PES to PES
dialogue

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for Public Employment Services

DG Employment, Social Affairs and Inclusion

PROFILING SYSTEMS FOR EFFECTIVE LABOUR MARKET INTEGRATION

Thematic Synthesis Paper

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1. INTRODUCTION: THE ROLE OF PROFILING IN THE PROVISION OF PERSONALISED EMPLOYMENT SERVICES

The increasing personalisation of Public Employment Service (PES) provision has for some years been an important element of the modernisation of PES in the EU Member States. This trend is reinforced by the European Employment Strategy (EES). Guideline 7 of the European Employment Guidelines on *Increasing Labour Market Participation of Women and Men, Reducing Structural Unemployment and Promoting Job Quality* highlights that "*Employment services play an important role in activation and matching and they should therefore be strengthened with personalised services and active and preventive labour market measures at an early stage*".[1]

Profiling, i.e. assessment performed by PES counsellors and through the use of IT and statistical tools for profiling can play an important role in the personalisation of PES services. Various profiling tools have been developed in many countries to make labour market integration more effective by better targeting services and scarce resources. They have been used:

- To diagnose individual strengths and weaknesses with regard to personal action planning;

- To assess the risk of long-term unemployment among unemployed individuals and those about to become unemployed;

- To segment job seekers according to the level of assistance they are considered to require in achieving (re-)integration by statistics;

- To target appropriate services, measures and programmes considered most suitable to meet the requirements of their particular "profile" by statistics-based programme selection.

In order to assess the suitability and outcomes of the use of different profiling approaches and tools, as well as to determine their implications with regard to placement outcomes for job seekers and their impact on the work of PES counsellors, the first conference held under the European Commission's new mutual learning programme for PES[2] was dedicated to looking at the role of profiling systems in achieving the effective labour market integration of job seekers.

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[1] Council Decision of 21 October 2010 on guidelines for the employment policies of the Member States (2010/707/EU), see http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32010D0707:EN:NOT

[2] For further information on the PES to PES Dialogue Programme, see http://ec.europa.eu/social/main.jsp?catId=964&langId=en

The conference built upon the findings of previous seminars[3] and focused on subsequent developments and evaluations relating to profiling practices in different EU Member States. It aimed to discuss recent trends, innovative approaches and developments of profiling systems and their use in PES, on progress and challenges for the future. Particular emphasis was placed on holistic assessment and on the use of profiling for risk identification, resource allocation, matching and action planning.

This thematic report summarises the main findings and lessons for policy makers and practitioners arising from two discussion papers prepared by the keynote speakers, Professor Jenny Bimrose and Dr Regina Konle-Seidl, the presentations provided by Member State PES experts (from Belgium [Flanders], Denmark, Finland, Germany, the Netherlands and Slovenia) and discussions at the conference.

The conference programme, discussion papers and a full set of presentation materials from the conference can be accessed via the PES to PES website.

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[3] Profiling for Better Services, Report on EU profiling seminar, January 12-14 2005 http://www.upjohninst.org/fdss/euroseminar.pdf and Peer Review on systematic preventive integration approach for Job seekers and the unemployed, Berlin, 28-29th October 2010; http://www.mutual-learning-employment.net/index.php?mact=PeerReviews,cntnt01,detail,0&cntnt01template=display_by_year&cntnt01year=2010&cntnt01orderby=start_date%20DESC&cntnt01returnid=59&cntnt01item_id=84&cntnt01returnid=59

2.   NEW APPROACHES TO SKILLS PROFILING

In recent years, approaches to profiling have become more holistic and moved away from simply gathering information about an individual job seeker's employment record, work experience and formal qualifications, to additionally capturing information on "generic" and "soft" skills. This reflects at the same time increasing employer demand for transferable skills and competencies, as well as changes in the labour market which have led to more frequent job transitions which require greater adaptability.

Despite this universal trend, there is no agreed definition at European level of the terms "generic" and "soft" skills. The UK definition, which was presented at the conference, considers these to be as follows (see also Bimrose et al., 2007):

Generic skills	Soft skills
Communication	Enthusiasm
Numeracy	Sense of humor
Information technology	Adaptability
Working with others	Ability to take initiative
Improving own learning	Planning and organization skills
Problem solving	

Other countries use different definitions of "key" or "generic" skills, which often contain elements of the UK concept of "soft skills".

In addition, many different approaches to capturing these types of skills through IT-based profiling tools have developed at national level and in different PES. In the next sections, we present the main findings on the development of skills profiling since 2005 as charted in the expert discussion paper (section 2.1), provide examples of current skills profiling tools and their implementation at Member State level (section 2.2) and summarise the debate on the utility and service implications of such tools for policy makers and practitioners (section 2.3).

