

THE FUTURE OF LABOR MARKET PROGRAMS AND SERVICES IN  
MOLDOVA

Functional Review of Public Employment Service`s Systems

## Acronyms

AIS	Automated Information System
ALMP	Active Labor Market Program
GoM	Government of the Republic of Moldova
GRM	Grievance Redress Mechanism
IAP	Individual Action Plan
ILO	International Labor Organization
IT	Information Technology
LM	Labor Market
LMFS	Labor Market Forecast Survey
LMI	Labor Market Information
LMO	Labor Market Observatory
MIS	Management Information System
MoE	Ministry of Education
MoF	Ministry of Finance
MoHLSP	Ministry of Health, Labor and Social Protection
NEA ( <i>ANOFM</i> )	National Employment Agency ( <i>Agenția Națională Pentru Ocuparea Forței de Muncă</i> )
NSIA ( <i>CNAS</i> )	National Social Insurance Agency ( <i>CNAS, Casa Națională de Asigurări Sociale</i> )
OM	Operational Manual
PES	Public Employment Service
PwDs	People with Disabilities
TA	Territorial Agency
TVET	Technical and Vocational Education and Training
TS	Territorial Subdivision
UI	User Interface
VLM	Virtual Labor Market

## Table of Contents

Table of Contents.....	3
<b>1</b> Background and Objectives .....	6
<b>2</b> Capacity and Institutional Setup.....	9
2.1 Major stakeholders.....	9
2.1.1 The Ministry of Health, Labor and Social Protection (MoHLSP) .....	10
2.1.2 The National Employment Agency (NEA) and Territorial Subdivisions (TS).....	10
2.2 Responsibilities and functions within the employment agency.....	13
2.2.1 Management: decision making at the organizational level .....	14
2.2.2 Internal support .....	15
2.2.3 Servicing beneficiaries/jobseekers.....	21
<b>3</b> Labour market services and the delivery chain .....	23
3.1 How do labor market programs delivery chains work? .....	23
3.2 The delivery chain in Moldova .....	25
3.2.1 Assess .....	25
3.2.2 Decide.....	29
3.2.3 Implement.....	32
3.2.4 Exiting the system .....	36
3.3 Overall recommendations to improve labor market programs and the delivery chain .....	39
<b>4</b> Labor Market Programs Information Management .....	41
4.1 What does an MIS look like? .....	41
4.2 The NEA IT Infrastructure .....	43
4.2.1 Operational MIS (Jobless Platform) .....	44
4.2.2 Accounting and Financial Management MIS.....	46
4.2.3 The Portal .....	46
4.2.4 The Angajat Portal.....	47
4.2.5 Moldova’s Migration Portal - “Recordkeeping of Labor Migration” (RLM) Automated Information System (AIS) .....	48
4.2.6 The Labor Market Forecast Survey Software - Labor Market Forecast (LMF) AIS.....	48
4.2.7 Hosting Infrastructure of the NEA.....	49
4.3 Jobless Platform assessment.....	50
<b>5</b> Good Practices and International Experience.....	52
5.1 Operational Models.....	52

5.1.1	Client-centered approach .....	52
5.1.2	Individualization of support and service prioritization .....	53
5.1.3	One-stop center (integrated case-management model) .....	54
5.1.4	Specialization of caseworkers/PES for certain target groups .....	56
5.1.5	Enhanced contracting out of services to private sector and NGOs .....	56
5.1.6	Regular monitoring and evaluation.....	56
5.1.7	Engaging employers .....	58
5.2	Information Systems.....	59
5.2.1	The Greek OAED.....	59
5.2.2	The German VLM Platform .....	61
5.2.3	Matching mechanisms .....	63
<b>6</b>	<b>Conclusions .....</b>	<b>65</b>
6.1	A client-centered operational model .....	65
6.2	A revised MIS system.....	67
6.2.1	Support the workload of TS caseworkers when servicing jobseekers .....	68
6.2.2	Provide an online platform with information for all clients (jobseekers, employers and service providers).....	69
6.2.3	Provide an online entry point for all clients (jobseekers, employers and service providers) 70	
6.2.4	Facilitate administrative and planning processes (NEA and TS) .....	71
<b>7</b>	<b>References .....</b>	<b>73</b>
Annex I: Hosting Options and Available Services.....		74
The NEA Data Center .....		74
MCloud.....		78
Software as a Service - SaaS.....		79
Platform as a Service – PaaS .....		79
Infrastructure as a Service – IaaS.....		80

## List of Figures

Figure 1: Interaction between administrations, service providers and beneficiaries .....	9
Figure 2: Organizational chart of the National Employment Agency (NEA) .....	13
Figure 3: Labor market programs delivery chain .....	24
Figure 4: Set of services to be offered to each profile of jobseeker (2018) .....	30
Figure 5: Business process from the client's perspective .....	<b>Error! Bookmark not defined.</b>
Figure 6: A view of the client-centered approach. ....	53
Figure 7: Services provided to all the labor market actors by the MIS.....	68

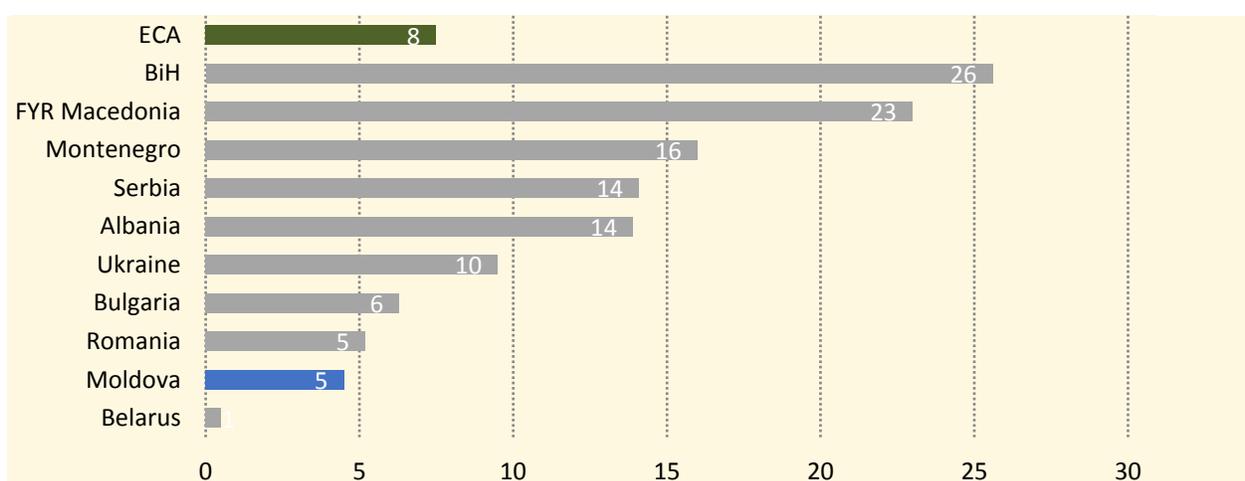
## List of Tables

Table 1: Planning and introduction of new labor market measures .....	14
Table 2: Budget allocation .....	15
Table 3: Needs for ALMPs .....	16
Table 4: Internal training.....	17
Table 5: Monitoring and evaluation (M&E) .....	18
Table 6: Service providers .....	19
Table 7: Information Technology (IT).....	21
Table 8: Servicing jobseekers .....	22
Table 9: Jobless Platform technical specifications .....	45
Table 10: Information systems interoperating with Jobless Platform.....	45
Table 11: NEA Portal technical specifications .....	46
Table 12: Angajat Portal technical specifications .....	47
Table 5: RLM AIM technical specifications .....	48
Table 14: LMF AIS technical specifications .....	49
Table 15: The NEA Data Center Information Systems and Infrastructure .....	74

## 1 Background and Objectives<sup>1</sup>

**Although Moldova has one of the second lowest unemployment rate in the region, differences in the incidence of unemployment exist based on age, location or gender.** For the past two decades, and with the exception of a small bump in 2009-11 corresponding to the global economic and financial crisis, Moldova has experienced a continuous reduction in unemployment rates. With unemployment rates below 5 percent of the working-age population, the country is experiencing one of the lowest unemployment rates in the region. However, young Moldovans – aged 15 to 29 – register unemployment rates twice as high as prime-age individuals – 30 to 64 years old. Similarly, urban dwellers and male workers are more likely to be unemployed than, respectively, rural and female workers.

Figure 1: Unemployment rates (%) for select neighboring countries, November 2017



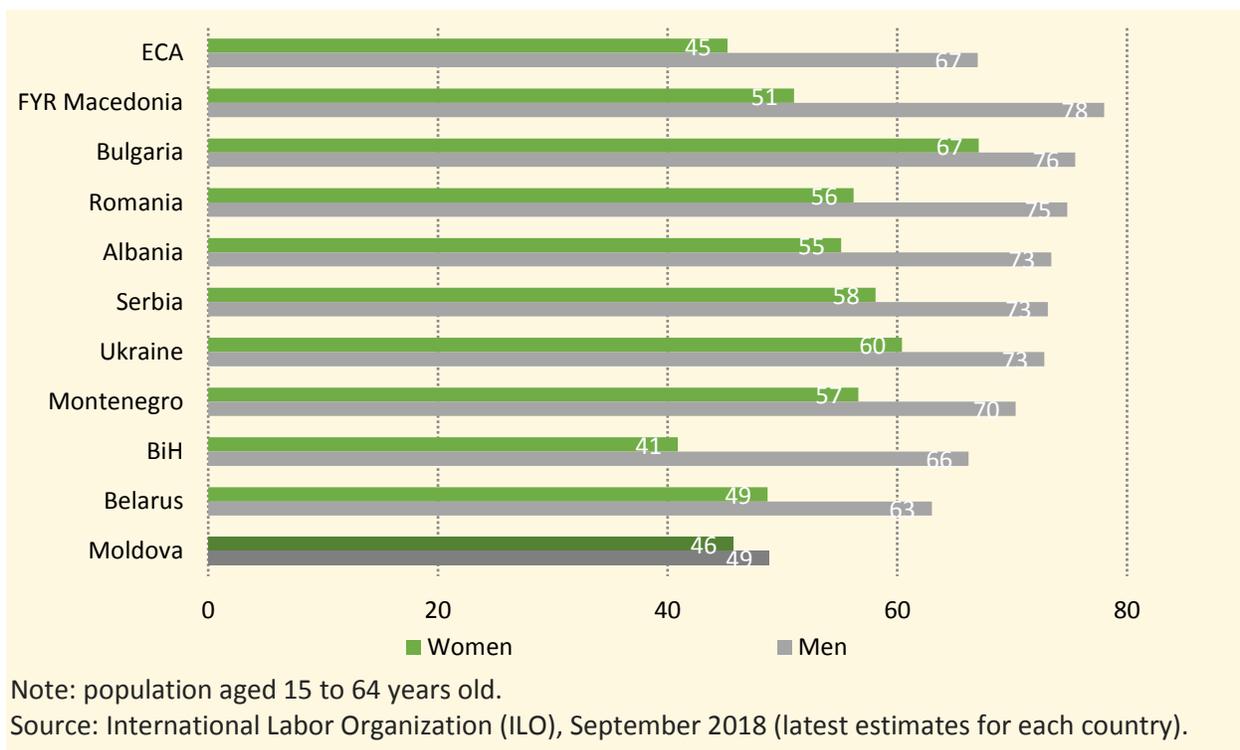
Note: population aged 15 to 64 years old.

Source: International Labor Organization (ILO), September 2018 (latest estimates as of November 2017).

**Moreover, the low unemployment rates coexist with the lowest labor force participation rate in the region, while many of the available jobs appear to be of low quality.** Moldova is confronted with the lowest labor force participation rate in Eastern Europe and Central Asia (ECA), and especially so among men. These figures may be an indication that a large share of the population is seasonally employed abroad. In addition, the quality of jobs appears to have worsened over time. Informal employment and seasonality represent a large share of the Moldovan economy today, while real income has eroded, and returns to education have plummeted.

<sup>1</sup> This technical report has been prepared by Celine Ferre and Giannis Tzimas, Consultants, GSP03, under the Moldova: R14 RSR: Strengthening the Delivery of Public Employment Services task. The guidance has been provided by Yuliya Smolyar, Senior Social Protection Specialist, GSP03 and Zlatan Sabic, Senior Operations Officer, GHN03. The team wishes to recognize the generous award of a grant from the World Bank's Rapid Social Response (RSR) Trust Fund Program, which is supported by the Russian Federation, United Kingdom, Norway, Sweden, Australia, and Denmark, without which this work would not have been possible.

Figure 2: Labor force participation rates (%) for select neighboring countries, latest years



**Higher unemployment and inactivity rates at the turn of the century led the Government of the Republic of Moldova (GoM) to prioritize these challenges.** The topic of unemployment took the center stage of all the main national and sectoral strategies including: The Economic Growth and Poverty Reduction Strategy (2004-2006), the National Development Strategy (2008-2011), the Strategy "Moldova 2020", the National Strategy on Employment Policies (2007-2015), the "Moldovan Village" strategy, and the National Employment Strategy and Matrix for Action (2017-2021). In 2018 the law on *Employment support and insurance against unemployment* was also passed.

**The organizational structure of the labor market system is undergoing significant reforms.** Public administration reforms prompted organizational changes in the structure, roles and responsibilities of the different stakeholders involved in the labor market system, including the Ministry of Health, Labor and Social Protection (MoHLSP), the National Employment Agency (NEA), the Territorial Subdivisions (TS), the jobseekers, the employers and the service providers (training providers, the information technology or IT maintenance provider, the bank delivering payments, other institutions linked electronically, etc.).

**In addition, new active labor market policies were introduced.** The law on *Employment support and insurance against unemployment* introduced a new portfolio of active labor market programs (ALMPs), namely vocational training, on-the-job training, traineeships, employment subsidies, self-employment grant, local initiatives grant, mobility grant, and vocational rehabilitation and work-place adaptation for people with disabilities (PwDs).

**In this context, the World Bank was requested to provide technical assistance to help NEA to improve the efficiency of its new business model.** The objective was to enable the agency to address more efficiently the needs of the jobseekers, in the wake of the organizational reform and the deployment of many new ALMPs. This task is particularly critical given that the existing management information system (MIS) has reached its maximum capacity and will need drastic changes to adapt to the new requirements brought about by the reform. It is also especially important given the limited availability of labor market information (LMI) in Moldova leading to suboptimal education and training decisions - and especially so among disadvantaged students who experience higher information deficits.

**This report aims to provide a quick institutional and legal review to map out the delivery chain for labor market services/programs administered by the NEA.** <sup>2</sup>The objective of this document is to provide an assessment of the NEA delivery systems - institutional responsibilities, underlying business processes - and information management. This exercise ultimately aims to identify and present recommendations for the development of a new NEA operational model, as well as the main functional requirements for a new management information system (NEA MIS) that would enhance the operational efficiency of the agency along the PES delivery chain.

---

<sup>2</sup> A companion report will tackle labor market information (LMI) gaps and provide recommendations on addressing data needs through the Labor Market Observatory (LMO) set up within NEA. It will provide a review and revision of the LMO operational model and LMI services. The review and proposed revisions will focus on functional requirements for LMO information services that will feed data from various sources (administrative data from NEA MIS, tracer and other studies done in education sector, household and firm surveys, job vacancy data, tax administration data, etc.) and provide digested information to the end-users.

