

European Network of Public Employment Services

PES Annual Mutual Learning Conference

'How to prevent unemployment in a changing world of work?'

Workshop 6 "Involvement of big companies and SMEs"

Discussion paper



Written by Eamonn Davern SEPTEMBER 2019

EUROPEAN COMMISSION

Directorate-General for Employment, Social Affairs and Inclusion Directorate B — Employment Unit B1 — Employment Strategy

E-mail: EMPL-PES-SECRETARIAT@ec.europa.eu

European Commission B-1049 Brussels

The European Network of Public Employment Services was created following a Decision of the European Parliament and Council in June 2014¹. Its objective is to reinforce PES capacity, effectiveness and efficiency. This activity has been developed within the work programme of the European PES Network. For further information: http://ec.europa.eu/social/PESNetwork.

This activity has received financial support from the European Union Programme for Employment and Social Innovation "EaSI" (2014-2020). For further information please consult: http://ec.europa.eu/social/easi.

LEGAL NOTICE

This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

¹ DECISION No 573/2014/EU

Table of contents

INTRODUCTION	. 4
The context for change What does the changing labour market mean for PES? The European Policy Dimension	. 4
1. THE NEED TO ENHANCE PES EMPLOYER ENGAGEMENT	. 5
1.1 The new recruitment paradigm	
1.2 Which jobs will grow and which will diminish?	
1.3 Developing a future mindset	
1.5 Building future skills	
1.6 PES as ambassadors for new jobs	
2. CHALLENGES AND OPPORTUNITIES	. 8
2.1 Employer perceptions of PES	. 8
2.2 Use of subsidies	
2.3 Benefits of investing in training staff	
2.4 Assessing the Impact of Training 1	
2.5 Training in large firms and SMEs 1	L1
CONCLUSIONS1	L1
Job Carving Malta 1	12
Skill Centres Belgium Wallonia 1	12
French PES Digital Strategy "Overcoming a new stage of digital transformation together"	12
REFERENCES	13

Introduction

The context for change

Technological change is having a profound impact on the context in which Public Employment Services (PES) operate. PES have been described as entering a new change paradigm in a VUCA world². The World Economic Forum, in a 2016 report, has described the 4th Industrial Revolution as driving major global labour market transformations, rapidly shifting the frontier between tasks performed by humans and those performed by machines. The European Network of Public Employment Services (EU PES Network) Working Paper on the Future of Work (2018) summarised the key technological trends driving change as Automation, Artificial Intelligence, and the Platform/On-demand (Gig) economy.

What does the changing labour market mean for PES?

The OECD (1997) has defined the core functions of employment services as payment of benefits, referral to active labour market programmes (ALMPs), and job brokerage. Struyven and Van Parys (2014) describe social and economic shifts as introducing new functions, namely labour market transparency (the demand side) and intake with screening and diagnosis of job seekers (the supply side), now functions of most PES.

Technological change is fundamentally altering traditional labour market dynamics. Key changes are an ending of the job for life concept, a move away from mass production to more tailored service delivery, and the shifting of traditional distinctions between unemployment and employment.

These changes have been a key influence in the development of Transitional Labour Markets³ (TLMs). TLMs have altered the dynamics of the relationship between employers and employees and require new approaches by PES in delivering their core function of supporting labour market transparency. In response to more frequent and diverse transitions, PES have altered the way that they engage with employers to place jobseekers, including introducing dedicated employers teams.

In order to continue to support the achievement of a labour market balance, PES must reform their services to ensure that transitions are well managed. PES must assist in bridging skills gaps to offer jobseekers the opportunity to access quality jobs. This will provide employers with a pool of suitably skilled recruits to enable them to take advantage of the opportunities presented through the harnessing of new technology to increase productivity and enter new markets.

As well as the nature of jobs and career trajectories changing, recruitment and application mechanisms have also been transformed by technology. These require PES to adapt in order to continue to undertake their job brokerage function. The EU PES Network Strategy for 2020 and beyond notes that modern service delivery is fundamentally IT-dependent and is influenced by new software, new tools for data collection, data mining, data exchange, and by alternative communication and collaboration channels.

