

PES NETWORK WORKING PAPER

THE FUTURE OF WORK: IMPLICATIONS AND RESPONSES BY THE PES NETWORK



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IMPLICATIONS AND RESPONSES
BY THE PES NETWORK**



DECEMBER 2018

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1. EXECUTIVE SUMMARY

The world of work is expected to change fundamentally over the next decades. These transformations will create many opportunities and certainly various challenges for Public Employment Services (PES).

Despite different organisational structures, PES help to match supply and demand on the labour market through information, placement and active support services at local, national and European level. PES thereby take a leading role in providing labour market services facilitating integration and balanced supply and demand. Given the magnitude of the changes ahead and the importance of PES for the smooth functioning of labour markets, it is important that PES are not only well prepared, but harness positive impacts while tackling inequalities and labour productivity.

1.1 Why do PES need to act?

This working paper, drawing on the inputs, discussions and case studies from eleven European PES, serves as input for PES' strategic, long-term orientation to address the future world of work. Starting with the key 'future of work' developments for PES – the 'why?' behind this report – technological, demographic and trends are outlined. The former includes key drivers such as automation, artificial intelligence, and 'non-standard' forms of work, greatly facilitated by the use of the internet. Trends also involve ageing and increased mobility. These trends will heighten labour market transitions in Europe, as the rate at which jobs will be created, redefined or destroyed will increase. The entire occupational landscape, including required skills and competences, is expected to change greatly. Accompanied by newly emerging economies and forms of work, needs of citizens, including PES customers and core partners beyond jobseekers and employers, will alter drastically. Consequently, the service provision and the functioning of PES will need to be modernised and adapted.

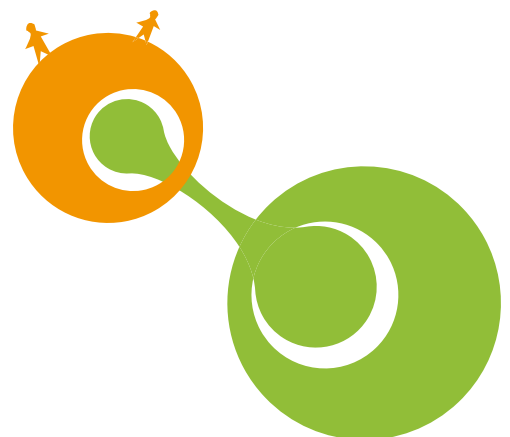
1.2 What can PES do and how to tackle ever-changing labour markets?

Considering major trends and their implications on PES, this working paper contributes towards a new vision for European PES to meet the needs of future labour markets. As such, responses to 'what' PES need to address include strategic approaches based on inclusiveness, empowerment, co-creation and knowledge management, as well as making good use of labour market intelligence.

Future labour market changes lead to various operational consequences for PES such as refining customer-orientation and modernising career information, ensuring a more adaptable and motivated staff and increasing the focus on cooperation with partners. This paper demonstrates approaches and examples that can help PES to implement future-proof strategies.

1.3 What needs to be taken forward by PES, partners and policy-makers?

Finally, this paper delivers recommendations for PES, the PES Network and policy-makers. Given the learning and modernisation processes already taken forward by the European Network of Public Employment Services (PES Network), the further establishment of a European 'PES Innovation Lab' could be an approach that facilitates the exchange and dissemination of PES innovative approaches, in particular those based on new technologies.



2. INTRODUCTION

The new world of work has already arrived, whilst technological developments constantly advance and accelerate change. The future of work is likely to be very different from its present, even if its exact nature cannot yet be fully anticipated. What is clear is that the forthcoming changes will lead to a number of challenges and opportunities for Public Employment Services (PES). Therefore, PES need to understand the changes ahead and at the same time develop responses that fully make use of potential benefits for its clients. The aim of this paper is thus to provide clear guidance on trends, uncovering the implications of the future of work for PES and consequently pointing out a number of possible solutions that can support PES in the further development of evidence-based activities and services whilst facing labour market challenges. While doing so, PES need to take into account huge national differences in institutional settings, objectives, product portfolios and own structures.

The PES Network¹, comprising 32 agencies from all 28 EU countries, Norway, Iceland and the European Commission, was established following a [Decision](#) by the Council and the European Parliament to maximise

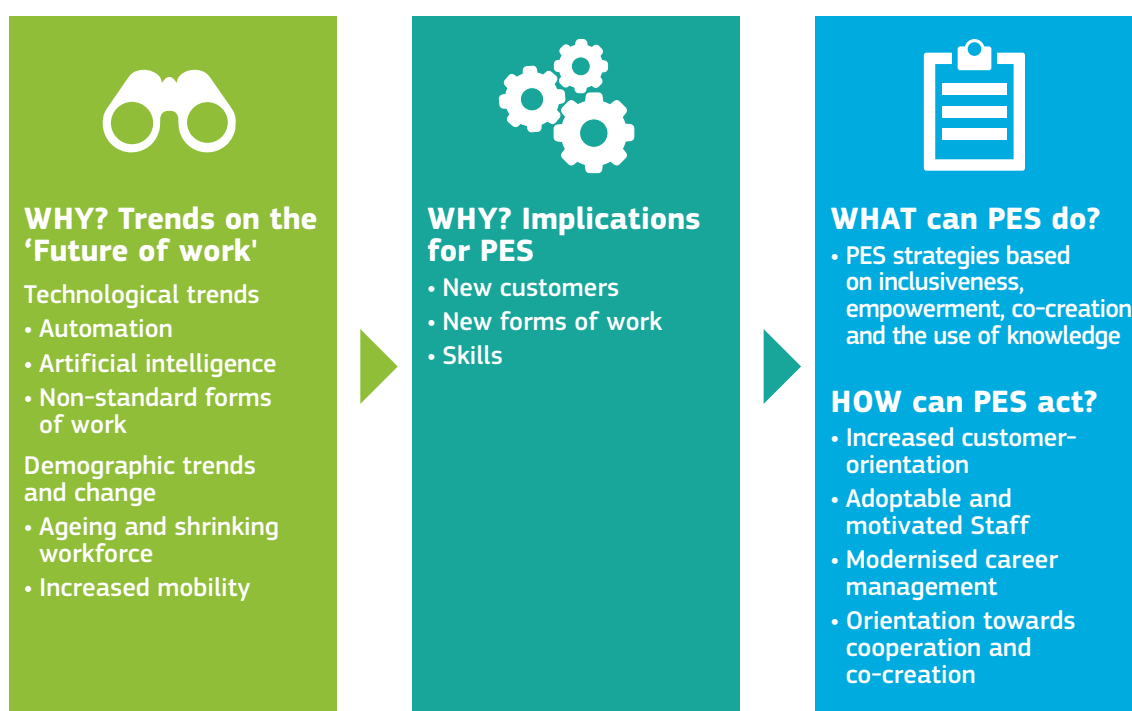
¹ The Heads of PES (HoPES) Network that has been in operation since 1998.

efficiency of public employment services via comparing PES performance through benchlearning: identifying evidence-based good practices and fostering mutual learning.

