## Mutual Learning Programme Database of National Labour Market Practices Croatia - Statistically Assisted Profiling (StAP)

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

Source of national practice	Ministry of Labour and Pension System
Title of the policy or measure (Original language)	Statistiki potpomognuto profiliranje
Title of the policy or measure (English)	Statistically Assisted Profiling (StAP)
Country	Croatia
Name of the responsible body	Croatian Employment Service - Hrvatski zavod za zapošljavanje (HZZ)
Geographical scope of the responsible body	National
Name(s) of other organisations involved (partners/sub-contractors)	External consultants
Start year of implementation	2015
End year of implementation	Ongoing

EU policy relevance	Key to this approach is a model of personal service, i.e. profiling clients according to their employability, based on statistical predictive model and focused counselling. Resonating with Employment Guideline 7 (Enhancing the functioning of labour markets), in particular in the area of tailoring services and interplay of active labour market policy measures (ALMPs) with "passive" measures, the overall emphasis was to move to an inverted pyramid model. The focus is put on self-help (through strengthening career management and life-long learning and career support) for the people closer to the labour market and to individual case management services focused on those hardest to employ and who are furthest away from the labour market. StAP is a tool to segment clients into specific groups who need to access different levels of services.  At the beginning of the project (2015) the number of registered unemployed was 285,906 out of which 141,906 or 49.5% were long-term unemployed. At the same time, the workload was on average 700 unemployed per counsellor. Among the newly registered unemployed in 2014, disparities in re-employment rates within a year of registration were evident for different educational attainment levels - no secondary school education (40%), secondary school education (56%) and tertiary education (72%).
National labour market context	The situation on the Croatian labour market has continued to improve. According to the latest available Labour Force Survey data published by Eurostat, the employment rate of the population aged 20 to 64 increased from 62.9% in the third quarter of 2016 to 65.6% in the third quarter of 2017. Over the same period, the unemployment rate decreased from 10.9% to 9.0%, and the share of long-term unemployed (12 months or more) in the total number of the unemployed fell from 49.7% to 42.9%. Based on those data, it can be calculated that the long-term unemployment rate, i.e. the share of the long-term unemployed in active population, declined from 5.4% to 3.9%. It should be mentioned, for the sake of comparison, that in the EU-28 as a whole, the share of the long-term unemployed in the total number of the unemployed in the third quarter of 2017 stood at 44.7% and the long-term unemployment rate amounted to 3.3%. Thus, the long-term unemployment rate in Croatia was slightly higher than the EU-28 average, while the share of the long-term unemployed in the total number of the unemployed was lower than the EU-28 average. Currently (February 2018) out of 193,080 registered unemployed people, 78,251 or 40.5% are long-term unemployed. Among age groups, the largest share of long-term unemployed is found among people over 50 years - 39,285 or 50.6% of the long-term unemployed are people over 50 years. By gender, 57.5% of long-term unemployed are women.
Policy area	Labour market functioning and segmentation,Labour market participation

Specific policy or labour market problem being addressed	The persistently high long-term unemployment rate and the comparatively high caseloads that employment counsellors are faced with, pose challenges for the efficient provision of individual services for jobseekers. StAP is intended to help employment counsellors by enabling them to segment jobseekers into groups based on their unemployment risk and provide them with the most suitable support as early as possible.
Aims and objectives of the policy or measure	Identifying clients' risk of not becoming employed within a year by using an IT-tool, the practice aims to achieve the following:  • provide needs-based services to jobseekers;  • facilitate the work of employment counsellors in managing the inflow of cases; and  • efficiently allocate resources over a longer time period.
Main activities/actions underpinning the policy or measure	A statistical predictive model of employment within 12 months from entry to the unemployed register (for newly registered) was designed using 970,000 entries in 2012-14, tracked until the end of 2015. Dropout from the register within 12 months was also predicted and implemented into counsellors' IT support application.  A number of job-seeker attributes are used in prediction of employment including indicators for human capital (education and experience), the history of employment and unemployment, affiliation to vulnerable groups, economic sector (occupation and industry of previous employment, area of education), and monthly labour supply-demand ratio (education-level specific).  Client segmentation is based on estimating the probability of employment within 12 months following the registration and has four risk group outcomes:  • high probability of employment;  • no specific indication (medium risk);  • reduced likelihood of employment.  Low employability groups are recommended to be given more frequent and more in-depth counselling, as well as priority for other activities (including ALMMs), while highly employable group is recommended to be nudged towards online tools. Low employability groups, who tend to have above-average predicted drop-out probability as well should receive more information and advice on their rights and obligations.  Piloting of the model took place from March to September 2017 in two regional offices. The rollout in all offices is gradual and the implementation of the model has started in December 2017. So far, StAP model is implemented in 13 out of 22 regional offices. By June 2018, StAP will be implemented in all regional offices.
Geographical scope of policy or measure	Regional
Target groups	Other