Unmet demand for new skills and demographic changes with ageing populations in advanced industrialised economies are presenting further challenges for PES, who must

 3 TLM theory considers labour markets to be social institutions supporting freely chosen career paths over a life cycle.

² VUCA, Volatile Uncertain Complex and Ambiguous.

seek to meet employer needs whilst particularly focusing on improving the employment prospects of those farthest from the labour market in order to combat social exclusion.

The European Policy Dimension

The European Pillar of Social Rights⁴ sets out principles to support well-functioning and fair labour markets. It stresses the need to ensure lifelong access to education and training to acquire key competencies for active participation in society and employment. The Preamble states that it "reaffirms rights contained in the Union acquis and adds new principles which address the challenges arising from societal, technological, and economic developments".

The EU PES Network response to the Consultation on the European Pillar of Social Rights (2017) noted that "well-functioning labour markets are an essential driver for the growth necessary to sustain social support systems", and that the "external environment within which employment systems operate is undergoing a significant transformation with trends including technological enhancement with the 4th Industrial Revolution". It is therefore vital that policy instruments support the reforms needed to ensure that institutional developments keep pace.

The proposal for a European Council Recommendation on establishing a Skills Guarantee⁵ notes that specific new challenges are emerging from "collaborative economy models, increased independent and contract-based work, more frequent job changes (for necessity and opportunity), and changes in work organisation". It refers to forecasts indicating that no more than 15% of the future workforce will be employed in low-skilled jobs. It also references the Council Recommendation on the integration of the long-term unemployed into the labour market⁶, recommending that people unemployed for over a year should be offered in-depth individual support, linking this to the Council Recommendation on Upskilling Pathways⁷. The recital to this Recommendation notes that a large majority of future jobs will require some level of digital competence and that adults with higher proficiency in technology-rich environments tend to have more success in the labour market.

1. The need to enhance PES employer engagement

1.1 The new recruitment paradigm

Labour markets are becoming increasingly volatile with ever more rapid transitions presenting both opportunities and risks for job seekers, PES and employers. The reduction in the size and ageing of the working-age population, increased labour demand, skill shortages and mismatches run in parallel to new forms of employment and increasingly digitalised recruitment methods.

The PES Network Working Paper on the Future of Work (2018) identified several key components of PES Employer Engagement: formal employer engagement strategies, employer segmentation methods, PES staff specialisation, training and competency development for employer advisors, and the monitoring of employer engagement. These

⁴ European Pillar of Social Rights proclaimed by European Parliament, Council, and Commission at social Summit for Fair Jobs and Growth at Gothenburg 17th November 2017.

⁵ Proposal for a Council Recommendation on establishing a Skills Guarantee Strasbourg COM (2016/0179(NLE).

 $^{^{6}}$ Council Recommendation of 15th February 2016 on the integration of the long term unemployed into the labour rmarket 92016/C 67/01).

⁷ Council Recommendation of 19th December 2016 on Upskilling Pathways, New Opportunities for Adults (2016/C 484/01).

approaches and practices must evolve so that PES can address what has been described in studies (Cedefop 2015, Eurofound 2016) as persistent and increased recruitment challenges.

There is evidence that the size of an employer is a significant influence on the recruitment channel they use. Dietz et al. (2013) noted that informal networks remain the most important recruitment channels used by employers, especially SMEs. Connors and Thomas (2014) observed that micro employers in particular made use of free or inexpensive local advertising. The 2016 Eurofound study found that private recruitment services were almost exclusively used by larger firms. Oberholzner identified the growing importance of social media and online recruitment, especially in certain sectors, financial services, the technology sector, and young firms in general. Several PES have already responded to this new segmentation and have changed their employer approaches when developing and reviewing their employer engagement strategies.