2.1. Increasing the focus on holistic profiling: findings from the discussion paper

As indicated above, changing labour market demands and the reality of increasing numbers of job transitions experienced by individual workers over their employment career have emphasised the need for more holistic skills assessment, taking on board not only work experience and formal qualifications, but also informal skills and capacities acquired at work (or indeed in an individual's private sphere), including generic and soft skills (Savickas et al,, 2009). This trend has, if anything, been further amplified by the recent economic crisis, which has forced so many workers to seek labour market transitions. Concepts underpinning key and soft skills development and assessment are closely intertwined with those of "employability" and "lifelong learning", which have been very much at the heart of the EU policy debate for a number of years, as employability is often defined through some of these core transferability skills and lifelong learning should include not just formal skills but also informal skills such as those delimited in by the terms generic and soft skills.

While it is relatively easy to chart an individual's work experience and employment record, as well as their formal qualifications, generic, and in particular soft skills, are by definition more intangible and are more dependent for their identification on the assessment of the individual case worker. This could lead to divergence in assessments and the potential misinterpretation or in the worst case scenario, discrimination, particularly if the staff are not appropriately skilled to operate a differentiated assessment. As a result, in recent years, increasing efforts have been made to systematize and to "standardise" this process, either to assist case workers with a heterogenous qualification background in making more "objective" and thorough assessments, or to enable individuals to assess their own skills and capacities in order to influence their own decision-making or their pathway towards a successful transition.

Examples of new self-help tools for holistic skills profiling

In her discussion paper, Jenny Bimrose refers to the development of self-help tools (for use either online or on paper), tools which can be used in groups and tools which are completed with the support of a PES practitioner. These include the following:

Name of tool	Self-help or facilitated (online or paper based)	Contents
Skills check (UK)	Mainly self-help, but also facilitated (paper based)	Designed to assess literacy, numeracy, language skills
Skills interest inventory (SII), Skills confidence inventory (SCI) (US)	Self-help (online or paper based)	Assess interest and suitability for various occupations Assesses style of working, leadership, risk taking capacity etc
Campbell interest and skills survey (US)	Mainly self-help (paper based or online)	Assess skills for different occupations
Kuder skills assessment (US)	Mainly self-help (online)	Skills and interest assessment Motivation and self efficiency
Bilan de competences (FR)	Face to face	Identification of needs, professional interests, skills and motivations

Source; Adapted from Bimrose (2011)

Her paper presents more in depth two specific new tools which have been developed most recently, or are still in the process of testing: the UK "Skill Health Check" and the "Getting Ready for Your Next Job" tool from the United States.

- The Skill Heath Check (UK)

This tool was commissioned by the UK government, is a new computer-based skills assessment instrument targeted at all working age adults. The tool includes twelve areas (including skills, interests, personal style, motivation and activity in relation to working with numbers, working with written information, checking information, problem solving etc.) and has been trialed, piloted and evaluated, has already undergone six iterations and is continuing in development prior to its release in autumn 2012. Its modules aim to assess generic, soft and technical skills and it is thus intended as a holistic skills assessment tool (Adams, L et al. (2009)).

What has become apparent throughout the testing phase is the need to inform and train PES practitioners about the purpose and added value of the new tool and its practical application. As a result, detailed teaching modules have been developed to accompany the forthcoming launch of the Skills Health Check through a staged process.

- Get ready for the next job (USA)

In the United States, the new self-assessment tool "Getting Ready for Your Next Job" was developed to help job seekers and employment service staff to identify the soft skills an individual has acquired through work and in their private life, which may assist the job search and job transition process, as well as highlighting skills gaps which may pose a problem in placement. It assesses tangible skills, including skills for job search. It contains thirteen distinct areas that are relevant to successful job outcomes for different client groups. A second goal was to develop a tool which individuals could use independently, either on paper or online[4].

The tool can be mailed to individuals or made available online. It was financially supported by the Government. Interesting features of the tool include feedback boxes, so that general advice, job search tips and information about resources or specific actions can be provided (either by PES or private agencies using the tool). Initial evaluations suggest that both practitioners and job seekers find the tool useful (Wanberg, C.R et al (2010)).

Advantages and disadvantages of skills profiling tools

Bimrose identifies a number of advantages and disadvantages of new skills profiling tools.

Among the **key advantages** identified are:

- The **more holistic nature** of such tools, which can provide a broader and more rigorous base for future employment and career decisions;

- The ability to **access** such tools **online**, thus offering greater flexibility (but see also below disadvantages to this approach);

- The **self-awareness raising** which is stimulated by the completion of such tools (including awareness of the transferability of certain work and life skills).