This working paper is only one example of promoting modernisation of PES organisations and services. It illustrates the strong collaboration and strategic work of the European Network of Public Employment Services (hereafter PES Network) and feeds into the updating of the '[PES 2020 and beyond](#)' Strategy. The paper draws on discussions and contributions from a group of PES representatives, chaired by PES Hungary, namely from Belgium (Le Forem and VDAB), Croatia, Denmark, France, Germany, Slovenia, Spain, the Netherlands and Norway.

A number of EU initiatives inform the present contribution. These include the [European Pillar of Social Rights](#), the [EU New Skills Agenda](#) (especially the [Upskilling Pathways](#)), the [Youth Guarantee](#), the [Recommendation on the integration of the long-term unemployed](#) (with the notion on [Active Inclusion](#) to enable every citizen, notably the most disadvantaged, to fully participate in society), the Council Conclusions on '[Future of Work: a Lifecycle Approach](#)' and the Communication of the Commission on '[Artificial Intelligence for Europe](#)'.

Figure 1: WHY, WHAT and HOW to address change?



3. WHY? TRENDS AND IMPLICATIONS FOR PES

Two trends will play an important role in shaping labour markets in the years to come: demographic and technological change. Although these trends may evolve differently across Europe, a number of common challenges can be expected and will inevitably have impact on PES. A common and overarching theme is the accelerating transitional nature of labour markets.

‘Transitional labour markets’: Increased demand for flexible working arrangements, a shift from ‘life-time’ jobs to several positions throughout a career and a changing demand for certain skills and jobs will cause multiple transitions arising in the labour market and during individual careers.

3.1 Technological trends

54% of adult employees in technical and associate professions in the EU have already experienced changes in technologies used in their workplace in the last five years². Here the paper focuses on changes derived from automation, artificial intelligence and ‘non-standard’ forms of work, such as the platform economy.

3.1.1 Automation

As tasks in production processes are carried out with increasingly reduced human intervention, the demand for labour by those will decrease. According to a 2018 study by the OECD³, 14% of jobs in a subset of OECD countries have a probability of automation of 70% or more and 32% of jobs have a probability of automation of between 50% and 70%. Automation can therefore lead to a substitution of labour in sectors such as manufacturing, construction and agriculture, while employment in knowledge-intensive, digital and creative sectors might increase. Job growth will polarise, in particular at the higher and lower end of the skill spectrum bringing a risk of job polarisation⁴. As average real incomes increase, the demand for new products and services – many of which may be highly labour

intensive – will lead to the creation of new jobs, some of which will emerge in entirely novel industries. However, income inequality may also increase, especially if workers in declining sectors struggle to upgrade their skills and/or move to expanding sectors. It will also lead to the change of the set of tasks in a job, including the disappearance of the most repetitive components through automating functions such as data interpretation, thus freeing up time for softer or non-cognitive aspects, related to social or interpersonal engagements.

3.1.2 Artificial intelligence

‘Artificial Intelligence’: a field from computer science that aims to develop programmes and machines that have abilities similar to human intelligence. These abilities are based on ‘machine learning’ (computer algorithms are trained and gain the ability to make decisions from large data sets), among other methods.

Computers are increasingly able to interpret information and make decisions in a similar way to human beings. The growth of artificial intelligence is driven by big data, digitalisation and machine learning. As in the case of automation, artificial intelligence can lead to the disappearance or reconfiguration of certain occupations. Artificial intelligence can also create new jobs, as potentially generated reduction in costs for businesses is likely to generate extra profit while reducing the prices and rising real incomes for workers. These can then lead to increased demand towards new products and services as well as towards jobs, occupations and skills that underpin such products and services⁵.

3.1.3 ‘Non-standard’ forms of work

‘Non-standard work’ (employment contracts that are neither permanent nor full-time) represent nearly 20% of part-time employment and over 10% temporary employment in the EU in 2017⁶.

2 CEDEFOP (2018)

3 Nedelkoska, L. and G. Quintini (2018)

4 CEDEFOP (2012)

5 See for example: Acemoglu, D. and P. Restrepo (2017), Autor, D. (2015), Graetz, G. and G. Michaels (2018), McKinsey Global Institute (2017)

6 Employment and Social Developments in Europe 2018, <http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8110&furtherPubs=yes>. See also Spasova S., Bouget D., Ghailani, D. and Vanhercke B. (2017)

The internet has greatly facilitated the growth of flexible forms of working. This often includes more flexible, ‘one-off’ relationships between employer and employee, increased self-employment and other new ways of how work is conducted⁷. Examples are ICT-based work, portfolio or platform work⁸.

‘Platform work’: these involve flexible, ‘one-off’ labour relationships between providers and users of services, intermediated by online platforms. The worker or service provider is not hired under an employment contract but can be self-employed or even unemployed. Popular examples include taxi rides, meal deliveries, and software programmers.

As of 2017, an average of 10% of the adult population of the European Union has already used online platforms for the provision of some type of labour services. However, currently only 2% of the adult population earn 50% or more of their income and/or work more than 20 hours a week via platform work⁹. Both figures, as well as the number of platforms (estimated to be 173 across the EU in 2017¹⁰) will grow over the next years. These virtual labour marketplaces can offer novel opportunities for workers, either as their main sources of income or as a complement to their main jobs. It can also provide new opportunities for many types of workers, including skilled consultants and those who appreciate the flexibility of self-employment, for instance because they are caring for relatives or they want to pursue education or other interests while working. At the same time, this work often goes along with a greater unpredictability of working conditions and income flows, especially for workers in low skilled occupations. It can also increase the risks of illegal and bogus self-employment and diminished social protection (including sickness, unemployment benefits and retirement pensions). Depending on the social protection provisions available in each country and the circumstances in which they can be accessed, the ‘platform economy’ model can be associated with an increasing imbalance between flexibility and security, which PES need to take into account when supporting jobseekers’ integration.

7 These work opportunities may not need to be established as employment contracts. These questions may raise opportunities for collaboration between the PES Network and the new European Labour Authority.