The 4th Industrial Revolution is envisaged to totally transform the recruitment paradigm. Predictions as to the labour market impact vary. Two contemporaneous UK studies in 2018 considering the potential labour market impact of technological change over two decades predicted that "There will be widespread hollowing out of job roles and whole job families as large swathes of people become technologically unemployed" (Andy Haldane, Chief Economist Bank of England), and "7 million jobs will be displaced and 7.2 million will be created. Manufacturing and agriculture will suffer an overall job loss whilst other industries such as new technology and healthcare will see job growth" (PWC).

There is however a consensus that artificial intelligence, augmentation, and machine learning will see technology increasingly displace humans in many tasks and processes which will lead to the fractionalisation of work. This will have a number of significant implications for PES.

Skills gaps will shift, evolve, disappear, and transform at an increasing rate. In order to maintain their relevance and continue to attract vacancies that can provide potentially beneficial career paths for their clients, PES will need to both maintain knowledge about potential sectors where demand for labour is expected to grow and be aware of sectors likely to face a decline. This will be necessary to provide relevant advice to both employer clients and job-seeking customers. In this regard, PES will need to develop a consultancy service to maintain future customer service levels and mutually beneficial relationships with employers.

1.2 Which jobs will grow and which will diminish?

In order to protect and – where possible – to increase their market share of vacancies, PES will need to form a view of how various sectors will be affected by changes in the nature of work. The more accurate and expert PES are in obtaining knowledge on trends for the future of job roles, the greater the chance that they offer the required support to their customers.

Frey and Osbourne (2017) have identified the characteristics of jobs expected to provide Resilient Careers (requiring a high degree of skill, persuasion, emotional intelligence, critical thinking, and original thought), contrasting these with Disappearing Careers (jobs which are heavily knowledge-based, have high levels of customer service/contact, are highly administrative, low skilled, and process-oriented). They also described Emerging Careers based around creating, maintaining, and collaborating with new technology. A fourth category, Jobs with a New Technological Dimension, was discussed as only emerging as new technologies become established. The impact on career structures and the demand for skills from these future occupations is necessarily extremely difficult, if not impossible, to predict.

A World Economic Forum (2016) report predicted that 65% of children currently entering primary school will end up working in jobs which do not currently exist.

A Recruitment and Employment Confederation study (2018) identified four key characteristics which recruitment organisations would need to display in order to maintain and enhance their role in such a fast-changing world of work: developing a "future-focused" mindset, delivering new services and forging new identities, building future skills and leadership to take their organisations forward, and becoming ambassadors for future jobs.

Pre-empting job market changes will not only be essential to enable PES to maintain their relevance but can also present opportunities for future-focused PES to plan ahead and develop strategies that reflect the changing labour market. The Norwegian PES (NAV) Horizon Scan 2030 (2019) reports that people's expectations of the service will increase, and users will gain more influence. However, digitalisation has the potential to improve coordination between NAV employees' municipalities, and the educational and health sectors which could improve user experiences, particularly for those with complex needs.

1.3 Developing a future mindset

There are several ways in which PES can engage with large firms to maintain and develop relationships. These include collaborating on "future of jobs" events, active involvement in trade associations to pre-empt sector-specific developments, input to regional and national industrial strategies to inform their knowledge base of future growth sectors, and planning their training and referral systems to meet these demands. They will need to develop internal teams to ensure that PES structures are ready to adapt to labour market changes and that an up-to-date source of information on labour market trends is maintained.

1.4 Delivering new services

PES will need to invest in their infrastructure to remain credible labour market stakeholders. It will be especially important that PES take advantage of opportunities from new technology to provide state of the art services for jobseekers and employers. This will involve enhanced customer relationship management (CRM) systems (to track and monitor re-integration journeys), predictive analytics and matching tools, growing use of recruitment platforms (including open access systems) and potentially more dynamic partnerships with a broad range of other, both public and private, stakeholders in recruitment partnerships.

There are increasing recruitment difficulties and skill shortages in many sectors, this presents PES with opportunities to enhance relationships with employers and foster inclusion. The evolving job market may present opportunities to develop PES assistance for employed people seeking to change jobs/sectors to enhance their career prospects.