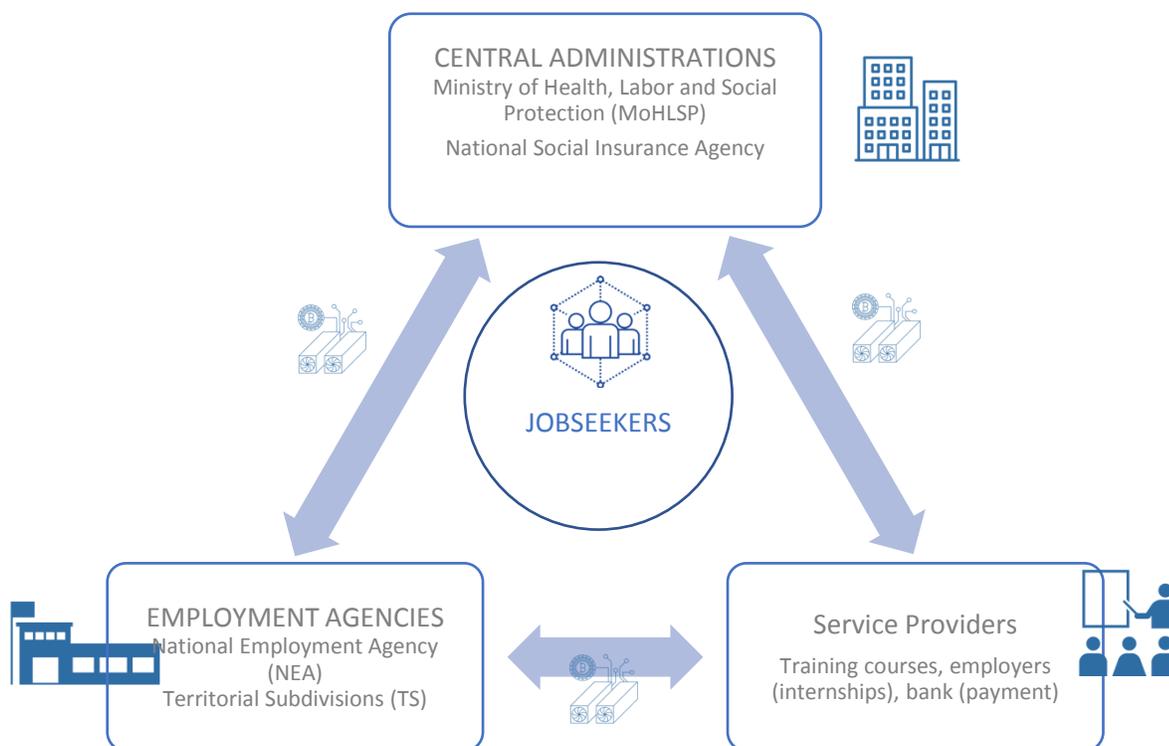
## 2 Capacity and Institutional Setup

**This chapter provides an overview of the institutional setup of the Moldovan labor market system.** For that purpose, the major stakeholders involved, and their main functions are first described in section 2.1; secondly, section 2.2 concentrates on the Employment Agency and its capacity to fulfill its main responsibilities including management, internal support, and servicing beneficiaries. Along the different sections, recommendations for the improvement of the institutional set-up and capacity of specific institutions are provided.

### 2.1 Major stakeholders

**Central administrations, employment agencies, and service providers interact all along the delivery chain of labor market programs targeted at jobseekers (see Figure 3).** Two major institutional stakeholders are involved in the delivery of labor market programs: The Ministry of Health, Labor and Social Protection (MoHLSP), and the employment agency (through the National Employment Agency or NEA, and its 35 Territorial Subdivisions or TS). In addition to these two key institutional players, other central ministries and national agencies may be involved to a certain extent (Ministry of Education, National Social Insurance Agency, etc.), while core services are outsourced (trainings, payments, etc.). Information Technology (IT) intermediates as the bridge between all of these actors.

Figure 3: Interaction between administrations, service providers and beneficiaries



### 2.1.1 The Ministry of Health, Labor and Social Protection (MoHLSP)

**The Ministry of Health, Labor and Social Protection (MoHLSP) develops policies and strategies in the field of employment.** MoHLSP is responsible for coordinating the National Employment Strategy 2017-2021. In collaboration with other line ministries and relevant institutions, it develops policies and strategies in the field of employment, coordinates the development of the Annual Action Plan, monitoring its implementation, drafts Annual Implementation and Evaluation Reports, submits them to the National Commission for Consultation and Collective Bargaining for validation, and latter to the State Chancellery for information. In addition, the Ministry is in charge of regulating labor migration through a dedicated department: The Directorate for Occupational and Migration Policy.

**With the new reform, MoHLSP will take on more complex and comprehensive data analysis and forecasts, for which it is not necessarily prepared.** The reform has led the Ministry to undertake for instance the elaboration of goals and targets including budget, number of beneficiaries per program, forecast of training by occupation/field, etc. However, the limited availability of data (the Labor Market Forecast Survey or LMFS was not updated since 2017, for instance), and the high staff turnover rates that left some units without qualified staff, may hinder the development of effective policies and goals in this area.

#### RECOMMENDATIONS

- **Promote tools that can help with setting goals and targets.** These would include, but not be limited to, tracking of number of participants in different ALMPs over time, number/share of jobseekers in each profile (low-medium-high), especially since this task was carried out by NEA until 2018;
- **Institutional set-up.** Deepen collaboration with other public institutions (Ministry of Education, Ministry of Finance, etc.) and increase the coordinating role of MoHLSP.

See examples of best practice in *Section 5.1.2 Individualization of support and service prioritization* and *Section 5.1.3 One-stop center (integrated case-management model)*.

### 2.1.2 The National Employment Agency (NEA) and Territorial Subdivisions (TS)

**The portfolio of the National Employment Agency (NEA) will drastically increase with the reform.** Until 2019 the active measures implemented by the NEA included vocational training, public works programs, and the mobility grant; with the new reform, however, the agency will be in charge of 9 different programs including: vocational and on-the-job training, traineeships, employment subsidies, self-employment grant, local initiatives grant, mobility grant, and vocational rehabilitation and work-place adaptation for people with disabilities (PwDs).<sup>3</sup>

---

<sup>3</sup> Two ALMPs will be carried out with the reform: vocational training and mobility grant. Public works programs will be discontinued, as the social assistance program (*Ajutor social*) will require compulsory participation of beneficiaries in community tasks.

**With the new reform, NEA will also have to take on more complex tasks that were before delegated to territorial and regional agencies.** With the new reform, NEA will oversee 35 Territorial Subdivisions (TS)<sup>4</sup> of 4 to 10 staff. Many of the tasks and responsibilities will be centralized, with NEA being responsible for setting performance targets for all TS staff, identifying training needs, and organizing tenders for service providers. The TS in turn will be responsible for delivering the best set of programs and services to jobseekers and interacting with employers and service providers. However, they will no longer be in charge of identifying training needs (previously the responsibility of the 5 regional agencies), or of selecting the training providers. In addition, they will need to monitor all service providers located in their catchment area monthly.

**The average salaries of civil servants are low, and the public service remains structurally weak due to staff moving to the private sector.** The problem of retaining graduates is especially acute because of low pay, frustration about career opportunities, and a work environment that discourages initiative. Staff turnover is estimated at around 20 per cent annually, but this problem is particularly dire in larger towns where there are more private sector opportunities; in Chisinau, for example, half of the staff at the beginning of 2017 was newly recruited.

#### RECOMMENDATIONS

- **Promote tools that can help with setting goals and targets.** These would include, but not be limited to, estimating the types of trainings to offer per region/TS.
- **Subcontracting of services.** Consider subcontracting some of the new tasks for which NEA does not have the capacity.
- **Reinforce training.** Reinforce training materials for all the services and programs targeting jobseekers.
- **Strengthen the Labor Market Observatory.** Reinforce the capacity of the Labor Market Observatory (LMO).

See examples of best practice in *Section 5.1.4 Specialization of caseworkers/PES for certain target groups* and *Section 5.1.5 Enhanced contracting out of services to private sector and NGOs*.

**The organizational structure of NEA and its link to the Territorial Subdivisions includes very different units, as depicted in Figure 4.** The different tasks, responsibilities, and functions of the different departments presented in Figure 4 are discussed in more details in Section 2.2. The numbers displayed in parenthesis are the number of staffs allocated to each division or department. It must be noted that the total number of staffs will be 250, down from 335 before the reform: 50 people will be working in the national agency, while 200 will be working in the different TS.

- *Tripartite Council:* The council comprises representatives of the government, employers, and trade unions. It plays an advisory role and approves the yearly workplan of NEA.

---

<sup>4</sup> Formerly Territorial Agencies (TAs).

- *Budget planning, accounting and payment division:* The division is involved in budget planning, and in defining how budget is disbursed. This division is not connected to Jobless.<sup>5</sup> One of the issues faced by this division is that they have information about the budget allocated to each TS, but not real time information about how much of that budget is actually being disbursed by the TS.
- *Information technology (IT) division:* The division has four employees<sup>6</sup> and manages all the IT infrastructure of the NEA, *Jobless*, *Angajat*,<sup>7</sup> and the links with other systems of the government (through MCloud<sup>8</sup> and M-connect). Some of the most important responsibilities of the division are: To ensure the proper and continuous functioning of the organization's information systems and IT infrastructure, both at the central and territorial levels;<sup>9</sup> to facilitate the interoperability of the organization's IT systems and services with the state electronic services (i.e. e-Gov); to ensure the advancement of the IT platform that manages the information generated by the Agency (Jobless Platform); to accommodate the payment process related to the available ALMPs; and to facilitate the organization's procurement processes. With the new reform, there will be one person responsible for all public procurement within the IT department.
- *Human resource division:* The division oversees staff. It organizes three to four seminars per year on specific topics (return migration, human trafficking and so on). In 2016, 85 per cent of all in-service personnel participated in these seminars. The training on the technical competencies of public employment services are mainly organized by international cooperation projects.
- *Legal service:* The service is in charge of the elaboration of legislation linked to NEA activities. A disciplinary committee exists in case of internal dispute. It also provides legal assistance to the employees of NEA for ALMPs, public procurement process, development and monitoring.
- *Internal audit:* It develops the internal audit chart.
- *Call and communication center:* The center will be a help desk, in charge of communicating the work of NEA - publications for the population at large and all other stakeholders (employers, other institutions, etc.), information campaigns through media, website, and development of materials.
- *Labor Market Observatory (LMO):* The Observatory is responsible for the analytical work on the labor market, including the yearly publication of the Labor Market Forecast Survey (LMFS) and the Occupational Barometer.
- *Employment policy and implementation division:* The division publishes monthly and quarterly reports on the number of registered unemployed, registered vacancies, the number of participants in each program, and the number of successful exits (jobseekers who were hired through NEA). It also drafts methodology, conducts training, and checks that processes are followed. In 2018 the division conducted a skill needs assessment for the first time.
- *Migration division:* The division ensures the implementation of policy documents on labor force migration, including the policy on reintegration of returnees and on foreign citizens. It also

---

<sup>5</sup> Jobless platform is the MIS supporting NEA's core business processes related to the delivery of services to the jobseekers and the employers.

<sup>6</sup> There is also one vacant position.

<sup>7</sup> Angajat enables employers to post job vacancies and jobseekers to perform job searches.

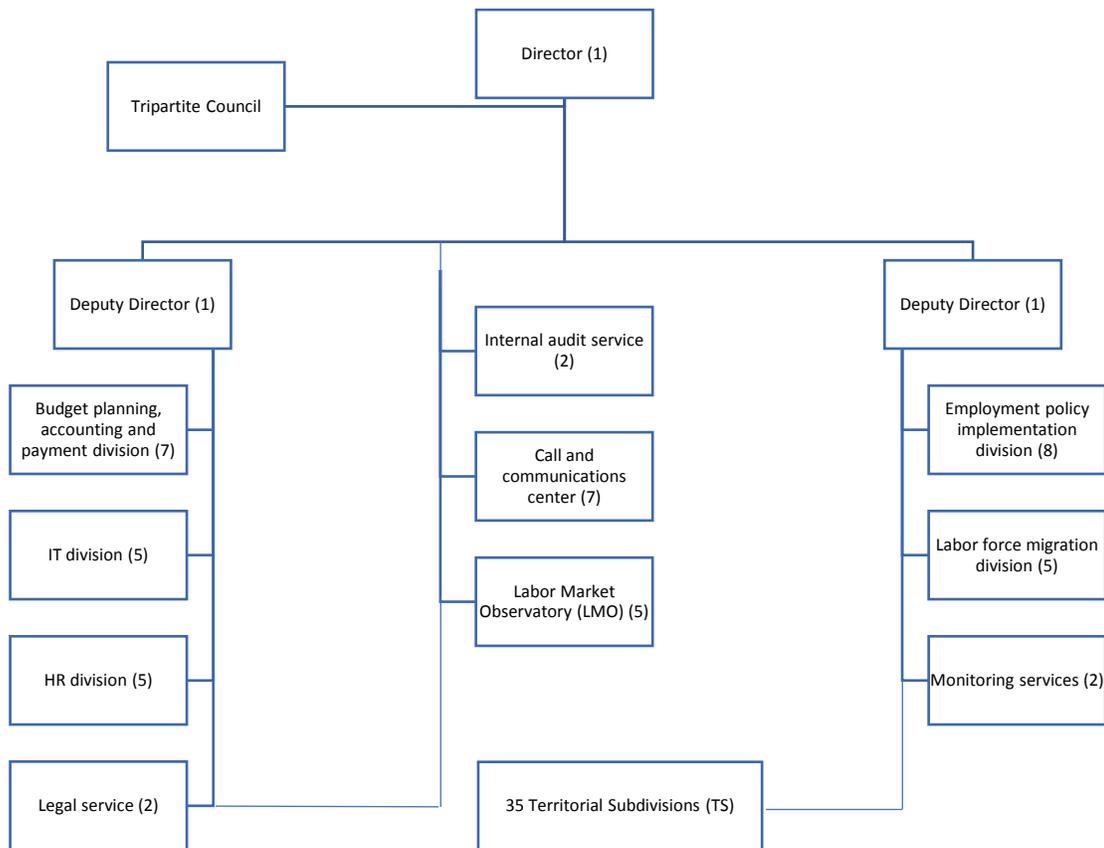
<sup>8</sup> <https://mcloud.gov.md/en/content/about-mcloud>

<sup>9</sup> The division provides daily email support for all the users of the organization through a system called Service Disk.

ensures the employment of Moldovans abroad - Not in Jobless, but in a separate system for foreigners. For these, the migration division links with private recruiting agencies. The unit also drafts information notes and statistics on employment abroad and on the reintegration of Moldovan citizens.

- *M&E service*: The service is in charge of the monitoring of ALMPs, evaluating the impact of ALMPs, the continuous analysis of jobseekers, vacancies, and the unemployed. It also monitors the implementation of targets set for the NEA and TS, and drafts the NEA yearly activity report (with the targets established by MoHLSP).

Figure 4: Organizational chart of the National Employment Agency (NEA)



## 2.2 Responsibilities and functions within the employment agency

**The employment agency carries out three major tasks.** First, it plans the implementation of labor market programs and secures budget allocation. Second, the employment agency carries out internal functions that are necessary for planning and implementing labor market programs (assessing skills needs, monitoring programs, selection of service providers, payments). Finally, and most importantly, the employment agency's core role is to service jobseekers (registration, profiling, individual action plan, provision of labor market programs and services). These three major functions, and the departments responsible for carrying out these responsibilities, are discussed in further detail below.

### 2.2.1 Management: decision making at the organizational level

- Planning and the new active labor market policies

**Planning is centrally done by MoHLSP and NEA.** MoHLSP has more of a policy making and budget allocation role, while NEA is responsible for the organization and management of the delivery of labor market programs and services. Until now performance indicators were set locally by the head of each TA (indicators, targets, and evaluation), while the targets for the head of each TA were set by NEA. With the new reform, however, the targets will be set centrally by MoHLSP (for both heads and all staff of TS).