8 Eurofound (2018)

9 Pesole, A., Urzì Brancati, M.C, Fernández-Macías, E., Biagi, F., González Vázquez, I. (2018)

10 Fabo, B., Beblavý, M., Kilhoffer, Z. and K. Lenaerts (2017)

Technology and digitalisation will enhance an emphasis on the ‘Knowledge Society’ in which intellectual tasks and the organisation of and access to information and data are vital for competitiveness. This may lead to new forms of collaboration and more transparency of information, if access to information is shared widely, but also potentially the furthering of existing trends towards labour market polarisation and growing numbers of workers at the fringes of the labour market who may increasingly feature in PES core and priority customer groups.

A 2018 Nesta Report¹¹, ‘*A blueprint for designing inclusive skills policy for the digital age*’, noted that digital innovations create opportunities to empower citizens, improve society, and grow economies. However the fast pace of change disrupting the labour market was also causing a continuous shift in the demand for skills. Consequently, individuals risk falling behind if they do not have the right skills and business will struggle to innovate and grow if they cannot find appropriately skilled workers. Governments must therefore focus on skills to foster inclusive and adaptable labour markets that enable everyone to reap the benefits of digitalisation. The report concluded that Digital Innovation therefore presented four key challenges for Governments, that are all especially relevant for PES: Anticipating the skills that will be in demand; serving the diverse needs of workers across various contexts; building a resilient labour market system that can adapt to changes in skills demand; and discovering and promoting services that drive people’s intrinsic motivation to learn.

3.2 Demographic trends and societal change

3.2.1 Ageing and shrinking workforce

According to Eurostat, the old-age dependency ratio (number of people aged 65 and over compared to the number of people of working age, i.e. 15-64 years old) in the European Union was 29.9% in 2017, having increased by 4.7 percentage points during the past decade. Ageing will change gradually the profile of the workforce and strengthen further the transitional dimension of the labour market. Ageing will also affect labour demand through changes in the profiles of goods and services demanded by an older population, for example there will be a stronger demand for care and health services. It moreover influences the total duration

11 Orlik, J., Casasbuenas, J., Helkkula, K. (2018)

of careers and the labour supply preferences of younger workers, who may demand more time and flexibility to care for their (older) relatives. These developments imply that policies to reconcile work and care, as well as retention strategies for older workers are likely to be increasingly relevant.

3.2.2 Increased mobility

The changes described above result in an increased mobility of workforce between and within countries. The significant differences in living and working standards both between Europe and other countries and within Europe are likely to continue which will lead to significant flows of migration over the next decades. In 2016, there were an estimated 2.4 million immigrants to the EU-28 from non-EU countries. In addition, in 2016, more than 16 million Europeans lived and worked in a Member State other than that of their nationality. Migration has the potential to address future skills needs, but this will depend upon appropriate and sufficient policy measures and resources to enable successful integration. In turn, countries that can position themselves to take advantage of the opportunities that follow from the future of work will also be able to attract immigrants that are more qualified and will fare better in the race for global talent.

This increased mobility may also result in growing shortages of skilled workers in some occupations or regions. With the concentration in urban growth hubs, areas that are more rural tend to experience shortages of jobs and skilled workers. In turn, some urban areas suffer from poor access or non-availability of knowledge, information and services (education, health care, etc.). This leads to inequalities in terms of opportunities, jobs and incomes.

In some countries and regions, PES may in the future thus be dealing with increasingly heterogeneous customer groups (who also have different levels of mobility), and increasing inequalities as a consequence of a growing variety of labour markets.

‘Heterogeneous customer groups’: transitional and fragmented labour markets will bring up different personal careers that will generate heterogeneous customer portfolios for PES to deal with. While the heterogeneity of potential PES customers increases, with a focus on ‘in-work’ customer groups and new forms of employers (such as platform providers), the need for new and different types of service delivery will increase as well.

Increased mobility and new forms of work will also pose questions for collaboration between the PES Network and labour market institutions beyond the Network borders, moreover, it needs to be considered with regards to the planned European Labour Authority.

3.3 Implications for PES

The trends described above affect PES who need to adjust to new forms of work, changing skills needs and customer agenda.

3.3.1 New forms of work

Several occupations can be expected to grow or decline due to the trends outlined above, in which the profiles of their tasks will be subject to adjustments. In addition, new occupations will emerge. Employment relations change, with an increase in flexible working arrangements, employee and job sharing, or freelancing leading to increased opportunities for some jobseekers, but also to the risk of precarious employment for others. These developments will increase the number of labour market transitions, significantly reducing the relevance of the already outdated ‘job for life’ model¹².

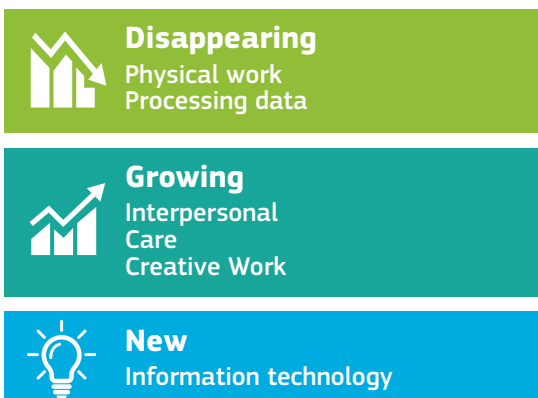
Life-long (career) guidance enables people to make sustainable transitions on rapidly changing labour markets. Lifelong guidance activities are for individuals of all ages, at all career stages, and enable them to identify their capacities, competences and interests, to make educational, training and occupational decisions and to manage their individual life paths in learning, work and other settings in which these capacities and competences are learned and/or used.

As more people will work differently and longer, PES need to take a holistic approach in transitional labour markets. This includes lifelong guidance¹³ on a much more proactive basis, both for specific individuals and for more heterogeneous groups of customers covering the question of which skills,

12 Draft Resolution of the Council and of the representatives of the Governments of the Member States meeting within the Council on Strengthening Policies, Systems and Practices in the field of Guidance throughout life in Europe on 14 May 2004.

13 Resolution of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 21 November 2008 on better integrating lifelong guidance into lifelong learning strategies (2008/C 319/02) [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:42008X1213\(02\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:42008X1213(02))

Disappearing, growing and new jobs



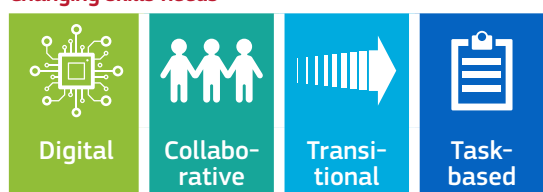
occupations and new forms of work are most likely to facilitate successful transitions across their career: from and to another form of employment, another occupation, another sector or another region or country. PES need to act fast, as more detailed definitions of jobs and competencies will need to be developed with the aim to provide up-to-date labour market information for customers addressing increased uncertainty and ambiguity.

