused applied research in Ireland's Technology Centres. The programme is open to researchers worldwide. To date, 50 experienced researchers have received the opportunity to engage in a three-year fellowship, one year of which being on secondment to an Enterprise Ireland Partner.
Research Centres	Science Foundation Ireland	The network of 16 SFI Research Centres links scientists and engineers in partnerships across academia and industry to address crucial research questions. The centres support both basic and applied research, spanning a wide range of sectors at varying levels and stages.
Centres for Research Training	Science Foundation Ireland	Provide funding for training postgraduate students in areas of identified skills needs. The purpose of the centres is to provide cohorts of academically outstanding future research leaders with the skills and knowledge required to address the future challenges of an ever-changing work environment.
Researcher Database	Science Foundation Ireland	The Researcher Database provides a facility to search for SFI-funded researchers by name, award type, year, institution, industry sector and/or scientific category. The database contains over 2 000 records.
Industry RD&I Fellowship Programme	Science Foundation Ireland	Seeks to support academia-industry interactions in order to address industry-informed challenges. Awards under this programme can be made to academic researchers wishing to spend time in industry worldwide through temporary placement.
Enterprise Partnership Scheme	Irish Research Council	Co-funds research master's and doctoral candidates across all disciplines to undertake collaborative research with enterprise while based at a HE institution.
Employment-based Postgraduate Programme	Irish Research Council	Co-funds collaborative research with higher education institutions while research master's and doctoral candidates are based within a range of organisations.
New Foundations	Irish Research Council	Supports researchers across a range of disciplines to undertake research, networking or dissemination activities.
Collaborative Alliances for Societal Challenges (COALESCE)	Irish Research Council	Supports research addressing national and global challenges, including partnerships with government departments and agencies.
Campus Engage	Irish University Association	Dedicated to supporting Irish HEIs to embed, scale and promote civic and community engagement across staff and student teaching, learning and research.
Researcher International Mobility	Irish University Association	Supporting international researcher mobility under Marie-Sklowdowska-Curie Actions, including through doctoral networks, staff exchange and postdoctoral fellowships.
Researcher Career Development and Employment Framework	Irish University Association / Technological Higher Education Association	An overarching framework for HEIs that aims to support more structured progression for researchers and clearer pathways into employment within and beyond academia.

Note: This is not an exhaustive list, but it aims to highlight the main programmes with a strong focus on knowledge exchange and innovation diffusion in Ireland.

Reviews and evaluations of Ireland's public research, development and innovation (RD&I) system suggest that programmes are well aligned to policy priorities, are achieving their aims and delivering a positive impact on innovation and wider performance indicators for beneficiaries and Ireland's economy. This includes positive engagement with SMEs, with small firms comprising 56% of beneficiaries of Enterprise Ireland RD&I financial support and 66% of R&D agreements between research-performing organisations and Irish SMEs (Technopolis/ESRI, 2020[48]; Knowledge Transfer Ireland, 2021[49]; Indecon, 2017[50]). Yet, relative to the size of the SME population, uptake is more limited among smaller enterprises, suggesting there is scope for TTOs and R&I Centres to further broaden the base of firms with which they engage. Enterprise Ireland, KTI and the SFI should explore the scope to further strengthen existing targets or incentives for SME engagement, as well as simplify and speed up the application process as well as minimise the administrative burden of monitoring activities, which have been cited as areas for improvement in past evaluations (Indecon, 2017[50]; OECD, 2019[17]; Technopolis/ESRI, 2020[48]). The 2019 OECD review of SME and Entrepreneurship Policy in Ireland also identified a potential role for LEOs in directing small firms to RD&I support available in regions (OECD, 2019[17]).

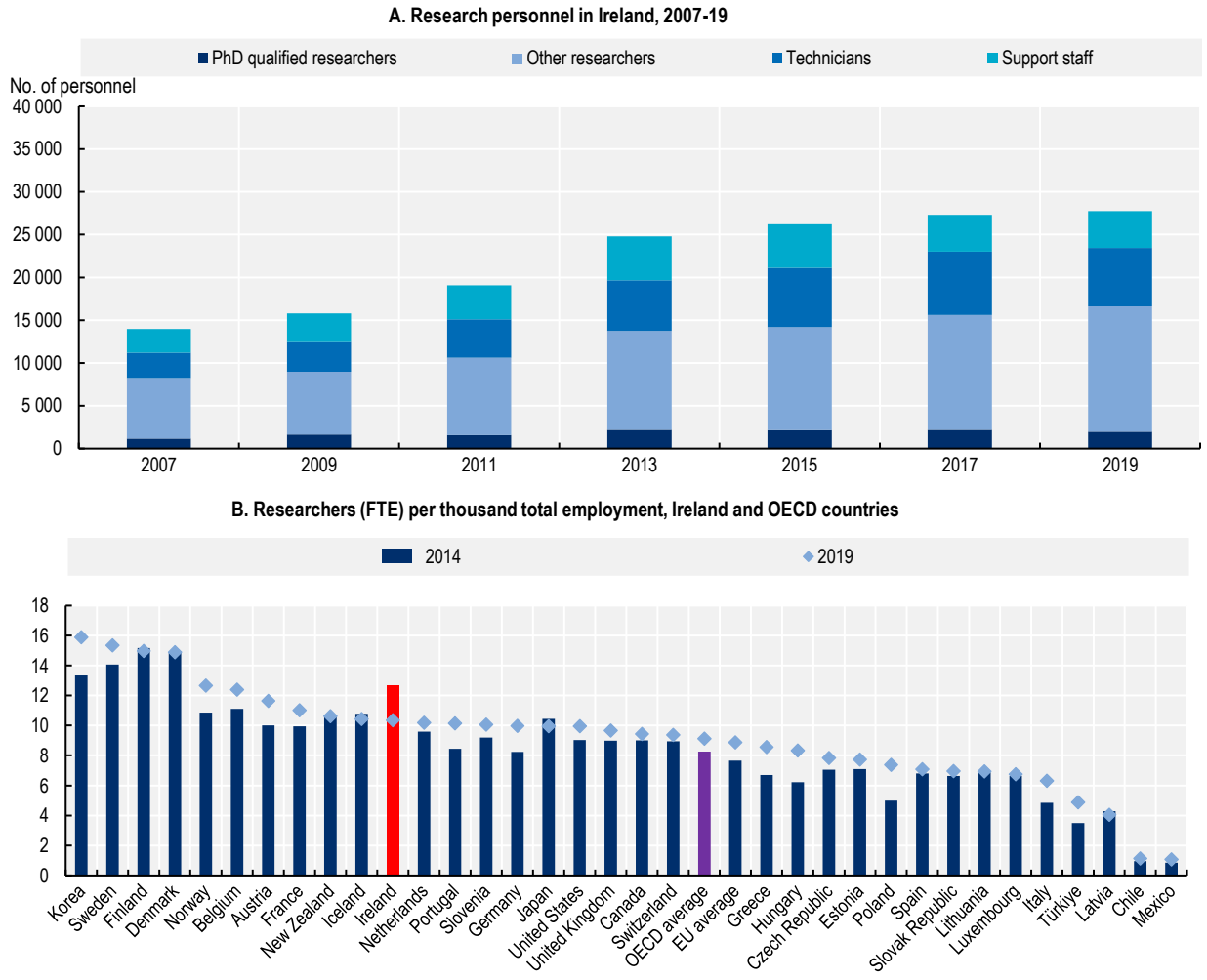
Project participants also emphasised that simplifying the language used to describe Ireland's public R&I system and support programmes was important to better engage smaller enterprises. It was felt there was a need to "demystify" the concept of innovation and build awareness of the value of incremental improvements in products, services or business processes (incremental innovation) alongside more transformational innovation. Technological universities (TUs) and institutes of technology (IoTs) were viewed as playing a vital role in widening participation, as institutions well embedded in regional economies and with strong networks with local businesses. However, project participants emphasised the relatively limited resources or incentives for engagement activities – both in terms of specialist staff and the time allocation of academic staff. Previous reviews of Ireland's higher education (HE) system have also found that current pay structures, the workload model and progression or promotion criteria do not sufficiently incentivise or reward academic staff for industry engagement, with some notable exceptions within specific HEIs (OECD/European Union, 2017[26]). DFHERIS and the HEA should work with the research-intensive and TUs and IoTs to examine how best to adjust staff teaching and research workloads to accommodate increased industry engagement, particularly ensuring that the TUs are adequately resourced to manage greater levels of activity envisaged in Impact 2030 (DFHERIS, 2022[25]).

Beyond strengthening mechanisms that enable access to research expertise and foster collaboration between academic, public and private sectors, there is also a need for Ireland to consider how to improve the mobility of research talent between academia, industry, the public and voluntary and community sectors. Ireland invests considerably in graduate and doctoral researchers who are among the most highly skilled workers in the economy. The knowledge vested in these individuals is considerable, as is their capacity to drive R&D intensity and innovation within firms. Studies of innovation systems over a number of decades have demonstrated the importance of the movement of skilled research personnel, within and between sectors, as a vehicle for the transfer and diffusion of formal and tacit knowledge (OECD, 2001[51]).

This has not escaped Ireland's attention and improving the mobility of research talent has been a priority in Ireland for several years. The National Strategy for Higher Education to 2030 called for secondments, consultancy and greater parity in the esteem afforded to knowledge transfer and commercialisation activities in performance reviews and metrics and promotion criteria to promote greater mobility of research staff (Department of Education and Skills, 2011[52]). Innovation 2020 established an explicit target of increasing the number of research personnel working in enterprises from just under 25 000 in 2013 to 40 000 in 2020 (Interdepartmental Committee on Science, Technology and Innovation, 2015[53]). Impact 2030 reaffirms this commitment, with a strategic objective to promote researcher mobility and to raise the number of researchers relative to the size of the labour force from 9.52 (in 2019) to 15.00 in 2030 (DFHERIS, 2022[25]). This would position Ireland among the leading innovation economies, such as Korea, Sweden, Finland and Denmark. However, as illustrated by Figure 4.6, the number of enterprise researchers has been increasing at a modest pace in Ireland and has reduced, relative to the size of the

labour force, over the past five years – with a more significant decrease in Ireland than in any other OECD country.

Figure 4.6. Enterprise researchers in Ireland and OECD countries, 2019



Note: Panel B: 2014 figure for Ireland is estimated based on the biennial BERD survey. Data for Switzerland and New Zealand are from 2015 and 2019. Data for Iceland are from 2015 and 2017. FTE: Full-time equivalent.

Source: CSO (2021[54]), *Business Expenditure on Research and Development (BERD) 2007-2021*, www.cso.ie/en/statistics/technologyandinnovation/businessexpenditureonresearchanddevelopment/; OECD (2022[55]), *OECD Main Science and Technology Indicators* (database), https://stats.oecd.org/Index.aspx?DataSetCode=MSTI_PUB.

StatLink https://stat.link/6etc3d

The continued policy focus on the mobility of research personnel is important to ensure Ireland does not lose ground on leading innovation economies. However, Ireland lacks detailed intelligence on enterprise demand for research talent and the movement of graduate researchers between sectors across their careers and the factors that inhibit and enable these transitions. Addressing these evidence gaps could prove crucial in better aligning the supply of research graduates with labour market demand and refining current interventions that promote research graduate mobility.

Ireland should prioritise regular forecasting of the demand for research graduates (National Framework of Qualifications [NFQ] Level 9 by research and Level 10) as an integrated part of the wider LMI framework in Ireland (see Recommendation 5 in Chapter 5 for further discussion of the need to reinstate regular

model-driven quantitative forecasting of labour demand at all levels). This would then provide the basis for a more detailed understanding of current and future needs for research graduates from different disciplines and by different sectors of Ireland's economy, complementing detailed foresighting activities progressed by EGFSN.

In addition to better anticipating labour demand, Ireland needs to examine research graduate outcomes and onward transitions of research talent in the labour market. The most detailed studies of labour mobility have been undertaken in Nordic countries due to the availability of highly detailed registers that capture the educational background of employees and their subsequent movement between jobs over time (Nas et al., 2001[56]). However, over the past decade, more countries, including Ireland, have invested in linking administrative datasets. The Central Statistics Office (CSO) Higher Education Outcomes collates data from various public bodies, including salary data from Revenue, benefits data from the Department of Social Protection, and graduate data from the HEA, enabling a longitudinal view of the mobility of research talent in the labour market. The planned development of a research graduate tracking system in Ireland, as part of the Impact 2030 work programme for 2022-24, would explicitly address this evidence gap. There is an opportunity for Ireland's plans to align with efforts by the European Commission to develop a European graduate tracking mechanism (European Commission, 2020[57]). Such approaches could also be further enhanced through new sources of "big data", including those drawn from social and professional networks, which provide new opportunities to track graduate transitions throughout their career, as seen in the OECD's work benchmarking the performance of HE systems (OECD, 2019[58]).

In addition to more detailed insight into the demand for research talent and postgraduate career pathways, project participants emphasised the importance of careers education, information and guidance for research talent. As noted earlier, career advice plays an important role in minimising skills imbalances in the economy and is considered vital to signposting researchers towards opportunities in the economy and building awareness and motivation to pursue careers outside of academia. Further discussion on careers education, advance and guidance can be found in Chapter 2.

The development of transversal skills among research graduates has been shown to have a significant impact on labour market outcomes (CESAER, 2020[59]; OECD, 2012[60]); features as one of the European Commission's seven principles for innovative doctoral training (European Commission, 2011[61]); and have been the subject of detailed study [see, for example, Eurodoc (2018[62])]. Past research has also shown that SMEs tend to attach greater value to PhD graduates' transferable skills than larger companies do (Borrell-Damian, 2009[63]).

Developing transversal skills among researchers is also a priority in Ireland. This is noted in the 2020 review of Ireland's Higher Education Research System (Higher Education Research Group, 2020[64]), and Impact 2030 commits to fostering transversal skills development, especially for early-career researchers, to enable career pathways outside academia. Graduate employability is also a key objective in the Higher Education Authority Strategic Plan (Higher Education Authority, 2017[65]); the development of transferable skills is central to the Irish Research Council (IRC)'s Career Development Policy (Irish Research Council, 2017[66]); and Science Foundation Ireland set out plans to align more PhD training to the National Framework for Doctoral Education to ensure doctoral researchers develop a breadth of skills, including entrepreneurship (Science Foundation Ireland, 2021[67]).

The OECD's review of Entrepreneurship and Innovation in Ireland's HE system notes that HEIs in Ireland undertake a range of activities to promote the development of transversal skills, including through teaching and learning, projects and work placements, competitions and prizes. HE work placements and job placement assistance have been found to support the development of employability skills, reducing the mismatch between graduates' skills land those needed by employers (OECD/European Union, 2017[26]). Ireland offers a range of such schemes. For example, the IRC Employment-based Postgraduate programme co-funds collaborative research with HEIs, while research master's and doctoral candidates are based within a range of organisations, and the SFI Industry RD&I Fellowships Programme supports

academic researchers in undertaking a temporary placement in industry to address industry-informed challenges (see Table 4.2 for a more detailed list). There are also institution-led initiatives, such as University College Cork's Odyssey Programme (discussed further in Box 4.6).

Box 4.6. Relevant national examples: Developing the transversal skills of research talent

Ireland: Odyssey programme, University College Cork

Formulated in response to the fact that a very small share of PhD graduates secure permanent positions in academia, the Odyssey programme aims to change the perspectives of researchers and final-year PhD students to explore and progress career paths beyond academia.

The programme includes a pre-meeting with participants to build trust and reflect on personal career expectations; a two-day programme exploring researcher career trajectories, organisational culture and skills needs outside of academia, and practical advice on the recruitment process; and a post-meeting, which includes a CV clinic and reflections on how to translate programme learnings into practical next steps. Early assessments of the programme report that 58% of participants moved beyond academia.

Ireland: Career-FIT, Enterprise Ireland

Career-FIT was launched in 2018 to offer experienced researchers the opportunity to develop their careers in market-focused applied research in Ireland's Technology Centres. The programme is open to researchers worldwide and is co-funded by Enterprise Ireland and the European Union. There have been two competitive calls to date that resulted in 50 experienced researchers receiving the opportunity to engage in a three-year fellowship, one year of which was on secondment to an Enterprise Ireland Partner.

Source: University College Cork (2022[68]), *Pathways Beyond Academia*, www.ucc.ie/en/hr/research/theodysseyprogrammeucc/odysseyreport2022; Enterprise Ireland (2023[69]), *Career-FIT*, https://horizoneurope.ie/career-fit.

Despite these initiatives, project participants suggested that further work is needed to strengthen the transversal skills of graduate researchers and the perceived value of academic researchers among smaller enterprises. Data from the Irish National Employer Survey also suggest that while employers tend to rate HE and FET graduates highly across a number of workplace and personal attributes, commercial awareness and entrepreneurial skills are perceived as weaknesses (Fitzpatrick Associates, 2019[39]).

The HEA, IRC and SFI should work collaboratively to strengthen research graduates' transversal skills, including by: further integrating transferable skills development into PhD programmes and Centres for Research Training; specialist doctoral schools and residential transferable skills training courses for postgraduate students; and collaborative doctoral programmes (Technopolis, 2011[70]; OECD, 2012[60]; Eurodoc, 2018[62]). The IRC and SFI should also prioritise SME engagement in these programmes, exploring the further scope for jointly supervised collaborations at the master's level, given that master's projects are typically shorter in duration and closer to market, addressing the distinct resource and financial constraints of smaller enterprises and maximising the commercial value of such collaborations (Borrell-Damian, Morais and Smith, 2015[71]). In recent years, there has also been growing interest in Doctoral Networks, where a partnership of universities, research institutions and businesses (including small firms), often from different countries, facilitate a series of short-term fellowships for researchers across the network (Borrell-Damian, 2009[63]). The Marie Sklodowska-Curie Actions (MSCA) Doctoral Networks provide one such example available to Irish researchers. There is an opportunity for the IRC and SFI to expand and enhance Doctoral Networks in Ireland, including exploring the scope for doctoral candidates to be "shared" by several companies, such as the SEPnet Doctoral Training Networks in the United Kingdom (Box 4.7), which support cost and risk sharing among SMEs (Borrell-Damian, 2009[63]).

Box 4.7. Relevant international examples: Developing the transversal skills of research talent

Europe: Marie Sklodowska-Curie Actions Doctoral Networks

MSCA Doctoral Networks implement doctoral programmes through partnerships with universities, research institutions and businesses, including SMEs. These doctoral programmes are centred around identified R&I needs and expose researchers to both academic and non-academic sectors, supporting the development of research and transferable skills and competencies relevant for innovation and long-term employability. Industrial doctorates train PhD candidates who wish to develop their skills and experience outside of academia, with participants jointly supervised by academic and non-academic partners and spending a minimum of 50% of their time working in the non-academic sector.

England (United Kingdom): SEPnet Doctoral Training Networks for SMEs

The South East Physics Network (SEPnet) has created an SME Doctoral Training Network (SME-DTN) to support regional industries and national science priorities. Funded by UKRI and Research England, the Doctoral Networks bring together small consortia of SMEs and large companies to share costs, facilities and expertise, develop industry-relevant research and create skilled, adaptable and commercially-focused PhD graduates to help meet their needs now and in the future. Companies share the costs of each PhD studentship with a SEPnet university partner and work with academics to shape projects in line with each company's business strategy. The project was launched during COVID-19 and is currently small in scale (supporting eight industry-relevant PhD projects), but it could prove an interesting model for enhancing SME engagement in collaborative doctoral programmes.

Source: European Commission (n.d.[72]), *Doctoral Networks*, https://marie-sklodowska-curie-actions.ec.europa.eu/actions/doctoral-networks; Irish Universities Association (2023[73]), *Doctoral Networks (DN)*, www.iua.ie/for-researchers/marie-sklodowska-curie-actions/funding-calls-and-deadlines/doctoral-networks/; SEPnet (n.d.[74]), *SEPnet's Doctoral Training Network for Small to Medium Size Enterprises*, www.sepnet.ac.uk/sme-dtn/.

Recommendation 2: Better activate the skills of graduate and doctoral researchers in the workforce to strengthen the innovation capacity of Ireland's economy

Ireland invests considerably in its public R&I system, and the knowledge vested in graduate and doctoral researchers is substantial, as is their capacity to drive R&D intensity and innovation within firms. However, while past research suggests mechanisms for knowledge transfer are well developed in Ireland, there is a need to enhance engagement with smaller enterprises and promote greater mobility of research talent between academia, industry, the public and voluntary and community sectors.

Ireland can undertake the following specific actions to better activate the skills of graduate and doctoral researchers in the workforce to strengthen the innovation capacity of Ireland's economy:

2.1. **Strengthen incentives and resources for research and innovation institutions and highly-skilled research talent to engage and collaborate with small enterprises.** Enterprise Ireland, KTI and the SFI should explore the scope to further strengthen existing targets and incentives for the TTOs, EDIHs and R&I Centres for SME engagement. DFHERIS and the HEA should also work with HEIs to examine how best to adapt the workload model progression and promotion criteria for academic staff to better enable and incentivise industry engagement while

ensuring that the technological universities are adequately resourced to manage greater levels of activity envisaged in Impact 2030.

2.2. **Advance further research to better understand current and future demand for research graduates and the mobility of research talent between academia, industry, the public and voluntary and community sector.** This could build on regular quantitative forecasting, including at NFQ Level 9 by research and Level 10, recommended in Chapter 5, to provide more granular insight into enterprise demand for research graduates from different disciplines and by different sectors of Ireland's economy. In the short-term, DFHERIS should also examine how the CSO Higher Education Outcomes data could be better leveraged to support a longitudinal view of the mobility of research talent in the labour market, as well as scope to utilise data drawn from social and professional networks to track research graduate transitions. Over the medium term, Impact 2030 plans to develop a research graduate tracking system in Ireland, which will prove vital to addressing this evidence gap. There is scope to align national efforts with wider initiatives being led by the European Commission to develop a European graduate tracking mechanism.

2.3. **Strengthen career guidance for research graduates and better integrate transversal skills development into research training at all levels.** The HEA, IRC and SFI should work collaboratively to review the career guidance for researchers (discussed further in Chapter 2) and further integrate transferable skills development into PhD programmes, EI Technology Gateways, SFI Research Centres and Centres for Research Training. There is also scope for Ireland to consider specialist, doctoral schools, residential transferable skills training courses for postgraduate students and extend collaborative doctoral programmes, including Doctoral Networks. SME engagement in these programmes must be a priority, with scope to extend jointly supervised collaborations at the master's level and advance Doctoral Training Networks for smaller enterprises that support cost and risk sharing between small firms.

Opportunity 2: Promoting the continuous improvement of leadership and management skills within enterprises

Strong management and leadership skills are vital to the success of Irish firms, underpinning their ability to adapt to many of the global megatrends set out in Chapter 1. Well-managed firms tend to perform better across a range of indicators: they are more productive, grow faster and have higher survival rates (Bloom and Van Reenen, 2010[75]). Skilled managers are more likely to innovate, adopt quality-orientated product market strategies and implement HPWPs (UKCES, 2014[76]). Managers' attitudes, particularly in small firms, have been shown to significantly influence the prioritisation and investment in training for workers (discussed further in Chapter 3).

For project participants, addressing weak management and leadership skills is key to driving innovation and strengthening firm performance in Ireland.

Management development has been a policy priority in Ireland for a number of years. The report of the Management Development Council proposed wide-ranging reforms to establish a national system for management development (Management Development Council, 2010[77]). More recently, the Expert Group on Future Skills Needs' report *Leading the Way* sets out a vision for management development in Ireland and makes a range of recommendations (EGFSN, 2020[47]), which are being taken forward by an inter-departmental group, working with business representative organisations (discussed in more detailed below).

Improving management capability is also acknowledged as vital to improving the productivity and competitiveness of Ireland's firms (National Competitiveness and Productivity Council, 2021[78]), enabling

the digital transformation of enterprises (Department of the Taoiseach, 2022[29]) and in maximising the benefits and mitigating the risks of the growth in hybrid working following the COVID-19 pandemic (DETE, 2021[79]).

Despite this policy focus, there are still various areas for improvement. Based on the assessment of the evidence, bilateral interviews and workshops, there is scope to extend flexible, subsidised and customisable development opportunities for Ireland's managers to maximise the accessibility, relevance and value of support; and to strengthen incentives for management development to raise the motivation of Ireland's managers to upgrade their skills and participate in lifelong learning.

Recommendation 3: Extend flexible, subsidised and customisable development opportunities available to Ireland's managers to maximise the accessibility, relevance and value of support

Existing research suggests that there is a range of measures available to support management development for businesses in Ireland (see Table 4.3 for an overview). LEOs act as a first-stop-shop offering management development programmes and mentor programmes for micro and small-sized firms. Enterprise Ireland offers a wide array of programmes to support Irish enterprises to grow, innovate and internationalise, including Leading 4 Growth and Go Global 4 Growth programmes, alongside grants for mentoring and strategic consultancy. Enterprise Ireland also runs a Mentor Network, which connects Irish businesses with experienced business leaders. IDA Ireland offers support for their client base, including the new Leading with Strategic Intent programme and the Future Subsidiary Leaders Programme, developed with the Irish Management Institute. Skillnet Ireland offers Management Development programmes through its 72 learning networks across Ireland and has recently launched Mentors Work with the Small Firms Association (SFA) to enhance leadership capability within smaller enterprises.

Table 4.3. Leadership and management programmes in Ireland

Programme	Organisation	Short description
Green for Micro	Local Enterprise Offices	Provides small businesses with tailored expert advice on how to drive sustainability. Qualifying SMEs get access to two days of intensive mentoring, including a sustainability audit and action plan.
Lean for Micro	Local Enterprise Offices	Supports companies in adopting lean business principles in their organisations to increase competitiveness. It helps identify issues and potential improvement areas and provides support for implementation and the achievement of savings and improvements in capability and the capacity to deliver.
Accelerate	Local Enterprise Offices	Aims to provide owners/managers with the management, leadership, business skills and knowledge to achieve sustainability and growth in their business.
Mentor Programme	Local Enterprise Offices	Matches up the knowledge, skills, insight and entrepreneurial capability of experienced business practitioners with small business owners/managers who need practical and strategic one-to-one advice and guidance.
Workplace Innovation Toolkit	Department of Enterprise, Trade and Employment	A diagnostic toolkit consisting of an online questionnaire designed to facilitate self-evaluation of an organisation's capacity to be an innovative workplace. It seeks to enhance performance in employee engagement, training, innovation and productivity.
Climate Toolkit for Business	Department of Enterprise, Trade and Employment	Provides practical and cost-effective actions for businesses to take to increase their sustainability.
Green Offer	Enterprise Ireland and IDA Ireland	Aims to help prepare companies to incorporate sustainable practices into the day-to-day running of their business. It comprises three levels of support, characterised by increasing levels of capability in implementing environmental best practice approaches to drive company awareness, adoption and integration of environmental best practice approaches, tools and techniques.
Lean Business Offer	Enterprise Ireland and IDA Ireland	This offer is designed to encourage companies to adopt lean business principles in their organisation to increase performance and competitiveness. The offer comprises three levels of support, characterised by increasing levels of capability in implementing lean leadership business principles and other best practice approaches to drive company awareness, adoption and integration of lean culture, tools and techniques.