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[4] See http://www.ynj.csom.umn.edu/

The following **disadvantages** are mentioned:

- Skilled practitioners needed. The main "disadvantage" of self-help tools also relates to one of the main findings from evaluations, i.e. that such holistic skills assessment tools work better and have more reliable results when they are facilitated by a skilled PES practitioner. This is not only because the language of such tools can often be confusing to users, but also because individuals/job seekers often have to be encouraged and guided on how to think more deeply about their skills and capacities (in particularly soft and generic skills), which they may not consider to be directly relevant. The assistance of appropriately trained PES professionals in administering such tools has been shown to increase the accuracy of outcomes.

- Staff reluctance as obstacle for implementation. An important issue raised in the discussion paper, which was repeatedly reflected in the conference relates to the need to persuade PES practitioners of the added value of using a tool for an assessment which they may in the past have made through their direct contact with the job seeker. While PES managers can be over-confident about the reliability and impartiality of computer-based assessments, practitioners have often shown concern that such tools could undermine their personal discretion and autonomy to make decisions about suitable measures and the allocation of resources. We will return to this important issue in section 2.3.

- Lack of evidence base "what works for whom". Another potential shortcoming of skills profiling and self-help tools relates to the widespread absence of valid assessments of "what works for whom", which would allow profiling outcomes to be clearly linked with proven measures for target groups with particular deficits or needs.

Bimrose concludes that the overall success of holistic skills assessment with regard to achieving integration into the labour market will depend on the strong inter-connectedness and collaboration between agencies to map and pursue a client journey which is influenced (even if not entirely determined) by an initial process of holistic profiling, be it through the use of self-help tools, IT support for interviewing or assessment by interviewing. We will return to this issue in section 3, which discusses the link between profiling and resource allocation.

2.2. Current developments in skills profiling: case studies demonstrate the advantages and pitfalls for advanced profiling tools

During the PES to PES Dialogue Conference, six countries presented the approach to profiling used in their respective PES. Although reference was made to overall profiling approaches and their implications for resource allocation in each national presentation, the tools and working methods presented by Belgium (VDAB-Flanders) and Germany placed greatest emphasis on skills profiling, whereas the presentations from Denmark, Finland, the Netherlands and Slovenia discussed overall profiling approaches (statistical profiling in the case of Finland and the Netherlands), which could include elements of skills profiling, but primarily highlighted the link between profiling and matching and interventions. In what follows, we therefore concentrate on the skills profiling tools developed in Flanders and Germany and only include aspects of the models of the three other countries in so far as they relate to skills profiling.

In the Belgian PES VDAB (**Flanders)**, the following steps are followed upon registration:

- The job seeker provides the PES with basic information about their qualifications, skills and work experience and the type of job they are looking for. This is done using a tool called ARIA (in English ARIS – which stands for activate, reflect, inform and stimulate).

- These details are matched by the database with existing vacancies, which are then automatically sent to the job seeker by SMS or email. Further action is then only taken if the individual does not receive any job offers within a month of registration or does not apply or does not find a job from the list of jobs being sent to them.

- The local office will then undertake "data mining" (cross checking of evidence provided) to establish any discrepancies in the file which could have led to inappropriate vacancies being sent out.

- The so-called "job indicator" tool allows the PES counsellor to assess which vacancies have been sent out, how many of the jobs have matched the clients requirements well and it can then be discussed what the job seeker has done with these, thus potentially identifying the support needed (motivational, additional training, assistance with CV writing etc). If the job seeker experiences difficulties with finding work rapidly through the vacancy matching process, different profiling tools are available. This includes *Jobready* – a holistic profiling tool developed by a sub-contractor on behalf of VDAB (see box below).

Jobready – a holistic profiling tool developed on behalf of VDAB

(Flanders, Belgium)

Jobready is a self-help tool which guides job seekers through a set of questions regarding the job they are looking for, their technical, generic and soft skills and qualities, their knowledge of the labour market and their job-search behavior. For example, in relation to their desired job, it asks about job content, working conditions, their attitude towards different tasks, their experiences in relation to previous jobs, any fears or concerns etc. In relation to job search skills, it seeks information about knowledge of job-search channels, search behaviour and the match between their competences and the jobs being applied for.

For each category, the report arising from the tools presents and thumbs up (job seekers are strongly aware of the requirements and skills) or flags up issues which need to be discussed and developed further. It serves as a basis for the advisors to structure their further discussions with job seekers.

As a result, this tool can be used to discuss shortcomings in job-search behaviour, unrealistic expectations about the labour market and the match between individual skills and the job being sought, additional skills and capabilities required and so on, and can therefore act as a basis for the development of a more detailed action plan.

Although Jobready is considered to provide a helpful tool, some job seekers are not keen to use it and its application is currently voluntary.