3.3.2 Focus on skills

With digital, technological and demographic change and more flexible forms of employment, there is a stronger focus on digital, entrepreneurial and interpersonal as well as on soft and non-cognitive skills¹⁴. Moreover, with more transitions between employers and occupations throughout a career, people will need to develop new skills throughout their lifetime.

PES need to monitor future skills needs, to predict future demand and develop training accordingly. This includes also stronger links and cooperation with employers and the education sector for better future skills needs matching. With increasingly transitional labour markets, policy-makers and PES need to invest in a more flexible (more regularly updated) supply and availability of training, more broad-based course curricula for a more hetero-

Changing skills needs



geneous customer profile and 'up-skilling' for employees in sectors that will be most affected by change¹⁵.

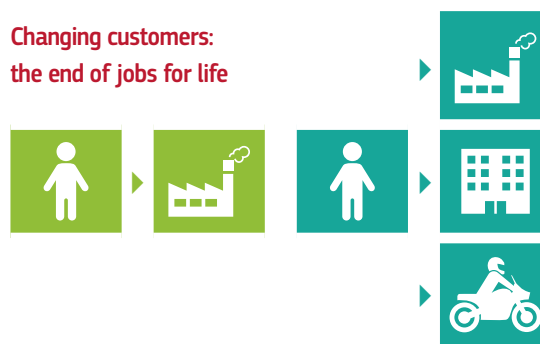
3.3.3 Changing customers

A shift in attitudes towards work, showing different preferences regarding the trade-offs between work and personal life, is noticeable. Moreover, labour mobility increases and new worker profiles emerge, for example that of 'entreploees' – employees during one part of the day or week and entrepreneurs in their remaining time.

PES will need to enhance outreach to meet the needs of a broader range of customers, primarily to employers and their employees in order to fully understand the nature and trends related to specific jobs. This also means considering the implications of changing employment relationships between employees and employers, including greater flexibility in work forms and contractual arrangements. This also applies to PES internal (human resource) management. In terms of matching, tailor-made approaches with a focus on skills, but also on the person(ality) need to be developed. The latter includes his or her preferences and motivation, well-being and personal settings (such as the family situation).

PES focus on support for those most affected by upcoming change and who require support to enter and remain in sustainable employment. This also poses questions for PES, for example if they should register platform-economy vacancies and potentially even consider them for the purposes of compliance with active job search criteria in the context of the payment of unemployment benefits, if such regulations are applicable in the country.

Changing customers: the end of jobs for life



¹⁴ See the Council Recommendation on Key Competences for Lifelong Learning (2018)

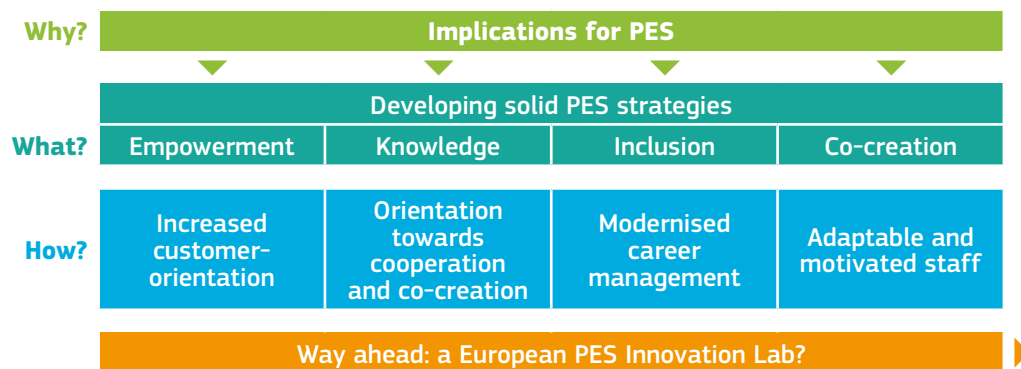
¹⁵ European Commission (2016)

4. WHAT? PES RESPONSES TO THE FUTURE OF WORK

The '[PES 2020 and beyond](#)' strategy highlights a number of pathways of change, including greater focus on the demand side of the labour market, stronger partnerships with other stakeholders (including in education and career management), higher levels of agility and flexibility, and a more prominent conducting function for PES in the labour market. These includes steps to support PES staff,

jobseekers, employees and employers to make transitions in future labour markets. Hence, inclusiveness, empowerment, co-creation and the use of knowledge are key concepts in PES strategies to address the challenges and opportunities from the future of work. Below we present a number of approaches from PES that take these principles forward.

Figure 2: PES responses to the future of work



4.1 Developing a solid PES strategy

PES need to utilise the opportunities that come with new forms of work, including a greater focus on skills and a heterogeneous customer group. Several PES have already started to develop strategies to address upcoming changes with the primary objective to promote work. For example, the German PES Strategy for 2025 based on a participatory and transparent approach includes employees and discusses the strategy and its approaches on all levels of governance. The Danish PES Strategy 2018 to 2021 aims to involve partners, such as researchers, other knowledge producers, practitioners, social partners and customers. Both strategies underline inclusion: the German strategy stresses the chal-

lenge of increasing social inequalities with the unequal distribution of chances to participate on the labour market and aims to increase participation opportunities by taking on responsibility for fostering social cohesion. The Danish PES sees digitalisation as a chance to increase labour market participation via better-targeted and individualised services. Empowerment is emphasised in both strategies via customer-orientation and co-creation.

Co-creation means involving customers and stakeholders in the design and implementation of services. Customer engagement in service creation therefore ensures that services meet their needs.

STAR's strategic development tracks 2018-2021, Denmark

1. Use of knowledge: information, data and knowledge are used to deliver useful and high-quality services and to better inform customers and clients.
2. Focused implementation at the front: this is based on transparency, involvement and prioritising. Key is an involvement process for staff and researchers, educational institutions, businesses and stakeholders and the strengthening of frontline staff to implement services.
3. Inclusion through digitalisation: to predict businesses' demand for certain skills and shortages and to give the citizen fast, targeted and individualised data that can help the citizen faster and better back into employment or education. This also requires legalisation on data security, user-friendly and operational IT systems.
4. Participating users: this includes the co-operation with customers in the creation and development process of services in order to meet their needs, as well as customising the service offer to enable staff to provide individualised support.