Outputs and outcomes of the policy or measure	Initially, 64 counsellors in the first two regional pilot offices used StAP. At the end of the piloting phase, a total of 84 counsellors used StAP (the final group of counsellors started in August 2017).  During the period December 2017 to March 2018 an additional 10 offices started using StAP. By February 2018, in total, 285 counsellors (around 60% of all counsellors) were trained and had started to apply StAP profiling. Another expansion will happen in May 2018 when an additional five regional offices will start implementing StAP profiling.  Outcomes that have been identified so far include the following:  • Counsellors' focus is directed to clients needing more support.  • Better distribution of counsellors' time.
Management and implementation arrangements	The project was financed by a World Bank loan. It was one of five components of the "Social Protection System Modernisation Project". The Ministry for Demography, Family, Youth and Social Policy was the holder of the loan and as such, the administrating of tenders, contracting and financing was under their jurisdiction.  Croatian Employment Service - Hrvatski zavod za zapošljavanje (HZZ) and the Ministry worked closely in setting the terms of reference for the project. HZZ was in charge for selection of the service providers, consultants, etc. In total five tenders for the five parts of the work activation component took place. All but one was finished in the predicted time. The external impact evaluation will take place in spring 2018. During the project, the consultants and other providers worked closely with the HZZ staff in providing the best solutions. For the roll-out (after the project phase) HZZ, mainly Mediation Department and IT Department of Central office, are in charge for the staff training, upgrading the model, implementation on the regional/local level, overall monitoring and evaluation. Monitoring of the process/staff is under the authority of the regional/local offices.  Central office will publish a call for proposals for the external impact evaluation.
Key challenges	<ul> <li>The main challenges in the management and implementation of the project are as follows:</li> <li>high caseload of employment counsellors in provision of efficient services for jobseekers;</li> <li>focus on the training of the counsellors and changing their attitudes;</li> <li>close monitoring and supervision; and</li> <li>changes in regulation were needed, i.e. in the Act on employment mediation and unemployment entitlements and the Ordinance on active job search (which derives from the Act)</li> </ul>

Key conditions for success	<ul> <li>Factors contributing to success and lessons learnt include the following: <ul> <li>Focusing on the training of counsellors and changing their attitudes.</li> <li>Close monitoring and supervision is essential.</li> <li>Involvement of PES counsellors in designing the IT-support application (they know what is most useful to them).</li> <li>Close and continuous cooperation of all partners in the project.</li> </ul> </li> </ul>
Method of assessment	Internal monitoring,External evaluation
Type of assessment	Qualitative and quantitative assessment
Duration and frequency of the assessment	Internal monitoring was constant throughout the piloting phase, consisting of site visits, guidance satisfaction questionnaires and periodical database reports on StAP usage. Clients' and counsellors' views on the old ("standard") procedure and StAP were surveyed once.  External impact evaluation will be conducted at the end of the project phase.

The causal impact will be evaluated using a pre-meditated "stepped wedge" approach with clustered randomisation (because of the latter, there is a limited pilot period). We have used internal monitoring - on-line questionnaires, monitoring site visits, satisfaction survey for both clients and counsellors, specifically created StAP reports.

The external impact evaluation is planned for the spring 2018 due to necessity that 6 months pass since the last pilot jobseeker enters the register, in order for labour-market outcomes to be evaluated. In mid-October the last person from the pilot period was treated.

Among evaluation and monitoring results produced so far, database reports have shown that counsellors tend to reevaluate jobseekers profile (relative to the recommended) particularly from the extremely low probability groups towards higher employability group – but so far not to the detriment of the latter's employment statistics. This can be interpreted as a welcome counsellors' improvement of imperfect statistical recommendation. Overall, about 60% participating counsellors said they agreed with StAP segmentation in 75% and more cases.

Further information on the assessment

Qualitative assessment has shown that counsellors' attitude towards StAP and its usefulness depends heavily on the casefiles, where clients are unequally distributed according to their employability, even among casefiles of general job-mediation counsellors (not only counsellors specialized for certain target-groups). This had consequences on the counsellor's ability to follow on the recommended activities (meeting frequency and duration).

As for the jobseekers' satisfaction and their experience with the process, a survey has shown that undergoing experimental counselling had a weakly significant positive effect on jobseekers' expectations to find work within 3 months. Controlling for demography, variation between counsellors and life satisfaction, job-seekers undergoing experimental procedure were for about 6% more likely to assess their job-finding chances as 50% or higher, relative to the job-seekers that went through the standard procedure. Using the same controls, it was also shown that among job-seekers who went through StAP, those categorized as 'highly employable' were for about 7 % less likely to report being informed on ALMMs during counselling in comparison with job-seekers that went through the standard procedure and who belonged to 'highly employable' group by their employment probability. This result is in line with the recommendation to better allocate ALMMs, though there were no differences in this regard between the experimental and the control group for other profiles (reduced and very low employment probability).

Links to the website, background information and assessment material	Information on the Project can be found on the links:  www.hzz.hr  www.mspm.hr  The web app of statistical model will be available online in April 2018 on the following website:  burzarada.hzz.hr
Contact details	Kristina Fleischer Croatian Employment Service - Hrvatski zavod za zapošljavanje (HZZ) Radnika cesta 1, 10000 Zagreb Phone: +385 (1) 6126 022 email: Kristina.Fleischer@hzz.hr CES OFC website
Keywords	Long term-unemployment, Public employment services, access to labour market, employment counselling, job-seekers, profiling, early intervention