In addition to Jobready, VDAB has also developed vocational orientation tools (BORINT, BORCOMP and ORIENT), as well as a tool called e-scan for use with individuals interested in setting up their own business. E-scan assesses their suitability for entrepreneurship. BORINT is an IT-based tool testing vocational interests which can be used with or without the assistance of a guidance counsellor, whereas BORCOMP tests vocational competencies and includes practical skills tests which can last a full day. VDAB are now working on the integration of both tools in a new package (ORIENT), which will also take into account other factors such as medical factors. The tools can also be combined with a database of occupations and includes an action plan to be pursued to achieve particular vocational goals. The prototype for this tool will not be ready until 2012.

E-scan is an IT-based self-help tool testing personal characteristics and motivations, as well as awareness of the market and competition. The outcomes of this tool can be used to assist PES counsellors in assessing readiness of entrepreneurship and further assistance required.

The **German** PES presented the KodiaK tool – a sophisticated system of test-oriented tools designed to support soft and generic skills analysis which is currently being piloted to make more efficient and effective use of the psychological departments of the PES. KodiaK is used to support profiling as part of the German four phases model. Briefly, the four phases model of PES intervention includes the following steps: profiling; goal definition; selection of intervention strategy; and implementation and monitoring. This approach was the subject of a peer review under DG Employment's Mutual Learning Programme, for more information on the model, the MLP's website should be consulted[5].

Participation in the various KodiaK modules is voluntary and their duration ranges from around 20 minutes (KodiaK 1) to several hours (e.g. KodiaK 4). KodiaK is intended as a support tool for job seekers, as well as counsellors and also seeks to standardise reporting on soft and generic skills (see box on following page).

Denmark has also developed IT-supported tools for profiling as part of the so-called "Employability Profiling Toolbox". The toolbox is used to categorise job seekers into different "match groups" (set out in more detail in section 3.2 below) and consists of the individual job seekers' public assistance record (showing which benefits the job seeker has claimed over the defined period), a job barometer (information about local labour market conditions for the job being sought), a preparation leaflet (information on job search skills) and a dialogue guide. The latter is supported with an IT-based set of questions aimed at ascertaining the likelihood of the individual to find a job swiftly and their ability to participate in suitable employment measures. The questions cover skills, including soft skills, as well as questions of motivation and job search skills. All tools can be combined on the individual's job file.

Slovenia uses a mix of self-help tools and structured interview questionnaires to be used by PES counsellors. Self-help tools are mainly used to help job-seekers carry out a self-assessment prior to first action planning. It assesses their goals, motivations and existing skills and can later be used in discussions in group settings and with PES staff to determine priorities for action. The structured interview questions are administered by a PES counsellor during action planning and results back up an IT-based profile of the job seeker.

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[5] For information on the Peer Review held in Germany in October 2010, see http://www.mutual-learning-employment.net/index.php?mact=PeerReviews,cntnt01,detail,0&cntnt01options=2&cntnt01orderby=start_date%20DESC&cntnt01returnid=59&cntnt01item_id=84&cntnt01returnid=59

KodiaK – the (soft) skills assessment tool of the Bundesagentur für Arbeit (Germany)

The KodiaK tool comprises five elements administered and facilitated by a psychological assistant within the PES:

Self-assessment questionnaire on behaviour in the working environment (Kodiak 1)

This is initiated in the reception zone and consists of a standardized, PC-assisted module and provides an immediate, standardised psychological report. It is used to analyse the client's strengths and defines their self-perception and can thus assist the employment counsellor with profiling. It is administered by psychological assistants.

Testing of intellectual aptitude (KodiaK 2)

This module also comprises a standardized PC-based test and is used to determine a job seeker's intellectual aptitude for certain training modules and tests the strengths of low-skilled clients which may not arise directly from work experience. It is initiated by the placement officer and administered by psychological assistants.

Achievement motivation (KodiaK 3)

This involves a 45-minute interview with a psychologist and seeks to test out motivation required for training/activation. It seeks to assess prospects for successful placement in the desired occupation and the potential for successful attendance in a particular training programme. KodiaK 3 is initiated by the placement officer and administered by trained psychologists.

Assessment centre for social and communication skills for selected occupations (Kodiak 4)

This module is designed for individuals wishing to enter occupations requiring high levels of communication skills (marketing, social work, other occupations requiring a high level of customer contact) and involves an assessment centre lasting around 3 hours. It is again initiated by the placement officer and administered by staff skilled in competence assessment for specific roles.

Technical standards for the analysis of personal skills (KodiaK 5)

This fifth part of the module contains the technical standards for the application of the tools and forms the handbook for staff guiding them through the KodiaK modules.