BA 2025 – Our Five Guidelines, Germany

'The Employment Agencies and the Job Centres are the institutions for individual counselling, placement, qualification and reliable livelihoods for their clients.

We take responsibility for social cohesion and improve participation opportunities.

Together with our cooperation partners, we design the training and labour market.

We use the possibilities of digitisation in the interest of our customers and employees.

We work competently, collectively and passionately to provide the best service to our customers.'

4.2 Use of labour market intelligence

Both PES mentioned above also emphasise a better use of available labour market information to become an (even more) data-driven and evidence-based organisation. PES currently already collect a large amount of data: they register a large share of jobseekers, collect job vacancies (even if penetration rates vary considerably across countries¹⁶) and monitor the implementation of their services including multiple active labour market policies. In some cases, PES also interact or are even merged with other public bodies that collect additional data, e.g. social security agencies, tax agencies, education ministries, and skills councils, as in the case study of Korea below.

Labour market intelligence is used for data-intensive activities, such as labour market information systems, profiling and matching. PES can sophisticate processes and offer new or improved services based on big data and artificial intelligence, leveraging the information from many thousands of individuals and their work histories¹⁷, while contributing decisively towards e-government.

Profiling is an assessment performed by PES counsellors to define the profile of the customer for better service targeting, done through the use of IT and statistical methods. This is done via an assessment of individual strengths and weaknesses or the need for particular services etc.

These services can include more advanced jobseeker profiling and monitoring, job and training recommendations and assignments that can deliver better matches for both the employer and the worker, leading to more targeted online tools supporting ultimately productive and sustainable work. The evaluation of active labour market policies (as well as other policies and programmes with a labour market dimension) can also benefit greatly from available data, including more sophisticated counterfactual analyses and real-time assessments.

¹⁶ According to our calculations based on the European Union Labour Force Surveys collected by Eurostat, on average, 38% of the individuals actively seeking employment in 2016 contacted a public employment office in the previous four weeks of being surveyed. This percentage drops to 21% in the case of private employment offices. However, only 8% of all the individuals employed in 2016 found their jobs through the involvement of their country's PES.

¹⁷ When utilising access to data and information, challenges such as legal and/or technical limitations to data/information sharing still may need to be addressed.

The shift towards targeted (online) services based on available evidence on what works can also allow PES to overcome the challenges of limited resources and capacity constraints amongst staff. As caseworkers stop spending time on the more automatable components of their jobs, they can devote more attention to the different needs of their customers, in particular those harder to reach and more vulnerable to technological change, as described in the following example:

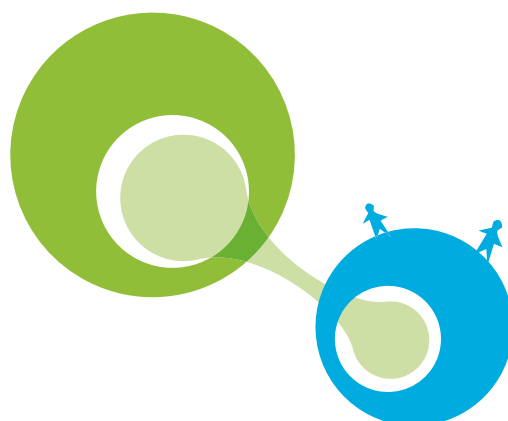
Development of a 'digital first' strategy, VDAB (Belgium)

This strategy aims to provide more and better information online, making PES customers more independent and empowered while letting caseworkers and training providers spend less time on administrative issues and focus more on PES customers. Face-to-face and human-digital (call-centre based) meetings are accessible for everyone who requires personal contact. However, they are increasingly regarded as secondary channels with a focus on people who are likely to be less self-reliant after using an online appointment system. A number of digital tools are being introduced to empower PES staff, in the context of the establishment of a data-driven orientation as the cornerstone of the services delivered. These include the analysis of large and comprehensive data sets on individuals, their characteristics, work histories, and previous and current interactions with PES (such as participations in active labour market policies or even click behaviour when using the PES platform), using machine learning and other techniques. The analysis of this data can greatly facilitate the segmentation of customers based on risk analyses and ultimately deliver suggestions regarding the optimal mix of interventions towards meeting the career goals of jobseekers and the recruitment objectives of firms.

Korean Employment Information System (South Korea): Development of a comprehensive and integrated PES portal (WorkNet)

The Korean online jobs portal WorkNet features a large number of integrated components, including information on current vacancies, youth employment services, higher education, labour market trends, occupations and career guides (including psychological tests). Partnerships with private, public and regional jobsites ensure that WorkNet vacancies are regularly updated. Jobseekers need to register both online and in person at a jobcentre to claim unemployment benefits. Automatic analysis of multiple data bases (including unemployment benefits and training) delivers up to date and detailed labour market information (by occupation), including information on salaries, required skills and qualification, vacancies and application procedures. These merged data sets are also used to evaluate active labour market policies and public-private partnerships which include activities that are paid according to performance-related criteria. A smartphone app presents geo-reference information about vacancies, also taking into account previous searches by each worker, including appointments for interviews with firms. There is also work on an artificial-intelligence and competence based job matching tool. In 2017, an average of over 750,000 individuals visited the site every day. In a labour market of 26.8 million people employed and an unemployment rate of 3.7%, over 2.8 million job openings were registered in the portal, leading to 2.1 million matches through the portal alone.

Some PES, as the examples above indicate, are already debating how to make their services fit for the future, while others may need to update their strategies to better adapt to future needs. When it comes to implement these strategies a number of operational activities can be taken forward as shown in the following section.



5. HOW? PES RESPONSES TO THE FUTURE OF WORK

While PES strategies to address future changes also widely depend on the national and institutional context, future labour markets will change PES services and governance models. Key approaches, increasing customer-orientation and modernising career information, adaptable and motivated staff, and increasing the focus on cooperation with stakeholders will help PES to address customer demand efficiently and effectively and to implement strategies that address future change.

5.1 Increased customer-orientation

Customers' (both jobseekers and employers) increased digital skills and better access to various communication technology and services have enhanced the opportunities of automated PES services and digital outreach activities.

Customer orientation is a pre-condition for PES to promote work on future labour markets. This requires that services address the needs of all citizens and are user-friendly and accessible. A way to ensure this is co-creation based on customer insights and involving them for designing or adapting services. For example, bottom-up approaches that implement ideas of customers in smaller pilots can be a way to test, improve and upscale new services.