**As an example, the new set of nine active labor market programs (ALMPs) was planned centrally by MoHLSP.** Two programs were already implemented by NEA prior to the reform (vocational training, mobility grant), one program was ended (public works), and seven additional measures were added: On-the-job training, internships, wage subsidies, local initiatives, self-employment, and two measures for people with disabilities. MoHLSP and NEA drafted a document containing 11 procedures on the implementation of the set of ALMPs.<sup>10</sup> The document is quite thorough, but it is not sufficiently process-specific to be directly used by caseworkers.

Table 1: Planning and introduction of new labor market measures

Unit/department/institution	Responsibilities
MoHLSP, NEA	11 procedures
MoHLSP	Performance indicators and targets
MoHLSP	General planning, yearly workplan
Tripartite council (NEA)	Approves yearly workplan

#### RECOMMENDATIONS

- **Staged roll-out.** Introducing nine new ALMPs at once, without prior experience, would be counterproductive. The introduction of the new ALMPs should be rolled out over the next years. Building on the programs that were already administered by NEA (vocational training and mobility grant), as well as the pilot of on-the-job-training, NEA will be introducing 4 measures as of February 2019: Vocational training, on-the-job training, internships, and the mobility grant. A second wave should include wage subsidies that require little additional capacity, before moving on to local initiatives or self-employment, the latter requiring skills that most caseworkers do not have. The 2 PwD measures should be handled carefully, as they also require a capacity that most agencies do not currently have.
- **Simplify and clarify procedures.** The procedures are written in a complicated language, not accessible to many, and do not clearly identify who could benefit from the measure, how, and what actions need

<sup>10</sup> The document includes one procedure for each one, as well as one procedure detailing the jobseeker registration process and another detailing the allocation of the unemployment benefit.

to be taken by the caseworker, the beneficiary, or the service provider. Additional procedures (for instance in connection with the services offered by the TS, or with monitoring and evaluation) should be developed.

- **Provide Operational Manuals (OMs).** To ensure the quality of services and the standardization of processes, the different programs and services and the tasks carried out by caseworkers and TS should be clarified by procedures and OMs.
- **Develop performance indicators and targets.** In addition to developing a sound monitoring and evaluation of NEA's outcomes and impacts of programs (number of beneficiaries, success rates in transition from unemployment to employment, etc.), it will also be important to assess and monitor the performance of the delivery systems, including institutions and other precursors, as well as key inputs (e.g., human resources, IT systems, organizational aspects, business processes, etc.). Key performance indicators relating to the outputs and outcomes of delivery systems include: Efficiency (for citizens, administrators, and governments), inclusion (coverage, equity, accessibility), quality, and transparency.

- Budget allocation

**The budget allocation process will be conducted each year.** Each TS is requested to identify the number of beneficiaries per program, and send that information to the budget planning, accounting and payment division that will transform the number of beneficiaries per program into an amount in Moldovan Leu. The total for all 35 TS will then be submitted to MoHLSP, which will transfer the budget request to the Ministry of Finance (MoF). All requested budget from the different line ministries will then be aggregated by MoF and submitted to the Parliament for approval (bottom-up approach). The revised budget for each ministry, approved by the Parliament, will then be shared with MoF and MoHLSP, and revised budgets will then be allocated per program and per TS. This is a new task for the TS, which did not have to estimate the number of beneficiaries that would participate per ALMP before.

Table 2: Budget allocation

Unit/department/institution	Responsibilities
Territorial Subdivision (TS)	Estimate number of beneficiaries per program per year
Budget planning, accounting and payment division	Converts the estimates in Moldovan Leu
MoHLSP	Aggregates the local budget, submits to Parliament for approval, revised budget and share it with NEA and TS

2.2.2 Internal support

- Assess labor market skills and training needs

**The demand for skills and training needs will be elaborated by the employment policy and implementation division.** Previously, the Labor Market Forecast Survey (LMFS) produced by the Labor Market Observatory (LMO) was the basis for determining which occupations were in demand through the national and regional occupational barometer. As the publication did not take place in 2018 and will most likely not take place in 2019, the employment policy and implementation division used the registry of vacancies and jobseekers to determine the occupations most in need of training for 2019. The final document including the number of jobseekers to be trained per occupation remains generic and does not specify which kind of training is preferred (vocational, on-the-job training or internship). In addition, the IT division may provide ad-hoc information, mostly to the employment policy and implementation division, using data from the Jobless database.

Table 3: Needs for ALMPs

Unit/department/institution	Responsibilities
Employment policy and implementation division	Estimate skills in demand and number of jobseekers to train for each specialty
Labor Market Observatory (LMO)	Labor Market Forecast Survey (LMFS), Occupational Barometer [currently discontinued]
IT division	Ad-hoc queries on Jobless database

## RECOMMENDATIONS

- **Determining skill needs.** With the new reform, the methodology to assess which occupations require training should be clearly elaborated and described in a separate procedure. It should describe which department in NEA will be responsible for the task, how that unit will interact with other stakeholders (MoHLS, Ministry of Education, employers, etc.) to assess skills demand, and which methodology should be adopted. The task should be carried out at the central level (NEA), as it was before, but the expertise of local TS could be sought to finalize the list of trainings. The ongoing activities of the World Bank-financed *Skills Data Capacity Building* project can help fill in some of the data gaps and establish the linkage between data analysis and decision-making processes on skills development.
- **Resume publication of LMFS.** With the new reform, the continuous publication of the results of the LMFS, not only at the national but also at the regional levels, is key to determine the training needs that respond to the demands of employers. This is a core part of the planning processes of the different types of training, which will inform the choice of training content and providers.
- Internal training (caseworkers from TS)

**The employment policy and implementation division organizes regular trainings of newly hired caseworkers and of current caseworkers when introducing new measures.** Newly hired staff should start

with a training on how to register, profile, and service jobseekers (individual action plan, different ALMPs and services). However, and because of capacity and budget constraints, these trainings are not conducted as often as would be needed, and many newly hired staff start working before they can attend the training (the waiting time may be up to 6 months). When this is the case, the head of the new caseworker’s TS will train the new recruit.

Table 4: Internal training

Unit/department/institution	Responsibilities
Employment policy and implementation division	“Regular” trainings
Head of Territorial Subdivision (TS)	Ad-hoc training of own staff

## RECOMMENDATIONS

- **Regular trainings.** To standardize the work of caseworkers, the internal trainings should be provided on a more frequent and, possibly, technology-facilitated/on-line basis. In addition, refresh training should be provided once a year to TS staff.
- **Online interactive guidance tool.** In addition to the regular trainings for caseworkers from TS, it would be important to add a help module to help caseworkers throughout the different processes directly in Jobless.
- **Monitoring and evaluation (M&E)**

**NEA has a weak Monitoring and Evaluation (M&E) set up.** M&E should track: (i) the implementation and results of services and programs, (ii) the performance of caseworkers and TS, (iii) the performance of service providers, and (iv) the employment outcomes of service beneficiaries. All processes are however poorly elaborated in the Moldovan case.

**Monitoring of services and programs is kept to a minimum.** The employment policy and implementation division publishes monthly and quarterly reports of the number of registered unemployed, registered vacancies, the number of participants in each program, and the number of successful exits (jobseekers who were hired through NEA). The Employment policy and implementation division also conducts operational audits. They used to do site visits (tried to do 35 every year but this year they did only 18), check that registration was done in compliance with rules, and check the paper file against digital file.

**With the new reform, the core of monitoring and evaluation will be delegated to the M&E service.** This will include the monitoring of ALMPs, the impact evaluation of ALMPs, the continuous analysis of jobseekers, vacancies, and the unemployed, the monitoring targets set for the NEA and TS, and the elaboration of NEA’s yearly activity report (with targets established by MoHLSP). In addition, the IT division may provide ad-hoc information, mostly to the employment policy and implementation division, using data from the Jobless database.

Table 5: Monitoring and evaluation (M&E)

Unit/department/institution	Responsibilities
Employment policy and implementation division	Monthly report Operational audits/site visits
M&E service	Monitoring and impact of ALMPs Continuous analysis of jobseekers and vacancies NEA yearly activity report (targets set by MoHLSP)
IT division	Ad-hoc monitoring reports

## RECOMMENDATIONS

- **M&E and longer-term impact of ALMPs.** To assess ALMPs outcomes, monitoring systems should track the employment experience after the intervention. This could be done by tracing training recipients' status 3-6-12 months after training by contacting them directly or by checking their employment records in the registry of the national social insurance agency (NSIA).
- **Track TS and caseworkers' performance.** Monitoring should also be put in place to track the performance of the different TS, as well as their difficulties and needs (placement rate of caseworkers, vacancies-to-jobseekers' ratio, rate of registered unemployed benefiting from ALMPs, etc.). This should not only help NEA to identify success stories, but it should also identify territorial agencies where additional resources may be needed.
- **Track performance of service providers.** Similarly, monitoring should be put in place to track the performance of the different service providers (e.g. share of participants graduating, share of trainees still employed 3-6-12 months after graduating).

See examples of best practice in *Section 5.1.6 Regular monitoring and evaluation and performance management*.

- [Interaction with service providers](#)

**With the new reform, public procurement rules will apply for the selection and contracting of training providers.** This task was previously conducted locally by the territorial agencies, and will be now conducted by the central agency, NEA. The unit(s) that will be responsible for the public procurement is not well identified, nor is/are the unit(s) that will be responsible for the selection of providers after the public bidding. The IT division will be responsible for publishing the advertisement. The territorial Subdivisions (TS) will no longer have to identify training needs, nor select the training providers. They will however monitor all service providers located in their catchment area monthly, which includes typing in the Jobless system all invoices received by service providers, as well as registering the attendance of all beneficiaries (linked to benefit payment).

**Training providers will be hired through public procurement, from a list of training pre-certified by the Ministry of Education.** Training providers will be responsible for developing the curricula and, as before,

sending at the end of each month an attendance spreadsheet of all the trainees (to the TS of the region where the training agency is located), as well as their invoices (to the budget planning, accounting and payment division). Payments to beneficiaries, service providers and employers are made by the bank that was selected through public procurement.

**Employers or businesses interact with the NEA in specific occasions.** Employers will most usually only contact the NEA for posting vacancies, and/or participating in ALMPs (on-the-job training, traineeship, employment subsidies, local initiatives grant, mobility grant, and vocational rehabilitation and work-place adaptation for PwDs).

**The responsibilities of MoHLSP, NEA, training providers and employers are sometimes blurred or overlapping.** For instance, in the case of on-the-jobs training, where procedures specify that technical and vocational education and training (TVET) providers and the employer are both responsible for the quality and implementation of training.

Table 6: Service providers

Unit/department/institution	Responsibilities
IT division	Advertising of public procurement
Unclear	Selection of service providers
Employers	Register vacancies Internship/on-the-job training Submit applications, invoices
Training providers	Content of training Delivery/implementation of training Submit invoices
Territorial Subdivisions (TS)	Entering invoices Entering attendance
Payments	Selected banking operator

## RECOMMENDATIONS

- **Only service providers that were previously pre-approved by the Ministry of Education should be able to bid.** This will ensure the quality of the service. In addition, as a result there may not be more than one pre-approved provider per training in the region where the training should take place, and therefore public procurement may not be needed that often. It would be important to check first-hand how often the more cumbersome procedure of public procurement should be applied.
- **Improve the mode of selection for providers.** If public procurement is required (more than one training provider), the current documents used by public institutions on “goods and services” may not allow NEA to select the best training providers. It may be a better option to use Quality-Based Selection (QBS).
- **Simplify the responsibilities when subcontracting.** The contracts binding the service provider with NEA should hold the provider accountable for the quality of the training, and not only beneficiaries’

attendance (and this is related to an improved M&E system). Contracts could for instance have a clause that increases the final installment if the employer signs a contract with the trainee upon the completion of the training.

- **Another way of ensuring the quality of selected providers could be to set up framework agreements with the training providers who have a good record of previous cooperation with NEA.** Such record should be assessed by the successful employment experience of their graduates. Framework agreements would allow NEA to contract such providers on a continuous basis, based on their satisfactory performance, without the need to repeat competitive procurement process. It will take time for NEA to gain such experience and collect this kind of records to distinguish reliable and well-performing providers.
- **Improving the efficiency and capacity of the system.** First, through the digitalization of tasks (for instance, creating a portal for training providers so that they can enter directly attendance/invoices, etc.). Second, creating guidance for employers that is clear and simple regarding eligibility to different ALMPs. Third, defining the roles more clearly. For instance, for on-the-job training, the training provider and employer are both responsible for quality and implementation.
- **Increasing the role of TVET.** While both the employer and the training provider offer different types of training inputs, it would make sense to hold the TVET facility responsible for the entire learning process to ensure coherence and complementarity between both the class-based and on-the-job trainings. Supposedly, the TVET facility should have more means and knowledge for that purpose. Overall, TVET facilities are well placed to be NEA's counterpart for training-related interventions, in charge of selecting jobs relevant to the training, contacting employers for on-the-job training and ensuring the complementarity of curricula between the theoretical and practical learning activities. This would also simplify NEA's work, as it would only require interacting with one actor - instead of two - , and set clear accountability arrangements.

#### - Information Technology (IT)

**All stakeholders are interconnected through different IT infrastructure, managed by the Information Technology (IT) division.** This includes *Jobless, Angajat*, and the links with other systems of the government (through MCloud<sup>11</sup> and M-connect). As mentioned earlier, the IT division is responsible for the proper and continuous functioning of the organization's information systems and IT infrastructure.

- *The director of the IT division:* Is responsible for the management and the orderly daily operation of the department, the strategic planning in relation to the organization's IT infrastructure and the negotiations with external contractors for the support and expansion of the IT infrastructure.
- *The deputy director:* Is responsible for the daily monitoring of the network infrastructure, the well-being of the data center and the integration of the state electronic services into the organization's IT infrastructure (e.g., digital signatures).

---

<sup>11</sup> <https://mcloud.gov.md/en/content/about-mcloud>

- *The system administrator:* Administers the *Jobless* Platform, the organization’s portal, the *Angajat* portal, as well as the Intranet.
- *The network and web administrator:* Administer the network infrastructure and updates the organization’s portals.

Table 7: Information Technology (IT)

Unit/department/institution	Responsibilities
IT division	Daily operation of the agency’s intranet Manages <i>Jobless</i> system Manages <i>Angajat</i> portal Responds to ad-hoc queries on <i>Jobless</i>

## RECOMMENDATIONS

Developed further in Section 4.

### 2.2.3 Servicing beneficiaries/jobseekers

**The Territorial Subdivisions (TS) are the main entities responsible for servicing beneficiaries, i.e. jobseekers.** There will be 35 Territorial Subdivisions (TS) of 4 to 10 staff - one head of TS, and 3 to 9 caseworkers. The TS will be responsible for delivering the best set of programs and services to jobseekers, interacting with employers and service providers, but they will no longer have to identify training needs nor select the training providers. They will however monitor all service providers located in their catchment area monthly.

**TS seem to have difficulties retaining qualified labor force.** Staff turnover seems to be quite high, especially with the introduction of the reorganizational reform: caseworkers’ salaries are low, caseworkers’ caseload is high, and the number of staffs per TS was capped by the new reform. The success of the core reform depends on having quality (and quantity) staff; therefore, addressing staff recruitment, training and retention will be fundamental to ensure quality delivery of services.

**The main specific tasks of the TS, which will be developed further in Section 3, are diverse.** These include: the registration of jobseekers, the verification of documents and certifications, profiling, the elaboration of individual action plans (IAP) including the best suited set of ALMPs and services to be provided, the intermediation between jobseekers and employers, and the sustained interaction with jobseekers.

**Having specialized case workers appears to pose challenges.** Each jobseeker should have one caseworker only. However, with the new reform, each TS staff will be specialized in a few ALMPs and will be the reference point for this subset of ALMPs. Given the fact that a jobseeker should have one interlocutor only, the high turnover of staff, and the limited number of ALMPs to choose from (nine in total), having specialized caseworkers does not seem to be the most appropriate option.