Programme	Organisation	Short description
Digital Marketing Capability	Enterprise Ireland	Management development support facilitated by a digital marketing agency or consultant, which aims to develop and enhance a company's capability to use digital channels for business development.
EILearn	Enterprise Ireland	An e-learning platform where Enterprise Ireland client companies can access over 450 pieces of customised content designed for start-ups and SMEs. The focus is around six key business pillars essential for growing a business: finance; people and management; sales and marketing; strategy; innovation; and operations.
Go Global 4 Growth	Enterprise Ireland	Delivered in partnership with Dublin City University, this strategy implementation programme facilitates the creation of international growth action plans by chief executive officers (CEOs) and their senior teams.
Innovation 4 Growth	Enterprise Ireland	A partnership with the Irish Management Institute (IMI) and Massachusetts Institute of Technology (MIT) Sloan School of Management, this programme targets leaders in a management team and fast-tracks companies through an end-to-end innovation learning and practice journey to support the delivery of one or more innovation initiatives.
Leadership 4 Growth	Enterprise Ireland	A partnership with IESE Business School, in association with Learning Partnership, this programme comprises three overseas weeklong residential modules, covering Dynamic Business Strategy, High-Performance Leadership and Sustainable Growth and aims to develop world-class business leaders equipped with the necessary strategic and innovative capabilities required to scale sustainable internationally trading companies.
New Frontiers Programme	Enterprise Ireland	Designed to help entrepreneurs develop their ideas through practical and interactive workshops, personalised mentorship, co-working space and funding. The course was developed by the institutes of technology and technological universities. It aims to equip budding entrepreneurs with the skills, confidence, and knowledge to turn their idea into a viable enterprise.
Strategic Marketing Review	Enterprise Ireland	Targeted at senior management teams, this programme involves one-to-one engagement with an experienced consultant with a focus on the development of a market-driven business strategy that will impact a company's international growth potential.
Spotlight on Skills	Enterprise Ireland	Developed in partnership with DFHERIS, IMI and Enterprise Ireland, this programme helps businesses create a company skills plan to identify and address their critical skills needs, build capability and achieve strategic growth.
Leading with Strategic Intent	IDA Ireland / Irish Management Institute	A strategic leadership programme for senior leadership teams in subsidiaries of multinationals based in Ireland to enable the crafting of a value-adding, future-focused subsidiary strategy.
Future Subsidiary Leaders Programme	IDA Ireland / Irish Management Institute	A senior leadership programme for subsidiaries of MNCs in Ireland to elevate and develop the capabilities and mindset needed to successfully lead the subsidiary.
Management Development Programmes	Skillnet Ireland	Skillnet Business Networks offer tailored upskilling, networking opportunities and management development programmes through its 72 Learning Networks, underpinned by an SME Management Competency Framework.
Innovation Exchange	Skillnet Ireland	Facilitates collaboration between corporates and SMEs to develop an understanding and capability around corporate innovation, from ideation and talent development to procurement and adoption.
Springboard+	Government / Higher Education Authority	Springboard+ is a government initiative offering free and heavily subsidised courses at certificate, degree, and master's levels leading to qualifications in areas with employment opportunities in the economy, including management courses.
Skills to Advance Leadership and Management	SOLAS / Education and Training Boards	Developed in collaboration with IDA Ireland, Enterprise Ireland and the Regional Skills Fora, Skills to Advance Leadership and Management provides subsidised training to upskill supervisory staff, resulting in a Level 6 certificate or diploma accredited by the Institute for Leadership and Management.
Ibec Academy	Ibec	Offers a variety of management development courses, covering issues such as leadership, human resource management, employee engagement and workplace well-being.
ISME Learning and Development	Irish SME Association (ISME) / Skillnet	ISME Skillnet offers a variety of courses tailored to small firms, including SME management and leadership development, and is extending the offer through a new partnership with University College Dublin (UCD) Professional Academy.
Mentors Work	Skillnet Ireland / Small Firms Association	A structured 12-week business-support programme comprising an integrated approach of mentoring and targeted learning opportunities.
Leadership Academy	The Wheel	Offers resources and support tailored to the needs of non-profit leaders.

Note: This is not an exhaustive list, but it aims to highlight the main programmes with a strong focus on management and leadership capacity in Ireland.

Government programmes sit alongside a wider offer of support for start-ups and SMEs offered through business representative organisations such as Ibec, the SFA and the Irish SME Association (ISME), as well as a range of management development programmes tailored to the needs of businesses operating in different sectors of the economy.

Despite initiatives like the LEO Making it Happen campaign, not all businesses, particularly SMEs, are aware of the opportunities available to them. Project participants viewed the complexity of the landscape of support for management development in Ireland as a critical factor inhibiting the take-up of management training and support programmes. Concerns were also raised that organisations were often presented with different management development opportunities depending on the agency they first contacted. This often reflected the suite of programmes that the agency was funded to deliver rather than signposting enterprises towards support that was best suited to their needs.

Following the OECD review of SME and Entrepreneurship Policy in Ireland (OECD, 2019[17]) and the *Leading the Way* report (EGFSN, 2020[47]), the SME and Entrepreneurship Implementation Group is progressing a range of important measures to enhance the availability, relevance and navigability of support for enterprises. This includes widening eligibility of existing schemes to address identified gaps, establishing micro-credentials for entrepreneurs and developing a Single SME Portal that will provide information on support available; diagnostic tools to guide managers to development opportunities most aligned to need; and access to a national mentoring programme for SMEs (SME Taskforce, 2021[80]). In addition, during the stakeholder engagement process, there was significant support for strengthening referrals between regional agencies, with the scope to develop a “no wrong door” policy or one-stop-shop where businesses can access a consistent offer. This was seen as a vehicle for accessing all training and development options (including management development), as also covered in Chapter 3.

While at first glance, there appear to be plentiful management training options in Ireland, there is evidence of potential gaps in support and underserved or unmet need for management development. One example relates to established, mid-sized enterprises employing 50 to 249 employees with limited export potential (OECD, 2019[17]). These firms would be ineligible for the support offered through the LEOs, which is targeted towards micro firms, and recently extended to small businesses with fewer than 50 employees (Government of Ireland, 2022[81]). They may also fall outside of Enterprise Ireland’s client groups, which include high-potential start-up companies with the capability to start a business and sell in export markets; established manufacturing and internationally traded services businesses that are SMEs; Irish-based food and natural resource companies that are overseas-owned or controlled; and large companies (with 250+ employees). Mid-sized, locally traded service companies may therefore be ineligible for Enterprise Ireland and LEO support programmes. However, these firms may still be able to benefit from open-access resources like the EILearn e-learning platform and participate in wider management development opportunities, such as Mentors Work.

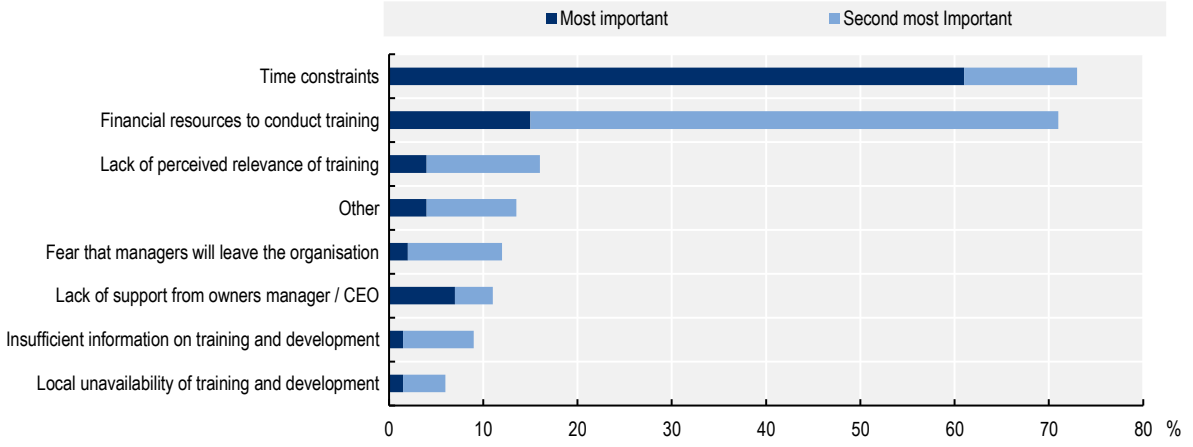
Another identified gap relates to community, voluntary and social enterprises (CVSEs). These organisations are acknowledged as making a vital contribution to Ireland’s economic and social prosperity and are increasingly deploying new technologies and creative approaches to address societal and environment challenges. However, many programmes listed in Table 4.3 are not available to charities or not-for-profit organisations. Research suggests that there are very low levels of awareness, a variable offer of support and limitations to the programmes available through the local enterprise support offer (The Wheel/Carmichael, 2021[82]; DRCD, 2019[83]).

Addressing these unmet needs should be considered a priority in Ireland. DETE and DFHERIS, working with Enterprise Ireland, the LEOs, Skillnet Ireland, the Regional Skills Fora and employer representative organisations such as Ibec and The Wheel, should review the relevance of their existing management development programmes to these organisations and the feasibility of widening the eligibility criteria for accessing support and developing targeted management development opportunities. Delivering commitments made in the Department for Rural and Community Development (DRCD) National Social

Enterprise Policy to compile a list of business support available to social enterprises, identify gaps in provision, improve access to mainstream support (such as that offered by LEOs) and provide tailored training for social enterprises will be important in improving business and leadership support for the CVSE sector. The launch of the Leadership Academy (see Box 4.8 further below), which offers resources and support tailored to the needs of non-profit leaders, is a noteworthy addition to the landscape of support and illustrates the value placed on customised and targeted support for groups of businesses that share common management challenges.

Several factors have been found to inhibit participation in management training. International evidence and research undertaken with businesses in Ireland identify time constraints as a major barrier to the take-up of management development opportunities, particularly among SMEs (Figure 4.7) (EGFSN, 2020[47]; Management Development Council, 2010[77]). Smaller firms are also less likely to have a dedicated budget for management development, meaning financial constraints are an additional concern. The EGFSN's *Leading the Way* report found that less than half (48%) of small firms have a budget for management development, and 32% of micro-sized firms do (EGFSN, 2020[47]).

Figure 4.7. Barriers to management development faced by SMEs in Ireland, 2020



Source: EGFSN (2020[47]), *Leading the Way: Investing in Management Development for SME Productivity and Growth*, www.skillsireland.ie/all-publications/2020/201020-final-leading-the-way-report_skillnet-ireland.pdf.

StatLink https://stat.link/0pg4qs

Chapter 3 discusses in great depth the barriers to lifelong learning and the need for flexible, modern learning options. In the context of significant time and cost constraints faced by managers in SMEs, this is particularly relevant, and project participants emphasised the need for substantially or fully subsidised training that is delivered flexibly, including short-term, modular and blended learning, online training and training delivered at times suited to business leaders.

Project participants also stressed the importance of engaging businesses in the co-design of management training and building a degree of customisation into the delivery of programmes. In particular, strong support was shown for the SFA/Skillnet Ireland Mentors Work programme and Enterprise Ireland Spotlight on Skills, which both enable participants to shape their learning journey and are also fully subsidised by the government and free to access for participants (in the case of the latter for EI clients only). Project participants viewed this as vital to ensure the relevance of management training to business needs, to maximise the business benefits of management development and to offer learning options that accommodate the time and cost constraints felt most acutely by SMEs. Another example of this in Ireland is the ISME / UCD Professional Academy which offers accredited, subsidised management development for SMEs, delivered flexibly through an interactive online study environment (Box 4.8).

Box 4.8. Relevant national examples: Flexible and targeted management development programmes for SMEs

Ireland: Skillnet Ireland Management Development Programme

Skillnet Ireland promotes training and upskilling for Irish companies. It designs tailored training programmes for companies and is overseen by a board of representatives from the Department of Education and Skills and key industry stakeholders. Accessed through networks that link companies based on areas of interest and business needs, it facilitates networking, the sharing of best practices and the delivery of upskilling programmes for employees. A core part of the programme is aimed at upskilling managers. The Management Development Programme offers courses for a wide variety of managerial needs. Managers can improve their leadership and communication skills, foundational skills, and the techniques necessary for managing teams, as well as learn specific skills required in sectors such as retail. Courses are subsidised, and in 2018, 56 182 people were trained from 16 462 member companies.

Ireland: The Leadership Academy

The Leadership Academy is a new model for leadership development in the community and voluntary sector, launched by The Wheel with support and funding from DFHERIS.

The Leadership Academy is a resource for all non-profit leaders, providing opportunities for peer networking, professional and personal development. A variety of resources are available from the Leadership Academy website, including self-assessment tools, workshops and webinars on key leadership topics, accredited leadership development opportunities and podcasts and publications.

Ireland: UCD Professional Academy

ISME Skillnet and the University College Dublin (UCD) Professional Academy worked together to develop subsidised, flexible, accredited management training delivered flexibly to accommodate the time constraints of smaller firms. As an alternative to on-campus learning, the UCD Professional Academy delivers expert instructor-led courses via an interactive online study environment.

UCD Professional Academy offers a variety of study options, including: live online learning, delivered through weekly evening classes, usually over 12 weeks or a 5-day intensive boot camp where participants can interact with each other but benefit from the convenience of studying from home; on-campus learning, in-person weekly evening classes; on-demand learning, where participants have the option to join live tutorial sessions but can learn at their own pace, on average over 6 weeks, but up to 18 weeks.

Each programme results in a UCD Professional Academy Diploma, with five areas of learning aligned to ISME's learning and development strategies: leadership and management; marketing; digital and information technology (IT); business programmes; and data analytics.

Source: Skillnet Ireland (2022[84]), *Home page*, www.skillnetireland.ie/; The Leadership Academy (2023[85]), *Home page*, www.leadersacademy.ie; UCD Professional Academy (2023[86]), *Home page*, www.ucd.ie/professionalacademy/.

An international example of relevance here is the Polish Agency for Enterprise Development (PARP) management development programmes, which are notable for the scale of subsidies (equivalent to 80% of programme costs), the breadth of online learning options and their scale – reaching 180 000 small businesses since 2006 (Box 4.9). Indeed, in addition to advancing new, flexible and targeted management training, Ireland should review the scope to scale up or draw lessons from successful existing development programmes. However, consultations with project participants suggest that there is a need for further

measures that stimulate demand and uptake among managers, particularly in SMEs (see Recommendation 4).

Box 4.9. Relevant international example: Flexible and targeted management development programmes for SMEs

Poland: PARP management development programmes

The Polish Agency for Enterprise Development (PARP) has a number of programmes targeting managers. For instance, the SME Manager Academy finances training and advisory support for managerial staff in SMEs in the area of business management, including human resources.

The academy aims to: 1) diagnose the needs of SMEs and the skills gaps of owners and managers; and 2) train managers of enterprises from the SME sector. Financial support covers up to 80% of projects, while the SME covers the remaining 20%. PARP has also introduced the PARP Academy, an e-learning platform offering 50 free-of-charge online training sessions tailored to the needs of the SME sector. The sessions are in four thematic areas related to setting up and running a business. Since 2006, over 180 000 participants have benefited from PARP Academy training.

Source: PARP (2023[87]), *Polish Agency for Enterprise Development*, https://en.parp.gov.pl/.

Recommendation 3: Extend flexible, subsidised and customisable development opportunities to Ireland's managers to maximise the accessibility, relevance and value of support

Addressing weak management and leadership skills is an important factor in driving innovation and strengthening the performance of firms in Ireland. Management development has been a policy priority in Ireland for several years, and much work is underway. Despite a well-developed landscape of management training in Ireland, however, there is evidence of unmet needs for management development and, thus, scope to extend and scale up flexible, subsidised and customisable learning options for managers.

Ireland can undertake the following specific actions to extend flexible, subsidised and customisable development opportunities to Ireland's managers to maximise the accessibility, relevance and value of support:

3.1. **Address gaps in management training for mid-sized, locally traded service companies and community, voluntary and social enterprises.** DETE and DFHERIS, working with Enterprise Ireland, the LEOs, Skillnet Ireland, the Regional Skills Fora and employer representative organisations, such as Ibec and The Wheel, should review the relevance of existing management development programmes to these organisations and the feasibility of widening the eligibility criteria for accessing support. There is also a need to develop tailored training customised to the distinct needs of these organisations, in the case of CVSEs, delivering commitments made in the DRCD National Social Enterprise Policy.

3.2. **Advance new flexible, subsidised and customisable management training and scale up successful existing programmes**. Enterprise Ireland and Skillnet Ireland, working in partnership with the RSF, employer representative organisations, education and training providers, should review how to support the expansion of short-term, modular and blended

learning, online training, and training delivered at times suited to business leaders, which can better accommodate the time and cost constraints felt most acutely by Ireland's smaller enterprises (see Chapter 3 for more recommendations on flexible and accessible learning opportunities). Ireland should also review the scope to expand or draw lessons from successful existing examples of fully subsidised and customisable management development opportunities in Ireland, with project participants highlighting the SFA/Skillnet Mentors Work and EI Spotlight on Skills as innovative models that could be usefully applied to other management training programmes.

Recommendation 4: Strengthen incentives for management development to raise the motivation of Ireland's managers to upgrade their skills and participate in lifelong learning

Data from the European Labour Force Survey suggests that in Ireland, managers are less likely to have participated in training than is average across the European Union. In 2021, 14.9% of Irish managers had engaged in education and training in the past four weeks, compared to 16.6% in the European Union and over 40% of managers in countries like Finland and Sweden (Eurostat, 2021[88]). As in other countries, participation in management development increases with firm size, with 67% of micro-businesses engaging in formal management development between 2017 and 2020 compared to 88% of medium-sized enterprises (EGFSN, 2020[47]).

Recent research also suggests there has been a deprioritisation of leadership development in Ireland, as firms have focused on the impact of COVID-19 and economic uncertainty (CIPD, 2021[89]). The impact of the COVID-19 pandemic on management skills needs was also identified by project participants. COVID-19 has accelerated the shift towards more flexible forms of working (Microsoft, 2020[90]), and more than half (56%) of organisations in Ireland have incorporated remote and hybrid working into strategies to attract and retain talent (CIPD, 2022[91]). However, there is evidence that managers find it more difficult to manage remote teams (McCarthy et al., 2021[92]). The DETE Making Remote Work strategy acknowledges that dedicated training to support management skills development will be important to enable the successful adoption of remote working (DETE, 2021[79]). However, while 75% of Irish firms had invested in technology to support remote or hybrid working, less than half (41%) of line managers had received training on how to manage remote or hybrid teams (CIPD, 2022[91]).

There is evidence that smaller enterprises may lack awareness of the value of management training and have unrecognised management development needs. For instance, evidence from the *Leading the Way* report suggests that business leaders in Ireland identify developing management capability as a priority but are more likely to identify management and leadership development as a top priority for their management teams than themselves (EGFSN, 2020[47]). In order to build a culture of continuous improvement in management development in Ireland, there is a need to build awareness and commitment at the very top of organisations and to develop the skills of the entire management community, including junior team leaders and middle managers as well as senior executives and leaders. A lack of evidence on the return on investment in management training has been identified as a further barrier to participation, both in the literature and among government and industry stakeholders in Ireland. This suggests a need to improve awareness among businesses, particularly SMEs, of the business benefits of management development for productivity, innovation and business performance. The EGFSN Leading the Way working group could build on the recently launched Skills for Better Business campaign, which includes an online assessment of management development capabilities and signposts businesses to suitable support, to provide stronger quantitative evidence and case studies demonstrating the return on investment associated with management training.

Alongside soft measures like awareness campaigns, project participants were also interested in the potential for management standards, accreditation and quality marks and how these might support

stronger incentives for management development. Internationally, a few such standards exist, often focused on specific aspects of management, particularly human resource management in the case of the Investors in People Standard (see Box 4.10). An overriding benefit of such approaches is that employers are supported to make management improvements in becoming accredited and often report a range of benefits as a result in terms of attracting talent, promoting staff retention, and strengthening employee engagement. National and local enterprise agencies, qualifications and standards authorities such as Quality and Qualifications Ireland (QQI) and the National Standards Authority of Ireland (NSAI), providers of management training, employer representative organisations such as Ibec, ISME, the SFA and The Wheel, large organisations and SMEs should work collaboratively to develop new management standards and quality marks to professionalise management in Ireland. It will also be important to co-design the standards with employers (particularly smaller enterprises) to work through implementation challenges and to maximise relevance and impact. For instance, the accreditation journey can be time-consuming and costly, and many existing standards are, for example, tiered to support employers of all sizes to engage with standards as part of a journey and encourage their ongoing participation – progressing through standard, silver, gold and platinum award levels in the case of Investors in People.

Box 4.10. Relevant international examples: Incentivising management development

Worldwide: Investors in People (IIP) international standard

IIP is an accredited standard for people management. It originally started as an initiative by the UK government in 1991 and is now an international standard applied in over 80 countries in more than 30 languages. The latest framework focuses on three key areas (leading, supporting and improving), each covering nine performance indicators. Organisations are assessed against these indicators using a performance model made up of four levels: developed, established, advanced and high-performing. Standard, silver, gold and platinum levels are then awarded for one of three years. IIP has accredited over 50 000 organisations, and its “we invest in people” accreditation could be considered the global benchmark for people management.

Scotland (United Kingdom): Approach to Fair Work First in procurement

The Scottish government has been deploying its spending power to leverage employers’ commitment to Fair Work across Scotland. This is achieved by applying Fair Work First criteria to issuing public grants, contracts and other funding awarded by and across the public sector. Thus, all policy, funding and procurement managers across the Scottish government have been trained in and guided by the Fair Work Convention principles. This means asking employers to work to certain Fair Work criteria when receiving public funding, including:

- appropriate channels for effective voice, such as trade union recognition
- investment in workforce development
- action to tackle the gender pay gap and create a more diverse and inclusive workplace
- no inappropriate use of zero-hours contracts
- payment of the real living wage.

The criteria were updated in 2019 to reflect emerging priorities for encouraging constructive partnerships between employers and workers and addressing workplace equality.

Source: Investors in People (2023[93]), *Home page*, www.investorsinpeople.com; Scottish Government (2021[94]), *Fair Work Action Plan: Annual Report*, www.skillsdevelopmentscotland.co.uk/media/47742/fair-work-action-plan-annual-report.pdf.

Ireland should review the scope to advance incentives that promote the take-up of these standards, for example, by making accreditation a condition for accessing public funding or support – particularly for larger businesses that have greater resources to invest in management development. Internationally, there are examples of employment standards being integrated into public procurement frameworks, such as the Fair Work Standard in Scotland (Box 4.10). There are also examples of banks offering discounted interest rates for small businesses that have completed management training, as seen in the United Kingdom in the mid-to-late 1990s (OECD, 2002[95]). There is some practice of this nature already underway in Ireland. For example, Micro Finance Ireland (MFI) offers a 1% discount to standard interest rates for loan applications made through LEOs, and once MFI approves the loan, businesses are provided with a mentor from the LEO Mentor Panel (Box 4.11). Extending such schemes could help to drive the take-up of management training and support a culture of continuous improvement in management skills in Ireland.

Box 4.11. Relevant national example: Incentivising management development

Ireland: Micro Finance Ireland (MFI)

MFI provides small loans of EUR 2 000 to EUR 25 000 for micro-sized businesses employing fewer than ten employees and with an annual turnover of less than EUR 2 million, including those that have been declined a loan from a bank.

MFI works closely with the LEOs and Local Development Companies and offers a 1% reduction in the interest rate on loans when businesses submit their applications through these intermediaries.

Micro-sized firms approved for a loan are supported by an experienced business mentor on the LEO Mentor Panel, who offers non-financial learning and support to help businesses develop and grow.

Source: Micro Finance Ireland (2023[96]), *Home page*, https://microfinanceireland.ie/.

Recommendation 4: Strengthen incentives for management development to raise the motivation of Ireland's managers to upgrade their skills and participate in lifelong learning

There is evidence that smaller enterprises have unrecognised management development needs, lack awareness of the value of investing in management skills and that COVID-19 has led to a deprioritisation of leadership development in firms in Ireland. Efforts to strengthen the relevance and accessibility of management training, therefore, need to be accompanied by interventions that increase the demand and take-up of management development opportunities.

Ireland can undertake the following specific actions to strengthen incentives for management development to raise the motivation of Ireland's managers to upgrade their skills and participate in lifelong learning:

4.1. **Strengthen evidence on the business benefits of management development for productivity, innovation and business performance.** The EGFSN Leading the Way working group could build on the recently launched Skills for Better Business campaign to provide stronger quantitative evidence and case studies demonstrating the return on investment associated with management training.

4.2. **Introduce a new management standard and associated quality marks to professionalise management in Ireland**. National and local enterprise agencies, qualifications and standards authorities such as QQI and NSAI, management training providers, employer representative organisations such as Ibec, ISME, the SFA and The Wheel, large organisations and SMEs should work collaboratively to develop the new management standard. It will also be important for stakeholders to co-design standards with employers to work through implementation challenges, minimise administrative burden and maximise value. Due consideration should be given to developing a tiered standard – for example, with gold, silver and bronze levels – to support employers of all sizes to engage with standards as part of a journey and encourage their ongoing participation.

4.3. **Advance incentives for Irish firms to take up new management standards and quality marks**, for instance, by making it a condition for accessing public funding and support. This could build on current partnership arrangements between MFI and LEos, which offer discounted interest rates on loans and promote participation in the LEO Mentor Panel. In addition, Ireland should review the potential to extend conditionality to a wider range of financial and non-financial support for business, particularly for larger firms that have greater resources to support management development.

Opportunity 3: Incentivising and enabling enterprises to make better use of the skills of their workers through innovative workplace solutions

While investment in R&D and the presence of R&D professionals within organisations are crucial factors in business innovation, an important but often overlooked determinant of innovation in smaller enterprises is organisational design and culture. How firms organise their workplaces has a significant impact on their ability to stimulate ideas from the workforce, transform these into innovation, and facilitate the absorption of knowledge from other firms and research organisations (Bloom and Van Reenen, 2010[75]; Flood et al., 2008[97]; Lorenz and Potter, 2019[98]). In the context of relatively low rates of innovation in Ireland discussed earlier in this chapter, work organisation warrants considerable focus in Ireland.

Research suggests that small firms that offer greater autonomy, teamwork, performance-related pay and appraisal, and regular staff meetings between employees and their supervisors innovate more and co-operate more for innovation. The positive impact of participative forms of work organisation on firm-level productivity are well documented and substantial. For example, Swedish surveys suggest an uplift of between 20-60% in addition to reduced staff turnover and staff absence (Totterdill, 2015[99]). In Nordic countries like Sweden and Finland, most SMEs design workplaces in these ways, but in Ireland, the share of firms adopting these organisational models is much lower (Lorenz and Potter, 2019[98]).

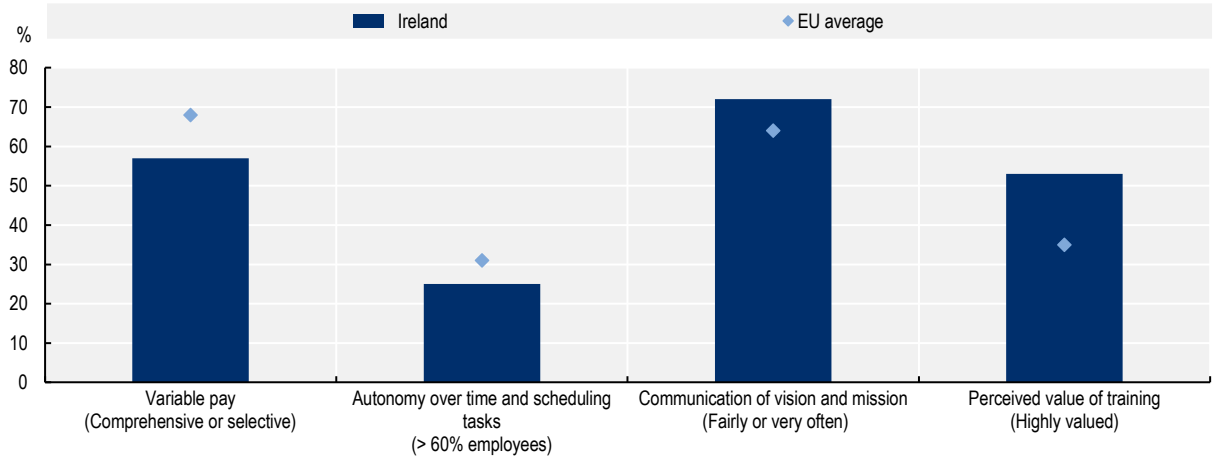
Research carried out by Dublin City University and the University of Limerick demonstrates the powerful effect that combining strategic human resource management with employee involvement and participation systems has on the performance of Irish firms. When employing this multi-dimensional model of HPWPs, firms were found to realise significant performance advantages, both in terms of labour productivity and workforce innovation (Flood et al., 2008[97]).