Tightening labour markets offer opportunities for PES to work with employers to develop recruitment pathways for harder to help clients. Examples of such partnerships include bespoke training programmes developed with employer input, ongoing post-employment support from PES to assist employers integrating staff, collaborations with Private Employment Services (PrES), NGOs, and employers on job carving initiatives.

Labour and skill shortages in growth employment sectors are likely to coincide with increased customer expectations. PES will need to continue to focus on developing their service to sustain their position on the labour market. The EU Decision on enhanced cooperation between PES⁸, with indicators measuring vacancy filling and jobseeker and employer satisfaction, reflects the importance of regular benchmarking and performance

⁸ Decision No 573/2014/EU of the European Parliament and of the Council of 15th May 2014 on enhanced cooperation between Public Employment services (PES).

measurement as tools for PES to enhance the quality of their services. Customer feedback on service delivery standards and input into the design of PES services through co-production/creation will need to be an increasing feature of PES service development.

Technological developments have made a significant contribution to the growth of flexible working. They have driven new employer/employee relationships, increased selfemployment, and new ways of working, including IT-based, portfolio, and platform work. A 2018 EU report noted that almost 20% of part-time and over 10% of temporary EU employment in 2017 was in "non-standard work" (temporary or part-time employment contracts). A Deloitte study (2018) reported that only 42% of surveyed organisations were primarily composed of salaried employees. 37% predicted a growth in the use of contractors and 33% predicted a growth in the use of freelancers. Platform, flexible and self-employment offer opportunities and benefits for certain jobseekers, including higherskilled consultants, and people preferring flexible work to balance their employment and domestic obligations. The PES remit in relation to atypical forms of employment must balance the identification of opportunities with ensuring that vulnerable, especially lowerskilled workers, are not disadvantaged by irregular earnings in exploitative working conditions. The PES Network Working Paper on the Future of Work (2018) notes that the development of links between PES and the new European Labour Authority can introduce safeguards.

1.5 Building future skills

Meeting the needs of employers and jobseekers in the future world of work will necessitate increased PES investment in developing their staffs' competencies and skills. In an increasingly competitive environment, PES will need to market their services to attract employer customers to provide opportunities for jobseeker customers. PES staff expertise in dealing with specific sectors and industries will be necessary to ensure a deeper understanding of client needs in the future world of work, this will be essential to continue to provide progression opportunities for clients.

1.6 PES as ambassadors for new jobs

PES have a key role in building bridges between skills development and training and employment. As a repository of labour market information, PES can offer intelligence on labour market developments and use these to influence the skills agenda. PES can utilise partnerships with Vocational Education and Training (VET) providers to promote training programmes to upskill clients to compete for jobs in growth sectors. Similarly, employer engagement strategies can prioritise attracting vacancies from employers in these sectors, including through the provision of recruitment incentives.

2. Challenges and opportunities

2.1 Employer perceptions of PES

Eurofound research (2016) noted that enterprises primarily use PES for recruitment into lower-skilled jobs, whilst they did not regard PES as suitable for recruiting into more highly skilled roles. Studies by the European Commission (2014) and Connors and Thomas (2016) noted a low market share of PES recruitment into medium- to high-skilled vacancies, possibly reflecting a perception by employers that PES focus on hard-to-place groups and that suitably qualified candidates are not available through PES. Brenzel et al. (2016) identified a diminishing use of PES by companies as skill requirements increased. Raikes and Davies (2015) found that whilst employers noted negative attitudes and low motivation held by unemployed job applicants compared to other candidates, those who used PES for recruitment had fewer negative perceptions about this group than those who did not.

Larsen and Vesan (2011) noted a negative and poor perception of PES clientele held by employers who reported a lack of motivation and interest in engaging with them. However, they also found that face-to-face interaction with professional competent PES counsellors could improve employer perceptions, hence the increase in specialised employer teams in PES.

2.2 Use of subsidies

A European Policy Observatory Review (2014) characterised hiring subsidies as being based upon three distinct rationales. Some subsidies designed to support labour demand in general through creating jobs have an economic rationale; other subsidies with a social rationale seek to support disadvantaged groups into jobs, to shift recruitment in favour of them, and to overcome productivity gaps amongst new recruits; a third type of subsidy has an upskilling rationale and is intended to contribute to enhancing the skills and employability of workers, incentivising training to address employers' and workers' skill needs.