Table 8: Servicing jobseekers

Unit/department/institution	Responsibilities
Territorial Subdivision (TS)	Outreach Registration Checking accuracy of jobseekers' information Profiling Individual Action Plan (IAP) – recommendation of ALMP and services Intermediation Follow-up with jobseekers while they are registered
Budget and planning -> bank	Payment of benefits

## RECOMMENDATIONS

- **Better servicing clients:**
  - Ensure staff retention and low turnover, including through performance-based bonuses.
  - Promote a coordination/supervisory role for the head of the TS, rather than a formal managerial position, since TS heads have limited decision-making leeway, and lack staff.
  - Train staff on all ALMPs so that each caseworker may service any type of jobseeker.
  - Promote tools that can help with choosing between different ALMPs and services.
  - Automate tasks (for instance, create a portal for training providers so that they can enter directly attendance/invoices, etc.).
  - Consider subcontracting some of the new ALMPs (provision of services, as well as ad-hoc involvement in selection of beneficiaries. For instance, the self-employment measure).
- **Servicing employers/service providers:** Develop a platform that promotes/explains the different ALMPs and modalities of collaborating with NEA for prospective employers and service providers (including clear and simple description of programs, eligibility criteria, documents to provide, etc.).

See examples of best practice in *Section 5.1.2 Individualization of support and service prioritization*, *Section 5.1.4 Specialization of caseworkers/PES for certain target groups*, and *Section 5.1.7 Engaging employers*.

### 3 Labour market services and the delivery chain

**This chapter reviews the delivery chain for labour market services in Moldova.** As seen above, the delivery chain in the provision of labour market services includes the functions of: (1) assessing what the needs and conditions of the jobseeker are, registering her and determining eligibility; (2) deciding the package of benefits and services most suited to the beneficiary; (3) implementing the actions included in the plan; and (4) exiting from the system. Step 3 also includes participation by the jobseeker in some of the active or passive labour market programs available when suited. Figure 5 below summarizes the typical delivery chain of PES for labour market programs based on the delivery chain of social protection programs.<sup>12</sup>

#### 3.1 How do labor market programs delivery chains work?

**The PES first assesses the needs and competencies of all stakeholders (jobseekers, employers, and service providers).** For jobseekers, this means in most cases reaching out to prospective jobseekers to explain the role of the PES, registering and profiling newcomers, and assessing whether they are entitled to unemployment benefits (UB). On the employers' side, this step includes reaching out to local employers and registering new vacancies. Finally, on the service providers' side, this step includes presenting the different programs offered by the PES for which subcontracting is needed and taking stock of the existing service providers.

**Second, the PES decides who will be involved in which activities and programs.** For jobseekers, this means contracting an IAP, and deciding which combination of services and ALMPs the jobseeker will benefit from, and what kind of actions this person and the caseworker will be taking for the next few months. Some market-ready individuals will be directly matched to existing vacancies and will immediately exit the system (for this, the PES will be interacting with both jobseekers and employers). Finally, at this stage, the PES selects the service providers needed for the implementation of the different ALMPs.

**Third, the PES implements the services and measures agreed upon in step 2.** For jobseekers, that means following up with the IAP, disbursing benefits if the jobseeker is entitled to them, monitoring attendance to meetings with the caseworker, and actions to be taken towards securing a job (job-search, group guidance, job fairs, participation in ALMPs, etc.). The PES will also match and finalize job offers between employers and jobseekers. The PES will implement the services and activation measures in coordination with service providers. Upon successful graduation from different services and activation programs, jobseekers may exit the program if they find and accept a job offer (exit from the system).

**Throughout the entire process (from registration, until after exit from the system, whether successful or not), the PES should carry out 3 additional tasks or responsibilities.** First, it should deal with potential complaints and issues that the jobseekers may face through the grievance redress mechanism (GRM). Second, it should monitor and evaluate the effectiveness of the different measures offered to jobseekers

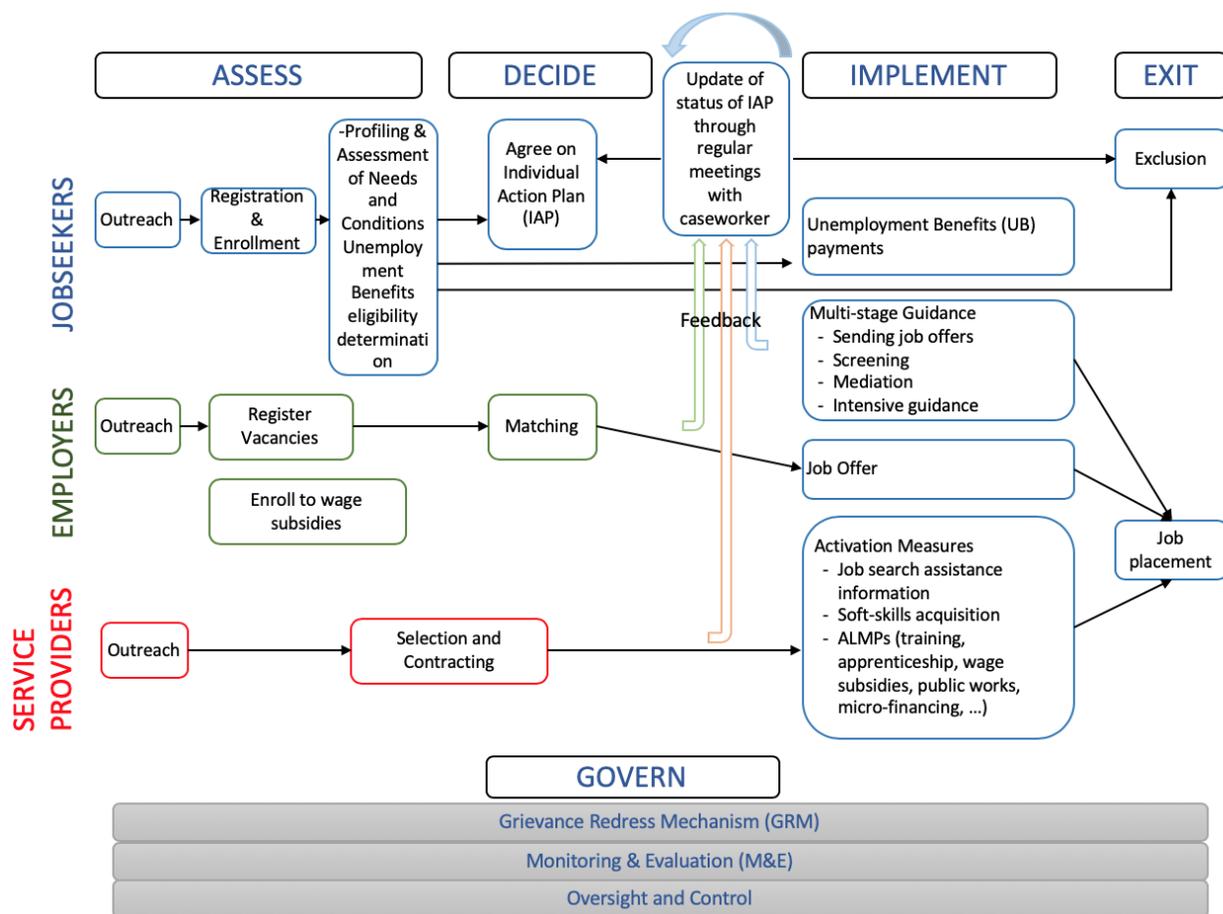
---

<sup>12</sup> World Bank (2016)

in facilitating them exiting successfully from the system, i.e. finding a job. Finally, the PES should constantly monitor the different processes put in place, to identify difficulties, bottlenecks, as well as examples of good practices to be shared among local employment agencies.

**The key element of that delivery chain mechanism is the constant update of the status of the jobseeker through regular meetings with the designated PES caseworker.** This central part is coined the client-centred approach. A client-centered approach is characterized by an emphasis on building trust, understanding and responding to individual needs and ultimately instilling ownership for the process. empowering the job seekers requires techniques which allow the caseworker to shift the locus of control to the client. These techniques can help the job seeker to feel more ownership of the agreed outcomes and the actions necessary to achieve them. They may also help jobseekers to become more responsible and independent and develop their own career management skills.<sup>13</sup>

Figure 5: Labor market programs delivery chain



Source: Adapted from "SPL Delivery Systems: Taxonomy of Core Terminology", The World Bank Group, 2016.

**There may be overlaps between PES and social welfare agencies.** PES are increasingly servicing vulnerable populations that face multiple difficulties in finding jobs. These include low levels of education

<sup>13</sup> European Commission (2012)

and skills, care responsibilities, no unemployment benefits and low or no income at the household level, poor health or chronic illness, substandard housing, and various additional difficulties (ethnic minority, domestic violence, substance abuse, etc.). While individual social and employment services may function effectively in their own right, certain gaps or duplications in services can be observed when considered more holistically. Separate services also do not provide a complete appreciation of each individual's or family's needs as a whole, which can lead to ineffective responses to individual issues.

**A key role that many PESs are now undertaking is that of the entry point for an array of services that jobseekers can access.** PES caseworkers “assess” incoming jobseekers, and depending on the jobseeker's profile, orientate them to different services that they can benefit from, some of them provided directly by the PES, and others provided by the social welfare agency (or others), such as social assistance benefits, housing benefits, counselling sessions, health assessments, etc. This holistic solution to the problems of disadvantaged groups moves beyond partnership working into the more complex and demanding area of service integration and is coined the integrated case management.

**This integrated case management entails abandoning the “silo” approach (everyone working solely within their own confined area of responsibility) and the fragmented administration of national and local services.** For many European countries it has meant the establishment of multi-agency teams at the national, regional and local levels, and working under an integrated management structure, with shared budgets, programs and objectives – a whole system approach, with a single key caseworker who has responsibility for coordinating the different agencies and professionals involved. It also means that the local PES is responsible for coordinating the different stakeholders (jobseekers, service providers, employers, other institutions and agencies).

## 3.2 The delivery chain in Moldova

**This section describes the current situation in Moldova and provides recommendations on how to improve the delivery chain mechanism to conform to international best practices.** In a nutshell, the current system in Moldova includes all three steps (assess, decide, implement), but does not yet have a strong client-centered approach (constant update of IAP/jobseeker's file), it does not have a strong integrated case management approach (weak links between NEA and the social welfare agency, especially on information regarding recipients of the social assistance program), and it does not have a strong monitoring component (process assessment, M&E, impact evaluation, and grievance mechanism).

### 3.2.1 Assess

#### - Outreach

**There are three main sources of information for the available labor market programs in Moldova.** These include: (i) the NEA portal, which describes the active and passive labor market measures, and provides associated legal information; (ii) the *Angajat* portal, which registers the available vacancies; and (iii) the TS, which can provide information about programs and services directly to clients.

Activities/functions	Current			Future	
	Labor market actors	IT support	Employment agency actors	IT support	Employment agency actors
Description of active or passive labor programs and respective legislation in NEA Portal, as well as provision of information by the TSs.  Job vacancies in <i>Angajat</i> portal.	Potential beneficiaries	NEA Portal	Employment Policy & Implementation Division  IT Division	NEA Portal	Employment Policy & Implementation Division  Call & Communications Center  IT Division

**RECOMMENDATIONS**

- **The NEA Portal should be the single point of interaction between the potential beneficiaries and the Agency.** All the detailed information on job vacancies, allowances, training programs details, guidance for beneficiaries, careers information, available on-the-job-training placements, FAQs, benefits, links to careers information attached to each of the ALMPs, etc. should be available from that same platform. The possibility for online inquiries by the potential beneficiaries through the portal should be allowed, and as well as communication management mechanisms for NEA.
- **Other interaction and information mechanisms should be strengthened.** First, interfacing the Portal with Social Media (Facebook, Twitter, LinkedIn, Instagram, etc.). including promotional campaigns through newsletters for potential beneficiaries and chatbots provided in the Portal, through Instant Messaging applications (e.g. Skype) and/or Social Media, to interact with the potential beneficiaries and provide information and guidance. In addition, mobile applications with information on LMPs (active and passive) and the use of push notifications to update the beneficiaries on the latest developments and opportunities would be useful.
- **There should be more awareness campaigns about the role of NEA/TS, especially in areas with high unemployment rates.** Some countries, such as the Former Yugoslav Republic of Macedonia, have implemented mobile teams with local social workers that work with local disadvantaged youth to promote the national employment agency.

See examples of best practice in *Section 5.1.3 One-stop center (integrated case-management model)*.

- [Registration and enrollment](#)

**The first steps followed by caseworkers to enroll a new jobseeker are the registration procedure and the automated profiling of the unemployed.** The client/jobseeker is requested to bring hardcopies of at least 2 documents to confirm personal information: ID and proof of education. Additional documents may be needed to prove additional rights, such as disability, or other categories of people subject to social exclusion. The caseworker enters the ID number into the Jobless system, which connects automatically through MConnect with the different databases (NSIH, State Tax Services Agency, SAAIS). A copy of the

proof of education is made manually. In the event that no proof of education is available, the caseworker will enter the lowest level of education by default, until the proof of education is available. When appropriate, any additional document will be entered in the system. Eventually, the caseworker will print out an affidavit of unemployment that the client will sign stating that he/she does not have a job. A hard-copy of all registration documents will be collected in a file and stored in a folder.

**If the jobseeker is entitled to unemployment benefits, the caseworker will enter and verify the information in the system to trigger the payment of unemployment benefits.** Enrollment to receive unemployment benefits should be done within the first five days from registration at the TS. The final form is digitally signed by the head of the TS, and a printed copy of the document is added to the hard copy file of the jobseeker. The enrollment in unemployment benefits is registered in the information system.

Activities/functions	Current			Future	
	Labor market actors	IT support	Employment agency actors	IT support	Employment agency actors
Registration (hardcopies of at least 2 documents to confirm personal information -ID and proof of education, and additional documents that may prove additional rights (disability, etc.)) Eligibility control through NSIH, State Tax Service, Public Services Agency and SAAIS. Unemployment benefit	Jobseekers	Jobless	TS caseworkers	NEA MIS NEA Portal	TS caseworkers

#### INSTRUCTIONS AVAILABLE

The only available documents are Procedure 1, which explains who can be granted the status of unemployed, and Procedure 11, which explains who is entitled to receive unemployment benefits.

## RECOMMENDATIONS

- **The procedures should minimize the list of documents required from the client.** A very minimal set of documents should be requested upon initial registration (e.g. just the ID and some sort of consent to be registered). Ideally, the registration would adopt a self-declaration principle whereby the client provides the personal information inputs as required to determine qualification for various services that are included in Jobless and matched with/verified through other systems/registries. Through the interconnected IT system, the caseworker could verify information about pension, work status, disability status, reasons for cessation of activity, and contribution period.
- **To promote a smooth client-centric approach, the interaction between jobseekers and TS caseworkers should be a continuous, asynchronous process of client status updates and checks.** The registration process should be opened to constantly update the statuses, either through the provision of documents or on-line updates of self-reported status to be cross-checked. Such open process would allow updates any time (or in some agreed dynamics, as a part of an IAP), but the eligibility determination for some benefits or services could only be triggered if all statuses/documents needed for that particular process were provided. Ideally, the client's file would be automatically updated if changes occur in other institutions sharing their data with NEA.

See examples of best practice in *Section 5.1.1 Client-centered approach*.

- [Assessment of needs and conditions \(Profiling\)](#)

**Immediately after registration, profiling should be administered by the caseworker.** The profiling assessment is an interview-based questionnaire, which seeks to identify the jobseeker's risk of becoming or remaining long-term unemployed. TS caseworkers should conduct the profiling for all jobseekers during the initial appointment unless the jobseeker was profiled during the past six months. The personal information collected during registration is not only used to profile jobseekers, but also to provide the background information needed to manage counselling sessions.