As set out earlier, data from the Survey of Adult Learning (PIAAC) suggest a smaller share of jobs in Ireland adopt these HPWPs. However, evidence from the European Company Survey and European Working Conditions Surveys suggests a mixed picture of workplace practices in Ireland (Figure 4.8) (Eurofound/CEDEFOP, 2019[14]; Eurofound, 2016[100]). On the one hand, employees in Irish firms report that working conditions are good; they tend to rate their line managers highly, are more likely to have undergone training, and report being able to apply their own ideas in their work. In addition, employers in Ireland assign greater value to training, more regularly communicate their vision and mission to staff, and take steps to ensure their employees are engaged in the decision making of the business. However, on

the other hand, Ireland performs less well on measures of job design: workers in Ireland are more likely to report that their work involves monotonous tasks and work long hours. They also tend to experience less autonomy on some measures and are less likely to work in self-directed teams. Other studies suggest that small firms in Ireland struggle with more formal and strategic human resource management, particularly target setting and incentivisation, performance management and dealing effectively with underperformance (EGFSN, 2020[47]; McKinsey & Company, 2009[24]).

Figure 4.8. High-performance workplace practices in firms, Ireland and the EU average, 2019

In percentage of firms



Source: Eurofound/CEDEFOP (2019[14]), *European Company Survey 2019*, www.eurofound.europa.eu/surveys/2019/european-company-survey-2019.

StatLink https://stat.link/x4tvoe

These findings suggest there is an opportunity for Ireland to stimulate SME innovation by driving improvements in workplace organisation through greater adoption of HPWPs. In particular, Ireland could reinvigorate strategic focus on workplace innovation as a key vehicle to improve the productivity and performance of firms; and extend funding and support for peer-to-peer learning to maximise knowledge exchange and innovation diffusion between Ireland's MNEs and SMEs.

Recommendation 5: Reinvigorate the strategic focus on workplace innovation in Ireland as a key vehicle to improve firm productivity and performance

Despite the well-evidenced positive impacts of HPWPs, many European countries lack a strong strategic focus on modernising workplaces. While there is considerable potential for public programmes to strengthen workplace organisational practices, work organisation can often be viewed as the private concern of enterprises and social partners rather than an issue for public intervention (OECD/ILO, 2017[2]).

The benefits of strengthening workplace practices have not gone unnoticed in Ireland. In the 1990s and early 2000s, Ireland was one of few liberal market economies to set out a strategic focus on HPWPs and workplace innovation, taken forward through the Irish government's National Workplace Strategy. The National Centre for Partnership and Performance (NCPP) was established to support and drive change in the Irish workplace. The NCPP subsequently launched a specialist Workplace Innovation Fund, which included public awareness campaigns to disseminate knowledge of HPWPs and running enterprise-level projects to foster social partnerships in advancing HPWPs within enterprises. However,

both the NCPP and its Workplace Innovation Fund were abolished in 2009 as part of wider austerity measures (Totterdill et al., 2016[101]).

While the NSS 2025 acknowledges skills use as an important objective, there is scope for DFHERIS to strengthen the focus on HPWPs as a means to improve the use of skills in the workplace, drive innovation, improve productivity and strengthen firm performance. The NSS 2025 follow-up offers the opportunity to reinvigorate the strategic focus on organisational practices and workplace innovation[4] in Ireland as a driver of innovation, productivity, competitiveness and digitalisation. While engagement activities undertaken during the recommendations mission for this project did not rate potential policy directions concerning workplace practices as highly as others, the mixed picture of workplace practices in Ireland and the potential uplift in productivity, innovation, and firm-level performance associated with participative forms of work organisation (noted above) justifies a sharper focus on enabling enterprises to make better use of the skills of their workers through innovative workplace solutions.

Lessons from those countries that have prioritised the diffusion of HPWPs over a number of decades also emphasise the importance of repositioning workplace innovation from a traditional industrial relations sphere to a mainstream policy priority (Totterdill et al., 2016[101]). There is a need to embed workplace innovation more strongly within the NSS 2025 and the wider policy framework for economic development, industrial development, innovation and digitalisation in Ireland. One such example of this was *Future Jobs Ireland 2019*, which notes that the full productivity gains of new technology will only be realised if complemented with changes in organisational processes (Government of Ireland, 2019[102]). This could include the government broadening its definition of innovation to include "organisational innovation", spanning the adoption of productivity and efficiency-enhancing processes, including potentially redefining the Revenue Commissioners' qualification requirements for the R&D tax credit. The IRC and SFI could also provide additional funding to support R&D projects that seek to blend technological innovation with investment in staff training, work reorganisation and job redesign to maximise the productivity benefits realised through the adoption of digital technology by Irish firms.

There are also potential learnings from workplace innovation programmes run in other European countries, particularly in countries like France, Germany and some Nordic countries, which have progressed a variety of strategies and interventions over the past 30 years, while other countries, like Canada, have relatively recently established organisational practices as a policy priority (Box 4.12). Evaluations of longstanding programmes identify a range of implementation challenges, including how best to allocate finite resources, deliver significant and sustained shifts in organisational practices, and successfully transition concepts and approaches from traditional manufacturing environments to meet the needs of knowledge-based service industries. They also offer lessons on how to successfully overcome many of these challenges, for example, through more inclusive framing strategies, involving workers and social partners in programme design, utilising collaborative learning networks to embed and diffuse learning and allocating sufficient resources for dissemination and capacity building (Totterdill et al., 2016[101]).

Box 4.12. Relevant international examples: Making workplace innovation a policy priority

Finland: Workplace Development Programme

Finland's Workplace Development Programme ran as a national government programme from 1996 to 2010. Motivated by a belief that sluggish productivity growth was linked to poor skills use, the programme aimed to disseminate new and innovative work, organisational and management practices, models and tools and to develop a "learning organisation" culture. Notable examples include the Finnish programmes TYKE (1996-2003) and TYKES (2004-10), which aimed to promote the introduction of organisational innovations, thus contributing to workplace productivity and the quality of working life. More than 1 800 projects were funded, involving nearly 350 000 employees and some EUR 106 million

of public funding. The most common focus areas for the development projects were work processes, the organisation of work, and the development of human resource management and supervisory work. Project implementation was in close co-operation between management and employees, and external experts were involved in each project. Most managers and staff expressed that the projects positively impacted the operational performance of the workplace and the quality of work. The programmes were especially successful in raising public awareness of the importance of workplace change and innovation; boosting development activity among a large group of workplaces, including SMEs; and strengthening expertise in workplace development and research on working life.

Canada: Innovation and Skills Plan

In 2017, Canada initiated the Innovation and Skills Plan, a blueprint to foster a culture of innovation in firms and workplaces, create well-paying, highly-skilled jobs, and help provide better services for entrepreneurs and businesses. The vision is divided into four key areas: 1) people and skills; 2) research, technology and commercialisation; 3) investment, scale-up and clean growth; and 4) programme simplification. The programme targets many areas of Canadian society and brings together different initiatives from different government departments to create one coherent strategy.

Some of the aims include increasing digital skills and literacy; increasing the number of professional, science and tech-related jobs in the Canadian economy; growing business investment in research and development; doubling the number of SMEs majority owned by women; and doubling the number of high-growth firms in Canada. Each target has a quantifiable goal that should be completed by 2025 (the plan's end date), and information on the progress of these objectives is provided to the public in a clear manner. On its dedicated website, progress bars visually track how close each target is to being achieved. The public can also see which government initiatives have been created to pursue each objective. This helps create accountability and transparency in implementing the Innovation and Skills Plan.

Source: OECD/ILO (2017[2]), *Better Use of Skills in the Workplace: Why It Matters for Productivity and Local Jobs*, https://dx.doi.org/10.1787/9789264281394-en; Government of Canada (2019[103]), *The Innovation and Skills Plan*, www.ic.gc.ca/eic/site/062.nsf/eng/h_00083.html.

The strategic prioritisation of workplace innovation in Ireland should, in turn, influence public funding allocation and programme design. As noted earlier, and in Chapter 3, Ireland benefits from a relatively well-developed offer of programmes to strengthen management capability and promote employer investment in skills. Several of these programmes develop skills required to drive improvements in organisational practices. For example, the Skillnet Ireland/Small Firms Association Mentors Work Competency Framework includes performance management, work culture, communication, and “motivate for growth” (among others), which equip participants with the skills to advance high-performing workplaces. The Ibec Academy offers a variety of relevant management courses on issues such as employee engagement and workplace well-being. Resources and programmes designed to support businesses in improving their organisational practices also exist. For instance, Enterprise Ireland’s Workplace Innovation Toolkit enables organisations to examine performance in areas such as employee engagement, training, innovation and productivity and signposts companies to relevant support. This includes, for example, Enterprise Ireland’s Lean Business offer, which enables firms to build the capability of leadership and staff to identify opportunities to improve operations and drive workplace innovation. Scaling up these existing initiatives, particularly promoting take-up among smaller enterprises, would help to secure improvements in workplace practices in conjunction with the digitalisation agenda.

DFHERIS and DETE, working through Enterprise Ireland, IDA Ireland, Skillnet Ireland, the RSF and LEOs and working with wider organisations such as Ibec, the SFA, ISME and The Wheel, should also examine the opportunity to update the content of wider programmes to strengthen the focus on workplace transformation and HPWPs. For instance, with the LEOs now servicing firms with up to 50 employees,

programmes such as the Accelerate Management Development Programme could be strengthened by adding modules focusing on building high-performing workplaces. In addition, Ireland could consider advancing new pilots that take well-established, innovative programmes, such as Skillnet Business Networks or Spotlight on Skills and apply them to improving work organisation within smaller firms. Similarly, additional funding and support planned for Industry Consortia looking to deploy Industry 4.0 technologies in firms could be extended to include organisational practices (DBEI, 2019[28]).

Alongside the opportunity to strengthen the strategic focus on workplace innovation, there is a need to raise the awareness and motivation of employers (particularly smaller enterprises) to implement HPWPs. Despite the well-documented positive impact of HPWPs on firm performance, the adoption of these practices across Europe remains limited, particularly in Ireland. Low levels of take-up tend to be attributed to low levels of awareness of what constitutes good practice, lack of awareness about the benefits of HPWPs and poor access to resources and support to improve organisational practice and enable workplace innovation (OECD/ILO, 2017[2]; Totterdill et al., 2016[101]).

Project participants suggest that while Irish firms generally demonstrate a strong appreciation of the need to invest in training and development for staff (an important component of HPWPs and discussed in detail in Chapter 3), their awareness of wider organisational practices that could improve employee engagement and firm performance (e.g. job design, target setting, incentivisation and mechanisms for employee participation) is much lower. There is, therefore, a need for Ireland to advance awareness campaigns that build an understanding of the steps that small firms can take to stimulate better work organisation practices and to strengthen the evidence base on the business case for the adoption of HPWPs. Many other OECD countries have faced similar challenges and advanced relevant initiatives from which Ireland could draw lessons, including awareness-building activities that demonstrate leading practices around work organisation and job design, e.g. social media campaigns, the sharing of success stories, networking and diagnostic tools that help firms identify where improvements can be made (Box 4.13).

Box 4.13. Relevant international examples: Promoting awareness of the need to stimulate better work organisation practices

Australia: Centre for Workplace Leadership

There are a number of government-led active efforts in Australia that aim to build the evidence base for why action is needed while also sharing best practices about successful programmes. For example, the Centre for Workplace Leadership was established in 2013 and is dedicated to excellence in leadership research, improving leadership quality in Australian workplaces and developing individual leaders. The centre aims to bridge the gap between research insights and leadership practices around work organisation and job design. It offers a number of customised programmes to help organisations engage employees and develop organisational leadership skills.

New Zealand: Poor utilisation of skills in the workplace a key policy issue

New Zealand has singled out the poor utilisation of skills in the workplace as a key policy issue and recognises the introduction of HPWPs as crucial to increasing workplace productivity. Policy has been focused on increasing awareness and demonstrating how HPWPs can be applied in the workplace to achieve gains for both employers and employees. Limited financial resources have been devoted, primarily from the Department of Labour.

Flanders (Belgium): Flanders Synergy

Flanders Synergy helps firms evolve through workplace restructuring, workplace learning and innovation. Its objective is to help organisations create more attractive (workable) jobs and to become more agile, innovative and responsive to market needs. To this end, Flanders' Synergy conducts scientific research and helps disseminate practical examples and success stories through networking,

training, and new business models and tools. The Flemish government subsidises some services for employers. Flanders Synergy has an advisory board that includes academic researchers and social partners, including unions, enterprises and consultants.

Source: Centre for Workplace Leadership (2018[104]), *Centre for Workplace Leadership*, https://fbe.unimelb.edu.au/cwl/about; OECD/ILO (2017[2]), *Better Use of Skills in the Workplace: Why It Matters for Productivity and Local Jobs*, https://dx.doi.org/10.1787/9789264281394-en; OECD (2015[105]), *Employment and Skills Strategies in Flanders, Belgium*, https://dx.doi.org/10.1787/9789264228740-en.

Recommendation 5: Reinvigorate the strategic focus on workplace innovation in Ireland as a key vehicle to improve firm productivity and performance

The NSS 2025 follow-up offers an opportunity for Ireland to reinvigorate its strategic focus on organisational practices. The mixed picture of workplace practices in Ireland, relatively poor rates of innovation in firms, and the well-evidenced uplift in the productivity and performance of firms associated with HPWPs suggest that work organisation warrants considerable focus in Ireland.

Ireland can undertake the following specific actions to reinvigorate its strategic focus on workplace innovation as a key vehicle to improve Irish firms' productivity and performance:

5.1. **Position the modernisation of Irish workplaces as an explicit policy priority in Ireland's National Skills Strategy 2025 follow-up.** Other strategies, such as Ireland's national R&I Strategy and Regional Development Plans, should also seek to acknowledge improvements in work organisation (or "workplace innovation") as a distinct and valued form of innovation, for example, redefining the qualification requirements for the R&D tax credit to include organisational innovation and supporting projects that seek to complement new technology with staff training and job redesign to realise the productivity benefits of digitalisation.

5.2. **Review Ireland's portfolio of management development opportunities to strengthen its focus on workplace transformation and high-performance workplace practices**. DFHERIS and DETE, working through Enterprise Ireland, IDA Ireland, Skillnet Ireland, the RSF and LEOs and working with wider organisations such as Ibec, the SFA, ISME and The Wheel, should examine the scope to scale up existing initiatives that develop skills required to drive improvements in organisational practices, such as the Mentors Work and Lean Business offers; adapt the competency frameworks or content of programmes to include work organisation and job design; or advance new pilots, that take well-established, innovative programmes, such as Skillnet Business Networks or Spotlight on Skills and apply them to improving work organisation within smaller firms.

5.3. **Advance awareness campaigns that build an understanding of the steps that small firms can take to stimulate better work organisation practices.** Project participants suggested Irish firms have very low levels of awareness of what constitutes good practice when it comes to organisational practices (beyond staff training). This highlights a need for Enterprise Ireland and the LEOs to strengthen the evidence base on the business case for the adoption of HPWPs and to advance new awareness-building activities that demonstrate leading practices around work organisation and job design, including social media campaigns, the sharing of success stories, networking and diagnostic tools that help firms to identify where improvements can be made.

Recommendation 6: Foster peer-to-peer learning and communities of practice to promote the diffusion of leading-edge organisational practices between Ireland's multinational enterprises and small and medium-sized enterprises

In addition to strengthening government support for improving workplace practices, past research and project participants show considerable interest in the role of employer networks in enabling peer-to-peer learning and fostering enduring communities of practice that can embed learning and share good practice on an ongoing basis (OECD, 2019[17]; SME Taskforce, 2021[80]).

Large and persistent dispersion exists in Irish firms' productivity performance (Papa, Rehill and Connor, 2018[106]). Ireland benefits from the presence of many global frontier firms, and there is growing interest in how to support the diffusion of knowledge, technology and management practices between these leading performers and the long tail of low-productivity firms (Government of Ireland, 2019[102]). *Future Jobs Ireland 2019*, for instance, identified the opportunity to increase the absorptive capacity of Ireland's small, indigenous enterprises by promoting stronger collaboration between MNEs and SMEs (Government of Ireland, 2019[102]).

Ireland already benefits from well-established mechanisms that promote collaboration and enable peer learning. For instance, peer-to-peer support is at the heart of Skillnet Business Networks, of which there are now 72 across Ireland. The PLATO Business Development Network has at the core of its programme carefully curated participant groups and monthly sessions facilitated by large parent companies (Box 4.14). Skillnet Ireland's recently launched Innovation Exchange is another example of fostering collaboration between smaller enterprises and large multinationals to improve their understanding and capacity across the innovation process. At the same time, IDA Ireland and Enterprise Ireland's Disruptive Technologies Partnership Portal provides a platform for companies in Ireland to collaborate around disruptive, digital and sustainable technologies. Skillnet Ireland, EI and IDA Ireland, as well as wider providers of management training, should consider how wider aspects of HPWPs, such as new forms of work organisation and direct employee participation, could be more strongly embedded within the design of peer-to-peer learning programmes in Ireland or to advance similar initiatives to support improvements in workplace practices.

Box 4.14. Relevant national example: Peer-to-peer support programmes

Ireland: PLATO Business Development Network

PLATO is a peer-to-peer support and development network for owner-managers, established in Ireland almost 30 years ago. Delivered through LEOs, Ibec and Chambers Ireland, Plato is an 18-month development programme for managers established for SMEs in every sector. While there are various activities and support available to participants, including training and networking, at the core of the programme are participant groups. Each Plato Group has around 12 to 15 participants, and each group's makeup is carefully considered by PLATO to incorporate the best mix of expertise and range of business experience. Groups meet for three-hour monthly sessions facilitated by large parent companies. These sessions provide a vehicle to share information, expertise and experiences, where participants are able to raise issues relevant to their businesses and then discuss, confidentially, with the group. Groups decide what topics to discuss, and external business experts can be brought into group meetings to advise on specific topics. The programme has assisted over 4 000 businesses across Ireland, and participants report improved management awareness and effectiveness, productivity, profitability and growth.

Source: PLATO (2023[107]), *About Plato Business Development Network*, https://plato.ie/about-plato/.

Given the strong presence of large MNEs, Enterprise Ireland and IDA Ireland should also examine the potential to further promote knowledge transfer between these organisations and their supply chains. Again, there are several international examples from which Ireland could learn. For example, in Korea, the POSCO National Human Resource Development (HRD) Consortium partners with local vocational education and training (VET) providers to offer leadership education to smaller enterprises in their supply chain. In Japan, J-Good Tech is an online business-matching site that aims to support information exchange and forming strategic partnerships between SMEs and larger domestic companies (Box 4.15).

There is one other area of focus Ireland could extend support to foster established or emerging business learning networks or communities of practice that seek to promote workplace innovation. These encapsulate a range of networks or forums that take varying forms, being sector-focused, supporting different professional groups, and often being geographically based. They can be vital in binding groups of businesses together, alongside other respected partners and experts, around a common purpose. These collaborative business networks often develop organically to advance specific short-term industry needs or business interests. However, if network activities support strong ties over time, this can boost the conditions for sustained and productive partnerships over the long term. Enterprise Ireland, IDA Ireland and Skillnet Ireland should review the existing landscape of networks and forums to identify the scope to further support these communities of practice and sharpen their focus on workplace practices. This could include extending networking activities for alums of existing programmes such as PLATO, Skillnet Business Networks or EI leadership programmes and IDA Innovation and Talent Forums, as well as offering targeted funding and support to collaborative business networks seeking to deploy innovative workplace solutions – an approach taken by France through its Competitive Clusters programme (Box 4.15).

Box 4.15. Relevant international examples: Peer-to-peer support programmes

Korea: POSCO HRD Consortium

Larger firms can encourage the better use of skills through their supply chain management practices. The POSCO HRD Consortium addresses company human resources management issues by involving change management and providing leadership education to managers on developing a common company vision in partnership with employees. POSCO has a large number of suppliers and outsourcing contractors that deliver goods and services for the production of steel in Korea. These companies, mostly SMEs, are located in the supply chain of POSCO and are not direct competitors. Through the POSCO HRD Consortium, SMEs are encouraged to increase investments in their own education and training programmes. POSCO partners with local VET providers to provide 130 courses in technology, safety, IT and ethics, including an e-MBA curriculum for executive members.

Japan: J-Good Tech

In Japan, SME Support Japan, a government-run organisation overseen by the Ministry of Economy, Trade and Industry, promotes SMEs in Japan and abroad. SME Support Japan runs the initiative J-Good Tech, an online business-matching site that connects SMEs with larger domestic and foreign companies. The overall aim is to support the creation of strategic partnerships between businesses and facilitate the exchange of information and ideas. The service is free, and companies are screened before they are listed on the site. Currently, 18 100 companies in Japan and abroad use the service, resulting in hundreds of SMEs and large companies exchanging ideas and collaborating on products.

France: Competitiveness clusters

France has sought to facilitate knowledge spillovers between large and small firms in the same sector by creating competitiveness clusters (pôles de compétitivité) in the regions of France identified with a particular specialisation. Grouping companies together aims to realise partnerships between different

actors with complementary skills and knowledge, develop collaborative R&D projects and enable targeted support to clusters on issues such as access to private financing and skills management. The clusters also intend to attract companies and avoid business relocation to other countries. As part of the clusters, a wide number of services are offered to SMEs to promote their participation.

Source: OECD/ILO (2017[2]), *Better Use of Skills in the Workplace: Why it matters for Productivity and Local Jobs*, https://dx.doi.org/10.1787/9789264281394-en; Erickson and Jacoby (2003[108]), "The Effect of Employer Networks on Workplace Innovation and Training", https://doi.org/10.2307/3590935.

Recommendation 6: Foster peer-to-peer learning and communities of practice to promote the diffusion of leading-edge organisational practices between Ireland's multinational enterprises and small and medium-sized enterprises

Ireland benefits from the presence of many global frontier firms but also a long tail of low-productivity enterprises. Peer-to-peer learning will therefore play a vital role in supporting the diffusion of knowledge, technology and management practices between Ireland's MNEs and SMEs.

Ireland can undertake the following specific actions to foster peer-to-peer learning and communities of practice to promote the diffusion of leading-edge organisational practices between Ireland's MNEs and SMEs:

6.1. **Review the potential to embed organisational practices and high-performance work practices more strongly within Ireland's well-established mechanisms for peer learning.** This includes Skillnet Business Networks, Plato Business Development Networks, the recently launched Innovation Exchange and the Disruptive Technologies Partner Portal, which could be expanded and extended to bring together enterprises to work collaboratively to embed wider aspects of HPWPs, such as new forms of work organisation, job redesign or mechanisms to support more direct employee participation within their organisations.

6.2. **Develop new programmes to promote innovation diffusion between multinational and smaller enterprises in their supply chains.** For example, Enterprise Ireland and IDA Ireland could draw on international examples of supply-chain capacity-building programmes, including exploring the scope for further online platforms that support matching and information exchange between Ireland's MNEs and SMEs and MNE-led leadership education and management development programmes delivered to smaller enterprises within their supply chain, as seen in Japan and Korea.

6.3. **Strengthen collaborative business learning networks or communities of practice that seek to promote workplace innovation.** These are often initiated in response to shared business challenges and take varying forms, including sector-focussed forums, supporting different professional groups and often being geographically based. Enterprise Ireland, IDA Ireland and Skillnet Ireland should review the existing landscape of networks and forums to identify the scope to further support their alignment and efficacy by extending networking activities for alums of existing programmes such as PLATO, Skillnet Business Networks or EI leadership programmes and IDA Innovation and Talent Forums, and offering targeted funding and support to collaborative business networks seeking to deploy innovative workplace solutions.

Summary of policy recommendations

Table 4.4. Summary of policy recommendations for leveraging skills to drive innovation and strengthen firm performance

Recommendations	Specific actions
Opportunity 1: Better utilising Ireland's research talent and public research and innovation system to drive innovation within firms	
1. Develop skills for innovation across the education system to strengthen Ireland's adaptive capacity and competitiveness.	1.1. Strengthen the strategic positioning of skills for innovation and improve connectivity with wider policy domains. 1.2. Improve the development of transversal skills for innovation across the education system, including lifelong learning. 1.3. Strengthen and systematise the process for identifying and responding to emerging technical skills needed for innovation in areas of strategic importance to the economy.
2. Better activate the skills of graduate and doctoral researchers in the workforce to strengthen the innovation capacity of Ireland's economy.	2.1. Strengthen incentives and resources for research and innovation institutions and highly-skilled research talent to engage and collaborate with smaller enterprises. 2.2. Advance further research to better understand current and future demand for research graduates and the mobility of research talent between academia, industry, the public and voluntary and community sector. 2.3. Strengthen career guidance for research graduates and better integrate transversal skills development into research training at all levels.
Opportunity 2: Promoting the continuous improvement of leadership and management skills within enterprises	
3. Extend flexible, subsidised and customisable development opportunities available to Ireland's managers to maximise the accessibility, relevance and value of support.	3.1. Address gaps in management training for mid-sized, locally traded service companies and community, voluntary and social enterprises. 3.2. Advance new flexible, subsidised and customisable management training and scale up successful existing programmes.
4. Strengthen incentives for management development to raise the motivation of Ireland's managers to upgrade their skills and participate in lifelong learning.	4.1. Strengthen evidence on the business benefits of management development for productivity, innovation and business performance. 4.2. Introduce a new management standard and associated quality marks to professionalise management in Ireland. 4.3. Advance incentives for Irish firms to take up new management standards and quality marks.
Opportunity 3: Incentivising and enabling enterprises to make better use of the skills of their workers through innovative workplace solutions	
5. Reinvigorate the strategic focus on workplace innovation in Ireland as a key vehicle to improve firm productivity and performance.	5.1. Position the modernisation of Irish workplaces as an explicit policy priority in Ireland's National Skills Strategy 2025 follow-up. 5.2. Review Ireland's portfolio of management development opportunities to strengthen its focus on workplace transformation and high-performance workplace practices. 5.3. Advance awareness campaigns that build an understanding of the steps that small firms can take to stimulate better work organisation practices.
6. Foster peer-to-peer learning and communities of practice to promote the diffusion of leading-edge organisational practices between Ireland's multinational enterprises and small and medium-sized enterprises.	6.1. Review the potential to embed organisational practices and high-performance workplace practices more strongly within Ireland's well-established mechanisms for peer learning. 6.2. Develop new programmes to promote innovation diffusion between multinational and smaller enterprises in their supply chains. 6.3. Strengthen collaborative business learning networks or communities of practice that seek to promote workplace innovation.

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Notes

1. In this report, “skills use” is defined as the frequency with which individuals use their skills at work (measured in the Survey of Adult Skills [PIAAC]). Skills use may reflect workers’ skills levels, their motivation, the skills required to carry out the job, and employers’ practices aimed at increasing the productivity of their staff.

2. Research and development (R&D) is defined as the creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge.

3. Gross national income (GNI) is used to control for the strong presence of foreign-owned companies in Ireland, which can distort ratio analysis based on gross domestic product (GDP), particularly when benchmarking against other countries.

4. The 2012 Dortmund-Brussels Position Paper on Workplace Innovation defines workplace innovation as a social process that shapes work organisation and working life, combining their human, organisational and technological dimensions. This participatory process simultaneously results in improved organisational performance and enhanced quality of working life. See www.workplaceinnovation.org/kennis/dortmund-brussels-position-paper-12th-june-2012/.