With upcoming change, PES need to consider and develop services for new customer groups: employers in start-up or platform economy sectors or people who face job loss may also receive targeted help. Furthermore, PES play a key role in promoting labour market participation opportunities for people furthest away from integration. In future labour markets, certain groups, such as low skilled, long-term unemployed or older workers will face increasing problems entering the labour market or remaining in sustainable employment. For some vulnerable groups, intensified, face-to-face support reduces the length of unemployment spells¹⁸. This requires better partnership working with other integration actors, such as social, health or education services to address personal needs. As a first step, profiling tools can determine the level and type of support,

allowing for more efficient use of scarce PES resources through systematic and evidence based prioritisation based upon customer need.

Extending online profiling and activation, The Netherlands

80% of all jobseekers in the Netherlands are now only served electronically within the first three months after registering as unemployed (60% of which find a job at the end of that period). The main online communication platform between the jobseeker and the counsellor, the 'Personal Work Folder', includes CV registration, matching services, and e-learning modules. This folder also lists all jobseeking activities, including their (coloured) deadlines and information about sanctions.

The 'Work Profiler', a 19-question survey including items such as health, views on work resumption and skills, can be used to estimate the time the jobseeker will take to return to work and to determine which services should be offered to the individual both online and offline. These measures were implemented in a context of cutbacks in funding and the closedown of regional PES offices, which illustrates not only the range of motivations in implementing novel tools but also the cost savings that can be delivered by online solutions. Counsellors can now focus more on job coaching for the 40% identified by the 'Work Profiler' who typically do not find jobs at the end of the first three months of their unemployment spell.

¹⁸ See the Council Recommendation on the integration of the long-term unemployed into the labour market and European Commission (2018)

5.2 Modernised career management

As individuals may experience increased uncertainty in terms of the impact of their previous education and training choices and face a larger number of transitions during their working lives, between jobs and occupations, support from PES in managing transitions together with their partners is increasingly important. This is especially true for people working in sectors most affected by change and young people (in particular NEETs). This support from PES includes career guidance combined with upskilling initiatives, which can benefit greatly from partnerships with other labour market stakeholders. PES and the education sector can enhance the existing services via more formalised cooperation, new ways to outreach for career guidance and specialised support for some groups¹⁹. In addition, digital services and big data/artificial intelligence provide new aspects to outreach and target wider groups (whilst also freeing up resources to allocate for people who need most support), as shown in the examples below:

Modernisation of the career advice provided to jobseekers, France

PES France puts emphasis on skills and a personalised career advice. Even before a counsellor has contact with a jobseeker, the jobseeker self-assesses his or her competences (not only qualifications) and preferences when they register with PES France. This information is subject to automatic data analysis on labour market opportunities, which then delivers various information (geo-localised job offers, skill needs, trends in the jobs demanded, etc.) that help to understand current and future labour market demand. Moreover, meetings with a counsellor can proceed from a more informed base and focus on more specific follow-up activities, including assignment to online courses that focus on autonomy or collective training workshops on competences. Jobseekers are also requested to keep records of their training and job search activities, which will be subject to further data analysis and facilitate a better understanding of optimal pathways.

Providing lifelong (career) guidance, Croatia

Lifelong Career Guidance Centres (CISOK) are central places for providing different types of career guidance services to all citizens: pupils, students, the employed and the unemployed. Through CISOK's services users can receive vocational guidance: advice and counselling services aimed at improving their career management skills and information about educational, training and employment possibilities. CISOK centres are also a central place for outreach and activation of youth, especially NEETs. CISOK centres are based upon a 'model of differentiated services' which includes various levels of support according to the assessed clients' needs: self-help and e-services, brief assisted services and individual case managed services. Services are delivered through individual and/ or group counselling, thematic workshops for career management skills, e-tools (e.g. self-assessment questionnaires, a labour market information system, statistics on-line and a job exchange portal), brochures, guides etc. The main e-tools are available through 'E-usmjeravanje' (E-guidance) web site <http://e-usmjeravanje.hzz.hr>.

All CISOK centres are partnership-based with relevant stakeholders (NGOs, youth organisations, local bodies/municipalities, schools, universities, training providers, social institutions, and social partners). From July 2013 to the end of October 2018 245,772 people used services in 13 CISOK centres and – 96% of the clients were satisfied or very satisfied with provided services.



¹⁹ See also here: PES Network Position Paper: Proposal for a structured cooperation between PES and the education sector for better school-to-work transitions (2017)

5.3 Adaptable and motivated staff

Working with customers, trained PES staff²⁰ provide counselling to those most in need and support with transitions on the labour market. In order to address future changes, staff at all organisational levels need to be equipped with up-to-date labour market information and the right skills and competencies to offer support to a potentially higher proportion of harder to help clients in their caseloads. An organisational culture that promotes flexibility to change, autonomy of decision-making, training and participation can support staff to do so. This can also address the challenge of limited capability for government agencies to manage change (for example lacking digital skills of an ageing PES workforce).

A vision for upcoming change, communicated to all staff, should describe how the organisation could profit from change. This also links to empowerment of staff to take decisions and to manage their careers. Together with other relevant stakeholders, PES staff and customers, some PES, including Norway, have already started an ongoing dialogue about how the organisation is to continually adapt and change.

Conducting 'Horizon Scans', Norway

The Horizon Scan discusses societal trends that will affect work and welfare up until 2030 and the resulting consequences for PES Norway. Core factors are demographic change, user behaviour, technology, the labour market, living conditions, health and political trends. The Horizon Scan combines available research, analysis and expert insight in different parts of the organisation and takes place every second year.

PES staff at all levels are involved in this discussion process, which promotes a common understanding of future challenges and opportunities, and to the development of more knowledge-based services. This also contributes to strategy development and organisational change by a shift from a procedure-driven organisation to a focus on individuals' potentials.

The scan, presented in easy-to-understand information of complex topics, is well received in the PES as well as by other stakeholders, such as Ministries, politicians, social partners and the media.

²⁰ See more on competences of PES staff here: <http://ec.europa.eu/social/BlobServlet?docid=14100&langId=en>

5.4 Orientation towards cooperation and co-creation

With a more heterogeneous customer base, PES need to engage in wider cooperation and co-creating with other integration actors, focussing on outreach activities. Key partners will be drawn from across the public, not-for-profit and private sectors²¹. These partners will include social security systems, which, provided the appropriate (organisational and technical) interfaces are in place, can play a critical role in providing high-frequency, comprehensive data on employment outcomes of workers and firms that can then be fed by PES to artificial intelligence systems for monitoring, evaluation, prediction and assignment purposes.