2.3. Lessons for future development: summary of the debate

Presentations and discussions at the conference clearly revealed the potential dichotomy between the aspirations of PES managers and/or policy makers, particularly in relation to the development of e-tools for profiling, and the realities of evaluation findings with regard to the potential for the use of entirely self-administered profiling tools. While on the whole such IT tools are considered to provide helpful assistance to PES counsellors, studies have shown that their outcomes tend to be more reliable when combined with the advice and support of a PES counsellor. On the whole, they can therefore not be seen as a "magic bullet" to satisfy political priorities with regard to cost savings. In the absence of a strong body of reliable evaluation evidence, more work is needed to assess for which target groups (pure) self-help tools can reliably be used for and at which stage in the process of profiling.

A number of the PES practitioners present at the conference questioned the added value of some profiling tools which had been developed. Some considered that the assessment provided by such tools could easily have been given by a skilled PES counsellor through their personal assessment of the job seeker. Nonetheless, many saw more holistic profiling tools as an important way to guide job seekers and PES counsellors through the process of building up a more reliable picture of their job and re-employment prospects. They were seen to have a particular value to:

- Rationalise the collection of information, thus freeing up more time for in-depth face-to-face contact, above all when preparatory self-assessment is used;

- Providing the opportunity to link up administrative information through IT systems (bearing in mind the potential restrictions or concerns about the use of data);

- Stimulate both sides to think about (and record) skills and capacities which cannot easily be gauged from an individual's employment of hard qualifications record;

- Provide a more detailed and holistic picture of the job seeker's capacities to prospective employers (to improve matching outcomes);

- Standardise the results of profiling and therefore potentially avoid discrimination of individual job seekers by counsellors (in cases of a poor rapport or cultural or ethnic stereotypes etc);

- Provide guidance for less experienced counsellors and overcome fallacious "learned" assumptions about certain job seekers' potential by very experienced counsellors (e.g. "older workers cannot learn new skills");

- Provide the option for IT tools as part of a modern service which is increasingly demanded by clients (who are also becoming more IT literate).

In order to achieve these positive outcomes, it is important to avoid conflicting incentives within the system and most importantly to bring PES practitioners on board. A number of participants indicated that profiling tools cannot meet a clear purpose in relation to resource allocation if certain services can only be provided after administratively set waiting times, or if certain ALMP measures are only available to certain target groups.

In order to increase buy-in from practitioners, the purpose and added value of such tools and the way in which they can support their core task of assisting job seekers must be clearly demonstrated. This should be done by:

- Involving PES practitioners more in the design of new tools;

- Piloting new tools with PES practitioners;

- Accompanying the introduction of new tools with awareness-raising campaigns demonstrating their value, as well as training on their use;

- Avoiding mixed messages about practitioners' job security and job content with the introduction of e-tools;

- Assuring PES counsellors that such tools do not undermine their autonomy, but simply assist them in their decision making.

To achieve all these goals, the tools being introduced must be sufficiently well developed and robust and have ideally been evaluated and piloted prior to large scale implementation.

3.   THE USE OF PROFILING FOR RESOURCE ALLOCATION

The goal of profiling is to provide a more reliable basis for needs identification of each job seeker in order to shape the allocation of services and of appropriate and proven measures. Recent years of PES practice in many Member States have seen increasing enthusiasm followed by some disillusionment about the use of statistical tools with some difficult but essential lessons to be learnt about the development and implementation of such systems. In the early to mid 2000s, an increasing number of diverse and complex statistical profiling tools were developed to enable an early diagnosis of risk of long-term unemployment and customer segmentation. In some countries, these were linked directly to decision-making about resource allocation, like the frequency and intensity of personal interviewing and specific measures.

The limited number of available evaluations shows that such systems **can be more accurate at predicting the likelihood of long-term unemployment** than the judgment of individual PES counsellors. In some cases, it also showed that allocation to measures based on the assessment of such profiling systems led to better placement outcomes than resource decisions make by PES counsellors.

However, despite these encouraging results from some countries, a number of statistical profiling systems have been adjusted or even abandoned in Europe. While in some cases this has been the result of unsatisfactory outcomes (too many false positives or negatives), it has largely been the result of resistance from PES counsellors against the use of such systems.

In the next sections, we present the main findings on the use of profiling for resource allocation since 2005 as charted in the expert discussion paper (section 3.1), provide examples of current profiling tools and their use (or otherwise) in determining resource allocation and their implementation at Member State level (section 3.2) and summarise the debate on the utility and service implications of such tools for policy makers and practitioners (section 3.3).

3.1. Learning the lessons from the rise and decline of statistical profiling systems: findings from the discussion paper

As a diagnostic tool, statistical profiling tried to identify job seekers' "needs" in terms of risk (e.g. risk of remaining/becoming long-term unemployed), which is related to client characteristics (e.g. gender, age, occupation, work experience etc.). The idea of statistical profiling for risk identification and resource allocation was first developed in Australia and the United States in the 1990s and then also spread more widely in Europe with countries such as Switzerland (outside the EU), Germany, France, the Netherlands and Sweden, for example (see Fretz, M. (2005), Hasluck, C. (2008), Rudolph, H and Konle-Seild, R (2005)).