5 Strengthening skills governance to build a joined-up skills ecosystem in Ireland

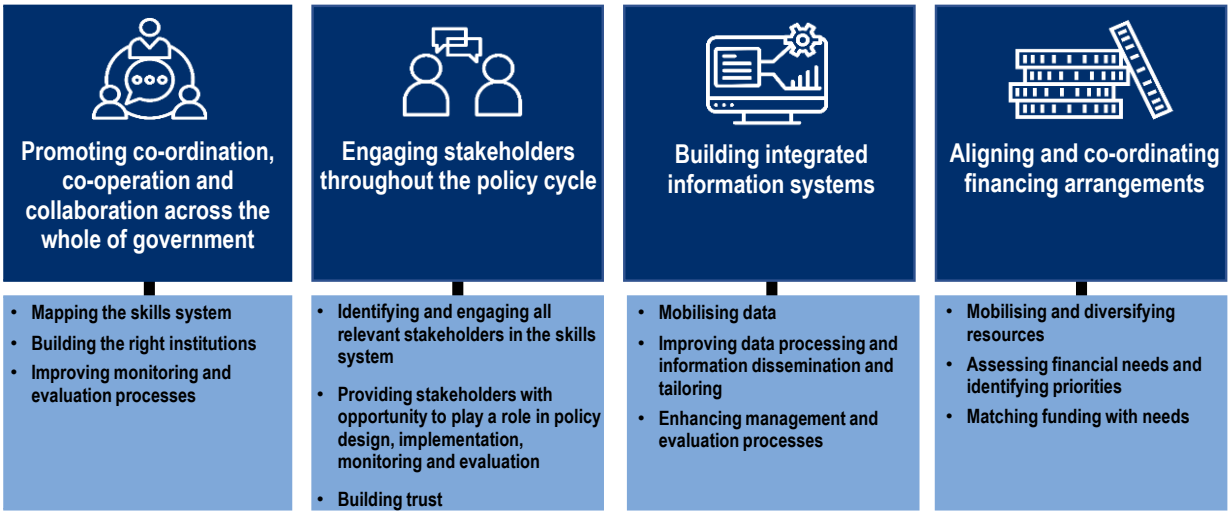
Well-functioning skills governance arrangements are the bedrock of a "joined-up" skills ecosystem, where skills policy design, implementation, monitoring and evaluation are impactful, mutually reinforcing and rooted in an extensive and robust evidence base. The complexity associated with skills policies, compounded by the uncertain and rapidly changing environment in which skills policy decisions are made, makes strong skills governance essential. This chapter explores three opportunities for strengthening skills governance to build a joined-up skills ecosystem in Ireland: 1) promoting a whole-of-government and strategic approach to skills policy; 2) supporting effective engagement with stakeholders throughout the skills policy cycle; and 3) strengthening the collection, exchange and use of skills information.

The importance of strengthening skills governance to build a joined-up skills ecosystem

Well-functioning skills governance arrangements are the bedrock of a "joined-up" skills ecosystem,[1] where skills policy design, implementation, monitoring and evaluation are impactful, mutually reinforcing and rooted in an extensive and robust evidence base. Policies aiming to secure a balance in skills (see Chapter 2), foster greater participation in lifelong learning (see Chapter 3) and leverage skills to drive innovation (see Chapter 4) will only realise their full potential if embedded in strong governance arrangements.

Setting up well-functioning skills governance arrangements can be challenging due to the complexity associated with skills policies.[2] Skills policies sit at the intersection of several policy fields, including education, labour market, innovation, industrial, migration and other policy domains. As a result, a wide range of actors from within and outside the government are implicated in designing, implementing, monitoring and evaluating skills policies. Furthermore, skills policies are designed and implemented in the context of uncertainty and constant change, particularly as the coronavirus (COVID-19) pandemic, Brexit, the Russian Federation's invasion of Ukraine, as well as megatrends such as the digital and green transition, and evolving global value chains reshape economies and societies, including in Ireland. To help countries govern skills systems effectively in the face of these complex pressures, the OECD Skills Strategy (2019[1]) identifies four building blocks of strong skills governance arrangements (Figure 5.1).

Figure 5.1. Four key building blocks of strong skills governance arrangements



Source: Elaboration on OECD (2019[1]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://dx.doi.org/10.1787/9789264313835-en.

Promoting a whole-of-government approach to skills policy is central to minimising inefficiencies in skills policy, making and fostering a shared conviction about the strategic importance of skills. A whole-of-government approach includes: 1) horizontal co-ordination between different governmental departments and agencies; and 2) vertical co-ordination between different levels of government (i.e., national and subnational levels).

Effectively engaging non-governmental stakeholders (i.e. employers and their associations, trade unions, education and training providers, learners, civil society, etc.) throughout the skills policy cycle is an equally important part of a whole-of-government approach. Stakeholder engagement allows policy makers to tap

into stakeholders' on-the-ground expertise and insights regarding the real-world effects of skills policies and regulations, increases the perceived legitimacy of skills reforms, and builds support for policy reform (OECD, 2020[2]). In turn, integrated skills information systems facilitate the assessment and anticipation of current and future skills needs as well as the dissemination of skills information among different target groups, which is crucial for supporting policy makers in making evidenced-based policy decisions and for informing individuals' education and career choices. Finally, aligning and co-ordinating financing arrangements is necessary for ensuring sufficient skills funding and the sustainability of skills investments.

The analysis and recommendations in this chapter seek to provide input into Ireland's main strategic document for skills policy, the National Skills Strategy (NSS) 2025, which was launched in 2016 (Department of Education and Skills, 2016[3]). In particular, Opportunity 2 of this chapter (see below) analyses Ireland's progress in achieving the NSS 2025's second objective on employer participation in the development and use of skills.

Box 5.1. This chapter and Ireland's National Skills Strategy 2025

The analysis and recommendations in this chapter's Opportunity 2 (Supporting effective engagement with stakeholders throughout the skills policy cycle; see more below) can be used to assess the progress towards the NSS 2025's second objective ("employer participation in development and use of skills"). Under the second objective, the NSS 2025 foresees a number of concrete actions, including supporting collaboration between employers and education and training providers in skills development.

In addition, the chapter analyses the challenges and opportunities of new bodies set up by the NSS 2025, such as the National Skills Council (NSC) and the Regional Skills I (RSF).

More broadly, this chapter supports the effective implementation of all objectives, actions and measures of the NSS 2025, which require a whole-of-government approach to skills policy, engagement with non-governmental stakeholders and robust collection, exchange and use of skills information.

Source: Department of Education and Skills (2016[3]), *Ireland's National Skills Strategy 2025 – Ireland's Future*, www.gov.ie/en/publication/69fd2-irelands-national-skills-strategy-2025-irelands-future/.

This chapter begins with an overview of Ireland's current skills governance arrangements and performance. Subsequently, it examines three skills-related policy areas – or opportunities – for strengthening skills governance to build a joined-up skills ecosystem:

1. promoting a whole-of-government and strategic approach to skills policy
2. supporting effective engagement with stakeholders throughout the skills policy cycle
3. strengthening the collection, exchange and use of skills information.

Overview and performance of skills governance

Overview of the current skills governance arrangements

The governance of the skills ecosystem in Ireland is complex and involves a wide range of governmental actors and non-governmental stakeholders. Roles and responsibilities for skills policy are distributed across three levels of government – national, regional and local.

At the national level, skills policy is overseen by governmental departments and agencies, some of which also oversee associated regional and local structures. At the regional and local levels, the roles of regional assemblies and local authorities include identifying regional and local development objectives via

dedicated strategies and plans, which can include skills-related objectives. Certain local authorities (e.g. the Fingal County Council) have even developed their own skills strategies.

Outside the government, a wide range of stakeholders, including education and training providers, employers, employees, learners, civil society and representatives of all of these stakeholders (e.g. associations, chambers, unions, etc.) are involved in the design and/or implementation of skills policy. Table 5.1 provides an overview of the key actors in Ireland's skills ecosystem and details their roles and responsibilities.

Table 5.1. Overview of key actors with roles and responsibilities for skills policy in Ireland

Actor	Brief description of roles and responsibilities
Governmental departments	
Department of Education (DEP EDU)	Designs and implements education policy in early childhood education (together with the Department of Children, Equality, Disability, Integration and Youth [DCEDIY]) at primary and post-primary levels and in special education. Oversees the Education and Research Centre, the National Council for Curriculum and Assessment, the National Council for Special Education and the State Examinations Commission, among others.
Department of Enterprise, Trade and Employment (DETE)	Designs and implements policies for stimulating foreign direct investment (FDI), enterprise innovation, fair competition in the marketplace, protection of consumer standards and workers' rights. Oversees Enterprise Ireland, IDA Ireland, Local Enterprise Offices, and the development of Regional Enterprise Plans, which outline strategies for supporting regional enterprise growth, competitiveness, innovation and job creation across Ireland's nine regions. Provides secretariat to the Expert Group of Future Skills Needs.
Department of Further and Higher Education, Research, Innovation and Science (DFHERIS)	Designs and implements higher and further education and research policy. Oversees the Higher Education Authority, National Training Fund (NTF), QQI, Regional Skills I, Science Foundation Ireland, Skillnet Ireland, and SOLAS. Provides secretariat to the National Skills Council (NSC) (see more in Opportunity 1).
Department of Public Expenditure, NDP Delivery and Reform (DPENDPDR)	Manages public expenditure, including on skills policy, and leads work on reform and innovation across Ireland's civil and public service.
Department of Social Protection (DSP)	Designs and implements social protection policies, including administering income support schemes. Operates the public employment service (Intreo) and funds a range of employment programmes and job seeker guidance services. Provides secretariat to the Labour Market Advisory Council (LMAC) (see more in Opportunity 1).
Department of the Taoiseach	Supports the Taoiseach (Prime Minister) and the government in implementing the government programme. Chairs meetings of the National Economic and Social Council (NESC) and provides inputs into the development of NESC's work programme. Participates in the Labour Employer Economic Forum (LEEF) (see more in Opportunity 1).
Governmental agencies and entities at the national level	
Education and Research Centre (ERC)	Provides assessment support services to schools and centres for education and conducts independent research on all aspects of education at all levels of the education system.
Enterprise Ireland (EI)	Supports the development, innovation and growth of Irish enterprises to help them expand into world markets, including by supporting enterprises with reskilling/upskilling.
Expert Group on Future Skills Needs (EGFSN)	Advises the Government of Ireland on the economy's current and future skills needs and associated labour market issues that impact national potential for enterprise and employment growth.
Higher Education Authority (HEA)	Governs and regulates Ireland's higher education (HE) system. Promotes equitable access to HE, internationalisation of HE and responsiveness and research capacity of HE institutions.
IDA Ireland	Oversees attraction of FDI into Ireland, including by assisting foreign enterprises established in Ireland with reskilling/upskilling.
Intreo (the public employment service)	Serves as a single point of contact for all employment and income supports and services.
National Apprenticeship Office (NAO)	Manages the delivery of apprenticeships in Ireland. Is accountable to HEA and SOLAS.
National Council for Curriculum and Assessment (NCCA)	Develops research and advises DEP EDU on curricula in early childhood, primary and post-primary education, and assessment procedures used in schools.
National Council for Special Education (NCSE)	Runs a national network of Special Educational Needs Organisers who interact with parents and schools and liaise with the Health Service Executive (HSE) in providing resources to support children with special educational needs.
Quality and Qualifications Ireland (QQI)	Oversees external quality assurance of further education and training (FET) and HE in Ireland.
Science Foundation Ireland (SFI)	Funds basic and applied research in science, technology, engineering and mathematics (STEM).

Actor	Brief description of roles and responsibilities
Skillnet Ireland	Runs sectoral and regional enterprise learning networks to increase education and training participation within enterprises and, thereby, enterprise competitiveness. Operates under a joint investment model, where government funding of on-the-job training is matched by contributions from enterprises.
Skills and Labour Market Research Unit (SLMRU)	Carries out analysis of Ireland's skills supply and demand to inform the work of the NSC and the public. Supports the development and review of policies and practices by the RSF, the EGFSN and other government bodies, including SOLAS and the education and training boards (ETBs).
SOLAS	Manages or oversees a range of FET programmes (e.g. Skills to Advance, apprenticeships, traineeships, etc.) and houses the SLMRU.
State Examinations Commission (SEC)	Oversees the development, assessment, accreditation and certification of the second-level examinations (i.e., the Junior Certificate and the Leaving Certificate).
Subnational authorities and entities	
Regional assemblies (3)	Identify regional development objectives, support co-ordinated implementation of national planning and economic policy, and manage the delivery of European Structural and Investment Funds across Ireland's nine regions. Develop Regional Spatial and Economic Strategies (RSES). RSES provide a high-level, 12-year framework for regional economic development and defines Regional Policy Objectives in several fields, including skills.
Regional Skills Fora (RSF) (9)	Act as regional one-stop-shops for supporting employers with reskilling/upskilling. Raise awareness of the range of services and programmes available across Ireland's education and training system among employers, help employers identify their skills needs, collect data on employers' skills needs, refer employers to suitable education and training providers and help design tailormade reskilling/upskilling programmes reflecting employers' needs, among others.
Local authorities (county councils, city councils, city and county councils) (31)	Oversee the provision of a range of local services (e.g. housing, fire services, register of electors, etc.). Develop the Local Economic and Community Plans (LECPs) in collaboration with the Local Community Development Committees. LECPs set out the objectives and actions needed to achieve economic and community development of the relevant local authority, including in the field of skills, over a six-year period.
Local Enterprise Offices (LEOs) (31)	Act as local one-stop-shops to support starting, growing and developing a business. Offer mentoring and training programmes for developing business and management skills.
Non-governmental stakeholders	
Education and training providers	Provide formal education and training to students and adults, non-formal education and training programmes to adults, and offer guidance services. Include schools, universities, institutes of technology, technological universities, ETBs and others.
Employers, employees, learners, civil society	Provide input into skills policy design and implementation via various fora (e.g. the NSC, National Training Fund Advisory Group [NTFAG], public consultations, etc.) with representation varying by specific forum.

Note: The table aims to provide an overview, not an exhaustive list. Actors are listed in alphabetical order in each category.

Roles and responsibilities for collecting, exchanging and using skills information (including administrative data and surveys on skills supply and demand) in Ireland are similarly widely distributed between a number of actors (Table 5.2). Some of Ireland's key sources of skills information come from international organisations or associations (Table 5.2). Information from administrative data and surveys is combined, or further complemented, and used to produce a number of regular publications on skills, particularly reports by the Expert Group on Future Skills Needs (EGFSN) (sectoral or thematic analyses of future skills needs) and by the Skills and Labour Market Research Unit (SLMRU) (e.g. the National Skills Bulletin, Monitoring Ireland's Skills Supply, etc.).

Table 5.2. Overview of key sources of information on skills supply and demand in Ireland

Name	Overview of information provided	Responsible actor(s)
Administrative data		
Employment permits	Third-country (non-EU) workers in Ireland by occupation, nationality, qualification level, etc.	Department of Enterprise, Trade and Employment (DETE)
Further Education Outcomes – Graduation Years 2010-2016	Outcomes (e.g. employment status, enrolment in further studies, etc.) of further education and training (FET) graduates between 2010 and 2016 by National Framework of Qualifications (NFQ) level, field of study, gender, etc.	Central Statistics Office (CSO)
Higher Education Outcomes – Graduation Years 2010-2019	Outcomes (e.g. employment status, earnings, enrolment in further studies, etc.) of higher education (HE) graduates between 2010 and 2019 by NFQ level, field of study, gender, education and training institution, etc.	CSO
Skills-OVATE	Vacancies from private and public job portals by sector (NACE, the statistical classification of economic activities in the European Community), occupation (International Standard Classification of Occupations, ISCO), educational level (NFQ) and specific skills (European Skills, Competences, Qualifications and Occupations Classification, ESCO)	European Centre for the Development of Vocational Training (CEDEFOP)
Skills for Growth dataset	Specific skills needs reported by enterprises to the Regional Skills Fora, Department of Social Protection (DSP) and Enterprise Ireland	Skills and Labour Market Research Unit (SLMRU)
Skills for Jobs database	Shortages and surpluses by occupation (ISCO), skills levels (ISCO) and specific skills. Qualification and field-of-study mismatches. Leverages a new methodology for calculating the importance of skills in occupations, relying on information retrieved from online job postings	OECD
Skills forecasts	Quantitative projections of the future trends in employment by sector of economic activity and occupational group, as well as the future trends on the level of education of the population and the labour force	CEDEFOP
Vacancy data	Vacancies by sector (NACE), occupation (SOC, Standard Occupational Classification), education level (NFQ)	Jobs Ireland (DSP)
Surveys		
Adult Education Survey (Every 6 years)	Formal and non-formal education and training and informal learning participation in the last 12 months, time spent on education and training, obstacles to participation, guidance and financial support, etc. The data feeds into relevant European Union (EU)-level statistics	CSO
Census of Population (Every 5 years)	Numbers and characteristics of Ireland's inhabitants, including education attainment, field of study, employment status/industry/occupation, etc.	CSO
Continuing Vocational Training Survey (Every 5 years)	Provision of continuing vocational training (CVT) courses and other forms of CVT, participants in CVT courses, costs of CVT courses, time spent in CVT courses, among others, within enterprises with at least ten employees. The data feeds into relevant EU-level statistics	CSO
Earnings, Hours and Employment Costs Survey (Quarterly)	Vacancy rates, earnings and labour costs across sectors. The data feeds into relevant EU-level statistics	CSO
European Company Survey (Every 4-5 years)	Work organisation, human resource management, skills use, digitalisation, direct employee participation and social dialogue, among others, within enterprises with at least ten employees	Eurofound
Graduate Outcomes Survey (Annual)	Outcomes (e.g. employment status, earnings, enrolment in further studies, etc.) of HE graduates by NFQ level, field of study, gender, etc.	Higher Education Authority (HEA)
Irish National Employer Survey (NES) (Irregular)	Employers' satisfaction with graduates from FET and HE, views on recruitment barriers and collaboration with FET/HE institutions, etc.	HEA, SOLAS, Quality and Qualifications Ireland (QQI)
Labour Force Survey (Quarterly and annually)	Labour force and employment status, occupation, education level, formal and non-formal education and training participation in the last four weeks (except guided on-the-job training), etc. The data feeds into relevant EU-level statistics	CSO
OECD Teaching and Learning International Survey (Every 5 years)	Teachers' and school leaders' working conditions and learning environments	OECD

Name	Overview of information provided	Responsible actor(s)
Programme for the International Assessment of Adult Competencies (PIAAC) (3 rounds to date [2012, 2015, 2018]; results of the next round to be released in 2024)	Adults' proficiency in literacy, numeracy and problem solving, information on how adults use their skills at home, at work and in the wider community	OECD
Progress in International Reading Literacy Study (Every 5 years)	Fourth-grade students' proficiency in reading	International Association for the Evaluation of Educational Achievement (IEA)
Programme for International Student Assessment (Every 3 years)	15-year-olds' proficiency in reading, mathematics and science	OECD
Recruitment Agency Survey (Annual)	Views of selected Irish recruitment agencies on occupations that are proving difficult to fill	SLMRU
Trends in International Mathematics and Science Study (Every 4 years)	Fourth and eighth-grade students' proficiency in mathematics and science	IEA

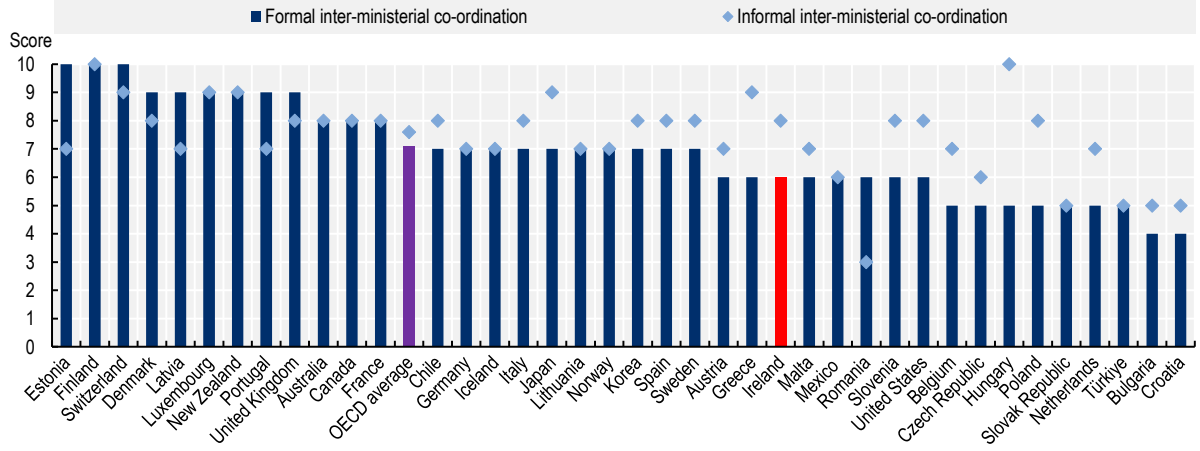
Note: The table aims to provide an overview, not an exhaustive list. The skills information sources are listed alphabetically in each category.

Ireland's skills governance performance

While several of the governance structures in Ireland's skills ecosystem, such as the NSC, the RSF and the EGFSN (see more below), are seen as international good practices (OECD, 2019[1]; 2020[4]; 2021[5]; 2021[6]), there are significant opportunities for further improvement in the governance of Ireland's skills system, which need to be seized to help realise Ireland's ambition of evolving from a strong to a top performer in terms of skills outcomes. Taking a bold approach to addressing the existing skills governance challenges is equally important for setting Ireland's skills ecosystem on a path of continuous improvement and building up ample capacity to meet future skills challenges and opportunities.

According to the Bertelsmann Foundation's Sustainable Governance Indicators (SGI), Ireland ranks below the OECD average on formal inter-ministerial co-ordination and above the OECD average on informal inter-ministerial co-ordination (across all policy areas) (Figure 5.2).

Figure 5.2. Performance in inter-ministerial co-ordination in Ireland and selected countries, 2022



Note: Formal co-ordination refers to scores that countries are assigned on the question, "How effectively do ministry officials/civil servants co-ordinate policy proposals?" Informal co-ordination refers to scores that countries are assigned on the question, "How effectively do informal co-ordination mechanisms complement formal mechanisms of inter-ministerial co-ordination?" Scores range from 1 to 10. The higher the score, the better the country's performance. Scores are assigned by country and sector experts and reviewed by scholars and practitioners.
Source: Bertelsmann Stiftung (2022[7]), *Sustainable Governance Indicators (SGI)*, www.sgi-network.org/2022/Good_Governance/Executive_Capacity/Interministerial_Coordination.

StatLink https://stat.link/tfnk5b

In skills policy specifically, given the complexity of Ireland's skills ecosystem (Table 5.1) and the fast pace with which new skills policies, programmes and initiatives are being introduced, effective and efficient co-operation, co-ordination and collaboration across the whole of government is vital. Co-operation, co-ordination and collaboration within and across the government on skills policy have become more important following the split of the Department of Education and Skills (DoES). In 2020, the mandate of DoES was divided between two separate departments: the Department of Education (DEP EDU) and the Department of Further and Higher Education, Research, Innovation and Science (DFHERIS), each now overseeing specific sub-sectors of skills policy (Table 5.1).

Stakeholders consulted during this Skills Strategy project (hereafter "project participants") underlined that not all departments in Ireland perceive skills from a holistic, life course perspective and, therefore, as necessitating close cross-departmental collaboration, but rather as an exclusive domain of DFHERIS. Equally, as many departments are directly affected by skills imbalances (such as shortages) arising in their respective areas of oversight and related sectors, the departments should be taking a more active role in, and greater ownership of, addressing such pressures, in collaboration with DFHERIS and other relevant actors (see Opportunity 1).

Despite the NSC's mandate to, among others, facilitate cross-departmental co-operation, co-ordination and collaboration on skills in the Irish skills ecosystem (see more in Opportunities 1 and 2), the NSC does not sufficiently support such collaboration and co-ordination across departments. Cross-departmental co-operation, co-ordination and collaboration on skills in Ireland occur to a large extent thanks to informal, ad hoc connections between civil servants, often leading to the establishment of various cross-departmental processes for collaboration at a technical level (see details in Table 5.3 in Opportunity 1). However, these collaboration arrangements are not being set up in a fully transparent and co-ordinated manner.

In addition, there are challenges in co-operation, co-ordination and collaboration at the regional and local levels, which arise due to overlapping mandates and lacking communication between actors who engage with employers on reskilling/upskilling on the ground, despite the existence of regional one-stop-shops (RSF) for employer engagement on skills. From an employer's perspective, such "crowding of space" leads to confusion. Equally, communication channels between the national level and regional actors (RSF) are under-developed (see Opportunity 1).

While it is positive that Ireland is planning to prepare a follow-up to the NSS 2025 with the view of further supporting a whole-of-government approach to skills, there are lessons to be learned from the implementation of the NSS 2025 itself to ensure effective implementation of the NSS 2025 follow-up (see Opportunity 1).

Ireland has created several mechanisms for engaging non-governmental stakeholders in skills policy. An overview of the stakeholder engagement mechanisms is provided in Table 5.5 (see Opportunity 2). While it is positive that opportunities for stakeholders to shape the design and implementation of skills policy exist, there are important challenges that Ireland should address to ensure effective and impactful engagement.

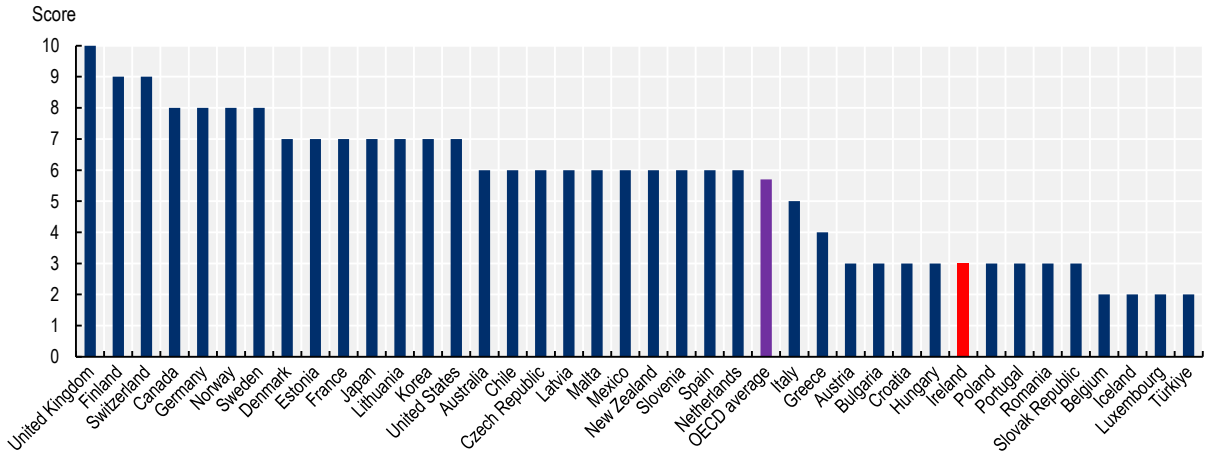
The NSC has not yet succeeded in developing an influential role and a strong voice in Ireland's skills ecosystem commensurate with skills and workforce challenges (see Opportunity 2). While according to its mandate, the NSC aims to create space for engaging stakeholders on skills policy (among other roles; see above and Opportunity 1), NSC meetings could in practice facilitate better engagement with non-governmental stakeholders on shaping skills policy priorities (see more in Opportunity 2). The NSC needs more representative and diverse non-governmental membership, stronger accountability mechanisms, sufficient resourcing and visibility. The collaboration between the NSC and Ireland's other stakeholder engagement mechanisms (Table 5.5) also needs to be strengthened to foster a truly "joined-up" governance of the Irish skills ecosystem.

Equally, the current functioning of the National Training Fund Advisory Group (NTFAG), established to support greater involvement of employers in decisions surrounding the National Training Fund (NTF), could provide more opportunities for stakeholders to provide input and advice into decisions on NTF expenditure, and to do so in a timely manner. Moreover, despite a large number of positive examples of engaging stakeholders in the design of education and training programmes, such engagement is not sufficiently systematic, inclusive (particularly of small and medium-sized enterprise (SME) voices), efficient and co-ordinated (see Opportunity 2).

While Ireland has a rich collection of skills information (Table 5.2), there are significant opportunities for further improvement, including by greater coordination between the bodies responsible for the collection of data and information in this regard. The range of information on (not only) skills needs collected from employers could be further expanded, and the granularity of such information further improved (see Opportunity 3). Information on outcomes of learners in further education and training (FET) is not collected systematically. At the same time, available economy-wide skills forecasts are not fully reflective of the specificities of the Irish labour market. Collecting data on skills needs directly from employers requires better co-ordination to enable more effective use, while skills data exchanges within the government and with stakeholders are complicated by technical challenges (see Opportunity 3).

Improved collection and use of skills information will be particularly important for strengthening Ireland's capacity to rigorously evaluate skills policies. Bertelsmann Foundation's SGI suggest that Ireland's *ex post* evaluation of public policies is relatively under-developed (Figure 5.3). Moreover, evidence gathered from project participants confirms that, despite improving in recent years, the evaluation of skills policies is not undertaken systematically enough (see Opportunity 3).