This will necessitate the development of enhanced partnership and joint working skills amongst PES staff, but also the organisational capacity and willingness to integrate products and services developed together with partners, including customers. Again, co-creation of services and bottom-up strategies, allowing for sufficient differentiation depending on local needs, are key approaches for further encouraging innovation.

For employers, the platform economy and other 'non-standard' ways of job matching may offer a less costly opportunity to find employees, often with more flexible conditions. While these activities may potentially weaken PES' share of vacancies (which is already low in many countries)²², these activities and new forms of work bring also opportunities. For example, start-ups may be more likely to hire several groups of disadvantaged workers. However, this might not always mean that this type of employment is beneficial for them in terms of wages and working conditions.²³ Here, PES will need to provide support for some (especially more vulnerable) customers describing which new forms of work might be most suitable and sustainable for them, combined with personalised support.

Partnership working with 'new employers' may provide up-to-date labour market information to address uncertainty and ambiguity, such as illus-

²¹ See 'PES 2020 and beyond' Strategy for cooperation partners.

²² The emergence of these potential competitors – and their potential impact on the data collected by PES – can also weaken the fit between training offered through PES and employers' needs, and their usefulness as a source of labour market information. Smaller and less comprehensive PES data can then compromise the labour market relevance, accuracy and insight that can be gained from the use of new matching technologies by PES.

²³ Fackler, Daniel; Fuchs, Michaela; Hölscher, Lisa; Schnabel, Claus (2018)

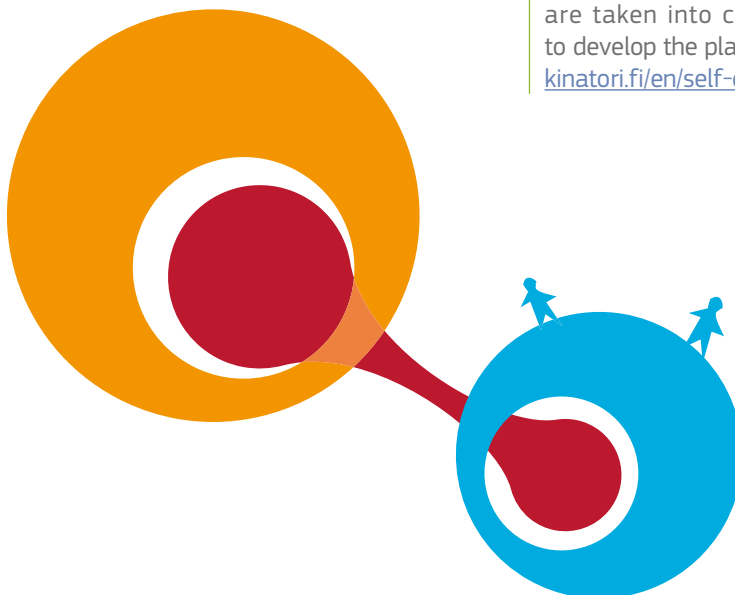
trated in the pilot below. PES may also want to conduct registration and screening activities and provide recommendations on training for platform economy jobs. As discussed before, many of these work opportunities may suit the needs and skills of a large number of jobseekers.

PES have the opportunity to utilise digital technology to enhance co-operation through enabling the interoperability of their systems with those of other partners. This can develop a 'soft infrastructure'. Such an approach can be especially useful for expanding the use of data to identify labour market skills requirements and matching these with customer competencies. Digital services with expanded data utilisation can provide the building blocks of this wider ecosystem, however achieving this interoperability will require the development of certain common standards, processes, and semantics. This can provide the basis for open collaborative platforms providing more advanced matching thereby enabling actors to co-operate and allowing customers to access services most suited to their needs.

New forms of work and entrepreneurship, Finland

The Ministry of Economic Affairs and Employment (MEAE) introduced definitions of policy regarding new work and self-employment in 2016. This was to encourage cooperation with the private service providers in the fields of digital job mediation platforms and invoicing. A study was also conducted in 2017 by the Ministry of Employment and the Economy investigating 'self-employment and the sharing economy in a changing working life'. This revealed that new forms of work challenge the concepts of traditional working life, and the role of social and unemployment benefits for the self-employed. At the same time, digital job platforms have significant growth potential.

Following the MEAE policy definitions and the recommendations from the study a pilot project, facilitating new forms of work and entrepreneurship, was launched in May 2017. The pilot was integrated as part of project to develop the digital online job market platform for jobseekers and employers, which is still under construction (<http://tyomarkkinatori.fi/en>). The objective of the pilot was to gather and disseminate information on new short term working and entrepreneurship/self-employment opportunities provided by digital job mediation platforms and invoicing services. It was also intended to train PES staff on how to engage with these new work and entrepreneurship/self-employment opportunities. Although partners have not yet reported a significant number of new customers, there is still interest in cooperation after the pilot phase. The pilot has now been integrated as a permanent section of the digital job mediation platform (työmarkkinatori) entitled 'Self-employment'. Ideas from users, PES employees and service providers are taken into consideration in further work to develop the platform. See also: <http://tyomarkkinatori.fi/en/self-employment/>



6. RECOMMENDATIONS FOR POLICY-MAKERS, PES AND THE PES NETWORK

The technological, demographic and social trends that we are already witnessing are likely to accelerate further – including automation, artificial intelligence, the platform economy, ageing and mobility. They are significant and carry with them the potential to increase the living standards of all. At the same time, they are resulting in increased labour market inequality and polarisation, across or within regions or countries.

PES can make a significant contribution towards addressing these implications. To sum up, PES must:

- Play an even more **important conductor** role in the labour market. Fulfilling this role will not only enable PES to keep up with the ongoing developments in labour markets and in the wider economy and society, but above all to take advantage of the new opportunities that are emerging in order to better serve their customers. Transitional and transforming labour markets need a conducting body. So PES as a primary source of vacancies and brokerage need to be kept at the centre of national governments' job-matching services.
- Enable smooth, sustainable and inclusive transitions, based on strategies that focus on the **empowerment of PES customers**, invest in the development and adaptation of their skills, make the best use of available knowledge and focus on those most in need while keeping up a productive dialogue with customers and stakeholders on labour markets and involving them in service design and delivery.
- Refine or even reinvent strategies and the design and implementation of policies. This means continuing to modernise their processes and tools, based on the PES 2020 and beyond strategy model, operating with a **higher level of agility and flexibility**. This may mean change across the whole organisation towards customer-orientation service models in order to ensure more productive and harmonious labour. A convincing business case to demonstrate the PES added value is key.