**The system automatically computes the profiling score and classifies the jobseeker into one of the three existing risk groups.** The caseworker asks a series of 20 closed questions,<sup>14</sup> which are already entered in the Jobless system. Each question gives a score (0 or 1, with 1 indicating a higher barrier to the labor market), and all points are finally added to determine the profile of each jobseeker. The total points thus range from 0 to 20. A high score indicates higher vulnerability. The three categories comprise jobseekers

---

<sup>14</sup> For each question, the answers are already pre-coded, so that the caseworker only has to select the appropriate answer.

with: (i) low probability of long-term unemployment, (ii) medium probability of long-term unemployment, and (iii) high probability of long-term unemployment.<sup>15</sup>

Activities/functions	Current			Future	
	Labor market actors	IT support	Employment agency actors	IT support	Employment agency actors
Profiling (Individual Action Plan)*  * only for medium- and high-intensity profiles, or LTU (>6 months)	Jobseekers	Jobless	TS caseworkers	Jobless Jobless	TS caseworkers

### INSTRUCTIONS AVAILABLE

An operational manual (OM) was developed in 2017 to guide caseworkers through the 20 different questions, as well as explain the overall objective of the profiling exercise.

The individual action plan (IAP) was developed in 2017 to guide caseworkers.

#### 3.2.2 Decide

**Once a client is profiled, she should be immediately directed to services if she has low barriers to employment; otherwise, the caseworker should establish an individual action plan (IAP).** This IAP is the founding stone of the client-centered approach, as this is the key step where the caseworker and the jobseeker discuss the set of the most appropriate measures and services. The IAP consists of a detailed plan of actions to be taken during the upcoming month, and a broader picture of actions to be taken in the next 12 months. It also designates a key counselor for the jobseeker, that is the person who will be personally responsible for following the jobseeker’s file.

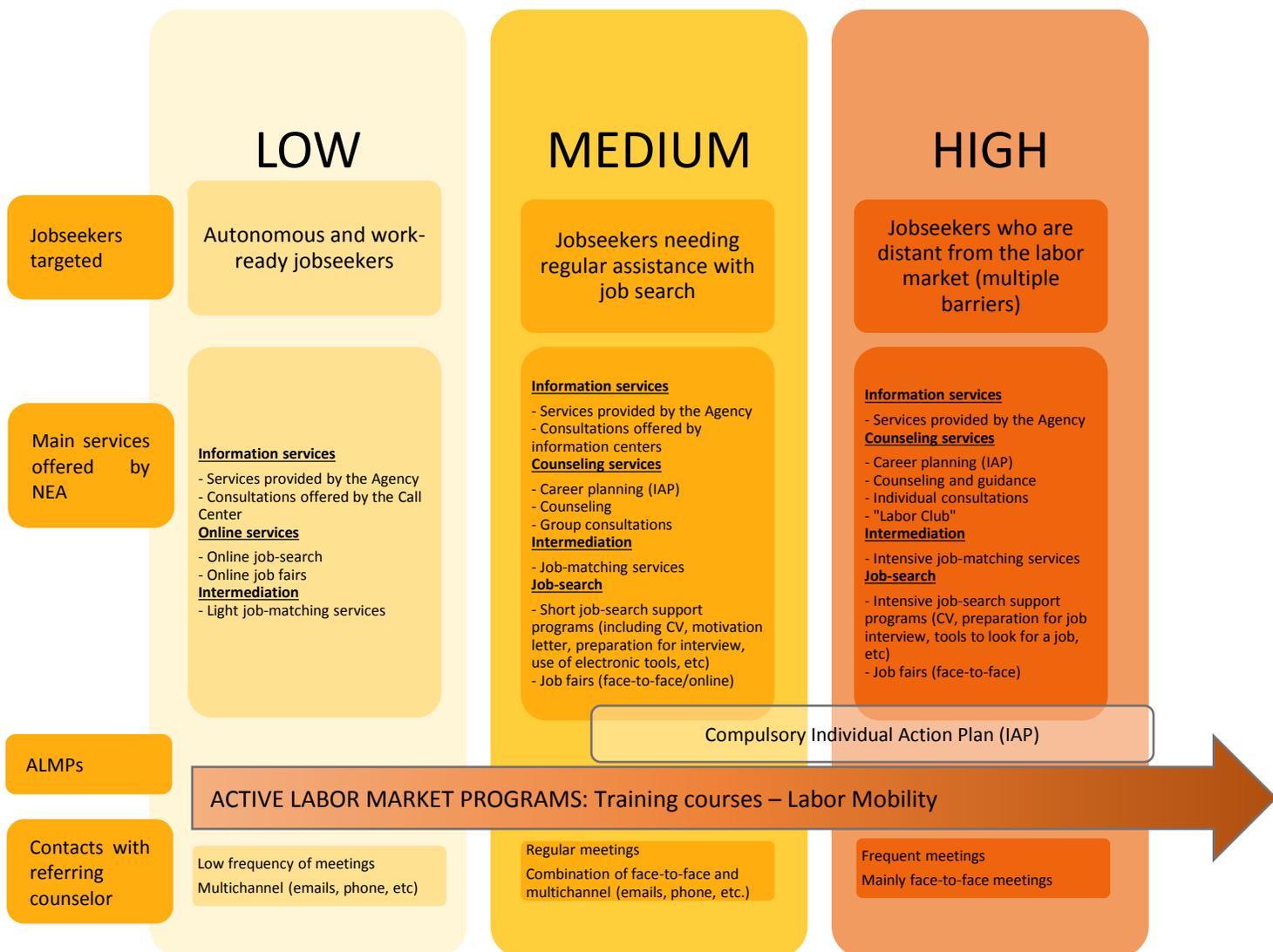


<sup>15</sup> The profiling system is a simplified version of a statistical profiling model. Due to limited data, it was not possible to calibrate a statistical model, so it was decided to select, based on a set of a-specific questions that would explain the distance of each worker to the labor market. For simplicity, each question was given the same weight (points = 0 or 1). Similarly, the thresholds for each status (high, medium, low) were determined during internal discussions and not affording to a sound calibration of the probability of being long-term unemployed.



**Currently, there is limited guidance on how to decide which set of programs and services should be offered to the different profiles** (see Figure 6 below). The IAP form, in fact, includes information on job-search activities, time and manner of reporting to the TS and what constitutes adequate employment – i.e. occupation to be sought. The IAP should be revised every 12 months. However, in reality, most TS lack office capacity to follow up on their implementation in accordance with NEA guidelines. In particular, high caseloads limit the time counsellors can devote to adequately monitor IAP implementation. Information on the measures and services that are available to jobseekers is provided face-to-face during counselling sessions, through leaflets and other information material available in local TS.

Figure 6: Set of services to be offered to each profile of jobseeker (2018)



Activities/functions	Current			Future	
	Labor market actors	IT support	Employment agency actors	IT support	Employment agency actors
Services	Low-intensity jobseekers		TS caseworkers		TS caseworkers
Individual Action Plan (IAP)	Medium- and high-intensity jobseekers			Jobless	TS caseworkers/IT division

**INSTRUCTIONS AVAILABLE**

The template for an individual action plan (IAP) was developed in 2017 to guide caseworkers. It should be fully updated to consider the new ALMPs.

**RECOMMENDATIONS**

- **The different services and ALMPs should be coordinated by some framework procedures and companion OM.** The procedures and OM should be transformed into a step-by-step guidance/detailed algorithm to help caseworkers to match the jobseeker’s profile with available services and determine/prioritize the intervention/mix of interventions that addresses her employment barriers in the best way. In addition to the OM, based on the jobseekers’ profile and programs’ eligibility criteria, the information system could automatically pull-out a shortlist of programs and services for which the client is eligible - in the same way that the three profiling categories are automatically generated by the system. The World Bank team will work with MoHLSP and NEA to develop more/other measures and help come up with a prioritization algorithm.
- **The prioritization of services for certain groups of clients would be required.** Currently, the document applies the first-come first-served approach to enrollment of applicants who meet basic eligibility criteria. NEA may want to consider finding ways to target the interventions to the most vulnerable/disadvantaged people, who would be served on a priority basis over the year. For instance, ALMPs may target longer term unemployed (e.g. unemployed above one year) and/or recipients of the *Ajutor Social* benefits. Similarly, trainings should be offered first to jobseekers with skills-set that are not in demand.

See examples of best practice in *Section 5.1.2 individualization of support and service prioritization* and *Section 5.1.4 Specialization of caseworkers/PES for certain target groups*.

3.2.3 Implement

**The final step is for the TS caseworker to implement the IA.** This consists of either checking that the jobseekers is attending the chosen ALMP, or that the jobseekers is actively looking for work (and helping

her finding a job). In the event that the job seeker is entitled to benefits linked to participating in ALMPs (mobility premium, accommodation, transportation and scholarship in the case of trainings, etc.), the TS caseworker will also determine the benefit amount that the jobseeker is entitled to.

#### - Services and ALMPs

**The different measures and services that can be offered to jobseekers are listed in Figure 6 above.** These include information, counseling, job intermediation, job-search assistance, and ALMPs. Instructions for caseworkers on the different set of services are scant. The only two operational manuals that exist relate to the profiling and IAP steps. According to those operational manuals, the concrete steps taken towards helping the unemployed to find a job may include mediation towards vacancies from the point of registration, early detection of possible obstacles/problems and adapted guidance, tailor-made services based on the profile and the needs of the jobseeker, optimal use of different communication channels (online, call center, counsellor), and recommendations based on the local labor market situation.

**The set of measures to achieve the IAP goals are taken from the set of services that NEA has developed, and need to be tailored to the groups of jobseekers identified previously (low, medium and high-intensity groups):**

- *Job-search assistance:* Independent job search (newspapers, internet, etc.), visits to the information centers;
- *Information:* Participation in the information meeting and other seminars in the open information area;
- *Motivation/counseling/soft skills acquisition:* Participation in group consultations or in motivational seminars, individual counseling, preparation for a meeting with an employer, CV preparation, preparation of an application letter, preparation for a job interview, etc.;
- *ALMPs:* in the first phase of the reform, only vocational training, on-the-job training, internships, and the labor mobility premium will be offered. As additional ALMPs are rolled out, TS caseworkers will offer employment subsidies, self-employment grants, local initiatives grants, and vocational rehabilitation and work-place adaptation for people with disabilities (PwDs).

**Multi-stage guidance includes different possible steps depending on the needs of the jobseeker.**

- *Matching and sending job offers:* Automatic matching of the data in the personal files of jobseekers and recent vacancies. If appropriate job offers are found, these are immediately delivered to the jobseeker by e-mail, text message or letter.
- *Screening through data-mining or through requesting information from the jobseeker:* Information is requested for updating the personal file and following up the job applications of the jobseeker. The needs for extra help or other problems are detected. After screening, the jobseeker is referred to mediation or individual guidance.
- *Intermediation:* Jobseekers who are immediately employable are mediated towards a job. The focus is on job vacancies and results of the application. Mediation can happen in collective sessions and/or on an individual basis, and face-to-face, by e-mail, phone and e-tools on a regular basis (for instance, every two weeks).

**Intensive guidance by a TA counsellor exists for jobseekers who are facing obstacles to find work.** This is for instance the case when the jobseekers lack technical competences or experience, or when there are other problems that are not related to the labor market and language (high score on the job search skills in the profiling questionnaire). The problems for employment are identified at the beginning. Then an individual action plan is created for guidance. This guidance is a planned, efficient and flexible series of steps in a logical sequence to increase the jobseeker's employment opportunities. Possible steps are profound screening, training, on- the-job-training, job application training, and personal skills training.

#### Box 1: Active Labor Market Programs (ALMPs)

With the new reform, 9 ALMPs will be available to jobseekers: Vocational training, on-the-job training, traineeships, employment subsidies, self-employment grant, local initiatives grant, mobility grant, and vocational rehabilitation and work-place adaptation for people with disabilities (PwDs). MoHLSP and NEA drafted 11 procedures concerning access to employment actions (2018): 9 procedures related to the implementation of ALMPs, and 2 procedures that are more general (granting the unemployment status and granting unemployment benefits). A brief description of the different measures, target beneficiaries and key actors involved is given below.

Any person who is older than 16 and younger than the official retirement age, who is not working, nor receiving a pension, and who is not enrolled in a full-time education program can register with the Territorial Subdivision (TS) as unemployed, provided she will be actively looking for a job. That person will lose the status of unemployed if she finds a job, starts receiving a pension, enrolls in a full-time education program, refuses two appropriate jobs in a row, or stops actively looking for a job.<sup>16</sup>

- Vocational training: vocational training aims to match the skills of jobseekers with the needs of the labor market. This kind of program could either benefit individuals with low education (upskilling) or with skills that are not in demand (reskilling/requalification). Any jobseeker whose skills are not in demand in the labor market is eligible for the program, unless she already benefited from such a program in the past 24 months.
- On-the-job training: on-the-job training is similar to vocational training with a strong focus on practice in a firm. Again, this kind of program could either benefit individuals with low education (upskilling) or with skills that are not in demand (reskilling/requalification). Any jobseeker whose skills are not in demand in the labor market is eligible for the program, unless she already benefited from such a program in the past 24 months.
- Vocational traineeship: vocational traineeship refers to internships. Individuals with no prior work history are eligible for the measure. This kind of program will be mostly targeted at young people with no experience. The trainee receives accommodation and transportation grants and receives 30 percent of the average salary in the year preceding her traineeship.
- Employment subsidies: employers who hire unemployed individuals may benefit from employment subsidies. That subsidy amounts to 30 percent of the average salary of the previous year. The

---

<sup>16</sup> A jobseeker who fails to show up at the TS for more than 60 days will be automatically removed from the registry.

employer must keep the subsidized hire on her payroll for at least 12 months after she stops receiving the subsidy.

- Subsidy to create and adapt jobs for people with disability and professional rehabilitation for people with disability: two measures will be available to integrate people with disabilities in the labor market: A subsidy to adapt the working place to people with disabilities, and a professional rehabilitation grant for people with disabilities.
  - Support to start a business: jobseekers who want to start their own business can apply to a self-employment grant, if they submit a business plan. Successful applicants will receive a grant and vocational training in running a business.
  - Support for local initiatives: any individual who needs to acquire additional equipment, machinery, tools, for business development in rural areas, is eligible for the local initiatives grant. She will have to co-finance at least 35 percent of the total amount requested.
  - Workforce mobility: this measure aims at promoting mobility for jobseekers.
- Follow-up

**Each jobseeker will have to show up at the local TS once per month, as requested by law.** The caseworker thus has a role of contacting and following up with each jobseeker he/she is responsible for. After two missed meetings without explanation, the caseworker should erase the jobseeker from the unemployed registry (in Jobless). In theory, the length of these follow-up meetings depends on the profile of the jobseeker (those with high barriers to enter the labor market should have longer meetings with their counselor, while those who are job-ready should have limited time with their TS focal point).

**In addition to following up with the jobseekers, caseworkers need to follow up with the training providers, to make sure that those enrolled in ALMPs are indeed attending.** This is done manually: Each training provider sends an attendance list, that is then entered by the caseworker in the Jobless system. Invoice on the other hand will be sent directly to the budget planning, accounting and payment division.

All actions relating to the implementation of the IAP are recorded on the IAP spreadsheet. In that way, the IAP is updated upon each visit, recording progress towards the objectives and bi-weekly actions that were identified by the caseworker and the jobseekers upon the initial elaboration of the IAP – see

- [Monitoring Performance and Grievance Redress Mechanism \(GRM\)](#)

There is currently no monitoring of the performance of TS and caseworkers, nor is there a grievance redress mechanism (GRM).

## INSTRUCTIONS AVAILABLE

Procedures 2 to 10 explain in detail the different ALMPs.