Experiences with the **accuracy of these statistical profiling tools** with regard to risk identification varied (depending on their design and the quality of input data), but many showed promising degrees of accuracy in predicting the likelihood of long-term unemployment (Finland, Switzerland, USA, Australia; see Coffee Communications (2007), Fröhlich, M et al (2003), O'Leary et al (2008)).

In her discussion paper, Regina Konle-Seidl argues that a good statistical profiling tool should not only take account of hard factors, but also include "soft" factors such as motivation, health and so on, as well as demand-side data (regional labour market information). In addition, accuracy and simplicity are important, as many tools which have been developed in the past have been considered too complex with substantial documentation required, significantly increasing the administrative burden and workload for PES staff (at least in the outset).

What is most striking is the difference between Australia, the US and Europe with regard to the use of statistical profiling systems for resource allocation. While in **Australia and the US profiling** is used as an **automatic determinator of resource allocation** (interventions and measures offered etc), this automatic link between profiling and the PES service offer has never been established in Europe, with PES counsellors retaining a final say over resource allocation. A more recent development is linked to the development of "dynamic profiling" – a system which is linked to planned regular monitoring of job seekers, including their potential re-categorisation, should their likelihood of integration be considered to have changed.

A number of countries have developed **systems to link client profiles to job matching,** including the VDAB in Flanders (see above), but also the German web-based VerBIS tool, which links information on regional labour market opportunities to client profiles.

Of all countries covered in the discussion paper, **Germany and France display the closest link between needs assessment** (statistical profiling combined with case worker judgment) **and resource allocation**, whereas in some other countries there is no link at all. This is often related to administrative rules regarding the offer of different

PES services (including ALMPs) which in some countries set certain timescales/or define certain target groups to whom different measures can be offered. Another important factor currently receiving insufficient attention is the link between statistical profiling and the evaluation of PES services and in particular ALMP instruments for different client groups. Attempts were made to develop a system linking these two key aspects during a pilot in Switzerland, but despite promising results, this system was abandoned.

Lack of take-up of such systems beyond the pilot or initial implementation phases – despite significant development costs - has largely been attributed to the lack of involvement of PES counsellors in the development of such tools, as well as the failure to communicate the purpose and advantages of such systems to front-line staff. A lack of training for staff and an inevitable concern for job-security, but also increased rigidity and lack of autonomy have also been important factors.

3.2. Current developments in the use of profiling for resource allocation: case studies demonstrate the mixed fortunes of statistical profiling systems

Among the few countries to recently develop approaches for statistical profiling are Finland and the Netherlands. The Finnish Ministry of Employment and the Economy introduced a statistical profiling tool in 2007. The tool is integrated in the IT-system used by PES counsellors and produces a risk estimate automatically when an unemployed person registers as a job seeking candidate. The risk estimate is presented to the counsellor as a sliding scale "thermometer" (low to high risk). Counsellors are advised to discuss the estimate with the client. The risk estimate is one factor affecting the segmentation of the clients and in determining appropriate interventions for each client. However, the PES counsellor makes the final decision. Traditionally, counsellors made their decisions based on their own assessment.

Statistical risk profiling in Finland

The Finnish statistical risk profiling tool, introduced in 2007, utilises a large data-set collected by the Ministry of Employment about each unemployed person. The list of variables in the data-set includes mainly administrative data including: unemployment history, age, place of residence, previous occupation, citizenship, education, reason for the termination of previous employment and information about possible disability. The tool uses co-efficients produced through econometric estimations. Each co-efficient captures the marginal effect of each variable to the risk of prolonged unemployment. Each individual client has his or her unique history and personal profile. The tool calculates the overall risk of long-term unemployment based on this personal profile and the estimated co-efficients.

Different econometric specifications have been tested both in Finland and elsewhere. The current Finnish profiling tool belongs to the category of models estimating the risk of prolonged unemployment, not the exact duration of the unemployment period. It uses a logit model to produce the estimates.

The Finnish model has proven very effective at estimating the likelihood of long-term unemployment (over 12 months), with an accuracy of around 90%.

However, the actual impact of the tool has been limited because of low take up by PES counsellors. Based on a survey among PES counsellors conducted as part of the evaluation of the tool:

- Three out of four counsellors do not discuss the model and its predicted risk with the client. 53% said they did not discuss it because they felt it was not useful and 22% did not agree with the model's assessment; and

- 84% of counsellors considered that the tool did not help them to find a position of the job seeker.

Interestingly, the vast majority of clients who where told of their estimated long-term unemployment risk reacted positively, as this provided them with a more realistic perspective on their situation and could act as an incentive to become more pro-active.