For the PES Network, the future of work may mean:

- Evolve as a learning organisation, while continuing with benchlearning and raising knowledge based principles. The Network is continuously working on a more effective delivery of PES services and the improvement of PES organisations themselves. **Benchlearning needs to consider future-related trends and implications**, while actively involving all levels of PES, boosting their function as bottom-up as well as top-down learning organisations.
- One particular activity that may contribute further to the agenda of PES reform proposed here is the establishment of a European (Future of Work) '**PES Innovation Lab**'. In addition to the collection and dissemination of different PES practices, this lab could also model, pilot and test common innovative approaches and practices, while pooling existing national resources and minimising duplication of individual PES efforts. This could include development in profiling and matching (particularly involving big data and machine learning) or new approaches towards employers.

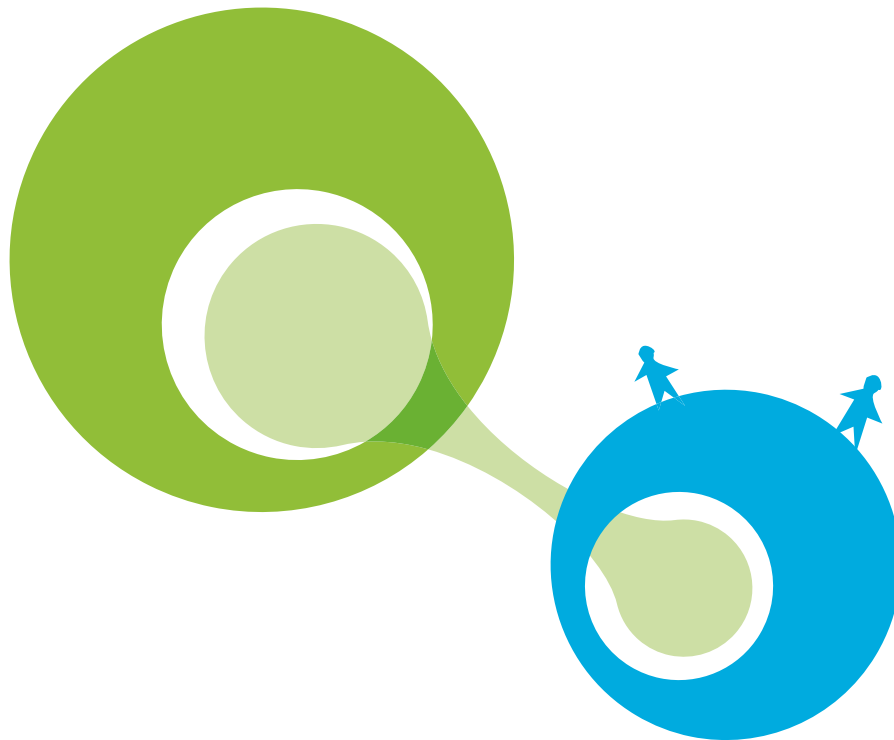
In terms of policymaking, this means:

- Public policies must keep up with these future labour market trends, **balancing flexibility and security** for all citizens, fostering quality of employment and **preventing precarious situations** arising from labour market transitions, including appropriate **social protection of workers** in all forms of work.
- PES are highly influenced by the socioeconomic and political situation in their countries. PES structures vary in terms of political mandate that defines statutory and institutional setting as well as PES activities. In order to ensure that well-functioning PES can better support (future) labour market transitions, policy makers are called upon to strengthening **organisational capacity** with a focus on staff skills and capacity, leadership, knowledge management and making efficient use of available labour

market information and the increased use of digital services.

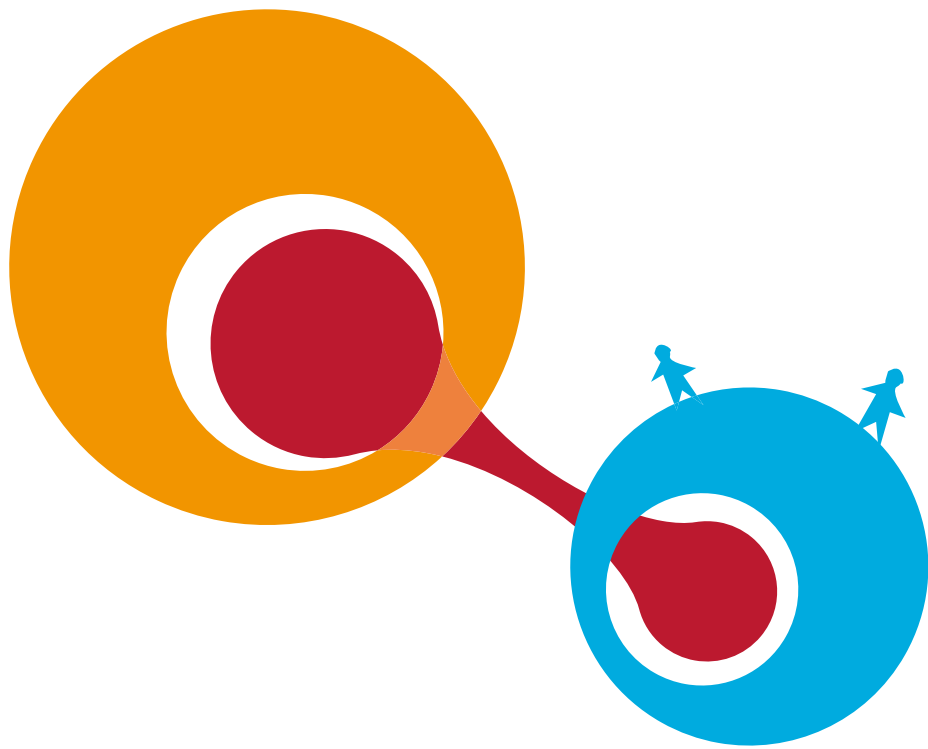
- 'Bottom-up networks' including systematic and evidence-based **exchange of knowledge and good practices between Member States** need political support. The PES Network itself follows this approach, promoting resource-efficiency and positive effects like creating ownership of the change agenda, fostering a permanent dialogue from peer-to-peer learning and enabling continuous improvement. This PES Network policy-making approach can

potentially be exploited across different (PES-related) policy fields and at various levels, including in the employment and education sectors. Through better bridging of policy design and implementation, this approach promises a process of upward convergence to provide more holistic support for citizens promoting future employment, continuing labour market balance, and fostering social inclusion. This can ensure that the benefits of technological change are deployed to meet the needs and aspirations of all citizens.



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