Figure 5.3. Performance in *ex post* policy evaluation, Ireland and selected countries, 2022



Note: Scores reflect the performance of countries on the question, "To what extent do government ministries regularly evaluate the effectiveness and/or efficiency of public policies and use results of evaluations for the revision of existing policies or development of new policies?" Scores range from 1 to 10. The higher the score, the better the country's performance. Scores are assigned by country and sector experts and reviewed and approved by scholars and practitioners.

Source: Bertelsmann Stiftung (2022[8]), *Sustainable Governance Indicators (SGI)*, www.sgi-network.org/2022/Good_Governance/Executive_Capacity/Evidence-based_Instruments.

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Opportunities for strengthening skills governance to build a joined-up skills ecosystem

This section describes three main opportunities that were selected for Ireland to strengthen the governance of its skills ecosystem. The selection is based on input from literature, desk research, discussions with the Cross-Departmental Project Team and discussions with a broad range of project participants – e.g. government departments and organisations, employer organisations, educational establishments and other interested parties – during workshops, group discussions and several related meetings. As a result, the following opportunities are considered to be the most relevant for Ireland's specific context:

1. promoting a whole-of-government and strategic approach to skills policy
2. supporting effective engagement with stakeholders throughout the skills policy cycle
3. strengthening the collection, exchange and use of skills information.

Opportunity 1: Promoting a whole-of-government and strategic approach to skills policy

A whole-of-government approach aims to promote horizontal (at the national level) and vertical (between national and subnational levels) co-ordination of government activity in order to improve policy coherence and use of resources and minimise overlaps and gaps in public programmes. A whole-of-government approach thus capitalises on synergies and innovation that arise from involving and engaging with a multiplicity of governmental actors while also providing seamless public service delivery to individuals and businesses (OECD, 2019[1]). Engagement with non-governmental stakeholders (see Opportunity 2), such as enterprises, employees, learners and education and training providers, is an important part of a whole-of-government approach to skills policy.

Strategies and action plans are key enabling mechanisms that support a whole-of-government approach to skills policy. They are essential for setting goals, priority groups and targets, clarifying roles for government and stakeholders in skills policy, articulating the challenges that require co-operation and allocating roles and responsibilities (OECD, 2019[9]).

> *Recommendation 1: Strengthen the commitment to and efficiency of adopting a whole-of-government approach to skills to help achieve a step change in Ireland's skills system*

The complexity of Ireland's skills ecosystem (see the Overview section above) requires active collaboration, co-operation and co-ordination on skills policy at the national and subnational (i.e. regional and local) levels, as well as between them. Responsibilities for skills policy at the national level are distributed between several departments (e.g. DEP EDU, DFHERIS, Department of Social Protection [DSP], Department of Enterprise, Trade and Employment [DETE], Department of Public Expenditure, NDP Delivery and Reform [DPENDPDR], etc.) as well as governmental agencies and institutes (e.g. Higher Education Authority [HEA], SOLAS, Skillnet Ireland, IDA Ireland, Enterprise Ireland [EI], Science Foundation Ireland [SFI], Quality and Qualifications Ireland [QQI], etc.) (Table 5.1).

In Ireland, more could be done to place skills "higher on the agenda" of certain departments, which have traditionally not perceived skills as part of their core mandates. Some departments in Ireland do not yet perceive skills policy holistically and from a life course perspective but rather as primarily the domain of DFHERIS, leading to a lesser willingness to collaborate on skills issues and/or limited input in NSC discussions (see more on NSC meetings in Opportunity 2). Equally, given that several departments are directly affected by skills imbalances (such as shortages) arising in their respective areas of oversight and related sectors, these departments would benefit by taking greater responsibility for addressing such pressures in collaboration with DFHERIS. At the same time, as the impacts of global megatrends continue to change skills requirements across Ireland's sectors while positioning certain industries and activities (e.g. renewable energy) as increasingly important, there needs to be a commensurate increase in

commitment and action across the whole of Ireland's government to work together on developing a pipeline of talent with the relevant skills.

As noted above, Ireland's NSC aims to, according to its mandate,[3] facilitate collaboration and co-ordination between Ireland's governmental actors responsible for the different sub-sectors of skills policy. The NSC brings together appointed departmental representatives (Secretaries General and Assistant Secretaries General) of DEP EDU, DETE, DFHERIS, DPENDPDR and DSP, and representatives of EI, HEA, IDA Ireland, SFI, Skillnet Ireland, SOLAS and QQI, in addition to non-governmental stakeholders.

However, as detailed further in Opportunity 2, the meetings of the NSC are structured around the NSC members exchanging views on pre-selected topics to be judged of increasing relevance for Ireland's skills system, and as noted by project participants, do not help facilitate cross-departmental collaboration and co-ordination on skills. At the same time, it should be noted that attempts to leverage bodies similar to the NSC for both cross-departmental collaboration and co-ordination as well as for engagement with non-governmental stakeholders may run the risk of not effectively delivering on either of the two objectives (OECD, 2020[4]; 2021[5]).

As highlighted in Recommendation 3, Ireland should thus adjust the NSC's terms of reference and membership to position the NSC primarily as a platform for strategic engagement with non-governmental stakeholders. At the same time, the cross-departmental co-ordination and collaboration issues should be addressed by a different set of policy levers. More specifically, Ireland should promote greater establishment of cross-departmental processes for collaboration on skills in areas of strategic importance while paying due attention to avoiding unnecessary duplication and overlaps (see more below). For example, DFHERIS and the Department of Children, Equality, Disability, Integration and Youth (DCEDYI) have recently started collaborating on jointly addressing pressing challenges related to the supply of social workers. Certain project participants saw the DFHERIS-DCEDYI collaboration as a worthwhile partnership that could be replicated more widely. For example, some project participants suggested promoting collaboration between DFHERIS and the Department of the Environment, Climate and Communications on green skills, or between Intreo and SOLAS on strengthening the labour market relevance of training for Intreo clients, among others. Equally, the need for a whole-of-government collaboration on skills should be repeatedly stated by DFHERIS and other relevant departments at the ministerial level in cabinet meetings or other high-level government fora, such as meetings of relevant Senior Officials Groups (SOG),[4] in order to bring all relevant departments "on board". In SOG meetings, the buy-in for the establishment of potential, new cross-departmental processes for collaboration could also be secured.

Notwithstanding the above, it should be recognised that cross-departmental collaboration on certain skills policy issues does already take place in Ireland. Such collaboration often develops at the technical level between career civil servants, partly thanks to informal, personal connections. Given the challenges related to the role of the NSC in facilitating cross-departmental collaboration on skills (see above), it is not surprising that project participants agreed that such collaboration "was there before the NSC" existed. Table 5.3 provides a non-exhaustive list of Ireland's existing cross-departmental processes for collaboration (e.g. working groups, committees, protocols, etc.) on skills policy.

While establishing various cross-departmental processes for collaboration on certain skills policy topics is a step in the right direction, promoting an effective and efficient approach to collaboration is equally key, given that the latter is a time-intensive exercise. In Ireland, the cross-departmental processes for collaboration on skills policy are at times being set up on an ad hoc basis, without great consideration, and sometimes knowledge of, already existing processes or structures, which risks generating inefficiencies and missing out on potential synergies. For example, while the recent establishment of the Strategic Skills Group is a positive development, especially as Ireland's key skills data entities (the SLMRU and the EGFSN) are housed by different departments (Table 5.1) thereby making close collaboration and co-ordination imperative, the remit of the Strategic Skills Group (as currently defined) partially overlaps

with the remit of the equally recently established Evidence for Policy Unit (EfP) in DFHERIS (see more on the EfP Unit in Opportunity 3).

Table 5.3. Cross-departmental processes for collaboration on skills policy in Ireland

Name	Objective	Actors involved
DFHERIS-DCEDIY collaboration	Boost the supply of social workers	DFHERIS, DCEDIY, other stakeholders
DSP-DFHERIS High-Level Group	Co-ordinate action between public employment services and the education and training sector to assist job seekers in reskilling	DSP, DFHERIS, DCEDIY, SOLAS, HEA, Skillnet Ireland
Comprehensive Employment Strategy for People with Disabilities Implementation Group	Support the implementation of the Comprehensive Employment Strategy for People with Disabilities	DCEDIY and other governmental departments, National Disability Authority, HSE, Ibec, ICTU
Guidance High-Level Group	Develop a national strategic framework for lifelong guidance	DEP EDU, DFHERIS, DSP, DETE, DCEDIY
Interdepartmental Committee on Economic Migration	Examine requests for changes to the employment permit eligibility lists	DETE, DEP EDU, DSP, DPENDPDR, DHLGH, DJ, DH, DAFM, DTCAGSM, SLMRU
Job Loss Protocol	Co-ordinate action across Irish regions to respond to worker redundancies	DSP, DFHERIS, DETE
National Oversight Group for the Regional Enterprise Plans	Oversee the preparation of the new Regional Enterprise Plans	DETE, DFHERIS, DRCD, Regional Assembly, LEOs, IDA Ireland, NTDA, non-governmental stakeholders
Strategic Skills Group	Support better use of skills information	DFHERIS, DETE, SLMRU, RSF, non-governmental stakeholders by invitation
Transitions Group	Support the smooth transitions of students from second-level education to further and higher education	DEP EDU, DFHERIS, Central Applications Office, higher education institutions

Note: The table does not aim to provide an exhaustive list. It includes collaboration processes still in place at the time of this report's finalisation. The collaboration processes are listed in an alphabetical order and the acronyms used in the table are as follows: DFHERIS: Department of Further and Higher Education, Research, Innovation and Science; DCEDIY: Department of Children, Equality, Disability, Integration and Youth; DSP: Department of Social Protection; HEA: Higher Education Authority; HSE: Health Service Executive; ICTU: Irish Congress of Trade Unions; DEP EDU: Department of Education; DETE: Department of Enterprise, Trade and Employment; DPENDPDR: Department of Public Expenditure, NDP Delivery and Reform; DHLGH: Department of Housing, Local Government and Heritage; DJ: Department of Justice; DH: Department of Health; DAFM: Department of Agriculture, Food and the Marine; DTCAGSM: Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media; SLMRU: Skills and Labour Market Research Unit; DRCD: Department of Rural and Community Development; LEOs: Local Enterprise Offices; NTDA: National Tourism Development Authority: RSF: Regional Skills Fora.

To promote a more co-ordinated approach to cross-departmental collaboration, Ireland should map, monitor and raise awareness of existing cross-departmental processes for collaboration on skills. Such a mapping would help ensure that any new collaboration processes on skills are not established in a duplicative manner while making it possible to explore synergies between the existing processes and potentially leveraging the latter to advance the priority areas of the NSS 2025 follow-up (see Recommendation 2), where relevant. The mapping should be regularly updated and made accessible across departments. In this context, Ireland could take inspiration from Canada's information-sharing tool developed to facilitate collaboration between federal public servants (Box 5.2). Conditional upon a commensurate increase in resources (see Recommendation 3), the NSC secretariat may be well placed to take on the responsibility for the undertaking, sharing and updating the mapping, given the secretariat's experience with cross-departmental communication in the context of organising NSC meetings. Tasks related to undertaking, sharing and updating the mapping would be added to other roles of the NSC secretariat (see Figure 5.4 under Opportunity 2).

Box 5.2. Relevant international example: A cross-departmental knowledge-sharing platform

Canada: GCpedia

Launched in 2008, GCpedia is an internal knowledge-sharing platform accessible only to Canadian public servants. Public servants from across government departments and agencies can publish information on the platform, offering governmental employees access to subject matter expertise and a whole-of-government perspective on a given policy, project or concept.

Acting as an internal wiki not available to the public, any government user can edit and publish without approval on GCpedia. As a result, while GCpedia is not an authoritative government source, it does allow public servants to quickly update and share information across agencies and departments. As of 2016, GCpedia had roughly 71 000 users.

Gcpedia is part of a larger suite of resources used within the Canadian government called GCTools, including a government-wide directory (Gcdirectory), messaging service (Gcmessage) and networking service (Gcconnex), among others. Gcpedia is managed by the GCTools Team, which works under the Office of the Chief Information Officer of Canada within the Treasury Board Secretariat of Canada. The suite of tools was fully redesigned in 2016 with input from user experience testing and feedback sessions.

Source: Government of Canada, (2018[10]), *GCTools/GCpedia*, https://wiki.gccollab.ca/GCTools/Gcpedia; Treasury Board Secretary, (2016[11]), *Treasury Board Secretariat Public Service Renewal Results, 2016*, www.canada.ca/en/treasury-board-secretariat/corporate/reports/treasury-board-secretariat-public-service-renewal-results-2016.html.

In the context of this project, consideration was given to the possibility of establishing a central oversight body (e.g. a formal committee) at the national level with membership from all relevant departments and agencies and potentially high-level political representation (e.g. at a ministerial level) (OECD, 2020[4]; 2021[5]). The central oversight body would aim to strengthen Ireland's cross-departmental commitment to skills policy issues at the national level; promote a more co-ordinated approach to cross-departmental collaboration on skills; and minimise the risk of creating processes and structures with competing objectives and mandates (see more below on how overlapping mandates and lacking communication complicate collaboration on skills at the regional and local levels). Such a body could equally oversee the design, implementation and evaluation of the follow-up to the NSS 2025 (see Recommendation 2). However, project participants broadly agreed that in Ireland's specific context, adding an additional layer of governance by introducing a new, formal governmental body/committee may only exacerbate existing complexity in Ireland's skills governance (Table 5.1, Table 5.3 and Table 5.5) while running the risk of compromising its effectiveness. Therefore, when considering potential policy solutions, improvements to the existing skills governance system were prioritised.

Collaboration, co-operation and co-ordination on skills at the regional and local levels should be similarly strengthened. The RSF, in addition to serving as one-stop-shops for reskilling/upskilling support services for employers (Table 5.1), play a particularly important part in fostering co-ordination, collaboration and co-operation on skills at the regional and local levels. The RSF participate and share insights on employers' skills needs in the numerous regional/local groups established by other governmental actors or employers (e.g. Regional Enterprise Plan Steering Committees, implementation groups for local skills strategies, industry-led clusters, etc.), while certain RSF also involve representatives of local authorities. Given the complexity of the Irish skills ecosystem, it is important that Ireland continues to promote co-ordination, collaboration, and co-operation on skills at the regional and local levels, such as is currently done by the RSF. However, it should be noted that the RSF are currently constrained by capacity and resourcing issues (see Recommendation 4 and Chapter 3).

Moreover, as mentioned above, the RSF are meant to serve as a one-stop-shop for reskilling/upskilling support services for enterprises. In practice, however, there is a plethora of other actors on the ground (e.g. engagement officers and managers from EI, ETBs, IDA Ireland, LEOs, Skillnet Ireland, etc.) who all approach employers to promote their respective reskilling/upskilling support services (including conducting skills needs audits – see more in Opportunity 3 and Chapter 3). In certain regions, this engagement occurs without prior co-ordination between involved actors, even though they are all, typically, members of the RSF. Also, according to project participants, engagement in RSF meetings and with RSF activities on the part of RSF members varies from region to region.

A more co-ordinated approach to employer engagement on the ground would reduce the complexity and confusion around Ireland's education and training offer, which is already difficult to navigate (see Chapters 2 and 3), without requiring considerable time investment from employers who tend to be time-poor (especially SMEs). Equally, such a "crowded space" where several actors compete to provide reskilling/upskilling solutions to employers due to overlapping mandates only further underscores the need for a more co-ordinated approach to the design and implementation of skills policies, programmes and initiatives between governmental actors at the national level.

Going forward, DFHERIS, in collaboration with other relevant departments, should address the co-operation and collaboration challenges between the various actors who approach employers on reskilling/upskilling on the ground (e.g. by undertaking a detailed, joint assessment of the existing overlaps in roles and responsibilities, issuing guidelines encouraging a more collaborative approach, etc.). In the long term, a co-ordinated approach to skills policy design and implementation at the national level should be equally promoted via a clearly defined strategic vision in the foreseen follow-up to the NSS 2025, which should be developed and implemented in close collaboration with all relevant departments and stakeholders (see Recommendation 2).

Nonetheless, project participants pointed to positive examples of collaboration between the RSF and other regional/local actors. For example, in the context of the Spotlight on Skills initiative, EI works closely with the RSF. RSF managers are a key part of the design of Spotlight on Skills, and EI actively connects companies participating in the initiative with the RSF. Also, certain RSF managers have put in place memoranda of understanding (MoUs) between the RSF and their different member groups (e.g. an MoU between RSF Dublin and education and training providers) to help promote greater collaboration. Such examples of good practice, which help support co-ordination and collaboration on skills at the regional and local levels, should be considered by DFHERIS and other relevant partners in addressing the co-ordination and co-operation issues at the regional and local levels highlighted above.

Finally, there is space to further support collaboration, co-operation and co-ordination on skills between Ireland's national and regional levels. Given the varied roles that the RSF play mentioned in Table 5.1 and above, the RSF have a good overview of skills developments and the regional and local levels. Going forward, communication channels between the regional and national levels should be expanded, and relevant regional voices (such as the RSF) should be represented on the NSC (see Recommendation 3).

Recommendation 1: Strengthen the commitment to and efficiency of adopting a whole-of-government approach to skills to help achieve a step change in Ireland's skills system

A well-coordinated, whole-of-government approach to skills policy is essential for achieving a step change in Ireland's skills system and delivering joined-up responses to Ireland's skills challenges, particularly in as complex a skills ecosystem as Ireland's. However, not all departments in Ireland perceive skills policy holistically and from a life course perspective but rather see it as primarily the responsibility of DFHERIS. In addition, more departments should be taking more responsibility for addressing skills pressures (e.g. skills shortages) that directly affect their respective areas of oversight. Moreover, where existing cross-departmental collaboration processes on skills do exist across Ireland's government, they are not being established in a fully transparent and co-ordinated manner. At the local and regional levels, co-ordination and co-operation challenges arise due to overlapping mandates and lacking communication between governmental actors who engage with employers to promote their respective reskilling/upskilling support services on the ground.

Ireland can undertake the following specific actions to strengthen its commitment to and efficiency of adopting a whole-of-government approach to skills:

1.1. **Adopt processes to support cross-departmental collaboration on addressing skills challenges in areas of strategic importance.** Ireland should consider establishing new processes for collaborating on the development, use and governance of skills over the life course in areas of strategic importance while avoiding duplication (see more below). For example, departments facing strong skills pressures in their respective oversight areas could establish collaboration processes with DFHERIS and/or other relevant departments and agencies to work jointly to address these pressures, such as has already been done between DCEDIY and DFHERIS (Table 5.3). In addition, the importance of cross-departmental collaboration on skills should be regularly underlined by DFHERIS and other relevant departments at the ministerial level in cabinet meetings or other high-level governmental fora, such as relevant meetings of Senior Officials Groups. Equally, DFHERIS, in collaboration with other departments and DFHERIS agencies, should address the co-operation challenges and increasing competition between governmental actors who engage with employers on reskilling/upskilling at the regional and local levels (e.g. by undertaking a detailed, joint assessment of the existing overlaps in roles and responsibilities, issuing guidelines encouraging a more collaborative approach, etc.).

1.2. **Reduce duplication and promote synergies by mapping, monitoring and raising awareness of existing processes to support cross-departmental collaboration on addressing skills challenges.** Ireland should establish a mapping of existing, cross-departmental collaboration processes on skills (e.g. working groups, committees, protocols, etc.), which should be regularly updated, and made accessible across departments. A single entity could be tasked with undertaking, updating and sharing the mapping. The secretariat of the NSC might be well suited to take on such responsibilities, given the secretariat's experience with cross-departmental co-ordination in the context of organising NSC meetings. However, taking on such a role would need to be met with a commensurate increase in the secretariat's capacity and resources (see Recommendation 3).

Recommendation 2: Prepare a follow-up to the National Skills Strategy 2025 to help place skills at the top of Ireland's policy-making agenda, and enable effective implementation

Ireland's NSS 2025 sets the overall vision and direction of skills policy in Ireland. It was launched by the former DoES in 2016 (Department of Education and Skills, 2016[3]) (see the Introduction section).

The launch of the NSS 2025 has been a step in the right direction. Project participants mentioned that while the topic of skills is often mentioned across many governmental strategies (Table 5.4), which is positive, skills should be seen as a policy priority in its own right rather than a second-order issue merely facilitating and enabling other priorities (e.g. green transition, foreign direct investment [FDI] attraction, etc.). A standalone skills strategy that adopts a life course perspective, such as the NSS 2025, can help elevate the profile of skills on the governmental agenda. It can also help put skills policy higher on relevant departments' priority lists by creating consensus around and shared commitments to concrete goals and actions. Equally, as mentioned above, overarching, holistic skills strategies are one of the "enabling conditions" to support a whole-of-government approach to skills policy. However, achieving such benefits is conditional upon the effective design, implementation, monitoring and evaluation of skills strategies, including the NSS 2025.

Table 5.4. Overview of the key strategies related to skills in Ireland

Name	Objective	Lead actor
Action Plan for Apprenticeship, 2021 to 2025 (2021)	Supporting the development and uptake of apprenticeships in Ireland	DFHERIS
Adult Literacy for Life 2021-2031 (2021)	Equipping adults in Ireland with the literacy, numeracy and digital literacy needed to fully engage in society and realise their potential	DFHERIS
AI – Here for Good: National Artificial Intelligence Strategy for Ireland (2021)	Supporting Ireland in becoming an international leader in using artificial intelligence (AI), including by equipping people with relevant skills to enable each individual to benefit from increased AI adoption	DETE
Climate Action Plan 2021 (2021)	Decarbonising the Irish economy and transitioning Ireland to a low-carbon status by 2030, and a zero-carbon position in the decades beyond, including by equipping people with the right skills to be able to participate in and benefit from the future net zero economy	Government of Ireland
Comprehensive Employment Strategy for People with Disabilities (2015-2024)	Addressing the obstacles to the employment of disabled people, including by developing skills	DCEDIY
Digital Strategy for Schools to 2027 (2022)	Equipping learners in schools with the knowledge and skills they need to successfully navigate the evolving digital world	DEP EDU
Driving Recovery and Sustainable Growth 2021-2024 (2021)	Encouraging foreign direct investment (FDI) inflows into Ireland, including by assisting foreign enterprises established in Ireland with reskilling/upskilling	IDA Ireland
Economic Recovery Plan (2021)	Supporting Ireland's recovery from the COVID-19 pandemic. The Plan has four pillars, with one dedicated to helping people get back to work, including by reskilling/upskilling.	Government of Ireland
ESD to 2030: Second National Strategy on Education for Sustainable Development (2022)	Supporting the contribution of education towards a more sustainable future at individual, community, local, national and international levels	DEP EDU
Future FET: Transforming Learning, The National Further Education and Training (FET) Strategy (2020)	Supporting the development, relevance and uptake of FET in Ireland	SOLAS
Harnessing Digital – The Digital Ireland Framework (2022)	Advancing the use of digital technology in the delivery of public services, and the adoption of digital technology in enterprises and across the education and training system	Department of the Taoiseach
Housing for All: A New Housing Plan for Ireland (2021)	Ensuring access to sustainable, good-quality and affordable housing, including via reskilling, upskilling and skills forecasting measures in the construction sector to deliver the labour force required to build an average of 33 000 homes per year	Government of Ireland

Name	Objective	Lead actor
Impact 2030: Ireland's Research and Innovation Strategy (2022)	Maximising the impact of research and innovation (R&I) in Ireland, including through the development of research talent and strengthening linkages between the public R&I system and private performers	DFHERIS
Languages Connect – Ireland's Strategy for Foreign Languages in Education 2017-2026 (2017)	Supporting the acquisition of foreign languages by individuals in Ireland	DEP EDU
Leading in a Changing World 2022-2024 (2022)	Supporting enterprise creation and development in Ireland and the expansion of Irish enterprises into world markets, including by supporting enterprises with reskilling/upskilling	EI
Making Remote Work: National Remote Work Strategy (2021)	Increasing the uptake and ensuring the sustainability of remote working opportunities in Ireland, thereby aiming to support better use of skills in Ireland	DETE
National Smart Specialisation Strategy for Innovation 2022-2027 (2022)	Providing a link between regional and national innovation strategy building and decision making, bringing coherence to research, development and innovation (RD&I) planning and advancing the RD&I agenda regionally and nationally. The strategy acknowledges the importance of skills for RD&I in Ireland.	DETE
Pathways to Work Strategy 2021-2025 (2021)	Increasing employment levels and expanding labour market participation among under-represented groups (i.e. lone parents, the young unemployed, persons with disabilities, women/carers/those with home duties, etc.), including by reskilling/upskilling. The strategy serves as a key delivery mechanism of the Economic Recovery Plan.	DSP
Project Ireland 2040 (2018)	Providing improved social, economic and cultural infrastructure for all people in Ireland. Project Ireland comprises the National Planning Framework (NPF) and the National Development Plan 2021-2030 (NDP). The NPF sets the vision and strategy for the development of Ireland to 2040, including by supporting skills development, and the NDP provides the enabling investment to implement the NPF.	Government of Ireland
Resilience and Recovery Plan (2021)	Supporting a sustainable, equitable, green and digital recovery from the COVID-19 pandemic, including by outlining reforms and investments in reskilling/upskilling. The plan is co-funded by the European Union.	Government of Ireland
STEM Education Policy Statement 2017-2026 (2017)	Further developing science, technology, engineering, and mathematics (STEM) education in Ireland	DEP EDU
Technology Skills 2022 – Ireland's Third ICT Skills Action Plan (2019)	Meeting the demand for high-level information and communications technology (ICT) skills in Ireland	DFHERIS, DETE
White Paper on Enterprise 2022-2030 (2022)	Supporting Irish-based enterprises to succeed through competitive advantage based on sustainability, innovation and productivity while delivering rewarding jobs and livelihoods. Skills, talent, and workforce development are identified among the key enablers of a competitive enterprise environment.	DETE

Note: The table aims to provide an overview, not an exhaustive list, and includes key strategies published since the launch of the NSS 2025 in 2016, which were still in place at the time of this report's finalisation. Strategies are listed in alphabetical order. The lead actor acronyms are: DFHERIS: Department of Further and Higher Education, Research, Innovation and Science; DETE: Department of Enterprise, Trade and Employment; DCEDIY: Department of Children, Equality, Disability, Integration and Youth; DEP EDU: Department of Education; EI: Enterprise Ireland; DSP: Department of Social Protection.

It is positive that in the design phase, the NSS 2025 took a life course and holistic perspective on skills policy. Beyond supporting the development of relevant skills in formal education, the NSS 2025 counts greater participation in lifelong learning and more effective use of skills in workplaces among its six strategic objectives.

Non-governmental stakeholders were actively involved in developing the NSS 2025, which is important for ensuring its relevance. The development of the NSS 2025 was overseen by the National Skill Strategy Steering Group (NSSSG), which included representatives of DoES (now DEP EDU and DFHERIS), DSP, Department of Public Expenditure and Reform (now DPENDPDR), Department of Jobs, Enterprise and Innovation (now DETE), HEA, SOLAS and non-governmental stakeholders. Moreover, DoES held a public consultation to gather views on the NSS 2025 from stakeholders not involved in the NSSSG, and received

over 120 submissions from a diverse range of governmental and non-governmental actors (DFHERIS, 2021[12]).

The NSS 2025 has several features that should facilitate its effective implementation in practice. For each of the six strategic objectives, the NSS 2025 identifies broad action areas and concrete measures for implementation. Each measure is assigned "lead(s)" (i.e. actor[s] from within and outside of the government), who are responsible for the measure's implementation. Measurable, mid- and long-term indicators are also set out (DFHERIS, 2021[12]).

However, project participants broadly agreed that implementing the NSS 2025 in practice has not been without challenges, partly because parts of the implementation period coincided with the outbreak of the COVID-19 pandemic and the restructuring of certain departments in Ireland. The NSS 2025 refers to using "existing governance and performance structures and processes" for monitoring purposes. In practice, however, there has been little and/or unsystematic follow-up on how relevant leads are implementing measures for which they have been assigned responsibilities in the NSS 2025. While some departments mentioned reporting on the specific NSS 2025 measures shortly after it was launched, all leads did not adopt such reporting, and the reporting results had not been evaluated.