The **Dutch** example, presented by representatives of UWV WERKbedrijf demonstrated not only the potential, but also the future requirement of e-tools for profiling and raised important questions about the feasibility of moving quickly from a PES-delivery model dominated by face-to-face contact to one primarily delivered through e-services. With the impending budget reduction of 50% facing the Dutch PES by 2015, the government is keen to expand the use of e-services to change the balance of face-to-face contact to e-service provision from the current 80/20 to 10/90. The Netherlands had been an early innovator in profiling with the development of the so-called Kansmeter, but this model was abandoned in 2007 for a model not based on customer segmentation, but queuing, partly due to concerns that early intervention could undermine individual effort and lead to deadweight effects.

Two key instruments have been developed for profiling: the Work Explorer (*Werkverkenner*), which acts as a predictor of job opportunities based on occupations sought and regional occupational labour market data, and Personal Explorer (*Persoonsverkenner*). It was the latter which was presented in more detail at the conference. This is essentially a tool aimed at predicting the likelihood of re-employment success within 12 months of registering as unemployed. The tool was developed by UWV WERKbedrijf with the research and evaluation support of the University of Groningen. It was developed by initially asking unemployment benefit recipients a series of questions at the start of unemployment and followed this up after a period of 12 months. This started with 150 items related to their skills, job search behaviour, perceptions etc. and was narrowed down to 9 characteristics (18 items) as a result. The box below describes further details of the current pilot phase and the early outcomes of the pilot evaluation.

These findings show that although the Personal Explorer is set to go online as an e-tool by 2012, there are many unanswered questions about whether this can achieve the reduction in face-to-face support aspired to by policy makers without compromising the value of the tool as a reliable predictor of the need for further services and assistance. However, the purpose of the tool, once finalised is to provide a critical, albeit not automatic input into the determination of suitable measures for individual job seekers.

Pilot of e-profiling tool in the Netherlands

As a result of research carried out among unemployment benefit recipients, 9 characteristics were identified as the most reliable predictors of re-employment success:

1. Age (negatively related to re-employment success)

2. Years worked in last job (negatively related to re-employment success)

3. Difficulties in understanding Dutch language (negatively related to re-employment success)

4. Perception of finding work (positively related to re-employment success)

5. Perception of being too ill to work (negatively related to re-employment success)

6. Job search intention (positively related to re-employment success)

7. Job search behaviour (positively related to re-employment success)

8. External variable attribution (negatively related to re-employment success)

9. Work ability (positively related to re-employment success)

The initial results from the pilot phase show that, when used at the beginning of unemployment, measurement of these 9 indicators as part of an electronic assessment tool can act as a reliable indicator of re-employment success.

Indeed, the outcomes of the use of the e-tools strongly correlate with the assessment of the PES counsellor after interviews with the job seeker. It is therefore considered that this can be used as part of e-services to segment job-seekers and help to steer service allocation. However, it was also found that the completion of the Personal Explorer is more accurate when supported with telephone or face-to-face advice and needs to contain more specific questions targeted at certain client groups (older workers, disabled individuals etc). Users found the tool easy and quick to complete.

In **Denmark**, the purpose of the Employability Toolbox, introduced in section 2.1 above, is to segment job seekers into three different "match groups":

- Match group 1 is the group considered ready to take on a job and leave the system within three months. For this group, the path towards a job is usually via a period of on-the-job training.

- Match group 2 defines the group of job seekers "ready for active employment measures". It includes individuals who are not considered to be ready to take on a job within three months, but who are able to participate in ALMPs.

- Match group 3 delimits the group of individuals temporarily on passive support and usually includes individuals on various sickness or disability benefits.

This new model replaces a previous approach of segmenting group seekers into 5 match groups. This was abandoned because too many PES counsellors did not see the significant difference between some of the match groups, leading to a high number of "mis-classifications".

Although the three new match groups are in principle linked with different approaches for intervention and different frequencies of contact, in the Danish system access to ALMP measures is effectively governed by a "queuing approach" with access to certain measures being available after given periods of time in unemployment. Profiling into match groups therefore has no direct impact on resource allocation other than the definition of frequency of interaction with PES staff (which obviously has internal resource implications).

Slovenia's approach was described as one of "dynamic profiling", although it also automatically defines some target groups as being at high risk of long-term unemployment. These groups include disabled individuals, young people, individuals with health problems and those having experienced longer periods of inactivity. Individual counselling and actions plans are offered to those with more intensive needs and higher risks of long-term unemployment.

As indicated above, none of these countries employs "hard profiling" in which profiling outcomes directly lead to decisions about resource allocation. The latter are always mediated through decisions taken by job counsellors.