The review found the third category of subsidy to be more prominent in countries with a stronger tradition of employer-led training/embedded apprenticeship schemes. Whilst noting how this can be a positive development from other schemes, with an underpinning objective of addressing labour market disadvantages amongst marginalised groups such as the long-term unemployed, the overriding concern driving these upskilling subsidies tends to be structural change. In this regard, PES need to ensure that schemes addressing the changing nature of employment with more demand for higher skills, particularly from skill shortages and employment gaps, are available to unemployed people as well as those working at the lower end of the labour market.

Alessio and Brown (2015) concluded that labour market subsidies can be cost-effective and can increase labour market flows and future employment prospects, while reducing labour market persistence and enabling a more equitable distribution of employment. The study noted benefits for both the unemployed and employers from hiring subsidies, with reduced labour costs, increased employment, and opportunities for employers to screen workers and help unemployed people regain and build their human capital.

Sensible targeting and design were essential for positive outcomes. If successful, this can improve the position of a long-term unemployed person on the labour market. Targeting the long-term unemployed redistributes employment incentives to the disadvantaged and strengthens their labour market attachment; however, too loose targeting can create deadweight and displacement costs, whereas excessively tight targeting can create stigmatisation, administrative and monitoring costs for employers, and potentially low take-up.

Brown and Koetti (2015) concluded that ultimately the suitability and effectiveness of any ALMP would be determined by considering whether there were micro-economic benefits i.e. for individual workers, and macro-economic benefits in terms of cost-effective socially desirable outcomes.

The Heads of European Public Employment Services (HoPES) Network (2013) considered that conditionality (regulations requiring employers to keep someone employed for some period after the end of the subsidy) and systematic monitoring and evaluation (understanding impact, checking effective targeting, use by appropriate employers, and value for money) were the most important factors in ensuring that temporary wage subsidies lead to sustainable integration.

2.3 Benefits of investing in training staff

The increasing pace of technological change is driving the requirement to upskill employees, including an enhanced focus within EU PES (Skienkiewicz 2018). This is raising

new questions for employers considering their approaches to investment in staff development. Specifically, what are the advantages and risks of investing in staff skills when, in growing markets, these can be easily transferable to competitors? Further to this, when demand conditions are favourable, it is easier in the short term for companies to hire staff who have already been trained rather than to spend resources improving the skills of in-house talent.

How to promote staff development, encourage their employees to participate, and manage the risk of them leaving to work for rivals is a particular problem for employers in the technology sector, where turnover can be very high. A Robotics Process Automation (RPA) survey in 2018 reported that 94% of staff in high-technology industries believed there was an industry-wide shortage of their skill set.

In this context, where "headhunting" is frequent, there can be a tendency for companies to focus on immediate gaps and key talent in more highly skilled and management roles, rather than looking at the overall capability of the workforce. However, investing across the organisation can develop greater loyalty, and in the longer-term, investing in staff can be more cost-effective than hiring talent from outside. It is probable that a higher level of skills across an organisation will lead to stronger company performance. Similarly, whilst losing skilled staff can clearly pose difficulties for employers' mobile skills, it can have a positive effect across sunrise growth sectors, increasing overall productivity, contributing to further growth and greater job creation.

Similarly, the most creative staff may well be attracted to the most dynamic companies, so firms continuing to invest in improved processes and production methods could attract the most dynamic staff. The job for life in one firm is a diminishing prospect across the occupational range, including high-skilled sectors. This, however, does not preclude high-value careers and moving from a company on good terms means that this does not have to be a "one-way door".

So notwithstanding turnover, there remains a business case to invest in training and skills development, whilst given some of the frictional cost for companies from high turnover, and overall economic benefits from high productivity, well-targeted government investment in VET is clearly important.