Project participants mentioned that the lack of accountability mechanisms has been at least partly behind the challenge in implementation. In addition, the scope (i.e. the number of measures) of the NSS 2025 was seen as overly extensive, which made it difficult for the leads to prioritise between the measures assigned to them. Even more importantly, project participants agreed that the structure of the NSS 2025 did not leave much space for updating the listed measures based on new developments in the Irish skills ecosystem and the evolving socio-economic conditions. The limited flexibility to update the actions defined in the NSS 2025 has also complicated the alignment between the NSS 2025 and other, more recent strategies covering specific sub-sectors of the skills policy, or broader economic strategies (e.g. Economic Recovery Plan, Resilience and Recovery Plan, etc.), which include reskilling/upskilling among their priorities (Table 5.4). Project participants also highlighted that greater emphasis could be placed on evaluating the impact of measures implemented under the NSS 2025, for which it will be crucial to further strengthen Ireland's evaluation capacity in skills policy (see Opportunity 3).

The opportunities for improvement, which were identified during the implementation of the NSS 2025, provide important lessons in the preparation of a follow-up to the NSS 2025, which is planned by DFHERIS. The idea of preparing a follow-up strategic document, which builds on the NSS 2025, should be supported, given the important role that such documents play in supporting a whole-of-government approach to skills policy and in helping to elevate the profile of skills on the governmental agenda.

The design of the follow-up to the NSS 2025 should, again, be an inclusive, cross-departmental initiative, with emphasis placed on sourcing inputs from other relevant departments and agencies as well as stakeholders while carefully promoting synergies between existing and foreseen relevant strategies and action plans. Once designed, the final version of the NSS 2025 follow-up could be subject to the approval of the NSC in order to promote ownership and secure buy-in for subsequent implementation from all the key actors besides DFHERIS. A collaborative approach to the design of the NSS 2025 follow-up would also help ensure that identified skills priorities become accurately reflected in other departments' relevant strategies and action plans, reinforcing, in turn, impactful implementation and further elevating the strategic profile of skills across the government. Consideration could also be given to establishing standing, technical-level implementation groups, with members sourced from across departments and stakeholders as relevant, to support the implementation of the specific priority areas of the NSS 2025 follow-up.

Skills data and information from the SLMRU and the EGFSN should feed into developing the NSS 2025 follow-up. Consideration should also be given to prioritising a smaller number of more strategic, high-impact priority areas in the NSS 2025 follow-up, as was highlighted by project participants during an Extraordinary Meeting of the NSC organised as part of the consultations for this project. The follow-up to the NSS 2025 should also have a more flexible structure, enabling continuous updating. Ireland's recently

published *Impact 2030: Ireland's Research and Innovation Strategy* (Box 5.3) was frequently quoted by project participants as a good example of a strategic document that introduces a sufficient degree of flexibility thanks to differentiating between the "core" of the strategy and a more flexible work programme.

Box 5.3. Relevant national example: Introducing flexibility into strategic documents

Ireland: Research and Innovation Strategy ("Impact 2030")

Ireland's Research and Innovation Strategy ("Impact 2030") was launched in May 2022 and aims to advance the strategic development of Ireland's research and innovation (R&I) system by 2030.

Impact 2030 has five key pillars: 1) maximising the impact of R&I on Ireland's economy, society and the environment; 2) impact of R&I structures on excellence and outcomes; 3) innovation driving enterprise success; 4) talent at the heart of the R&I ecosystem; and 5) all-island, EU and global connectivity. For each of the five pillars, Impact 2030 defines a set of more concrete, strategic objectives.

Impact 2030 will be delivered through three three-year work programmes, the first of which covers 2022-24 and is included in an annex of the publicly available version of Impact 2030. For selected strategic objectives, the 2022-24 work programme defines specific actions that should be undertaken and the actor(s) who should take the lead in implementing each action. The work programmes can be updated as need be to enable flexible implementation.

Source: Government of Ireland (2022[13]), *Impact 2030: Ireland's Research and Innovation Strategy*, www.gov.ie/en/publication/27c78-impact-2030-irelands-new-research-and-innovation-strategy/.

As highlighted above, the follow-up to the NSS 2025 should have clearly defined accountability mechanisms. Therefore, consideration could be given to establishing clear progress-reporting guidelines, which all partners involved in implementation should follow. For example, the relevant parties could report progress with the implementation to the NSC secretariat at regular intervals, allowing the secretariat to compile a report tracking the implementation progress. The progress report could be regularly presented and discussed at the NSC in order to obtain stakeholders' feedback before being submitted to the government as part of a broader, regular NSC report (see also Recommendation 3). Similarly, in Northern Ireland (United Kingdom), issuing an annual report on the progress with implementation of the goals of the Skills Strategy, "Skills for a 10x Economy", is part of the mandate of the newly established Skills Council (Box 5.4).

Box 5.4. Relevant international example: Accountability mechanisms for implementing strategic documents

Northern Ireland (United Kingdom): Annual reporting on Skills Strategy implementation via the National Skills Council

The Northern Ireland Skills Council (NISC) is a new advisory body set up to provide strategic advice to Ministers of the Northern Ireland Executive and governmental departments on issues related to the development of skills policy with the view of meeting the objectives of the Programme for Government, the economic vision for Northern Ireland's "10x Economy: Northern Ireland's Decade of Innovation" and the Skills Strategy, "Skills for a 10x Economy".

One of the council's objectives is to issue an annual report on progress against the goals of the Skills Strategy and the commitments specified in implementation plans. In addition, the mandate of the NISC includes: advising and supporting the strategic development of 2-5-10-year implementation plans underpinning the Skills Strategy; identifying and making recommendations on key strategic priorities for

Northern Ireland's skills system; supporting economic development and greater social inclusion; and rationalising the advisory infrastructure in Northern Ireland's skills system.

The NISC will remain independent from the government and maintain a strategic advisory role. It will continue to operate for the duration of the Skills Strategy (i.e., until 2030).

Source: Department for the Economy (2023[14]), *Northern Ireland Skills Council (NISC) - Competition to appoint chair and members*, www.economy-ni.gov.uk/publications/northern-ireland-skills-council-nisc-competition-appoint-chair-and-members.

Finally, in the long term, it would be advisable for DFHERIS and other relevant actors to conduct an impact evaluation of key, relevant interventions introduced under the NSS 2025 follow-up and the NSS 2025 itself. For this purpose, the evaluation capacities of the recently established EfP Unit and/or other evaluation structures in the government (see Opportunity 3) could potentially be used, as relevant, while allowing stakeholders and other departments to provide feedback on the evaluation process and findings (e.g. during NSC meetings).

Recommendation 2: Prepare a follow-up to the National Skills Strategy 2025 to help place skills at the top of Ireland's policy-making agenda, and enable effective implementation

Strategies and action plans are key enabling mechanisms that support a whole-of-government approach to skills policy (see Recommendation 1) and are important for ensuring that skills remain on top of policy makers' agendas. In Ireland, it is imperative that skills feature high among governmental priorities. Based on the experience with implementing the NSS 2025, there are important lessons that Ireland can draw upon when preparing the planned NSS 2025 follow-up to enable effective implementation.

Ireland can undertake the following specific actions to prepare a follow-up to the NSS 2025 to help place skills at the top of its policy-making agenda and enable effective implementation:

2.1. **Apply a whole-of-government approach to the design and implementation of the National Skills Strategy 2025 follow-up.** DFHERIS, who is leading the development of the NSS 2025 follow-up, should actively involve other departments and key stakeholders in the design of the follow-up. Active cross-departmental and stakeholder collaboration on the design of the NSS 2025 follow-up would help establish consensus around the identified priority areas and, therefore, greater salience of the follow-up and ownership of its implementation among all relevant parties going forward. At the same time, a collaborative approach to the design of the NSS 2025 follow-up would help ensure that identified skills priorities become accurately reflected in other departments' more specific strategies and action plans as relevant. Consideration could also be given to establishing standing, technical-level implementation groups, with members sourced from across departments and stakeholders as relevant, to support the implementation of the specific priority areas of the follow-up.

2.2. **Prioritise a smaller number of high-impact priority areas in the National Skills Strategy 2025 follow-up and consider a more flexible structure.** In preparing the follow-up to the NSS 2025, DFHERIS and relevant partners should prioritise fewer yet higher impact priority areas to support effective implementation. When considering the structure of the NSS 2025 follow-up, DFHERIS and relevant partners could consider differentiating between the core of strategy and related, more flexible work programmes, such as those included in Ireland's *Impact 2030* Strategy (Box 5.3) in order to create space for updating, as need be.

2.3. **Establish clear accountability mechanisms to support progress reporting on and evaluating the measures implemented under the National Skills Strategy 2025 follow-up.** Consideration should be given to establishing clear progress-reporting guidelines, which all partners involved in the implementation of the follow-up should follow. For example, the relevant parties could report progress with the implementation to the NSC secretariat at regular intervals, allowing the secretariat to compile a report tracking implementation progress. In addition, the progress report could be regularly presented and discussed at the NSC in order to obtain stakeholders' feedback before being submitted to the government as part of a broader, regular NSC report (see also Recommendation 3). In the long term, it would be equally advisable for DFHERIS and other relevant actors to conduct an impact evaluation of the key, relevant interventions introduced under the NSS 2025 follow-up and the NSS 2025 itself. For this purpose, the evaluation capacities of the recently established EfP Unit and/or other evaluation structures in the government could be used, as relevant, while allowing stakeholders and other departments to provide feedback on the evaluation process and findings (e.g. during NSC meetings).

Opportunity 2: Supporting effective engagement with stakeholders throughout the skills policy cycle

Engaging with stakeholders supports policy makers in dealing with the inherent complexities of skills policies. Stakeholders are uniquely positioned to provide policy makers with valuable insights into the real-world effects of skills policies. Information on "what works and what does not" on the ground can be difficult for policy makers to access. However, it is essential given that the effects of skills policies can be quite different in practice from those that governmental policy makers initially intended (OECD, 2020[2]).

Stakeholder engagement also helps generate political legitimacy, which can itself be an important resource when designing and implementing ambitious skills reforms. Reform efforts based on a broad consensus between involved actors are more likely to be fully accepted and broadly supported. This will, in turn, increase the likelihood that policy decisions will be implemented according to the initial intentions of decision makers and thus improve the overall effectiveness of the policy-making process.

The notion of the "skills policy cycle" implies that there is a constant feedback process between the phases of policy implementation and (re-)design, as skills policies are revised according to implementation experiences and, ideally, based on input from research (OECD, 2020[2]).

Recommendation 3: Strengthen the National Skills Council and other stakeholder bodies to enable stakeholders to more effectively shape Ireland's skills policy priorities

Ireland has several mechanisms for engaging stakeholders in shaping skills policy priorities (i.e. providing input into the strategic direction of skills policy). These mechanisms include public consultations run by different departments and a range of bodies and groups (Table 5.5). While some of these bodies and groups have a mandate broader than providing advice on skills policy and only touch upon skills issues occasionally (e.g. the National Economic and Social Council [NESC] provides advice on strategic policy issues relating to sustainable economic, social and environmental development), others are concerned with a specific sub-sector of skills policy (e.g. the National Apprenticeship Alliance [NAA] advises on the development of the apprenticeship system and approves the development of new apprenticeships). The NSC focuses on skills policy specifically, with skills policy understood holistically (i.e., going beyond a specific sub-sector of skills policy). Given the NSC's membership and according to the NSC's mandate (see more below and the overview in Table 5.5), the NSC aims to create space for engaging stakeholders on skills policy (among other roles, see above).

Table 5.5. Ireland's key mechanisms for engaging stakeholders in skills policy

Name	Overview of roles and responsibilities	Members
The Economic and Social Research Institute (ESRI)-Department of Further and Higher Education Research Innovation and Science (DFHERIS) Joint Research Programme on Irish Skills Requirements	Undertakes research on developments in the Irish labour market and the shifting nature of skills	DFHERIS and related agencies, NTFAG, Department of Enterprise, Trade and Employment (DETE), ESRI
Labour Employer Economic Forum (LEEF)	Provides a forum for tripartite dialogue on economic and employment issues affecting the labour market, including skills (on occasion)	Departments, employer associations, trade unions
Labour Market Advisory Council (LMAC)	Advises the Minister of Social Protection and the Government of Ireland on the efficient operation of the labour market, focusing on increasing participation rates, minimising unemployment levels and reducing average unemployment durations. Discussions can touch upon skills on occasion.	Departments, governmental agencies, employer associations, employers, trade unions, education and training providers, independent experts
National Apprenticeship Alliance (NAA)	Advises on the development of the apprenticeship system. Oversees and approves the development of new apprenticeships. Monitors the implementation of the Action Plan for Apprenticeship 2021-2025.	Departments, employer associations, trade unions
National Competitiveness and Productivity Council (NCPC)	Reports to the Taoiseach and the Government of Ireland, through the Minister for Enterprise, Trade and Employment, on key competitiveness issues facing the Irish economy and offers recommendations on policy actions (including on skills policy, on occasion) required to enhance Ireland's competitive position	Departments, governmental agencies, employer associations, employers, trade unions
National Economic and Social Council (NESC)	Advises the Taoiseach and the Government of Ireland on strategic policy issues relating to sustainable economic, social and environmental development in Ireland, including skills policy (on occasion)	Departments, employer associations, trade unions, civil society representatives
National Skills Council (NSC)	Provides advice on priority skills needs, the direction of skills and knowledge development in line with emerging global trends, and the opportunities and challenges for learning and work. Prepares an annual prioritisation of skills needs to advise DFHERIS and to inform decisions on the allocation of funding across further education and training, higher education and Skillnet Ireland. Oversees research and approves reports and publications by EGFSN and Skills and Labour Market Research Unit (SLMRU). Set up by the National Skills Strategy 2025.	Departments, governmental agencies, education and training providers, employers
National Training Fund Advisory Group (NTFAG)	Develops evidence-based recommendations to the NSC to maximise the effectiveness and impact of National Training Fund (NTF) expenditures and facilitates NTF-related inputs from non-governmental stakeholders, including employers, to DFHERIS in the context of the annual estimates cycle.	Departments, governmental agencies, employer representatives, civil society representatives
Project steering and implementation groups of the Expert Group on Future Skills Needs (EGFSN)	To support and oversee the progress of each EGFSN study, a representative steering group, composed of the key public and private sector stakeholders for relevant sectors or occupations, are established. Project steering groups help create consensus on establishing the evidence base and the measures needed to address the skills needs identified in EGFSN studies. The groups also help steer the comprehensive engagement with industry, as well as government and education and training sector stakeholders, which help inform each study's findings. Project implementation groups seek to support the implementation of EGFSN's recommendations, with the EGFSN secretariat encouraging the replication of the initial project steering groups where feasible.	EGFSN and a wide range of stakeholders

Note: The table aims to provide an overview, not an exhaustive list. Stakeholder engagement mechanisms are listed alphabetically.

Project participants generally viewed the establishment of the NSC positively, particularly because the need to engage with non-governmental stakeholders on skills policy is perceived to be very important in Ireland. Equally, conditional upon effective functioning, standalone skills-focused bodies similar to the NSC help put skills higher on stakeholders' agendas (OECD, 2020[2]), thereby helping to further elevate the

profile of skills in the country to facilitate reform efforts (see also Opportunity 1). However, the NSC has also been subject to a certain degree of criticism related to its limited influence in the Irish skills ecosystem, where the NSC has not yet succeeded in positioning itself as a "strong player".

Project participants signalled several potential reasons behind the NSC's limited influence. First, there is a lack of clarity around the NSC's mandate. The NSC's mandate is defined in the NSC's terms of reference (ToRs) (as summarised in Table 5.5). The ToRs state that the NSC "brings together education and training providers with representatives from business, to effectively respond to skills needs" (DFHERIS, 2022[15]). The NSC should advise the Minister for Further and Higher Education, Research, Innovation and Science, and DFHERIS more broadly, on Ireland's "priority skills needs" (i.e. skills policy priorities) on an annual basis in order to inform decisions on the allocation of funding across FET, higher education (HE) and Skillnet Ireland. The NSC should also oversee research and approve the publication of reports by the EGFSN and the SLMRU, action plans developed by the EGFSN for implementing recommendations in EGFSN reports and receive costed proposals for the EGFSN's annual work programme. The ToRs also require the HEA and SOLAS to report to the NSC on their respective funding allocations. As per the ToRs, IDA Ireland, EI, and SFI should, in turn, report on developing sectoral opportunities and potential target areas for increased FDI into Ireland and provide advice on the extent to which Ireland's skills supply can meet such potential new employment opportunities. Further, the NSC should receive regular updates from governmental departments on relevant strategies, as well as from public education and training providers on how the providers are responding to the identified skills needs. The NSC should also consider updates on the work of the RSF (DFHERIS, 2022[15]).

However, the actual NSC meetings only mirror the original ToRs to a limited extent. While the EGFSN and the SLMRU present new research to the NSC for approval, the rest of the NSC's original ToRs are not being translated into practice. Divergence from the original NSC ToRs is not strictly negative, given that the original ToRs already create relatively limited space for sourcing advice from non-governmental stakeholders on skills policy priorities. The original NSC ToRs, as well as NSC's current membership (see more below), position the NSC to be a space dedicated primarily to cross-departmental co-ordination and reporting on skills (even though not without challenges – see more below and in Recommendation 1) rather than to engagement with stakeholders.

In contrast to the NSC's original ToRs, each NSC meeting largely consists of a high-level discussion on a topic determined in advance by the NSC secretariat (i.e. the Skills Policy and Enterprise Engagement Unit in DFHERIS). An expert on the particular topic typically facilitates the discussions (e.g. an international consultancy firm facilitated the discussions on the "workplace of the future"). Despite a recent improvement in the engagement in NSC discussions by NSC members, project participants suggested that the quality of discussions could be improved, and the contributions of some NSC members, including governmental departments, are limited (see also Opportunity 1). Nonetheless, project participants highlighted that governmental actors rather than non-governmental stakeholders still dominate most NSC discussions. Project participants also mentioned that participating in NSC meetings can sometimes be seen as a "turn-up, tick-box exercise" without real commitment, while the discussions around EGFSN and SLMRU reports tend to be limited, and the reports' approval is perceived merely as receiving a "rubber stamp". Stakeholders similarly pointed out that the selection of NSC discussion topics could be undertaken more collaboratively. At present, certain topics (e.g. research skills and talent) are only discussed at the NSC to a limited extent and would merit greater attention.

To a certain extent, the modest level of engagement of certain NSC members could also be explained by the fact that members are not clear on what the NSC's mandate and objectives are and, therefore, what difference their contributions to NSC discussions will make in practice. In recent months, the NSC secretariat started compiling a summary of NSC discussion outcomes, which are shared with NSC members and within DFHERIS. Nonetheless, it is unclear whether or to what extent the discussion outcomes influence skills policy, partly because there are no accountability mechanisms to facilitate effective follow-up.

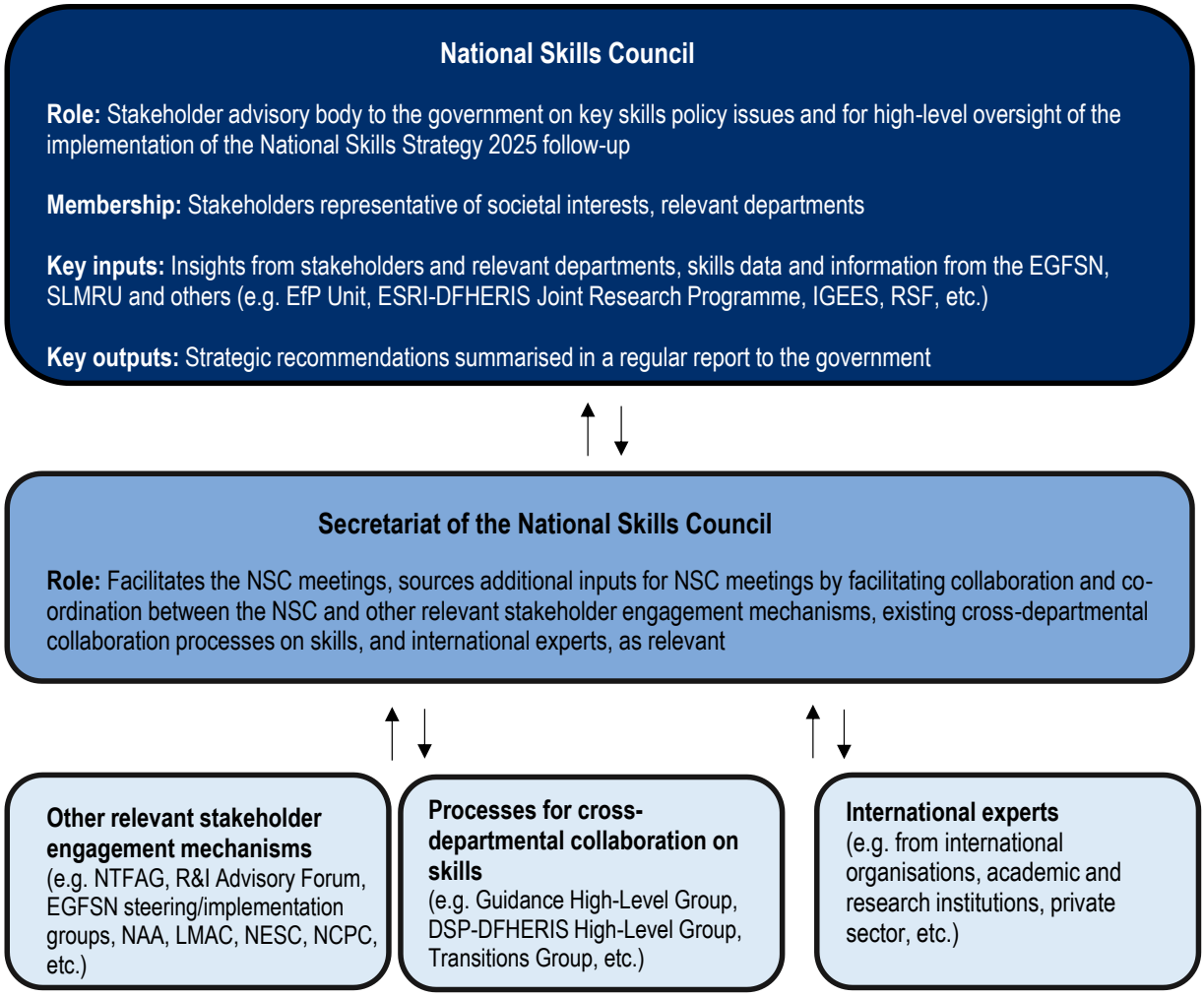
Second, the legitimacy of the NSC among stakeholders in Ireland is negatively impacted by the lack of representativeness and diversity in the NSC's membership base. Even if the NSC's mandate was clearly defined and understood, and the discussions led to concrete outcomes which influenced policy, the relevance of the NSC's advice could still be questioned due to its relatively homogenous and non-representative membership. While as noted above, the NSC ToRs state that the NSC "brings together education and training providers with representatives from business, to effectively respond to skills needs" (DFHERIS, 2022[15]), and the NSC is chaired by an enterprise representative, the NSC membership is dominated by governmental actors. More specifically, 13 out of 21 seats on the NSC are taken up by governmental representatives (i.e. representatives of departments or governmental agencies and institutions). The eight remaining seats are distributed between representatives of public education and training providers (three) and individual employers (five – including the chairperson) (DFHERIS, 2022[15]). Therefore, it is not surprising that the NSC discussions are dominated by governmental actors, even though some might be more active in NSC discussions than others (see above). Participants in a public consultation survey carried out as part of this project also stressed that the NSC has not succeeded in securing gender balance in its membership, which should be addressed.

Project participants highlighted that the NSC has limited visibility outside of governmental departments and that the dissemination of information about the work of the NSC to external audiences is generally insufficient. For example, consulted representatives of SMEs were unaware of the NSC's existence. At present, the NSC does not have a dedicated website. Existing, publicly available information on the NSC can only be found in a small section of the website of the Irish government, outlining the NSC's ToRs and membership, providing links to NSC agendas and meeting minutes, and stating the contact details for the NSC secretariat. Finally, the fact that the NSC secretariat is constrained by limited capacity and is responsible for tasks other than managing the NSC poses obstacles to NSC's effective functioning. It could complicate effectively implementing further improvements in the future.

Going forward, DFHERIS should address the challenges related to clarifying NSC's mandate, membership, accountability mechanisms, visibility and secretariat resourcing. In addition, DFHERIS should revise the NSC ToRs to clearly position the NSC as a stakeholder advisory body to the government on skills policy issues instead of a discussion forum for governmental officials (see more on improving cross-departmental collaboration and co-ordination on skills under Recommendations 1 and 2) and adjust the NSC's membership accordingly (see below). Figure 5.4 provides a simplified overview of the structure and functioning of the "refreshed" NSC, while further details are provided below.

In revising the NSC's ToRs, DFHERIS should determine (e.g. via the Strategic Skills Group) how the work of the EGFSN and SLMRU, and/or other relevant entities and partnerships working on/with skills data and evidence (e.g. EfP Unit, ESRI-DFHERIS Joint Research Programme, Irish Government Economic and Evaluation Service [IGEES], RSF, etc.) could be better leveraged and co-ordinated to advance the NSC's work. DFHERIS should equally ensure that those governmental stakeholders who will be part of the refreshed NSC (see more on adjusting the NSC membership below) are assigned relevant roles in the ToRs. For example, as mentioned above, while the NSC ToRs now state that IDA Ireland, EI, and SFI should report on developing sectoral opportunities and potential target areas for increased FDI into Ireland, only IDA Ireland has a mandate for attracting FDI to Ireland.

Figure 5.4. Overview of the structure and functioning of the "refreshed" National Skills Council



Note: The figure provides a simplified overview. Further details can be found in the text below. The acronyms used in this figure stand for the following bodies and terms: EGFSN: Expert Group on Future Skills Needs; SLMRU: Skills and Labour Market Research Unit; EfP Unit: Evidence for Policy Unit; ESRI-DFHERIS: Economic and Social Research Institute-Department of Further and Higher Education Research Innovation and Science; IGEES: Irish Government Economic and Evaluation Service; RSF: Regional Skills Fora; NTFAG: National Training Fund Advisory Group; R&I: Research and innovation; NAA: National Apprenticeship Alliance; LMAC: Labour Market Advisory Council; NESC: National Economic and Social Council; NCPC: National Competitiveness and Productivity Council; DSP-DFHERIS: Department of Social Protection-Department of Further and Higher Education Research Innovation and Science.

DFHERIS should pay particular attention to ensuring that a wider range of relevant non-governmental stakeholders representative of different societal interests are members of the NSC (Figure 5.4) and that governmental actors do not outnumber the non-governmental stakeholders. For example, Norway's Skills Policy Council includes a broad array of non-governmental stakeholders (Box 5.5). Similarly, in Ireland, relevant stakeholders to include on the NSC could include representatives from social partners (i.e. representatives of employers, including SMEs and trade unions), as well as relevant regional stakeholders (such as RSF), representatives of disadvantaged groups, private education and training providers, learners, independent experts and the community and voluntary sector. A wider range of relevant non-governmental stakeholders on the NSC would not only strengthen stakeholders' voices in shaping skills policy priorities, but also facilitate a more substantial discussion on the EGFSN and SLMRU reports prior to approval and publication. Furthermore, in the establishment of structures similar to the

NSC, it should be ensured that stakeholders representing economically less influential individuals and groups (e.g. SMEs, non-governmental organisations [NGOs], etc.) are also given a seat at the table (OECD, 2020[2]).

Box 5.5. Relevant international example: Including non-governmental stakeholders in stakeholder engagement bodies

Norway: Skills Policy Council

In order to improve skills governance arrangements in Norway, the Norwegian Strategy for Skills Policy 2017-2021 (Nasjonal Kompetansepolitisk Strategi) introduced the establishment of the Skills Policy Council. The council's mandate was renewed in 2022 and stipulates that the council's purpose is to promote good co-operation in skills policy design. The council's main task is to highlight specific issues and discuss possible solutions, so that the government receives views and input from different actors and points of view.

As of 2022, Norway's Skills Policy Council has the following members: four representatives of employers; four representatives of employees; an NGO umbrella organisation association for lifelong learning; a lifelong learning association; the Norwegian Association of Higher Education Institutions; the Vocational School Council; and county municipalities represented by a county director/county councillor. The government is represented by the Ministry of Labour and Social Affairs; the Ministry of Local Government and Modernisation; the Ministry of Education and Research; the Ministry of Trade, Industry and Fisheries; and the Ministry of Health and Care Services. The Sami parliament has observer status.