## RECOMMENDATIONS

- **Introduce a culture of monitoring performance:** Strong emphasis should be put on regular data collection to ensure targets and forecasts are based on the most current data. Similarly to monitoring the outputs and outcomes of measures and programs implemented by NEA through TS, NEA should introduce the monitoring and evaluation of the performance of TS and caseworkers. Monitoring and evaluation indicators should consider the needs of each TS (i.e. level of local unemployment, density of enterprises in the region, jobs turnover), the resources or inputs (i.e. number of TS caseworkers, number registered jobseekers, budget allocated to active and passive LMPs, etc.), and the performance (outputs and outcomes) such as number of registered jobseekers transitioning to formal jobs, number of jobseekers still holding a job after 3/6/12 months, average wage in job, etc.
- **Introduce a Grievance Redress Mechanism (GRM):** The GRD should be integrated into all NEA's core processes and activities. It should also be integrated into staff job descriptions and responsibilities. The GRM should be appropriately resourced and monitored and operate independently of interested parties. There should be clearly defined standards for the objective judgement of each grievance. It should be accessible to all stakeholders, irrespective of their remoteness, language, education or income level, with procedures to file grievances and seek action easily understood by the beneficiaries. To be efficient, the GRD should be advertised and communicated to all involved actors. All grievances should be filed anonymously, through various contact options and multiple uptake channels (email, box, etc.). The mechanism should be responsive to the needs of all complainants, offering a clear procedure with time frames for each stage and clarity on the types of results it can (and cannot) deliver. Grievances should be treated confidentially, assessed impartially, and handled transparently.

See examples of best practice in *Section 5.1.6 Regular monitoring and evaluation and performance management*.

Figure 7.

**RECOMMENDATIONS**

- **Improve the M&E and follow-up mechanisms of ALMPs within a client-centered approach:** It would be necessary, for instance, to automate the reporting procedures from the service providers (including invoices and attendance of beneficiaries). In order to organize the work of caseworkers in a client-centered approach, the client’s file should be regularly updated, based on information from his/her activity: enrollment in ALMP, attendance, graduation from ALMP, new skills certificate (training), job-search actions, visits to the TS, etc.

See examples of best practice in *Section 5.1.6 Regular monitoring and evaluation and performance management*.

3.2.4 Exiting the system

**If the jobseeker was successful at securing a job, the caseworker should close the registry.** Similarly, if the jobseeker does not show up for more than 60 days, her registry should be closed. Caseworkers are mandated to get in touch with registered jobseekers who do not come to their monthly meetings, in order to understand the reason for their exit and properly enter it in the Jobless system when closing their case. Monitoring and follow-up of successful jobseekers is currently limited, and it is only mandatory for the mobility grant.

Activities/functions	Current			Future	
	Labor market actors	IT support	Employment agency actors	IT support	Employment agency actors
Regular meetings					
Provide guidance and services	Jobseeker	Jobless	TS caseworker	Jobless	TS caseworker
Monitor attendance for ALMPs	Jobseeker	N/A	TS caseworker	Jobless	TS caseworker
Determine amount of benefit	Training provider	N/A	TS caseworker	Jobless	TS caseworker
Make payments	Bank	N/A	TS caseworker	Jobless	TS caseworker
(Exit from database)	(Successful Jobseeker)	Jobless (partially)	Budget planning, accounting and payment division	Jobless + automated	Budget planning, accounting and payment division
(Follow-up)	Jobseeker	Jobless	TS caseworker	Jobless	TS caseworker
		(?)	TS caseworker	(?)	TS caseworker

- **Monitoring Performance and Grievance Redress Mechanism (GRM)**

There is currently no monitoring of the performance of TS and caseworkers, nor is there a grievance redress mechanism (GRM).

## INSTRUCTIONS AVAILABLE

Procedures 2 to 10 explain in detail the different ALMPs.

## RECOMMENDATIONS

- **Introduce a culture of monitoring performance:** Strong emphasis should be put on regular data collection to ensure targets and forecasts are based on the most current data. Similarly to monitoring the outputs and outcomes of measures and programs implemented by NEA through TS, NEA should introduce the monitoring and evaluation of the performance of TS and caseworkers. Monitoring and evaluation indicators should consider the needs of each TS (i.e. level of local unemployment, density of enterprises in the region, jobs turnover), the resources or inputs (i.e. number of TS caseworkers, number registered jobseekers, budget allocated to active and passive LMPs, etc.), and the performance (outputs and outcomes) such as number of registered jobseekers transitioning to formal jobs, number of jobseekers still holding a job after 3/6/12 months, average wage in job, etc.
- **Introduce a Grievance Redress Mechanism (GRM):** The GRD should be integrated into all NEA's core processes and activities. It should also be integrated into staff job descriptions and responsibilities. The GRM should be appropriately resourced and monitored and operate independently of interested parties. There should be clearly defined standards for the objective judgement of each grievance. It should be accessible to all stakeholders, irrespective of their remoteness, language, education or income level, with procedures to file grievances and seek action easily understood by the beneficiaries. To be efficient, the GRD should be advertised and communicated to all involved actors. All grievances should be filed anonymously, through various contact options and multiple uptake channels (email, box, etc.). The mechanism should be responsive to the needs of all complainants, offering a clear procedure with time frames for each stage and clarity on the types of results it can (and cannot) deliver. Grievances should be treated confidentially, assessed impartially, and handled transparently.

See examples of best practice in *Section 5.1.6 Regular monitoring and evaluation and performance management*.

Figure 7: Individual Action Plan (IAP) spreadsheet



Planul de angajare al: \_\_\_\_\_

Data de azi: \_\_\_\_\_





**Eu vreau să...** \_\_\_\_\_  
eu să obțin un loc de muncă în calitate de consultant vârstnic în 6 luni

**În timpul consultației**

**Stabiliți obiectivele**

Stabiliți-vă scopurile specifice, măsurabile și reale pentru următoarele două săptămâni  
Ex: căutarea a 3 anunșuri de consultant vârstnic

Obiectiv 1: \_\_\_\_\_

Obiectiv 2: \_\_\_\_\_

Obiectiv 3: \_\_\_\_\_

Obiectiv 4: \_\_\_\_\_

Obiectiv 5: \_\_\_\_\_

**Acasă, înainte de consultație**

**Revizuiți progresul**

Schitați progresul și notați orice obstacol cu care vă confrunțați

Finalizat  Am început  Problema/obstacol \_\_\_\_\_ Încă nu am început

Finalizat  Am început  Problema/obstacol \_\_\_\_\_ Încă nu am început

Finalizat  Am început  Problema/obstacol \_\_\_\_\_ Încă nu am început

Finalizat  Am început  Problema/obstacol \_\_\_\_\_ Încă nu am început

Finalizat  Am început  Problema/obstacol \_\_\_\_\_ Încă nu am început

**La următoarea dvs. consultație**

**Cereți părerea specialistului**

Se completează de specialist

Părerea specialistului	Următorii pași

**Planificați cum veți atinge aceste obiective în două săptămâni**

Specificați ce, unde și când intenționați să vă atingeți scopul

	Luni	Marți	Miercuri	Joi	Vineri
Dimineața	Ce... (ex. aplic pentru postea consultant vârstnic angajat/mă acasă)	Ce...	Ce...	Ce...	Ce...
	Unde... (ex. pe angajat/mă acasă)	Unde...	Unde...	Unde...	Unde...
După masă	Ce...	Ce...	Ce...	Ce...	Ce...
	Unde...	Unde...	Unde...	Unde...	Unde...

	Luni	Marți	Miercuri	Joi	Vineri
Dimineața	Ce...	Ce...	Ce...	Ce...	Ce...
	Unde...	Unde...	Unde...	Unde...	Unde...
După masă	Ce...	Ce...	Ce...	Ce...	Ce...
	Unde...	Unde...	Unde...	Unde...	Unde...

Următoarea consultație: \_\_\_\_\_


 Semnătura șomerului \_\_\_\_\_


 Semnătura specialistului \_\_\_\_\_

### 3.3 Overall recommendations to improve labor market programs and the delivery chain

**Improving the operational manuals to ensure a client-oriented approach would be required.** This would entail the following steps:

- First, to simplify the procedures and transform them into sections of an operational manual (OM), accessible by its length, language, and structure, to any caseworker.<sup>17</sup> An online help with a simple search tool would be the most appropriate medium.
- The second and most important step will be to move from a catalogue of independent procedures, to an OM centered around the beneficiary – client-oriented approach. The current procedures are stand-alone description of processes and are not linked to one another. However, the main task of a caseworker is to guide the jobseeker and offer her the most efficient combination of programs and services. The OM should guide the caseworker through all the different steps and processes, from the registration of the jobseeker, to her exit from Jobless. In that sense, the OM should start with the registration process, then move on to profiling, and the Individual Action Plan (IAP). Both OM exist already. The key element of the client-centered approach will be to organize the different ALMPs and services around the results from the profiling: 3 different types of sets of actions should be taken by the caseworker, depending on the profile of the client (high, medium, or low intensity).
- The set of OMs should hence improve the understanding of caseworkers, standardize their approach, and simplify their work. Such manuals would describe the goal of each procedure that the caseworker must implement (registration, benefits eligibility, profiling, development of IAP, etc...), and a step-by-step description of how to implement each procedure with concrete examples using, when appropriate, the Jobless interface. These simple and detailed OMs would guarantee a more standardized implementation process across caseworkers and TSs.
- Descriptions of the programs would benefit potential employers and guide them on the steps they are expected to take to participate in them, e.g., employer's subsidy, grant to create/adapt of workplace to persons with disabilities (PwDs), local initiative grant.

**The NEA would also need to move towards an integrated case-management system.** Given the large number of jobseekers requesting high-intensity services, the NEA and local TS will need to work towards collaborating closely with other government agencies providing additional services to jobseekers including, but not limited to, social welfare services (and the social assistance benefit) and health services (disability and chronic illnesses, especially for the two disability programs). As such, NEA will need to work towards an integrated case-management model, coordinating different stakeholders: Jobseekers, employers, service providers, and other state agencies.

---

<sup>17</sup> OM for trainers (the training team from NEA) are currently being developed by ILO for two procedures: on-the-job training and internships.

## RECOMMENDATIONS FOR ALL MEASURES

- **Be clear about the rationale:** Spell out clearly in the profiling exercise what are the main obstacles identified among prospective jobseekers/unemployed. That will help to better understand the extent of the issue (youth unemployment, skills mismatch, etc.), and to narrow down the beneficiaries. It will also help to identify the key performance indicators, and which measures should be prioritized.
- **Specify clearly who the target beneficiaries are:** As of now, most measures seem to be available to any jobseeker, without a clear prioritization. This should change, and ALMPs should target those jobseekers facing the highest barriers to the labor market. In addition, some clarifications need to be introduced. For instance, on-the-job training seems to be available to everyone, but the English translation refers most often to the “student.” It would be good to clarify if that measure is targeting an age-specific group.
- **Standardize the training courses:** Each training provider is responsible for the training materials. While this makes sense for niche trainings that can only be provided by one subcontractor, standardization of the material for trainings that will be offered by different service providers would save time.
- **Improving available criteria for training selection:** Choosing between various types of training based on the applicants’ characteristics/needs may not be straightforward for TS caseworkers and additional guidance, with a clear algorithm on how to check and match specific characteristics of the applicant with specific training types, may be needed.
- **Others:**
  - For on-the-job training, TVET providers should be the only focal point accountable to NEA for its implementation, including financing and reporting on various parts of training.
  - Allowance amounts should be automatically computed, and not manually calculated by TS caseworkers.
  - Simplify the requirements for employers to participate.

## 4 Labor Market Programs Information Management

**The primary role of public employment information systems is to support business processes in the service delivery chain.** A modern MIS should support the PES delivery chain in an efficient manner and provide for all the services analyzed below. In the following sections, the existing IT infrastructure of NEA is presented and its effectiveness to cope with all the business processes related to the labor market actors assessed. This chapter also offers some specific recommendations that could be of interest for the Moldovan Government in that particular area.

### 4.1 What does a PES MIS look like?

**The information system typically supports the delivery chain through a number of functions.**

- Maintenance of beneficiary/applicant databases: These usually cover both active and former beneficiaries/jobseekers. Maintenance of this information allows the generation of reports and statistical analysis for current and historic activities.
- Interaction with the population, the employers and the service providers: The system provides support for the promotion of labor market programs, the communication of rules for participation in ALMPs or to award benefits or services, the planning and monitoring of communication and promotional activities, on-line access to relevant documents, etc.
- Application and registration for jobseekers: This includes the entry of application information, the validity check and the creation of a database of potential beneficiaries, including information relevant for enrolment as defined by law, e.g.: (1) family demographics; (2) education; (3) employment status; (4) residence and household expenses; (5) household assets; (6) existing social protection information; (7) sources of income; etc. The on-line application is particularly useful and should be considered as the primary mode of application. If an electronic application cannot be authenticated electronically, it must also be provided on paper and authenticated by signature, but in this case the application must first be filed electronically. In some countries, an application may also be made by telephone, which however requires special identification and authentication mechanisms.
- Application and registration for employers: This activity refers to the online mechanism for employers to offer job vacancies and apply for ALMPs (e.g., wage subsidies, on-the-job training placements, etc.) on a continuous basis. The system should complement this functionality with advanced search mechanisms for the employers to search for potential candidates in the jobseekers' database and update them with possible matches over time, based on their preferences.
- Eligibility assessment: The information provided with the application or available from other official records is used to determine which jobseekers or employers are entitled to benefits, services or participation in ALMPs. This information ought to be verified by cross-referencing with the official records available.

- Assessment of needs and conditions: The system should provide the necessary functionality to the caseworkers for the profiling of the jobseekers and the development of individual action plans (IAPs) based on the profiling outcomes. This functionality could be enriched with matching mechanisms to support the matching process between the jobseekers and job vacancies or ALMPs or other services/providers, e.g., social welfare services, health services to help the client handle LM barriers as needed, etc., provision of alternative recommendations for the creation of the IAP based on the profiling outcomes, skills self-assessment tools for the jobseekers, and labor market information (LMI) to facilitate the counseling process.
- Approval: After eligibility and the assessment of needs (the amount of benefit, if any, has also been determined), the procedure for approval of entitlement to an ALMP, a benefit or service is initiated. At this stage the jobseeker becomes formally enrolled in the PES and registered in the database of beneficiaries. The system should support individual approval, generation of decisions, and automatic notification of beneficiaries.
- Benefit and/or service calculation: In addition to eligibility determination, the system should also support the calculation of the amount of benefit or type of service to be granted, based on the information provided by the applicant and the entitlement rules.
- Register of approved service providers: The system should provide functionality for the service providers to be able to apply online for their inclusion in the PES registries, as well as to submit an appeal in case they are excluded from the registry. All the necessary verifications should be made online by cross-referencing the providers' information with the official records available.
- ALMPs administration: The system should provide functionality to support all the business processes involved in the ALMPs. It should support effective mechanisms for the operational management of the ALMPs by the service providers and the employers, as well as related monitoring and reporting mechanisms in order for the PES staff to be able to administer the programs. The provision of individual accounts for all the service providers is particularly useful and enables an online communication channel between them and the PES to send in reports, invoices, etc. and receive payments. Moreover, the system should provide alerting, notification and information delivery mechanisms through various means (e.g., email, Web Access, SMS, etc.) for the service providers and employers in relation to their obligations stemming from their contracts with the PES (progress reports, financial data, administrative tasks, etc.).
- Disbursement: The system should provide functionality for the entire business processes involving the calculation of instalments (monthly, on-demand, etc.) for the beneficiaries, employers and service providers and their actual disbursement. Depending on disbursement rules for each individual benefit or service provision, this should also include the generation of electronic payment slips which will then be forwarded to disbursing institutions. The system should also track feedback on actual payments made.
- Case management: These activities allow for the collection and processing of various events in the course of a process and related communication with beneficiaries. The system should maintain an interactive database to allow the management of individual cases of beneficiaries, the management of counseling sessions, the continuous update of jobseekers IAPs with progress reports from their participation in ALMPs, achievements and certifications, job interviews

outcomes, etc. The system should also allow for the receipt and processing of beneficiaries' queries regarding disbursement, errors, service quality, and changes to family status.