3.3.   Lessons for future development? Summary of the debate

The experience of Denmark and other countries demonstrated that the context of and decisions about the allocation of ALMPs are often a deciding factor in determining whether profiling can be used as a tool for resource allocation and it was concluded that this can only be done if the rules in this regard are flexible.

Although the models developed in Finland and the Netherlands recently (as well as in other countries in the past) have shown high degrees of reliability in their predictions about the risk of long-term unemployment, it was again emphasised that for statistical profiling to be used, its methodology and underlying data sources need to be very reliable. The experience of the UK emphasised that in countries where expenditure on ALMPs is effectively rather low and a queuing system is employed with regard to the allocation of resources, the reliability of statistical profiling would have to be very high (above 85%) to show any cost benefits. A system which had been tested out in the UK only produced a statistical accuracy rate of 70% and was subsequently abandoned.

It was noted that although profiling is not used as a direct method of resources allocation (for example, on ALMPs), it is often used to determine the frequency of contact required between the job seekers and the PES, and PES counsellors workload, thus ultimately having resource implications.

A number of countries felt that the accuracy of statistical profiling and its positive impact of resource allocation needed to be trialled and evaluated over a sufficiently long period to deliver statistically reliable results. In order to do this, better data would also need to be available on the effectiveness of different PES interventions (including AMLPs) for different client groups. Given the availability and reliable positive outcomes of such an approach it may then be required to "impose" the use of such systems.

This view was, however, not shared by the majority of participants at the Dialogue Conference, who considered that instead the right balance needed to be found between "man and machine" in profiling and determining resulting resource allocation. It was emphasised that face-to-face contact with a counsellor and the integration of the counsellors experienced judgement and invention was a good in itself, particularly for client groups who experienced difficulties with self-confidence and self-motivation.

Again, the need to achieve buy-in from counsellors through their involvement in the development of (statistical) profiling systems and decision-making on resource allocation was highlighted.

4.   CONCLUSIONS

The policy conclusions from the Dialogue Conference can be summarised under the following headings:

- Progress towards more holistic profiling methods;

- Lessons regarding the alignment between labour market policy design and implementation rules;

- The importance of involvement of PES practitioners in the planning, design and piloting of profiling tools;

- The need for longer-term testing and evaluation to determine costs, benefits and reliability of profiling tools.

Progress towards more holistic profiling methods is being made with the development of more sophisticated profiling tools in many countries which serve to capture information relating to work experience and formal qualifications, as well as generic and soft skills. A more active exchange of information on such tools at EU level (as well as beyond) would be valuable to exploit potential learning. The experience of the private sector shows that tools developed among such providers are being successfully adapted and used in different countries.

The tools being developed must clearly demonstrate added value, for example, in standardising profiling processes, assisting counsellors, making outcomes more reliable and reducing the potential for discrimination.

While it is valuable to be able to make such tools accessible online as self-help tools, the current experience clearly shows that the information generated with such instruments is more reliable when instructions are provided by PES counsellors. Policy makers therefore need to be careful when considering the use of such tools, at least partly for cost-efficiency purposes, as their use may indeed have implications requiring counsellors to (initially) spend more time with individual job seekers to gather this holistic information – although this may lead to money and time savings in the long run.

The trialling of such self-assessment tools with job seekers themselves should also be considered imperative as they need to be proven to be easy to use and understand and judged to be helpful from a jobseekers perspective. In this regard, it is important to note that self-help tools have been credited with supporting greater self-awareness, realistic self-assessment as part of career management skills and with providing an enabling approach for job seekers.

The Dialogue Conference provided clear lessons with regard to the necessary alignment between the regulation and planning of active labour market policy intervention and implementation systems in the PES (as influenced by profiling).

Regulations governing access to different PES services, including active labour market policy must be sufficiently flexible to allow for profiling outcomes to have an impact on resource allocation. While it appears that statistical "hard" profiling leading to direct resource allocation as practiced in the US or Australia is largely unacceptable in the EU, it appears unsustainable to continue to trial such approaches – which are costly in their development phase – without achieving positive outcomes with regard to practitioner acceptance and take-up and resulting in meaningful impact on effective resource allocation.

In order to achieve this, it appears imperative that *PES practitioners be more closely involved* in the development, design, piloting and dissemination phase of such tools – a practice which currently appears to be largely lacking. *Better training* is also needed to increase buy-in and to optimise the outcomes of profiling tools (particularly to get reliable information on generic and soft skills).

Similarly, the importance of developing reliable tools which can show positive impact on placement outcomes in the longer term was emphasised. As well as requiring a sophisticated methodology and reliable underlying data, it is important that a better link can be made between the segmentation of job seekers and measures and interventions proven to work for different types of clients. *Stronger efforts in the field of policy evaluation* and the assessment of process data should therefore be considered as the necessary other side of the coin in developing integrated approaches.

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