The council is chaired by the state secretary responsible for skills policy in the Ministry of Education and Research. The Ministry of Education and Research also provides the secretariat to the council. An administrative working group with representatives from the members of the council assists the secretariat with preparing council meetings. The Ministry of Education and Research summons the group to meetings before the council meetings and co-ordinates the work.

As of 2020, the Skills Policy Council meets three to four times a year in sessions that last around two hours. High-level discussions at the ministerial level are supplemented by working-level discussions with the participation of civil servants, thereby ensuring that skills are on the agenda of decision makers and that concrete outputs in terms of policy making are met.

Source: Regjeringen.no (2022[16]), *Kompetansepolitisk råd*, www.regjeringen.no/no/dep/kd/org/styrer-rad-og-utvalg/kompetansepolitisk-rad/id2569522/; OECD (2020[2]), *Strengthening the Governance of Skills Systems: Lessons from Six OECD Countries*, https://dx.doi.org/10.1787/3a4bb6ea-en.

Equally, identifying relevant (and less relevant) stakeholders, as well as governmental actors, is an important part of designing effective governance structures. The exact number of stakeholders and governmental actors to be involved depends on a country's context and existing relationships between stakeholders and government. It is important to note that maximising effective stakeholder involvement is not the same as maximising the number of stakeholders (OECD, 2020[2]). Therefore, careful consideration should be given to the make-up of the NSC in Ireland, while efforts should also be undertaken to secure gender balance at the NSC as a whole.

The NSC secretariat should share the key discussion points ahead of NSC meetings to enable NSC members to adequately prepare for NSC meetings. The secretariat should equally allow the members to influence the agenda setting of NSC meetings to ensure that the topics are selected in an inclusive manner and that no major topics are neglected while paying attention to fairly balancing between topics suggested by both non-governmental and governmental stakeholders.

To ensure that NSC members are motivated to participate in NSC meetings, DFHERIS should create accountability mechanisms regarding the advice they provide. For example, NSC meetings could aim to conclude with clear, actionable items or recommendations to which the relevant parties (departments and/or stakeholders) would be required to respond. In the Netherlands, for example, the government is obliged to respond to the advice received from the Social and Economic Council (SER) within three months (Box 5.6). The NSC recommendations and subsequent responses from relevant actors and/or actions undertaken could be summarised in a regular NSC report to be submitted to the government (Figure 5.4). The NSC report could also include a progress update on the implementation of the NSS 2025 follow-up, while the NSC recommendations could provide valuable input in the design of the suggested, flexible work programmes of the NSS 2025 follow-up, as relevant (see Recommendation 2). Similarly, broad alignment between the strategic vision set out by the NSS 2025 follow-up and the focus of the specialised NSC's sub-groups, the potential set-up of which is currently being considered by DFHERIS, should be promoted.

Box 5.6. Relevant international example: Accountability mechanisms for following-up on stakeholder advice

Netherlands: Social and Economic Council

The Social and Economic Council (SER) is an advisory body on social and economic policy to the Government of the Netherlands and Parliament. The SER works to achieve its objective of "a strong and sustainable economy in which as many people as possible are in work; and a fair distribution of income". Although SER was established by law, it is not a government institution and is funded indirectly by industry through the General Unemployment Fund.

SER is part of the "consultative economy" in the Netherlands, whereby consultation occurs within enterprises via Work Councils, at the sectoral level where trade unions negotiate collective labour agreements with employers' representatives, and at the national level where SER and the Labour Foundation operate.

SER provides advice upon request from the government or at its own initiative. SER has set up various committees to prepare its advisory reports with recommendations. The draft advisory reports prepared by committees are then discussed in full council meetings. A key feature of SER's work is developing recommendations on the basis of a dialogue with all stakeholders. Therefore, SER's motto is "thinking, for support through dialogue".

SER has 33 members – 11 representatives of employers, employees and independent experts (Crown-appointed members), respectively. The independent experts are often professors in economics, finance, law or the social sciences. Representatives of government ministries can attend the council's public meetings and committees' private meetings as observers.

More than 80% of the advice put forward by SER is unanimous. Even though the Dutch government is not obliged to follow SER's advice, any unanimous agreement between the employers' organisations, employees' organisations and independent experts sends a powerful signal. Within three months, the government is required to respond to SER's advice. If the government chooses to deviate from the advice provided by SER, it must explain the reasons for doing so.

Source: Social and Economic Council (2023[17]), *About the SER*, www.ser.nl/en/SER/About-the-SER.

Improving the visibility and communication around the activities of the NSC will also be important for strengthening the NSC's role in Ireland's skills ecosystem. While NSC's website needs to remain integrated on gov.ie as per the existing communication guidelines, DFHERIS is considering organising an annual high-profile skills-related event (e.g. a Skills Summit) in Ireland. DFHERIS could consider linking certain

NSC meetings to the Skills Summit to help raise NSC's visibility or potentially present and discuss NSC's recommendations at the event.

As mentioned in Recommendation 1 (see above), equipping the NSC secretariat with more capacity and resources will be essential to support the effective functioning of the refreshed NSC. Beyond providing support in preparing NSC meetings and implementing the above-suggested improvements to the NSC, the NSC secretariat could support co-ordination between the NSC and the cross-departmental processes for collaboration on skills (see Recommendation 1). The NSC secretariat could also be in charge of co-ordination between the NSC and Ireland's other existing mechanisms for engaging stakeholders on skills (Table 5.5), as well as the proposed Research and Innovation Advisory Forum under the *Impact 2030* governance structures, in order to make sure that the NSC remains up to date on skills-related discussions in other fora, and, as appropriate, is able to provide and source relevant, additional inputs with the view of leveraging potential synergies. The NSC secretariat could also consider more frequent collaboration between international experts and the NSC, which project participants saw as desirable. As a result, bearing in mind co-ordination-related tasks that the NSC secretariat may be well placed to carry out (see Recommendation 1), it should be ensured that the secretariat has sufficient capacity and resources; these are currently lacking.

Beyond strengthening the NSC, which was seen as a priority, project participants have also raised the importance of improving the functioning of the NTFAG. The NTFAG was established following an external review of the NTF (Indecon, 2018[18]) in order to support the greater involvement of employers in decisions surrounding the NTF (see Chapter 3). As mentioned in Table 5.5, the NTFAG aims to develop evidence-based recommendations to the NSC to maximise the effectiveness and impact of NTF expenditures and facilitates NTF-related inputs from non-governmental stakeholders, including employers, to DFHERIS in the context of the annual estimates cycle.

While establishing the NTFAG was seen as a broadly positive development, project participants mentioned that the group has not been convening regularly or frequently enough in recent months. Certain project participants also felt that the NTFAG meetings did not create sufficient opportunities for discussion and room for stakeholders to raise funding-related issues they consider important. Instead, it was pointed out that the NTFAG meetings often consist of governmental representatives presenting NTF-related updates to stakeholders, with insufficient space for stakeholder inputs. As a result, stakeholders struggle to provide adequate input regarding annual NTF expenditure decisions and do so in a timely manner. In addition, the link between the NTFAG and NSC has not yet been formalised, which means that the NSC ToRs do not yet include the provision of feedback on and/or approval of NTFAG recommendations on NTF priorities. In practice, NSC meeting minutes show that NTFAG recommendations are not considered systematically at NSC meetings (DFHERIS, 2022[19]), despite NTFAG's mandate as outlined in Table 5.5. Therefore, in addition to strengthening the role of the NTFAG (see Chapter 3), DFHERIS should make sure that the NTFAG meetings are convened regularly and frequently enough for stakeholders to provide feedback, which can be taken into account in NTF expenditure decisions, and that the agenda of NTFAG meetings allows for active discussion and voicing of stakeholder inputs. Equally, the link between the NSC, the NTFAG and NTFAG recommendations should also be clarified and potentially formalised in the revised NSC ToRs (see above).

Recommendation 3: Strengthen the National Skills Council and other stakeholder bodies to enable stakeholders to more effectively shape Ireland's skills policy priorities

The National Skills Council (NSC) aims to create opportunities for engaging stakeholders in shaping skills policy priorities, with skills policy understood holistically and from a life course perspective. The National Training Fund Advisory Group (NTFAG) aims to maximise the effectiveness and impact of National Training Fund (NTF) expenditures. However, there is significant room for strengthening both the NSC and the NTFAG to improve their functioning, the effectiveness of stakeholder engagement and ultimately, the responsiveness and resilience of the Irish skills ecosystem.

Ireland can undertake the following specific actions to strengthen the NSC and other stakeholder bodies to enable stakeholders to more effectively shape Ireland's skills policy priorities:

3.1. **Revise the National Skills Council's terms of reference, improve its visibility, and adequately resource its secretariat.** DFHERIS should consider revising the NSC's terms of reference (ToRs) to primarily position the NSC as a stakeholder advisory body to the government on skills policy issues (Figure 5.4) instead of as a discussion forum for governmental officials (see more on improving cross-departmental collaboration and co-ordination on skills under Recommendations 1 and 2) and adjust the NSC's membership accordingly (see below). In revising the ToRs, DFHERIS should determine (e.g. via the Strategic Skills Group) how the work of the SLMRU, the EGFSN and/or other relevant entities and partnerships working on/with skills data and evidence could be better leveraged and co-ordinated to advance the NSC's work. As appropriate, the collaboration between the NSC and other relevant stakeholder engagement mechanisms on skills, existing cross-departmental processes for collaboration on skills (see Recommendation 1) and/or international experts should be actively facilitated by the NSC secretariat. Equally, DFHERIS should raise better awareness of the NSC and its work, such as at potential annual Skills Summit events. In order to adequately implement the suggested changes and strengthen the overall role of the NSC, consideration should be given to better resourcing the NSC's secretariat, the role of which is currently constrained by limited resources.

3.2. **Ensure that a wider range of relevant non-governmental stakeholders is represented at the National Skills Council, promote gender balance in its membership and foster accountability with regard to its advice.** DFHERIS should ensure that relevant non-governmental stakeholders, representatives of different societal interests, have a seat at the NSC. Relevant stakeholders could include social partners (i.e. representatives of employers – including SMEs – and trade unions), as well as relevant regional stakeholders (such as RSF), representatives of disadvantaged groups, private education and training providers, learners, independent experts and the community and the voluntary sector. As maximising the number of NSC members does not automatically translate into improving NSC functioning, attention should be paid to carefully identifying relevant (and less relevant) stakeholders, as well as governmental actors, to be included on the NSC. Gender balance in the NSC membership base should be equally promoted. Room should be created for NSC members to provide input into agenda setting of NSC meetings, and clear accountability mechanisms should be put in place regarding the advice provided by NSC members. NSC meetings could aim to conclude with clear, actionable items/recommendations. At the same time, the relevant parties could be asked to showcase how they had acted on the advice received or their reasons for not doing so, such as in the Netherlands (Box 5.6). NSC recommendations and subsequent responses from

relevant actors and/or actions undertaken could be summarised in a regular NSC report, to be submitted to the government, together with a progress update on the implementation of the NSS 2025 follow-up (see Recommendation 2).

3.3. **Convene more regular National Training Fund Advisory Group meetings and provide adequate opportunity for stakeholder input.** NTFAG meetings should be convened regularly, which is currently not the case as highlighted by project participants. The timing of convening the meetings should allow stakeholders to provide input on NTF spending at points in time when the input can be considered in NTF expenditure decisions. Sufficient space should also be set aside on the NTFAG meeting agendas for discussion and sourcing stakeholder inputs without the presentation of NTF-related updates by governmental officials dominating the meetings. Consideration should also be given to clarifying, and potentially formalising, the link between the NTFAG, NTFAG's recommendations and the NSC in NSC's revised ToRs (see above).

Recommendation 4: Scale up existing good practices and promote a more inclusive, efficient and co-ordinated approach to stakeholder engagement in the co-design of education and training

Engaging stakeholders in the design of education and training (i.e. in shaping the content of new courses and in updating existing curricula) is important for strengthening the responsiveness of further education and training (FET) and higher education (HE) to labour market needs (OECD, 2017[20]; 2022[21]) (see a broader discussion on the responsiveness of Ireland's skills system in Chapter 2). During an interactive survey carried out at an Extraordinary Meeting of the NSC convened in the context of this project, 84% of participants expressed that Ireland needed to facilitate closer interactions between enterprises and FET/HE providers to strengthen the responsiveness of the education and training supply to labour market needs. The importance of engaging stakeholders, and particularly employers, in the development and review of curricula, is also acknowledged in the National Further Education and Training Strategy 2020-2024, the Action Plan for Apprenticeship 2021-2025, and the Strategy for Higher Education-Enterprise Engagement 2015-2020 (SOLAS, 2020[22]; DFHERIS, 2021[23]; HEA, 2015[24]), among others.

The National Employer Survey (NES) shows that in both FET and HE, only 5% of Irish employers report collaborating with relevant educational and training institutions on course design (Fitzpatrick Associates, 2019[25]). Nonetheless, project participants highlighted that Ireland has made progress in engaging stakeholders in the design of education and training in recent years in both FET and HE. In the area of apprenticeships, the NAA, with representatives of social partners, has been established. The NAA oversees and sanctions the development of new apprenticeships in Ireland. It also reviews and approves occupational profiles (i.e. summaries of the skills needed to perform a job), which are essential for developing labour-market-relevant apprenticeship curricula (ILO, 2015[26]). Occupational profiles themselves are developed by stakeholder-led consortia (DFHERIS, 2021[23]).

Engaging enterprises in designing FET programmes other than apprenticeships (i.e. traineeships, Post-Leaving Certificate [PLC] courses, community and adult education, etc.) has similarly improved over the last few years. Employers are engaged in developing courses under the Skills to Advance initiative, introduced in 2018 to provide subsidised reskilling/upskilling opportunities for low-skilled employees vulnerable to job displacement. For example, SOLAS, ETBs, the Irish Hotels Federation, the National Tourism Development Authority, and the RSF collaborated to develop a hospitality and tourism programme and design processes (e.g. for optional PLC modules).

Engaging employers in the design of HE programmes has become more common in recent years. For example, the Springboard+ initiative,[5] providing free (for job seekers) or heavily subsidised (for workers), mostly part-time, one-year reskilling/upskilling opportunities in HE, encourages enterprise engagement in

course design. Any provider who wishes to deliver a Springboard+ course needs to "demonstrate clear evidence of engagement with enterprise/industry partners" in the funding application (Government of Ireland and HEA, 2021[27]). Similarly, Skillnet Ireland plays an important role in the collaborative co-design of training, working with regional and single or multi-sector enterprise networks, as well as higher education institutions (HEIs) and FET providers on the design of customised, subsidised training programmes. At present, Skillnet Ireland supports almost 23 000 Irish enterprises by facilitating access to tailored training offers, among others (see more on Skillnet Ireland in Chapter 3). In addition, professional bodies (i.e. professional associations that represent and/or regulate a profession) play an important role in accreditation processes in HE.

While there are many positive examples of engaging employers in course design by various individual institutions (see above), challenges remain. Stakeholder engagement in course design is not systematic across Ireland's skills ecosystem. The relatively high degree of autonomy of HEIs and the growing autonomy of public FET providers, combined at times with capacity constraints, complicates systematic employer engagement. Not all education and training institutions engage with employers on course design to the same extent, and engagement also varies across regions. For example, project participants suggested that technological universities, which primarily deliver vocationally and professionally oriented science and technology programmes (Eurydice, 2022[28]), could be more proactive in their course co-design efforts with stakeholders. In addition, notwithstanding the existing, successful examples of collaboration on course co-design between universities and enterprises [such as in the case of Dublin City University (Country Reports, 2022[29])], these collaborations tend to be developed on an ad hoc basis, often on the basis of informal connections.

Employer engagement efforts in course design could also be more inclusive. Where engagement (especially university-stakeholder engagement) does occur, it tends to be dominated by multinational enterprises, with limited space for input in course design for SMEs. Project participants similarly highlighted that employers (large and small) need to be engaged in the course design process earlier than is currently the norm.

Going forward, Ireland should consider further expanding existing good practices to help systematise enterprises' engagement in training co-design. Conditional upon demonstrating overall satisfactory outcomes (see also Recommendation 6), consideration should be given to expanding skills development programmes and initiatives where collaboration with employers is a core feature (e.g. Skills to Advance, Skillnet Ireland Networks, etc.) and/or where receiving funding is linked to demonstrating collaboration between education and training providers and enterprises (e.g. Springboard+). Where possible, incentives should be introduced to create more systematic opportunities for SMEs to provide input on co-creating FET qualifications and HE curricula. A co-ordinated approach to stakeholder engagement in course co-design should be promoted by actively collaborating with the RSF (see more below).

While certain existing mechanisms for incentivising education and training providers to engage with enterprises in course design are perceived as good practices (see above), others are proving more challenging to effectively implement. For example, conditional upon receiving public funding, ETBs need to demonstrate to SOLAS that they have engaged with the RSF in the planning of the FET provision (SOLAS, 2020[30]), given that the RSF possess first-hand information on employers' skills needs (Table 5.1). In practice, however, certain ETBs demonstrate RSF engagement simply by highlighting that they are members of RSF, even though their (providers') engagement in RSF meetings and activities can sometimes be absent or lacking, which should be addressed (see Recommendation 1).

Project participants also pointed out that there is space for improving the efficiency of enterprise engagement in FET qualification co-creation on the part of ETBs, to better focus ETBs' engagement efforts and further raise the quality of provision. Therefore, following a transparent and competitive process, Ireland could consider establishing dedicated "curriculum hubs", which would act as "centres of excellence" for FET qualification co-creation in selected ETBs. Similarly, curriculum hubs in further education exist in

Northern Ireland (Box 5.7). Under such a model, a designated hub would focus on developing cutting-edge FET qualifications in specific industries and/or areas of horizontal skills needs (e.g. digital/green skills) in collaboration with employers, other ETBs and other relevant actors (including relevant RSF, skills data entities at the national level, etc.). It would be important for representatives of the hubs to be engaged in the relevant RSF (see below). In their operation, the hubs could, in the long-term, benefit from access to the proposed common online skills needs database and a digital data exchange solution (see Recommendation 5). After a certain period since establishment, the functioning of the curriculum hubs should be duly evaluated.

Box 5.7. Relevant international example: A targeted approach to qualification co-creation in further education and training

Northern Ireland: Curriculum hubs

In 2016, the Department for the Economy (DfE) of Northern Ireland published the Further Education Means Success Strategy. The strategy set out 21 policy commitments to be implemented through 8 key projects. An important aspect of Project No. 1 was the designation, development and implementation of "curriculum hubs" in each of the six further education (FE) colleges throughout Northern Ireland.

On the basis of a competitive process, a lead FE college was designated as a curriculum hub in one or more selected priority occupational areas. The occupational areas included digital information technology (IT), engineering and advanced manufacturing, construction, health and social care, life sciences, entrepreneurship and hospitality and tourism.

Each lead college has been tasked with collaborating with the other five colleges, as well as employers and other stakeholders, to support a consistent approach to the delivery of training in the selected priority occupational areas and fostering high-quality, current, responsive provision.

Evaluation of the curriculum hub model found evidence of high levels of engagement and sharing of new ideas and good practices across FE colleges. Progress has also been made in forming partnerships with employers and other key stakeholders. There is evidence that the curriculum hub model can significantly improve the quality of provision across FE in Northern Ireland.

However, the evaluation has also identified challenges of the curriculum hub model, which should be addressed going forward. The challenges include: raising the strategic profile of the curriculum hubs; strengthening their co-ordination and reporting capabilities; promoting and attracting inward investment; and further developing international partnerships.

Source: Education and Training Inspectorate (2022[31]), *Evaluation: The Curriculum Hubs in the Six Colleges of Further Education in Northern Ireland,* www.etini.gov.uk/sites/etini.gov.uk/files/publications/evaluation-the-curriculum-hubs-in-the%20six%20colleges-of-further-education-in-northern-ireland_0.pdf.

In establishing the suggested hubs, Ireland should carefully determine how and where the latter would fit into the existing skills ecosystem to avoid adding further complexity to it. For example, where relevant, consideration could be given to building on the existing industry and/or occupation-specific networks and groups set up by the RSF across several regions. RSF groups and networks convene a range of employers and education and training providers typically to support co-ordinated course co-design efforts between industry and education and training providers and provide peer-learning opportunities in the relevant industry/occupation. For instance, the RSF West established the Sales Professionals Network, which included representatives of relevant ETBs, relevant Skillnet Ireland Networks, and relevant employers, among others (Regional Skills West, n.d.[32]). There are typically several such RSF networks and groups in each region, while multiple regions may have groups and networks with similar areas of focus. In the long run, establishing designated curriculum hubs could also help avoid duplicating training co-design

efforts through parallel RSF networks and groups across regions while rationalising their existing range, especially as the RSF are constrained by limited resources (see more below).

Beyond creating more systematic, inclusive and efficient opportunities for enterprises to shape the development of HE curricula and FET qualifications, Ireland should also promote a more co-ordinated approach to enterprise engagement in training co-design on the ground, given the large variety of actors (e.g. HEIs, ETBs, Skillnet Ireland Networks, etc.) engage in curricula and qualification co-design. An advantage of a more co-ordinated approach to stakeholder engagement in the co-design of training is using enterprises' time more efficiently (see Chapter 3 for a discussion on time-related barriers to learning faced by enterprises) and avoiding duplicate engagements where possible.

In promoting a more co-ordinated approach to enterprise engagement in training co-design, Ireland could draw on the RSF, which, as mentioned above, bring together the relevant actors in RSF meetings and, despite certain challenges (see Recommendation 1), have already established a good basis for a more co-ordinated approach and could provide such a platform going forward. The RSF could similarly be leveraged to provide a more systematic solution for promoting and scaling up existing good examples of collaboration between individual education and training institutions, given that such collaboration is currently often concluded on an ad hoc basis and formalised via isolated MoUs.

While it should be noted that the RSF were only established in 2016 by the NSS 2025, the capacity and resources of the RSF remain limited (see also Chapter 3), as was stressed by project participants. At present, the RSF are housed within education and training institutions in the respective regions, with the majority of RSF activities carried out by a single RSF manager. The limited resources equally impact the communication undertaken by the RSF and, therefore, their visibility, which is a challenge. Project participants indicated that certain employers or education and training providers do not yet engage with the RSF because the tangible advantages of such engagement are not immediately obvious to them, and stakeholders (particularly SMEs) cannot afford to invest time in their own research.

Recommendation 4: Scale up existing good practices and promote a more inclusive, efficient and co-ordinated approach to stakeholder engagement in the co-design of education and training

Engaging non-governmental stakeholders in the design of education and training is important for strengthening the responsiveness of education and training to labour market needs and was underscored as being highly relevant for Ireland by project participants.

Ireland can undertake the following specific actions to scale up existing good practices and promote a more inclusive, efficient and co-ordinated approach to stakeholder engagement in the co-design of education and training:

4.1. **Expand successful skills development programmes and initiatives where collaboration with enterprises is core to the course design and/or where receiving funding is conditional upon collaboration with enterprise – and encourage input from small and medium-sized enterprises.** Skills development programmes and initiatives such as Skills to Advance and Springboard+, as well Skillnet Ireland Networks, conditional upon demonstrating overall satisfactory outcomes, should be further expanded to incentivise further collaboration between education and training providers and employers. Where possible, incentives should be introduced to create more systematic opportunities for SMEs to provide input on co-creating FET qualifications and HE curricula to promote a more inclusive approach to course co-design.

4.2. **Consider establishing "curriculum" hubs" in selected education and training boards to better focus their stakeholder engagement efforts in further education and training.** SOLAS could consider establishing dedicated "curriculum hubs" in selected ETBs to increase the efficiency with which ETBs engage enterprises in the design of FET qualifications and to further improve the quality of provision. Under such a model, a designated hub would focus on developing cutting-edge FET qualifications in specific industries and/or areas of horizontal skills needs (e.g. digital/green skills), in collaboration with employers, other ETBs and other relevant actors, including relevant RSF as well as skills data entities at the national level, among others. Existing, relevant industry RSF networks and groups, where they are in place, could be built on when establishing such hubs, while representatives of the hubs should be engaged in the relevant RSF to promote a co-ordinated approach to training co-design (see below). After a certain period since establishment, the functioning of the hubs should be duly evaluated.

4.3. **Ensure adequate co-ordination between actors who engage with stakeholders in course co-design.** Ireland should promote a co-ordinated approach to course co-design between actors who approach employers on the ground (e.g. Skillnet Ireland Networks, ETBs, HEIs, etc.). The RSF, which bring together the relevant actors, have already established a good basis for a more co-ordinated approach and could provide such a platform going forward. At present, however, the RSF are constrained by limited capacity and resources.

Opportunity 3: Strengthening the collection, exchange and use of skills information

Comprehensive, reliable and accessible skills information (i.e. information on skills supply and demand) can help a variety of actors within and outside of the government form a shared understanding of the challenges and opportunities related to skills, which helps underpin effective governmental co-ordination, co-operation and collaboration and stakeholder engagement (see Opportunities 1 and 2, respectively). Skills information is equally essential for supporting evidence-based skills policy making, guiding individuals' skills choices and supporting the work of guidance counsellors, among others (OECD, 2019[33]).

To make the most out of available skills information, its effective use is essential but not automatic. To make informed decisions and carry out research, governmental and non-governmental actors need to access various data sources housed across a range of departments and agencies. However, they can face data privacy and other barriers. In addition, capacity or procedural constraints can hamper the systematic use of available skills data to evaluate skills policies and the use of the results of such evaluations in skills policy making (OECD, 2019[33]).

Recommendation 5: Improve the range and granularity of information on current skills needs, strengthen information on training outcomes and enhance skills forecasting

Ireland has a rich collection of skills information (i.e. information on skills supply and demand) (Table 5.2), much of which is gathered and stored centrally in the SLMRU. As mentioned in Table 5.1, the SLMRU provides skills and labour market research analysis to inform the work of the NSC and the public. The SLMRU also supports developing and reviewing policies and practices by the RSF, the EGFSN, and other government bodies, including SOLAS and the ETBs. The SLMRU, together with the EGFSN (see Table 5.1 and below), are the key actors responsible for skills assessment and anticipation in Ireland.

Ireland could take further steps to strengthen its existing collection of skills information. The range of information on employers' skills needs could be improved. The National Employer Survey (NES), developed collaboratively between the HEA, SOLAS and QQI, is Ireland's representative survey of employers' skills needs. As mentioned in Table 5.2, the primary focus of the NES is gathering employers' views on the subject of recruitment from HE/FET. The latest edition of the NES from 2018 provides

information on: the recruitment incidence of FET/HE graduates; profiles of HE/FET graduates recruited in the past 24 months; employers' satisfaction with FET/HE graduates in terms of technical and interpersonal skills; views on recruitment barriers and collaboration with FET/HE institutions; employers' skills gaps in terms of skills developed in FET/HE; barriers to recruitment of FET/HE graduates; and level of, and satisfaction with, collaboration between employers and FET/HE institutions. The last part of the NES, however, asks employers questions on subjects broader than recruitment from HE/FET, including employers' support for continuing professional development of their employees (Fitzpatrick Associates, 2019[25]).

Going forward, the NES could be expanded with additional questions, which would provide further insights into employers' skills needs (e.g. skills gaps among existing employees, etc.) and questions shedding light on the use of employees' skills in order to strengthen the evidence base on the uptake of high-performance workplace practices (see more in Chapter 4). In considering the expansion of the NES, the Employer Skills Survey in the United Kingdom could serve as a relevant example for Ireland (Box 5.8). Consideration could also be given to adjusting the NES to collect evidence specifically on the recruitment of research talent (i.e. graduate, postgraduate and doctoral research talent at National Framework of Qualifications [NFQ] Levels 8-10) (see more in Chapter 4), given that project participants highlighted that information on the demand for research talent should be strengthened. Going forward, consideration should also be given to carrying the NES out on a regular basis.

Box 5.8. Relevant international example: Large-scale, cross-sectoral survey of employers' skills needs

United Kingdom: Employer Skills Survey

Since 2011, the United Kingdom has conducted a large-scale, cross-sectoral survey of employers' skills needs. The United Kingdom's Employer Skills Survey is one of the largest employer surveys in the world. The survey is essential for the work of the Department for Education in England as well as their partners within national and local government.