In a 2019 article, O'Donnell quoted a "catch 22" situation for companies in that the cost of upskilling staff in the current era of rapid technology-driven change can seem prohibitive, but the price of an untrained workforce may be higher. "Highly trained staff may move on to greener pastures, but in the absence of training an organisation can be left with a skills deficit from an untrained workforce. The choice for companies can be paying a price of learning or paying a price in the marketplace." A 2018 McKinsey study states that around 32% of staff aged 16-54 regardless of position will need to retrain within the next 12 years. An AVADO survey (2018) noted that as jobs automate, employers may often need to help employees reskill to match the new jobs that will appear, and so large companies are spending more on training because the skills required in roles are changing very quickly.

Large corporate organisations, and particularly global companies, can clearly absorb such costs more easily than smaller companies, especially SMEs. However, even very large multi-nationals have seen benefits from rethinking the measurement of the costs of learning. The measurement of the Return on Investment (ROI) from training has been widened from training cost per employee to encompass retention, engagement and the quality of staff recruited.

2.4 Assessing the Impact of Training

Aguinis and Kraiger (2009) found benefits from this approach in greater innovation, adaptive, technical, and self-management skills, with improved performance from staff being more empowered leading to better communication, planning and task coordination.

Consequently, improved performance outcomes were achieved, including profitability, effectiveness, productivity, and operating revenue per employee. In a 2013 study of innovation in 260 Korean companies, Sung and Chor found that corporate expenditure for internal training predicted interpersonal and organisational learning, which in turn increased innovative performance.

Dostie (2015) predicted the time spent on training increasing in the future in view of the rapidly increasing pace of technological progress and the new demands that this will place on individual workers. External factors, such as changes in demand for a product or service, were identified as being crucial in enhancing or even removing the case for investment in a specific training approach. However, advantages were identified in improved skills, higher wages, increased productivity, higher value added per worker, and increased innovation. Productivity shocks from training and investment in skills have been identified in many studies, including Konings and Vanormelingen Germany (2015). However, the latter, examining the impact of training on productivity and wages, identified firms rather than individual employees to be the main beneficiaries of investment in skills.

2.5 Training in large firms and SMEs

Bresnahan, Brynjolfsson, and Hitt (2002) found that larger firms making capital investments in IT infrastructure provided more training due to the benefits of complementarities, and that returns on skills were higher in firms able to also invest in other physical and organisational capital, emphasising the advantages of large firms over SMEs. In this regard, according to OECD research (2002), the fact that "on the job" training programmes take an average of 137 hours per year may be a factor in issues faced by some SMEs in funding training programmers, irrespective of the likely benefits for these employers. Cardon and Stevens (2004) note that one of the most frequent organisational changes of the growth of SMEs is increasing formalisation of HR systems, though they and Aldrich (1999) comment upon the overall lack of information about the evolution of HR practices (including training policies) in small firms.

Studies emphasise the greater difficulties and dilemmas faced by SMEs, and especially small family-owned businesses, compared to larger companies when assessing the cost-benefit of upgrading staff skills. Koety and Folker (2007) identified relationships between the size of firms and volume and nature of training provided, smaller firms provided less training than large companies and this was more likely to be informal. Jones (2005), studying the impact of training on realising benefits from technological innovation in Australian companies, found that technological innovation distinguished high growth SMEs from others, with increased training being a critical feature of development pathways.

Conclusions

The changing world of work has extremely wide-ranging implications for all labour market actors. Many of the assumptions previously underpinning the relationships between stakeholders have been considerably altered or are no longer relevant at all. Therefore, training and skills provision and recruitment services will need to undergo significant transformation in order to support positive labour market transitions in the new situation. Long-established conventions governing the dynamic of employer, employee, and job seeker/applicant relationships will need to be reviewed and, in many instances, changed to ensure that employers can compete in the future and employees are not left at greater risk of precarious situations. When all parties are sufficiently aware of mutual benefits from collaborative approaches, "win/wins" may be possible. This note concludes with some brief descriptions of good practice examples illustrating the potential for positive adjustments finding opportunities from changes in the future of work.