- **Reporting:** The system should provide operating reports in support of administrative, financial, and management activities. These reports usually include lists of active beneficiaries at the local and national level; monthly, quarterly, and annual disbursement reports; lists of beneficiaries by age group, gender, and otherwise disaggregated with reference to stored information. These reports may also include statistics on demand. This reporting must be highly parametrized and allow users to individually generate ad hoc reports without additional interventions to the software.
- **Monitoring and Evaluation:** The system should generate information about program performance, including, for instance, increase or reduction in beneficiary numbers; disbursement and use of program funds; lists of beneficiaries leaving a program; etc. Similarly, the system should also generate program administration efficiency reports, such as the number of cases processed; the average time needed to process a case; the lapse of time between approval of benefit to actual disbursement; and similar information, disaggregated geographically, individually or by service. These reports should consider the needs (i.e. level of local unemployment, density of enterprises in the region, jobs turnover), the resources or inputs (i.e. number of TS caseworkers, number registered jobseekers, budget allocated to active and passive LMPs, etc.), and the performance (outputs and outcomes) such as number of registered jobseekers transitioning to formal jobs, number of jobseekers still holding a job after 3/6/12 months, average wage in job, etc.<sup>18</sup>
- **Grievance redress:** The system should allow beneficiaries, employers and service providers access to grievance redress and support the workflow for this process, the verification of allegations, arbitration and mediation management, and reporting on fraud or abuse of program funds. There should be a system to categorize, assign priority, and route grievances to the appropriate entity. It should have the ability to track grievances and assess progress being made to resolve grievances. It should automatically acknowledge complaints, and there should be a knowledgebase to support the grievance redress process.

## 4.2 The NEA IT Infrastructure

**The NEA has a wide range of information systems and infrastructure facilitating the daily operations within the organization, as well as the provision of services to the unemployed people and the employers.** In this section, the IT infrastructure utilized by NEA is presented, having as a primary goal to provide an assessment of the existing computerized information systems (including the existing NEA MIS), as well as the available services and tools.

---

<sup>18</sup> See the Albanian example in World Bank (2018) for instance.

#### 4.2.1 Operational MIS (Jobless Platform)

**The IT platform (Jobless platform) is one of the main components of the Moldovan NEA MIS.** The platform facilitates the core business processes of the Agency. The Jobless platform was developed in stages starting from the unemployed database (years 2003-2005) as new features were added to respond to emerging needs (in 2009 for instance the platform advanced using a 3-tier architecture and now it supports 350 users). It primarily collects information on: (i) registered unemployed (disaggregated by sex, age, educational attainment, regional distribution, duration of unemployment spell, reason of unemployment); (ii) notified job vacancies (by occupational code and regional distribution); and (iii) service and program delivery (participants and placement rate).

**The Jobless Platform is the main data repository and information processing mechanism utilized by the NEA for its daily activities.** It serves the organization at both central and territorial levels. The central database used by the Platform is located in NEA's Data Center in the municipality of Chisinau. The functional framework of the Platform includes:

- Jobseekers management (registration, CVs, counseling, Individual Action Plans – IAPs);
- Job vacancies management (vacancies registration, matching between the unemployed and vacancies);
- Unemployment benefit eligibility determination, calculation and allocation;
- Professional training programs administration;
- Public works programs administration;<sup>19</sup>
- Support for payments for the beneficiaries and the involved bodies (training providers, hostels, etc.) through the generation of payment lists that are manually sent to the respective payment service providers;
- Reporting facility (export of predefined reports in Adobe Acrobat format); and
- Other data related to labor market management and interaction with jobseekers.

**There are only two types of user categories involved in the system.** These include: (i) the administrators managing the platform and (ii) the users located in the TSs (counselors and accountants) who are responsible for interacting with the jobseekers, the employers and the entities involved in the provision of ALMPs (training providers, public bodies, etc.). Due to the lack of more user categories these users are fully responsible for the continuous update of the system in relation to the data managed during the NEA's daily operations (unemployment benefits, job vacancies, IAPs, matching, payment lists, ALMPs administration data, etc.).

**The system does not provide most of the basic functions (as presented in the previous section) required for the support of the PES delivery chain in an effective manner.** As an example, case management, monitoring, and grievance redress are not provided, while most of the other functions are only partially supported. Moreover, the system is not well documented (for both the administrators and the users) and there is no maintenance contract with the Jobless software provider. The system is upgraded based on

---

<sup>19</sup> According to the new reform the public works program will not be included in the ALMPs provided by NEA.

short-term contracts that cover specific requests for further development. The technologies used in Jobless and the information systems interoperating with it are presented in the following two tables.

**In addition, the platform is based on a client server-approach.** During the daily start-up process of the system the software clients at the TSs are automatically updated with the latest software updates/patches. The system is backed up on a daily basis, and the reporting layer “runs” on the production database causing performance problems in some cases (complex reports). With regards to security, the data are not encrypted in the database bringing about serious security risks. Apart from the data integrity checks at the database layer, most of the system’s business logic is implemented through the client application and there are cases where the system could allow an inexperienced user to perform actions not aligned with the organization’s current business processes, as no business process management or workflow management functionality is available. Moreover, no online help is available throughout the client’s user interface (UI).

Table 9: Jobless Platform technical specifications

Web/Application Server	GlassFish Server 3.1.2
Database	MySQL 5.0
Programming Language	Java 7 SE
Hardware	PowerEdge R710, Intel(R) Xeon(R) CPU X5675 @ 3.07GHz, RAM 32 GB, DELL PERC H700 SCSI Disk Device 1 TB
Operating system	Windows 2008 R2 Standard

Table 10: Information systems interoperating with Jobless Platform

NSIH	Extracts the individual’s account balance data, status: whether is (or not) a pensioner. Data exchange is performed through the interoperability government platform MConnect <sup>20</sup> by using the web services technology.
State Tax Service	Verifies whether the individual is (or not) a patent holder. Data exchange is performed through the interoperability government platform MConnect, by using the web services technology.
Public Services Agency	Extracts data on natural persons/legal entities, verifies whether the person is (or not) an administrator or associate. Data exchange is performed through the interoperability government platform MConnect, by using the web services technology.

<sup>20</sup> More information about MConnect can be found in [Annex I](#).

SAAIS – Social Assistance Automated Information System	Which is managed by MHLSP. Data is provided on the individual’s status (whether unemployed or not) and whether the individual has a corresponding job rejection. Data exchange is performed directly through web services.
--	--

**RECOMMENDATIONS**

- **New NEA MIS.** The Jobless platform has reached the end of its life-cycle. The new and revised MIS should not only facilitate the recording of actions related to all labor market actors as Jobless does, but, among others, it should provide the means for the streamlining of NEA’s business processes through the provision of automations for time consuming tasks. It should also become a supportive tool facilitating the daily tasks of the caseworkers, freeing up their time and enabling them to provide more qualitative services to the unemployed and the employers. Finally, it should lead to a more efficient case management through the realization of a client-centered approach. Indeed, all the information, services and tools should be designed and developed having the unemployed as a starting point.

4.2.2 Accounting and Financial Management MIS

**This MIS is used for the budget planning and expenses management of the organization.** The system supports the operations of the Budget Planning, Accounting and Payments Division. The MIS is based on an ERP software (targeting retail businesses), provided by an external software provider, who also provides maintenance services on an annual basis. There is no interconnection between the Jobless platform and the accounting and financial management MIS leading to a large administrative burden, since all the costs related to training programs have to be inputted manually into the MIS.

4.2.3 The Portal

**The NEA Portal (<http://www.anofm.md/en>) has as its primary goal to provide information to the unemployed people and the employers.** It is the main communication infrastructure of the organization and provides information on the activities of the organization, the employment legislation, the available ALMPs, limited LMI, and news. It also caters for online inquiries. The portal is administered by the IT Division with no external support and it does not interoperate with the Jobless platform.

Table 11: NEA Portal technical specifications

Web/Application Server	Apache 2.x+/Drupal 6
Database	MySQL 5.0.x+
Programming language	PHP 5.2.x+

**RECOMMENDATIONS**

- **Develop a public portal to inform jobseekers, employers and service providers about opportunities.** The current portal should be extended and become a portal open to the public, advertising the labor market programs. This portal should also provide the labor market actors (potential beneficiaries, training providers, employers, etc.) with information on job vacancies, allowances, training programs details, guidance for beneficiaries, careers information, available on-the-job-training placements, FAQs, application procedure and guidance for training providers (TPs) and employers, benefits, links to careers information attached to each of the ALMPs, grievance redress procedures and timetables, etc.

#### 4.2.4 The Angajat Portal

**The Agency manages the web page [Angajat](#), which offers basic information to both jobseekers and employers and hosts electronic job fairs.**<sup>21</sup> The website enables employers to post job vacancies and jobseekers to perform job searches. Online self-services (e.g. registration, career exploration tools, enrolments in education and training opportunities) are not yet available. Recently, the services provided by Angajat have been complemented with a mobile application that aims to provide information on employment (how to get employed, how to create a resume, how to and frequently asked questions for employment, etc.) to young people. The application’s content is rather static and the application itself does not interoperate with Angajat. The portal is administered by the IT Division with no external support. Angajat interoperates with the Jobless platform in a semi-automated manner, as daily exports of the Angajat database are integrated into Jobless after manual inspection and vice versa.

Table 12: Angajat Portal technical specifications

Web/Application Server	Apache 2.x+/Drupal 7
Database	MySQL 5.0.x+
Programming language	PHP 5.2.x+

## RECOMMENDATIONS

<sup>21</sup> Online job fairs represent a digital form of the traditional job fairs. They have a certain topic and are carried out in a certain period of time providing job vacancies that correspond to the ongoing job fair’s topic.

- **Develop online individual beneficiary accounts.** This would allow beneficiaries to view their account and their progress, but also to apply online for consultancy, assistance and support to start a freelance activity or a business.
- **Develop an online platform for employers to apply to ALMPs, offer job vacancies, and search for candidates.** These include for instance wage subsidies, on-the-job training placements and traineeship placements through the NEA Portal on a continuous basis. The portal should also update the employers with possible matches over time, based on their preferences.
- **Develop online service providers accounts.** This would allow service providers to update key information that is needed by the TS and NEA, such as attendance sheets, invoices, etc.
- **Introduce an online GRM.** In addition, the portal should cater for online inquiries/complaints.

#### 4.2.5 Moldova’s Migration Portal - “Recordkeeping of Labor Migration” (RLM) Automated Information System (AIS)

**The RLM AIS is the single system which keeps track of Moldovan immigrants and emigrants, feeding data into the Jobless platform.** This AIS keeps track of labor market processes in the Republic of Moldova and provides users from the Labor Force Migration Division with the possibility to register, store and share data on labor migration in the Republic of Moldova. The RLM AIS aims at exchanging data on NEA decisions in coordination with other state structures regarding working rights to foreign citizens and stateless persons in the territory of the Republic of Moldova and to Moldovan citizens for work abroad. Partly for that purpose, the RLM AIS main tasks include inputting/updating, storing, analyzing and transferring data on: (i) Foreign citizens or stateless individuals working in the territory of Republic of Moldova; and (ii) Citizens of Republic of Moldova working abroad.

Table 13: RLM AIM technical specifications

Web/Application Server	JBoss 5.1
Database	MySQL 5.0
Programming language	Java 5
Hardware	Dell Power Edge 2950, Intel(R) Xeon(R) CPU E5430 @ 2.66GHz, RAM 4GB, HDD 500 GB
Operating system	SUSE Linux Enterprise Server 10 (x86_64)

#### 4.2.6 The Labor Market Forecast Survey Software - Labor Market Forecast (LMF) AIS

**The Labor Market Forecast AIS is a web-based application used to collect quantitative data for the yearly production of the Labor Market Forecast Survey (LMFS).** The AIS is a combination of a Web application

for the collection of data and of a software to accommodate the respective analysis of data. The LMF AIS is administered by the IT Division with no external support. It is still under development and it is not interconnected with the Jobless Platform. Some of the advantages of the AIS are:

- Online access to a useful instrument for survey data collection;
- Provision of information on achieving the established KPI;
- Provision of a convenient working instrument for survey creation;
- Online receiving of survey data;
- Streamlined work processes for faster access to data on surveys;
- Fast processing and analysis of survey data.

Table 14: LMF AIS technical specifications

Web/Application Server	Apache 2.x, Laravel
Database	MySQL 5.0
Programming language	PHP 7.1, HTML, BOOTSTRAP 4, JQuery, CSS
Hardware	Dell PowerEdge R330 server  Processor Intel Xeon E3-1220 v6 3.0GHz, 8M cache, 4C/4T, turbo (72W), 14nm, TDP 72W Memory 16Gb (2x 8GB) 2400MT/S DDR4 ECC UDIMM, Memory module sockets: 4 LAN: On-Board LOM 1GBE Dual Port (BCM5720 GbE LOM) Chassis with up to 4, 3.5" Cabled Hard Drives +1.8" SATA SSD 3x 1TB 7.2K RPM SATA 6Gbps 3.5in Cabled Hard Drive 2x 200GB Solid State Drive uSATA Mix Use Slim MLC 6Gbps 1.8in Cabled Drive PERC H330 Integrated RAID (0, 1, 5, 10, 50) Hardware Controller)
Operating system	Ubuntu 16.04.3 LTS

## RECOMMENDATIONS

- **Keep the current system.** The new system was developed over the past 2 years.

### 4.2.7 Hosting Infrastructure of the NEA

**The NEA currently holds a data center<sup>22</sup> where all the information systems of the organization are hosted.** The data center is connected to the Internet through fiber optics connection (100Mbit connection with the TSs). The data center is supported by the staff of the IT division and there is no disaster recovery plan available apart from daily backups for all the information systems. Apart from the data center of NEA there are other options available in the country that could be considered for hosting the available

<sup>22</sup> Details on the available infrastructure of the data center are presented in [Annex I](#).

information systems, such as MCloud<sup>23</sup>, offering IaaS services to public sector bodies in Moldova. The choice of MCloud would relieve the IT Division of a large administrative burden.

### 4.3 Jobless Platform assessment

**The Jobless Platform has served the needs of the Moldovan NEA rather well until now, and presents several positive characteristics such as:**

- Its capacity to implement most of the business processes supported by NEA before the reform in an effective manner.
- Its ability to facilitate the detailed recording of actions related to all the involved labor market actors.
- The users of the system (system administrators, TSs caseworkers and accountants) are used to it.
- Due to the long period of time over which the platform is operational (despite several performance issues), it has reached a level of maturity that guarantees that most of the software bugs have been fixed in the course of time and there are limited cases of malfunctions.

**Despite the strengths of Jobless, there are serious obstacles to its upgrading into a modern PES MIS, such as the non-modular approach adopted to its architecture developments, the lack of a client-centered approach and the difficulties entailed by the use of a client-server model.** Since 2003 the system has been developed in a rapid and unstructured manner in order to keep up with the continuous legal changes in the country. This resulted in a non-modular approach in relation to its software architecture leading among others to the inability to reuse parts of the software, difficulty in system scalability and higher development and maintenance costs. In addition, the system's initial design was not based on a client-centered approach; as a result, the continuous adaptation of the system to new laws and regulations did not have any solid basis, whereas the role of reusability was insignificant. This is also evident in the client application menus. Such an approach cannot provide the necessary means for the creation of an intuitive, understandable and user-friendly system that would favor the universality of caseworkers.<sup>24</sup> Finally, the client-server model used for the service delivery does not allow for the upgrading of the system. As an example, more modern system architectures such as microservices cannot be incorporated easily. Moreover, according to the users (administrators and TSs users) the system has serious daily performance issues during the rush hours. For instance, it needs half an hour to startup due to the automatic software updates of the client software and the web services initializations.<sup>25</sup> In principle, the client-server architecture can be one of the prominent underlying reasons for the performance issues, as it usually requires heavy communication lines for the clients.