The latest completed iteration of the survey was carried out in 2019 via telephone interviews and asked employers questions about: 1) recruitment difficulties and skills lacking from applicants; 2) skills lacking from existing employees; 3) underutilisation of employees' skills; 4) anticipated needs for skills development in the next 12 months; 5) the nature and scale of training, including employers' monetary investment; and 6) the relationship between working practices, business strategy, skills development and skills demand.

Across different sectors, the survey enquired about employers' skills needs at the level of occupations as well as specific skills (e.g. management, leadership, digital, people or specialist job-related skills). More than 81 000 randomly selected employers across England, Northern Ireland and Wales participated in the survey in 2019.

The next iteration of the survey, to be published in 2023, was commissioned to three market research agencies by the Department for Education (DFE) in England, the Welsh Government and the Northern Ireland Executive, and covers England, Wales, and Northern Ireland. Again, the survey will be conducted via telephone interviews.

Source: Government of the United Kingdom (2020[34]), *Employer Skills Survey 2019,* www.gov.uk/government/collections/employer-skills-survey-2019; Department of Education (2022[35]), *Employer Skills Survey 2022,* www.skillssurvey.co.uk/.

The granularity of information on current skills needs in Ireland could also be strengthened. In a public consultation survey carried out in the context of this Skills Strategy project, strengthening the granularity of Ireland's skills information was judged to be one of the most relevant policy directions that Ireland should consider to strengthen the governance of its skills ecosystem.

There are several sources through which Ireland can obtain granular skills information. While in most cases, and similarly to most OECD countries (OECD, 2016[36]), skills needs are approximated by the level of education, field of study or via occupational needs trends, recently the SLMRU conducted a granular analysis of the specific skills in demand in Ireland on the basis of online job posting data from Lightcast (SOLAS, 2022[37]). Online job posting data, such as those collected and made available by Lightcast or by the European Centre for the Development of Vocational Training (CEDEFOP) (Table 5.2), can provide granular insights into skills demanded by employers in online job postings, which is valuable (see Figure 2.2 in Chapter 2 for the top-ten skills in online job postings in Ireland as found by CEDEFOP in 2020, by way of example). However, it should be borne in mind that online job postings are biased towards industries and occupations that seek high-skilled workers (Carnevale, Jayasundera and Repnikov, 2014[38]; Brüning and Mangeol, 2020[39]).

In Ireland, granular skills data are also gathered by RSF managers, who collect data on skills needs from employers on the ground as part of the Skills for Growth project (Table 5.2) and record the data in a standardised Excel spreadsheet template developed by the SLMRU. The template makes it possible to capture the skills required in occupations for which employers have a hiring need, among other variables (e.g. employer sector, region, etc.). Other actors, such as EI and DSP employer engagement officers, also use the Skills for Growth template when collecting information on employers' skills needs. While the Skills for Growth dataset is small (between 2018 and 2022, data from 750 companies were collected), the SLMRU considers the Skills for Growth data of great qualitative value for enriching the findings of the National Skills Bulletin (see more below). As mentioned above, the Skills for Growth template has been hitherto used to mostly collect information on employers' hiring needs (in terms of job title, skills, etc.). While the template was recently updated to also collect information on upskilling needs among existing employees, the template's structure does not allow for the easy capture of this information.

Going forward, the SLMRU could consider adapting the Skills for Growth template to clearly delineate room for the collection of information on both hiring needs and upskilling needs among current employees (in terms of job title, skills, etc.). The SLMRU should also apply a common skills taxonomy on the template at the data cleaning stage to enable easier connectivity between granular data collected at regional/local levels and national skills assessment and anticipation exercises. In addition, the SLMRU could consider using digital solutions (e.g. a common online skills needs database) to capture the data collected via Skills for Growth, given that the data are recorded at present in Excel spreadsheets and then sent to the SLMRU.

Similarly, the SLMRU's Recruitment Agency Survey (RAS) (Table 5.2), which provides information on recruitment difficulties (among others) of employers who look for new hires via recruitment agencies, is only able to capture a small number of recruitment agencies and is thus not considered representative. Nonetheless, similarly to the Skills for Growth data, the RAS provides valuable qualitative insights complementing the information from SLMRU's National Skills Bulletin, the NES, and the vacancy data from Ireland's public employment service (Jobs Ireland). The RAS also facilitates the identification of niche shortages (Gusciute, Quinn and Barrett, 2015[40]). Since 2021, the recruitment agencies surveyed began reporting not only the most difficult-to-find occupations but also the most difficult-to-find skills, albeit only in selected thematic areas (e.g. skills related to the green transition) in the RAS. Going forward, the SLMRU should take advantage of the RAS to collect granular information on difficult-to-find skills more broadly (i.e. not only in selected thematic areas) and consider classifying the data according to a common skills taxonomy, as suggested for the Skills for Growth data.

Information on current skills demand in Ireland and, more specifically, on the labour market outcomes of learners following education and training completion, could be collected more systematically. In HE,

graduate tracking exercises are carried out on a regular basis, drawing on survey and administrative data (HEA, n.d.[41]). In FET, a report on learners' outcomes based on a survey of FET participants was published in 2017 (SOLAS and Perceptive Insight, 2017[42]). Since 2017, SOLAS has produced research on: 1) outcomes of FET graduates having completed the PLC, and therefore covering only one specific type of FET provision; and 2) outcomes of early leavers from FET (SOLAS, 2020[43]; 2022[44]). In 2019, the Central Statistical Office (CSO) carried out a one-off analysis of the outcomes of FET learners who completed training between 2010 and 2016 (CSO, 2019[45]). However, regular analysis of FET learners, regardless of the type of FET qualification completed, is not being carried out. Project participants agreed that Ireland would benefit from a more systematic collection of information on FET learners' outcomes. For example, the United Kingdom collects and publishes analyses of FET learners' outcomes annually (Box 5.9).

Box 5.9. Relevant international example: Collecting information on the outcomes of learners in further education and training

United Kingdom: Further Education: Outcome-Based Success Measures

In the United Kingdom, the Department of Education publishes the Further Education: Outcome-Based Success Measures (FE OBSM). Published annually since being piloted in 2014, FE OBSM presents statistics on the employment, earnings and learning outcomes of learners in further education in the academic year after achieving their learning aim (i.e. qualification).

FE OBSM reports outcomes by various learner demographics and types and levels of learning. It covers adult (19+) learners in "FE and skills" (i.e. any study after secondary education that is not part of HE), as well as learners of all ages in apprenticeships and traineeships. FE OBSM does not cover learners funded through the Offenders' Learning and Skills Service or 16-19 year-old FE and skills learners.

FE OBSM draws on the Longitudinal Education Outcomes dataset, which allows the analysis of individuals' education and employment trajectories by linking information on schools and further and higher education from the DFE, employment information from HM Revenue and Customs and benefit histories from the Department of Work and Pensions.

For learners completing their qualifications from the academic year 2018/19 onwards, the FE OBSM results can be accessed via an interactive dashboard developed by the Department of Education's Unit for Future Skills.

Source: Department of Education (2021[46]), *Further Education: Outcome-Based Success Measures,* https://explore-education-statistics.service.gov.uk/find-statistics/further-education-outcome-based-success-measures/2018-19

While there is space for improving information on current skills demand, Ireland could also benefit from strengthening the basis for conducting quantitative, economy-wide skills forecast exercises (i.e. quantitative projections providing general indications about future trends in skills supply and demand in the labour market) (OECD, 2016[36]).

In Ireland, the SLMRU has access to and provides expertise to the skills (labour force) forecasts from CEDEFOP (Table 5.2). CEDEFOP skills (labour force) forecasts, available for all EU and six non-EU countries, provide comparative quantitative projections of the future trends in employment by sector of economic activity and occupational group, as well as the future trends on the level of education of the population and the labour force (CEDEFOP, 2018[47]). However, it should be mentioned that CEDEFOP forecasts are not intended to replace national skills forecasting exercises (CEDEFOP, 2012[48]), typically based on more granular data and knowledge of the national context. In the same vein, project participants agreed that while CEDEFOP forecasts were generally useful, it was also felt that these

forecasts were not always adequately capturing the specificities of the Irish labour market. In the past, SOLAS had carried out national, economy-wide skills forecasting exercises, which had drawn importantly on sectoral employment projections generated by the HERMES macroeconomic model run by the Economic and Social Research Institute (ESRI). However, since sectoral employment projections ceased being produced by the ESRI several years ago, Ireland's ability to produce economy-wide skills forecasts sufficiently reflecting the specificities of the Irish labour market became constrained.

Therefore, Ireland could consider reinitiating the development and systematic maintenance of a regular sectoral forecasting model to enable more relevant and accurate economy-wide skills forecasting by occupation and level of education, including graduate, postgraduate and doctoral research talent at NFQ Levels 8-10, as feasible (see more on the need for collecting more information on the demand for research talent above and in Chapter 4).

At the national level, more robust economy-wide skills forecasts could have several benefits. As mentioned in Table 5.1 and above, the EGFSN advises the Government of Ireland on the projected skills (labour force) requirements based on reports combining quantitative research, analysis and horizon scanning (based on interviews and workshops with project participants) in relation to emerging skills requirements at thematic and sectoral levels, and makes recommendations on how to address the identified needs (EGFSN, n.d.[49]).[6] Annually, the EGFSN tends to publish between two to three reports (excluding follow-up work) on selected sectors and/or themes with forecasts at the occupational and/or NFQ level. More robust economy-wide skills forecasts would prove useful in the EGFSN's sectoral and thematic skills forecasting exercises, as well as for the labour market monitoring reports produced by the SLMRU and other relevant agencies and provide a basis for a detailed analysis of emerging technical skills needed for innovation (see Chapter 4).

The EGFSN establishes project steering and implementation groups for each study that it undertakes (Table 5.5) to, respectively: advise on and oversee the progress of its studies; create consensus on establishing the evidence base and the measures needed to address the skills needs identified by the EGFSN; and foster greater visibility and effective implementation of the recommendations proposed in the published reports. Project participants raised questions about the extent to which the EGFSN's involvement in supporting the implementation of its recommendations, which increased after the revision of the EGFSN's mandate in 2005, takes away from the quality of the analysis and the number of reports the EGFSN can produce per year. While there are legitimate trade-offs between emphasising the breadth of research versus devoting time to supporting the implementation of the produced recommendations, the role that the EGFSN plays in promoting implementation on the ground is valuable and should continue. The project steering groups, which the EGFSN establishes to support its research, provide an ideal basis for leveraging the networks, relationships and stakeholder ownership developed during the report preparation process in the subsequent implementation phase. Similarly, in Estonia or France, groups similar to the EGFSN – i.e. the sectoral expert panels overseen by the Co-ordination Council of Estonian Skills and Labour Forecasting System (Estonian Qualifications Authority, n.d.[50]) and the Skills Employment Network in France (France Stratégie, 2021[51]), respectively – are involved in the implementation of their findings.

Recently, the EGFSN also started exploring ways to further improve the granularity of analyses in their reports to provide forecasts at the level of specific skills, not only at the level of occupations and/or the NFQ level. In light of the outcomes of the consultations with project participants, where the need for more granular skills information was considered highly relevant, the EGFSN should continue with its plans to further strengthen the granularity of their research.

Recommendation 5: Improve the range and granularity of information on current skills needs, strengthen information on training outcomes and enhance skills forecasting

Improving the range and granularity of information on current skills needs, strengthening information on training outcomes and enhancing skills forecasting is essential for strengthening Ireland's skills information collection and the collection's potential added value for learners, employers, education and training providers and policy makers.

Ireland can undertake the following specific actions to improve the range and granularity of information on current skills needs, strengthen information on training outcomes and enhance skills forecasting:

5.1. **Expand the scope of the National Employer Survey to collect more information on skills needs and skills use and implement the Survey on a regular basis.** HEA, SOLAS and QQI could consider expanding NES with additional questions, which would provide further insights into employers' skills needs (e.g. skills gaps among existing employees, etc.), the use of skills of existing employees as well as the recruitment of graduate, postgraduate and doctoral research talent at NFQ Level 8-10 specifically, as feasible. NES should be carried out on a regular basis.

5.2. **Enable systematic collection of information on employees' skills gaps via the Skills for Growth initiative and strengthen the emphasis on skills in the Recruitment Agency Survey.** The SLMRU should clearly delineate space for collecting information on upskilling needs among current employees in the Skills for Growth data templates. In addition, the SLMRU could consider using digital solutions (e.g. a common online skills needs database) for capturing the data collected via the Skills for Growth initiative. The SLMRU should also consider using the Recruitment Agency Survey (RAS) to collect granular information on difficult-to-find skills not only in selected thematic areas but more broadly. In the case of both the Skills for Growth data and the RAS, the SLMRU should consider applying a common skills taxonomy.

5.3. **Support systematic collection of information on the outcomes of further education and training graduates.** SOLAS should initiate a systematic collection of information on the outcome of FET graduates, regardless of the qualification awarded. Such tracking of outcomes should be undertaken on a regular basis. Where feasible, SOLAS could consider using administrative data to track outcomes of FET graduates to mitigate against potential "survey fatigue" in Ireland.

5.4. **Consider reinitiating the development and systematic maintenance of a regular sectoral forecasting model.** DFHERIS could consider reinitiating the development of a regular sectoral forecasting model, which would allow to produce more relevant and accurate economy-wide skills forecasts by occupation and level of education, including graduate, postgraduate and doctoral research talent at NFQ Levels 8-10 as feasible. More robust, economy-wide skills forecasts would also prove useful in the EGFSN's sectoral and thematic skills forecasting exercises as well as for the labour market monitoring reports produced by the SLMRU and other relevant agencies. One actor should systematically maintain the sectoral forecasting model to ensure continuity. DFHERIS could consider financing the development and maintenance of the model from the NTF.

Recommendation 6: Enable more effective exchange and use of existing skills data and promote systematic skills policy evaluation to support evidence-based skills policy making

To make the most out of the collected skills information, enabling effective exchange and use of such information is imperative. It is essential that collected skills information is disseminated to end-users in a targeted and user-friendly manner to inform individual academic and professional decisions (see more in Chapter 2) and that policy makers design and implement skills policies according to the best available evidence on value and efficacy.

Data exchanges within the government and between governmental actors and stakeholders could be better facilitated in Ireland. At present, challenges related to data sharing complicate evidence-based decision making. For example, the DSP does not have access to ETB training databases, which would facilitate filling difficult-to-fill vacancies. Similarly, RSF managers pointed out that they would benefit from ongoing access to education and training registration and/or completion data to better inform their own course development and planning work with regional providers on the ground. Recently, several OECD countries began exploring solutions facilitating easier exchanges of data, including skills data. Such international experience could be relevant for Ireland to consider. For example, Estonia and Luxembourg have developed digital data exchange solutions to support seamless and secure data exchanges (Box 5.10). Ireland could similarly consider developing digital data exchange solutions to better enable skills data exchanges between governmental actors themselves, as well as with stakeholders.

Box 5.10. Relevant international example: Digital data exchange solutions

Estonia: X-Road

The X-Road software-based solution is the backbone of Estonia's e-solution environment ("e-Estonia"). X-Road connects different information systems that may include a variety of services, communicates with multiple information systems, transmits large data sets and performs searches across several information systems simultaneously.

Thanks to X-Road, access to individual databases can be controlled and regulated, with only authorised users being able to enter the databases and receive pre-defined content. Over 150 public sector institutions in Estonia are connected to X-Road, and it is used indirectly by hundreds of enterprises and institutions and over 50 000 organisations.

In the field of skills, X-Road serves to support data exchanges between, for instance, the Estonian Education Information System (EHIS) and other databases and platforms, such as the population register or the Health and Insurance Fund. Such connections have several benefits. For example, the connection between EHIS and the population register enables EHIS to access data on a student's place of residence without the need to collect such information from the students themselves. In turn, the Health Insurance Fund uses EHIS data to determine who is eligible for student health insurance.

Outside Estonia, the X-Road software is also implemented in Finland, Iceland, Japan and other countries. By linking the two X-Road-based systems initially developed separately in Estonia and Finland, the two countries are now exchanging relevant data between their respective business, tax and population registers across the maritime border.

Luxembourg: National Data Exchange Platform

The Ministry of Higher Education and Research of Luxembourg, in collaboration with several other governmental actors, launched an initiative to set up the National Data Exchange Platform (NDEP), to facilitate smoother data exchanges.

The NDEP aims to become a data exchange environment that provides the IT infrastructure and legal basis to facilitate data sharing between ministries and government agencies while complying with EU General Data Protection Regulation (GDPR) requirements. Actors working on the NDEP are currently identifying the list of priority fields that would benefit from this platform (top priority are health, then energy data) and developing the legal framework. The OECD Skills Strategy for Luxembourg recommends that going forward, Luxembourg should consider including skills data on the NDEP and use the NDEP to facilitate data exchanges not only between ministries and governmental agencies but also with stakeholders.

It is expected that the NDEP will become operational in the coming months.

Source: OECD (2023[52]), *OECD Skills Strategy Luxembourg: Assessment and Recommendations*, https://doi.org/10.1787/92d891a4-en; OECD (2020[2]), *Strengthening the Governance of Skills Systems: Lessons from Six OECD Countries*, https://dx.doi.org/10.1787/3a4bb6ea-en; X-Road (2020[53]), *Estonia and Finland launch automated data exchange between population registers*, https://x-road.global/estonia-and-finland-launch-automated-data-exchange-between-population-registers.

Project participants agreed that more could be done in Ireland to effectively use the information on skills needs collected directly from employers at regional or local levels. Until recently, only skills audit data collection templates used by RSF managers and DSP employer engagement officers had been aligned with the format of skills needs data used at the national level (i.e. the standardised Excel spreadsheets developed by the SLMRU; see more above), were reported back to the SLMRU and used for the preparation of the National Skills Bulletin. Recently, in the context of the Spotlight on Skills initiative, EI started working on aligning the skills needs data collection processes with those of the SLMRU to allow SLMRU to use IE's data, which is welcome.

EI's approach should be followed by all actors who carry out employer skills audits at the regional or local levels, and a requirement of reporting all the skills audit data to the national level (i.e. to the SLMRU) should be introduced. The suggested common online skills needs database could be used to support easy and quick centralised data reporting following the SLMRU's template. Access to the compiled data by relevant actors (including RSF managers) could be facilitated thanks to the suggested digital data exchange solution (see above). A more co-ordinated approach to skills audit data reporting would allow the SLMRU to use the data to produce a more comprehensive picture of Ireland's skills needs.

Facilitating effective skills data exchanges, in tandem with strengthening Ireland's skills information collection (see Recommendation 5), is essential for enabling the effective use of existing skills data to evaluate Ireland's skills policies and programmes. Project participants agreed that Ireland's skills ecosystem would benefit from more systematic and regular evaluations of existing skills programmes and initiatives (e.g. Skills to Advance, Skills to Compete, Springboard+, etc.) before they are expanded, or new ones are established.

The Irish Government Economic and Evaluation Service (IGEES) is responsible for supporting better policy formulation and implementation based on economics, statistics, value-for-money analysis and evaluation across departments in Ireland (OECD, 2020[54]) and has a broader mandate than solely carrying out skills policy evaluation. Similarly to other OECD countries (Golden, 2020[55]), some departments and governmental agencies in Ireland commission policy evaluations to external bodies (e.g. the evaluation of the National Youthreach Programme undertaken by the ESRI and funded by SOLAS (Smyth et al., 2019[56])) and/or have their own evaluation structures. For instance, while within the DEP EDU, each unit manages its own evaluations, the Labour Market Advisory Council (LMAC) has a dedicated group working

on evaluating policies designed and implemented by the DSP (DSP, 2020[57]). At the start of 2022, DFHERIS established the EfP Unit, whose goal, once fully operational, will be three-fold: 1) improving data reporting within DFHERIS and between DFHERIS and related departmental agencies (Table 5.1); 2) strengthening co-ordination of research undertaken by the departmental agencies and identifying potential research gaps; and 3) evaluating the effectiveness of skills policies and programmes.

Going forward, it will be important to adequately resource and further strengthen the capacities of the EfP Unit as well as the evaluation structures and measures in other relevant departments in Ireland, and, in collaboration with the IGEES, promote co-ordination, collaboration and co-operation between one another as appropriate, given the breadth and cross-cutting nature of skills programmes and policies in Ireland, which would benefit from rigorous evaluation.

Recommendation 6: Enable more effective exchange and use of existing skills data and promote systematic skills policy evaluation to support evidence-based skills policy making

Fully leveraging the potential value added of a skills information collection requires enabling effective exchange and use of such information, so that individuals are supported in making informed choices, which will be rewarded in life and the labour market (see more in Chapter 2) and so that policy makers can design and implement impactful skills policies.

Ireland can undertake the following specific actions to enable more effective exchange and use of existing skills data and promote systematic skills policy evaluation to support evidence-based skills policy making:

6.1. **Support the development of digital solutions to facilitate easier exchange of skills data.** DFHERIS, in collaboration with other relevant actors (e.g. the Data Protection Commission), could consider developing digital solutions (e.g. data exchange platforms) to facilitate easier exchange of data across the government (i.e. between relevant departments, agencies, institutes, etc.) and with stakeholders. Skills data "use cases" should be included on such a platform.

6.2. **Enable more effective use of data from employer skills audits by promoting co-ordinated reporting and centralising the collected data.** DFHERIS, in collaboration with the SLMRU and with other relevant actors, should undertake a mapping of all governmental actors who carry out employer skills audits on the ground. At the national level, co-ordinated reporting should be promoted, including by contributing to the suggested online common skills needs database (see Recommendation 5) following the SLMRU's template.

6.3. **Support the development and adequate resourcing of dedicated evaluation structures and promote a co-ordinated and collaborative approach to skills policy evaluation.** Relevant departments (including DEP EDU, DFHERIS, DSP, etc.) should support adequate resourcing and capacity building of the respective evaluation structures and promote a co-ordinated and collaborative approach to skills policy evaluation, in collaboration with the IGEES, as appropriate.

Summary of policy recommendations

Table 5.6. Summary of policy recommendations for strengthening skills governance to build a joined-up skills ecosystem in Ireland

Recommendations	Specific actions
Opportunity 1: Promoting a whole-of-government and strategic approach to skills policy	
1. Strengthen the commitment to and efficiency of adopting a whole-of-government approach to skills to help achieve a step change in Ireland's skills system	1.1. Adopt processes to support cross-departmental collaboration on addressing skills challenges in areas of strategic importance. 1.2. Reduce duplication and promote synergies by mapping, monitoring and raising awareness of existing processes to support cross-departmental collaboration on addressing skills challenges.
2. Prepare a follow-up to the National Skills Strategy 2025 to help place skills at the top of Ireland's policy-making agenda, and enable effective implementation	2.1. Apply a whole-of-government approach to the design and implementation of the National Skills Strategy 2025 follow-up. 2.2. Prioritise a smaller number of high-impact priority areas in the National Skills Strategy 2025 follow-up and consider a more flexible structure. 2.3. Establish clear accountability mechanisms to support progress reporting on and evaluating measures implemented under the National Skills Strategy 2025 follow-up.
Opportunity 2: Supporting effective engagement with stakeholders throughout the skills policy cycle	
3. Strengthen the National Skills Council and other stakeholder bodies to enable stakeholders to more effectively shape Ireland's skills policy priorities	3.1. Revise the National Skills Council's terms of reference, improve its visibility, and adequately resource its secretariat. 3.2. Ensure that a wider range of relevant non-governmental stakeholders is represented at the National Skills Council, promote gender balance in its membership and foster accountability with regard to its advice. 3.3. Convene more regular National Training Fund Advisory Group meetings and provide adequate opportunity for stakeholder input.
4. Scale up existing good practices and promote a more inclusive, efficient and co-ordinated approach to stakeholder engagement in the co-design of education and training	4.1. Expand successful skills development programmes and initiatives where collaboration with enterprises is core to the course design and/or where receiving funding is conditional upon collaboration with enterprises – and encourage input from small and medium-sized enterprises. 4.2. Consider establishing "curriculum hubs" in selected education and training boards to better focus their stakeholder engagement efforts in further education and training. 4.3. Ensure adequate co-ordination between actors who engage with stakeholders in course co-design.
Opportunity 3: Strengthening the collection, exchange and use of skills information	
5. Improve the range and granularity of information on current skills needs, strengthen information on training outcomes and enhance skills forecasting	5.1. Expand the scope of the National Employer Survey to collect more information on skills needs and skills use and implement the Survey on a regular basis. 5.2. Enable systematic collection of information on employees' skills gaps via the Skills for Growth initiative and strengthen the emphasis on skills in the Recruitment Agency Survey. 5.3. Support systematic collection of information on the outcomes of further education and training graduates. 5.4. Consider reinitiating the development and systematic maintenance of a regular sectoral forecasting model.
6. Enable more effective exchange and use of existing skills data and promote systematic skills policy evaluation to support evidence-based skills policy making	6.1. Support the development of digital solutions to facilitate easier exchange of skills data. 6.2. Enable more effective use of data from employer skills audits by promoting co-ordinated reporting and centralising the collected data. 6.3. Support the development and adequate resourcing of dedicated evaluation structures and promote a co-ordinated and collaborative approach to skills policy evaluation.

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Notes

1. In this report, "skills ecosystem" is defined as all institutions, individuals, policies, laws and regulations concerned with the development and use of skills in the economy (OECD, 2020[2]).

2. In this report, "skills policies" are understood to encompass all policies governing skills development and use over the life course, which contrasts with how skills policies are typically understood in Ireland (i.e. only those policies governing the "tertiary system", higher education and further education and training).

3. Besides actions pertaining to DFHERIS and the agencies under its aegis, the terms of reference of the NSC state that the NSC should serve to "provide updates as required from other government departments on related strategies", "receive regular updates from other relevant stakeholders (IDA Ireland, Enterprise Ireland, etc.)", "receive and consider costed proposals for the annual research/work programme of the EGFSN" and "receive, consider and approve prior to publication agreed action plans based on EGFSN research findings" (DFHERIS, 2022[15]). See more in Opportunity 2.

4. SOG support the work of cabinet committees in Ireland. The cabinet committees assist the government in carrying out its responsibilities and reflect the government's national priorities (Government of Ireland, 2023[59]).

5. Springboard+ was originally launched as "Springboard" in 2011 and targeted primarily the unemployed by offering free training. In 2018/19, the initiative was extended to individuals in employment in a heavily subsidised form.

6. Projections of future skills needs are also undertaken by actors other than the EGFSN, usually to serve a specific need or fill a particular knowledge gap (e.g. IFS Skillnet has worked with employers to identify the key future skills requirements in the financial services industry (IFS Skillnet, L.C.G Market Solutions, FSI, 2022[60]); a skills forecasting model was developed to identify skills (labour force) gaps by selected sectors and occupation groups at the local level (in Fingal) up to 2023 as part of the Fingal Skills Strategy (Fingal County Council, 2019[58]), etc.).

OECD Skills Studies

OECD Skills Strategy Ireland

ASSESSMENT AND RECOMMENDATIONS

Skills are the key to shaping a better future and central to the capacity of countries and people to thrive in an increasingly interconnected and rapidly changing world. Megatrends such as digitalisation, globalisation, demographic change and climate change are reshaping work and society, generating a growing demand for higher levels and new sets of skills.

OECD Skills Strategy projects provide a strategic and comprehensive approach to assess countries' skills challenges and opportunities and help them build more effective skills systems. The OECD works collaboratively with countries to develop policy responses that are tailored to each country's specific skills needs. The foundation of this approach is the OECD Skills Strategy Framework, which allows for an exploration of what countries can do better to: 1) develop relevant skills over the life course; 2) use skills effectively in work and in society; and 3) strengthen the governance of the skills system.

This report, *OECD Skills Strategy Ireland: Assessment and Recommendations*, identifies opportunities and makes recommendations to secure a balance in skills, foster greater participation in lifelong learning, leverage skills to drive innovation and improve firm performance, and strengthen skills governance to build a joined-up skills ecosystem in Ireland.

PRINT ISBN 978-92-64-60885-6
PDF ISBN 978-92-64-81981-8

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