Job Carving Malta

A partnership between the Lino Spiteri Foundation and the Maltese PES began in 2016, supporting employment of people with reduced employment capability, especially from disabilities, by working with employers on job carving – i.e. creating job positions suitable for persons with limitations from "non-core/essential" tasks, e.g. administrative functions in existing job positions. This concept can identify new opportunities to employ people with barriers to labour market integration and increase the productivity of the employees in the "carved" jobs, notwithstanding changes in job roles through technological enhancement. There are 3 stages of work: Stage 1, registration – profiling and guidance referrals to open labour market opportunities or training; Stage 2 - corporate relations experts from the Foundation meeting enterprises and job carving/vacancy analysis conducted by enterprises; Stage 3 – job coaching of clients at the workplace. A person-centred approach focuses on individual competencies and adapting a job to match an applicant's needs. Clients receive job coaching and employers have a testing period to assess the suitability of people referred to them. Job carving creates new job profiles adapted to the target group and can enhance overall productivity and work satisfaction in a company. There is a 2% quota in Malta for employment of disabled persons (and revenue from noncompliance penalties is used to partly fund the programme), and employer incentives - e.g. exemptions from insurance contributions, fiscal incentives, and support services (including post-placement support) - for employers who participate. Closer employer/government PES partnerships including consideration of strategic labour market issues have developed as a consequence of the initiative.

Skill Centres Belgium Wallonia

The Skill Centres were established in 2001 and are supported by a range of social partners, vocational training institutes, research centres, and specific industrial clusters. The Network is coordinated by the Belgium Wallonia Region PES, Le Forem. The Centres operate in locations close to potential employers. They aim to help redundant (eg steel) workers to adapt to modern industrial needs, and also to prevent unemployment among younger workers. Thus, they aim to promote local economic development, keeping a skilled workforce in the region. They deliver training provided to meet employer needs as assessed based on analysis of labour market developments, especially by employers. The Centres also seek to raise awareness of opportunities in technical jobs. The Centres develop three-year strategic plans to enhance both employability and business competitiveness. There is a particular focus on high-value-added skills. The centres have identified 13 skills areas for action, focusing on potential growth sectors driven by technological change. Strategic planning of ALMPs has been more effective, given the significant employer input to decisions on design, determination of skills requirements, and provision of courses.

French PES Digital Strategy "Overcoming a new stage of digital transformation together"

The Strategy began in 2015 and aims to respond to service requirements and digital practices and challenges in the field of employment. PES counsellors have been provided with new digital tools to increase their available time for offering more personalised support to clients most in need of assistance, to avoid them falling into precarious situations and social exclusion. Digital communications are also deployed to enable more efficient communication between counsellors, jobseekers and employers, leading to more effective caseload management. Training is provided to develop jobseekers' digital autonomy as a key skill supporting a return to work. A key enabler for the strategy is simplified access to information and good quality online services, notably "Emploi Store", a user-centred online platform offering over 300 job search and career guidance services from over 250 partners, e-training, and an online interview simulation tool. The service continues to be enhanced

through joint innovations driven by PES and partners, and increasingly sophisticated data analysis.

References

Agunis H, Kraiger K, Benefits of Training and Development for Individuals and Teams, Organisations, and Society, Annual review of Psychology Vol 60 (2009).

Aldrich H E Organisations Evolving, SAGE London (1999)

Alessio J and Brown G, can hiring subsidies benefit the unemployed? IZA Germany (2015)

Brenzel H, Czepek J, Kubis A, Mozcall A, Rebien M, Rottger C, Szameitat J, Warning A, Weber E, Neueinstellungen im Jahr Nurnberg IAB (2016)

Bresnahan T F, Brynjolfsson E, and Hitt L, M, "Information technology, workplace organization, and the demand for skilled labour: Firm level evidence." The Quarterly Journal of Economics 117:1 (2002)

Brown A J G, Koetti J, Active Labour Market Programmes: Employment Gain or Fiscal Drain? IZA Journal of Labour Economics 4:12 (2015)

Cardon M, Stevens E, managing human resources in small organisations; What do we know? Human Resource Management Review September 2004

Cedefop Skill shortages and gaps in European Enterprises, CEDEFOP reference series 102, (2015)

Connors C, Thomas A, Small Employer Recruitment Practices Qualitative research into how small and medium sized enterprises select candidates for employment. DWP Report 855 (2016)

Dietz m, Kubis A, Leber U, Muller A, Stegnaier J. Kleine und mittiere Betriebe im Wettlewerb um Fachkrafte Nurenburg IAB (2013)

Dostie B, who benefits from firm-sponsored training? IZA World of Labour (2015)

Employment and Social Developments in Europe 2018 http://ec.europa.eu

EU PES Network Input Paper for Working Group on the "Future of Work "(2018) Martins Pedro S, with contributions from Schoenenberg L, and Davern E.

EU PES Network response to consultation on Pillar of social Rights (Adopted at 6th EU PES Network Meeting Valetta June 2017)

EU PES Network Strategy for 2020 and Beyond (Adopted at 5^{th} EU PES Network Board Meeting Bratislava December 2016)

EU PES Network Working Paper the Future of Work, Implications and Responses by the PES Network, EU Publications Office Luxembourg 2018

Eurofound ERM Annual Report 2015 Job Creation in SMEs (2016)

European vacancy and recruitment report 2014 European Commission

Frey Carl B, Osbourne Michael A, the future of Employment: How susceptible are jobs to computerization? Technological forecasting and social change Vol 114 Oxford Econ Paper (2017)

Heads of (EU) Public Employment Services (HoPES) Note on Wage Subsidies – A response from the HoPES Network to calls for action agreed at the Berlin Conference on Youth Employment on 3^{rd} July 2013

Human Resource Management How to attract, retain and develop talent. EU PES Network Thematic Paper Lukasz Sienkiewicz (2018)

Jones J T, The determinants of training in Australian manufacturing SMEs Education and Training Volume $47\ No\ 8/9\ 2005$

Konings J, and Vanormelingen S, "The impact of training on productivity and wages. Firm level evidence "The review of economics and statistics "The review of economics and statistics 97:2 (2015)

Kotey B, and Folker C, Employee Training in SMEs; Effect on Firm Size and Firm Type - Family and Non – Family, Journal of Small Business Management March 2007

Larsen A L, Vesan P, Public Employment Services, employers and the future of placement of low skilled workers in six European Countries. Edinburgh. Reconciling Work and Welfare in Europe White Paper #2 Recruitment and Employment Confederation (2011)

McGrath J, Atypical Employment and the Role of European PES An exploratory paper, ICON Institute for European Commission (2016)

McKinsey study (2018) quoted in O'Donnell R articleAVADO study 2018 - (ibid)

NAV Horizon Scan 2030 (2019)

O'Donnel R, why employers are spending more on learning and development. HR Drive article (2019)

OECD, Literacy in the Information Age: Final Report of the International Adult Literacy Survey. Paris, OECD (2000)

Robotics Process Automation (RPA) study quoted by Dominic Harvey Director CW Jobs in CW Jobs newsletter (2019)

Stimulating Job Demand - The design of effective hiring subsidies in Europe-European Employment Observatory Review European Commission (2014)

Struyven L and Van Parys L, (2014) Implementation of the PES Conductor role. The Belgian PES in Flanders a Case Study. Research Institute of Work and Society (HIVA – KU Leuven) and Faculty of Social sciences University of Leuven. In co-operation with ICF International

Sung Sun Young, Chou Jin Nam, do organisations spend wisely on employees /Effects of training and development investments on learning and innovation in organisations. Nanjing University, China Business School; Seoul University College of Business Administration South Korea; research Journal of Organisational Behaviour (2013)

The Future of Work – What this means for recruitment. Future of Jobs White Paper #1 Recruitment and Employment Confederation (2018)

The rise of social enterprise - 2018 Deloitte Global Human Capital Trends (2018)

World Economic Forum – The future of jobs, employment, skills, and workforce strategy for the 4^{th} Industrial Revolution. (2016)