---

<sup>23</sup> Details on MCloud can be found at <https://mcloud.gov.md/en/content/about-mcloud>.

<sup>24</sup> Given their reduced number in the field offices, caseworkers should be able to embrace all client services -not to be specialized by client/program- and be interchangeable.

<sup>25</sup> According to the company that developed Jobless.

**To support the new reform, the development of a client-centered software able to administer a large number of ALMPs, and the involvement of more user categories in order to achieve an effective information management are required.** Both of these requirements cannot be fulfilled easily by an upgrade of the system. As mentioned before, the system has been developed in a rapid and unstructured manner not favoring software reuse and easy scalability. To effectively cover both of these requirements, using a modular approach in relation to the system's software architecture would be necessary. The unstructured approach followed during the system's development does not allow its adaptation to such an architecture paradigm. The system, apart from the data integrity checks and the realization of business logic rules at the client level, does not enable the inexperienced users to use it effectively. Business process management (BPM) and workflow management functionalities are missing, leading to difficulties in the control of the various statuses of the involved entities (beneficiaries, training providers, employers, etc.). The easy creation of scenarios related to the rearrangement of business processes is not an available option, since in order to incorporate a new business rule in Jobless significant software development is needed. The system was initially designed for a small number of users with limited provision of upgrading options in terms of sizing (users and volume of data) creating several performance problems (e.g. performance issues related to the reporting layer).

**The need to adapt Jobless to accompany the reform while a new MIS is developed seems clear.** Overall, it would require a substantial investment for the Jobless platform to be further upgraded in order to evolve into a modular system, accommodating a client/case centered approach for the effective provision of services to the unemployed people and the employers. A small-scale adaptation of the Jobless platform can be realized in order to make it capable of supporting some of the changes set by the new reform, but the platform has reached the end of its life-cycle. The necessary development in order for Jobless to be able to support NEA during the first phases of the new reform should be realized, but in parallel a new MIS would need to be designed and developed to effectively support NEA's new operational model and the reformed business processes for the years to come.

## 5 Good Practices and International Experience

**This chapter reviews the international experience in this area, presenting some of the global best practices that can be of reference for Moldova.** More specifically, the chapter reviews the different operational models around the main principles of client-centered approach, the individualization of support, and the integrated case-management. Best practices with regards to information systems are also described in section 2.

**Over the past decades, a major shift can be observed in the institutional and organizational culture of PES worldwide.** Most PES have moved away from being a self-sufficient organization, to one that sets to develop and manage working relationships with other agencies, both public and private, in the delivery of employment services. In developing partnerships in service delivery, the challenge for PES is to ensure the quality of services through the establishment of standards for service delivery while tailoring adequate support to each unemployed person.

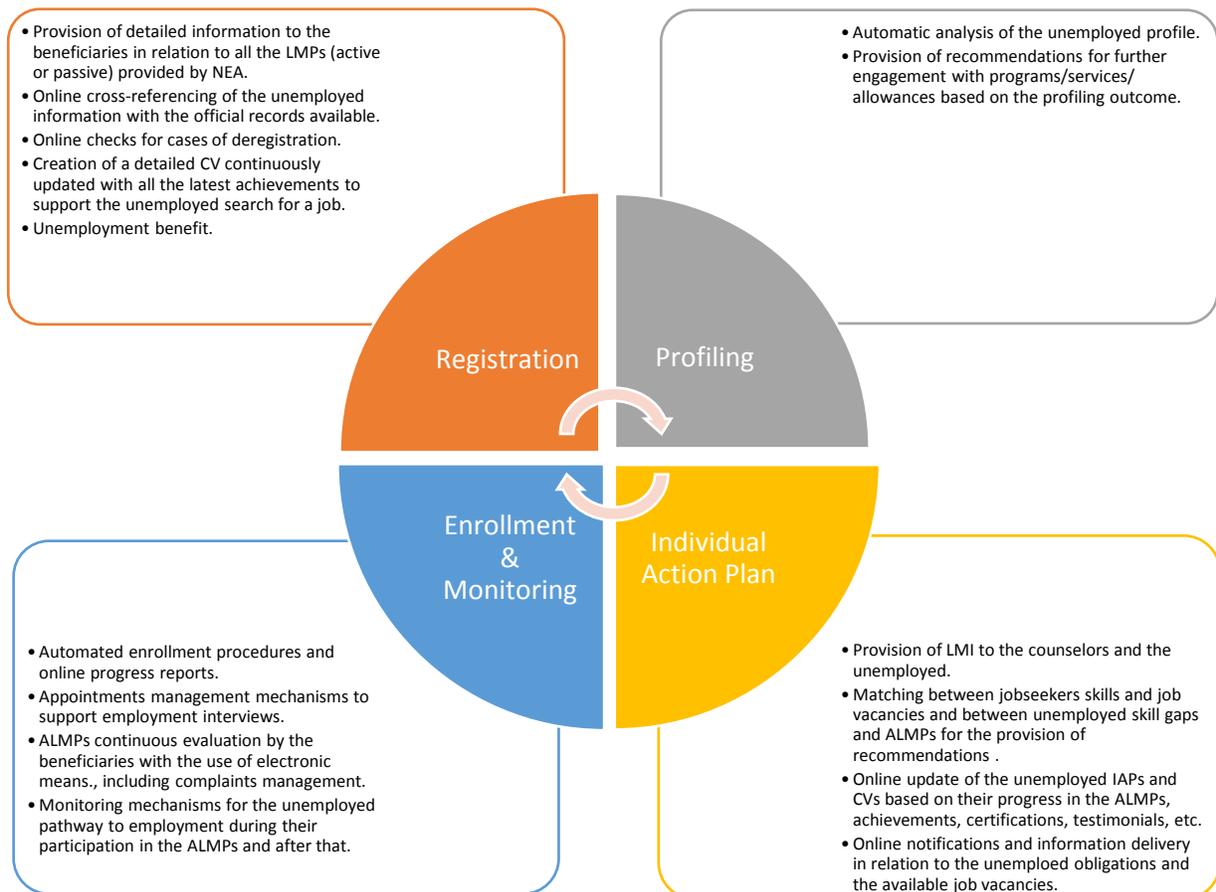
### 5.1 Operational Models

#### 5.1.1 Client-centered approach

**Most EU-28 countries are reinforcing the individualization of support provided to the jobseekers.** This entails focusing on job integration agreements tailoring support to individual needs with clear rights and obligations for both the jobseeker and the support bodies – the client-centered approach. This approach consists of constructing an operational model around the needs and specificities of each client, i.e. the jobseeker (see

Figure 8 below).

Figure 8: A view of the client-centered approach.



### 5.1.2 Individualization of support and service prioritization

**The first two steps of the client-centered approach (registration and profiling), allow the caseworker to provide individualized services.** Profiling involves assessing the jobseeker's background and employability at or prior to the first interaction with the PES staff and typically leads to the categorization of the individual's distance from the labor market. Rather than spread equally across all job-seekers, PES staff time will be focused on those hardest to place, while those easy to place take advantage of job postings in the labor office or of "virtual PES" through the Internet, job fairs, call centers and others. France provides an example of such experience (see below).

#### Best practice 1: Focusing on the hardest to place in France

In France, the national action plan against long-term unemployment adopted in 2015 combines a reinforcement of personalized, intensive counselling, aiming to reach 460,000 beneficiaries in 2017, an increased offer of subsidized contracts and vocational training and a new scheme of work-based training for older workers or those with lower qualifications, as well as better access to childcare and housing support. Long-term unemployed will also benefit from the 500,000 supplementary trainings for jobseekers in 2016, which will double jobseekers' training offers and of which one third should target specifically long-term unemployed and/or low-qualified workers.

**In order to shift counselors' attention away from the easy-to-place and onto the hardest to place (the so-called "creaming effect"), incentives need to be put in place.** Performance incentives need to be tied to the placement of disadvantaged jobseekers under a management by objectives (MBO) system. Budgets can be awarded according to the objectives, and outcomes at the end of the year measured against these objectives. Under such an arrangement, labor offices can receive additional resources aimed to meet an objective of placing more long-term unemployed into jobs. MBOs are particularly suited to a regionalized PES structure, with budgets allocated tied to certain agreed performance benchmarks. The addition of staff rewards is a feature in some PES and has proved to be a successful motivating factor in the achievement of objectives. The UK Jobcentre Plus and the Swiss public employment service have experimented with such incentives (see below).

#### Best practice 1: Management by objectives – UK's Jobcentre

The UK Jobcentres Plus are subject to a job entry target based on a point system that gives disproportionate weight to disadvantaged jobseekers. Jobseekers with the highest points are lone parents as well as people with a disability, with additional points awarded for people residing in marginalized neighborhoods, defined as having a high share of ethnic minority residents, long-term unemployed and low-income households. Giving more points to those disadvantaged jobseekers gives higher incentives to caseworkers to service the most in need.

**Finally, service prioritization allows for a more efficient allocation of resources available for counseling.** The staff time that is currently allocated to relatively easy-to-place job-seekers will be freed up, and therefore can be devoted to the most difficult cases. Some main lines of action proposed by the caseworker to the most vulnerable jobseekers include more intensive mediation for those who are at risk

of long-term unemployment or are already long-term unemployed, including more intensive diagnostics, retraining, support for the creation of new and targeted jobs, support for community work and short-term jobs, organization of work experience, support for self-employment and other measures to enhance the employability of the target groups. With respect to the organizational implications, the emphasis is placed on staff training, increased action planning capabilities, evaluation mechanisms and the development of more sophisticated labor market information systems.

**In particular, most countries focus on prevention and early interventions for youth.** Most countries have introduced systems to detect risk groups early on and make them subject to prioritized and individualized attention, in particular youth through career counseling and professional orientation at school. This also involves early drop outs from school at a time prior to becoming long-term unemployed, typically after six months of joblessness, with directions to remedial and second-chance education or work placement and apprenticeship schemes.

### 5.1.3 One-stop center (integrated case-management model)

**Service integration typically involves either a merger of the traditional PES with social welfare offices or the introduction of integrated computer systems.**<sup>26</sup> Service integration builds on the recognition that job-seekers can have multiple needs that are best addressed in an integrated, one-stop shop manner. It also exploits synergies and generates savings that can be reinvested in new and more intense service provision and programs. Evidence points to the importance of integrating the broad range of employment services into one-stop shops as part of a transition of the PES to “intermediation services” between employment, education and training actors, enabling better labor market functioning and quality job placements.

#### Best practice 3: Case management approach in Estonia

The case management approach used in Estonia provides a notable example of how the PES can manage relationships with other agencies that have specialized staff to work with the disadvantaged job seekers or long-term unemployed to move them towards suitable employment. The steps involved in the case-managed approach used in Estonia include:

- The establishment of contact with the client and making an initial assessment of their employment related difficulties. The kind of support that the client needs is determined. Other primary-level specialists may be involved in the initial assessment process, including the local government social worker, rehabilitation officers, etc.
- The assignment of a case-manager to the client.

---

<sup>26</sup> Coordination with other policy makers and agencies working in fields such as education, health, housing and childcare is also needed to provide a more client-oriented approach that addresses the multi-faceted barriers faced by those farthest from the labor market. Some countries have been exploring new ways of providing such coordinated services, for example through local employment “brokers” who can signpost unemployed people to different services (both pre- and post-employment) while helping communities to fix long-standing barriers and bottlenecks such as a lack of available childcare.

- In-depth assessment of the client's abilities, problems, environment, and resources. An outcome of this assessment is the production of an individual action plan to help the person into employment.
- The coordination of the implementation of the action plan.
- The evaluation of the attainment of the objectives.
- The direct delivery of specific services.
- The referral of the person to employment services and/or public care services (including rehabilitation services if warranted).

**From an IT perspective, good international practices highlight the importance of integration and interoperability.** The PES should be capable of and willing to integrate products and services developed together with partners, including customers. Exchanging knowledge and information both with stakeholders at the national level and between PES can encourage innovation and provide strong leverage to improve the implementation of good employment policies and strategies.

#### 5.1.4 Specialization of caseworkers/PES for certain target groups

**The latest trends include greater specialization of caseworkers or entire PES.** This includes dedicating staff to dealing with hard-to-place clients and investments in training and retraining as well as rotating staff. It also crucially involves culturally sensitive service provision, centered around the individual's needs and abilities, involving dedicated advisors for minority jobseekers in those areas with large minority communities. Japan and Canada offer interesting examples (see below).

#### Best practice 4: Specialization of caseworkers in Japan and Canada

In Japan there are special offices targeting persons over age 40 seeking managerial and technical jobs, mothers, people seeking part-time employment, recent graduates, and youth. In Canada, the Targeted Initiative for Older Workers (TIOW) helps unemployed workers, typically aged 55 to 64, return to work. The initiative is cost-shared with the provinces and territories. It provides employment assistance services, such as resume writing and counselling, and improves participants' employability through activities such as skills upgrading and work experience.

#### 5.1.5 Enhanced contracting out of services to private sector and NGOs

**Many countries around the world choose to contract out the activation services for the most difficult to place clients, based on performance-related payments to the private sector and NGOs.** This shift is reflected for example in Australia where the PES has effectively been outsourced to private and NGO-type agencies. The rationale is that outside partners are better positioned to deliver more effective services than the PES infrastructure – for example NGOs with experience in working with Roma communities or PWD. However, outsourcing is likely only effective when coupled with a performance monitoring and measurement system which allows tracking the individual's progress in finding and retaining a job (e.g. through monitoring social insurance contributions). The Czech Republic has recently launched a pilot initiative focused on Roma communities (see below).

### Best practice 5: Contracting out to NGOs in the Czech Republic

The Czech Government has launched a pilot Social Inclusion Agency to promote innovative partnerships between public services and NGOs in select marginalized communities which provide an entry point for a new approach to promote the employment of Roma. The Social Inclusion Agency relies on the opportunity to develop innovative social inclusion programs individually tailored to local conditions and taking advantage of locally available know-how and actors. The Agency acts as a service provider itself in the pilot localities, but it effectively outsources the bulk of activities to local NGOs.

#### 5.1.6 Regular monitoring and evaluation and performance management

**Good international practices also highlight the importance of regular evaluation of the effectiveness of the employment offices.** Effectiveness is measured by jobseekers' placement and through regular client surveys to ensure high quality and focused service provision. Empowering clients to demand high quality services is also important, by for instance introducing client satisfaction report cards where clients can provide feedback on the quality of service they have received.

At a minimum, PES monitor a key set of performance indicators:

- Jobseekers/PES clients: number of jobseekers registered (detailed statistics per profile of jobseeker), number of jobseekers serviced, number of jobseekers registered in active and passive LMPs, number of jobseekers who successfully transitioned to formal employment, number of jobseekers still holding a job 3/6/12 months after exiting the system, etc.

### Best practice 6: Internal quality and process evaluation in Estonia

The Estonian PES assesses Individual Action Plans (IAP) twice a year to ensure that the plans consider the needs of the jobseeker and outline relevant support measures. The IAPs are drawn up by the job counsellor and the jobseeker and contain a plan of actions and measures to help jobseekers find suitable employment. The methodology to assess the quality of IAPs was developed in 2010 because the PES noticed that IAPs were missing background information and that actions were inconsistent. An internal team (consisting of specialists on work-focused counselling and previous job counsellors) reviews a random sample size of 130 IAPs in total from all regional offices along the following criteria: accuracy and consistency of information about the jobseeker, coherence of the individual's opportunities and obstacles to finding employment, relevance of agreed actions, progress reporting, analysis of results, record of appointments and other relevant information, relevance of the services and ALMP measures to the needs of the jobseeker. The IAPs are assessed within these criteria on a 4-point scale. The average score of IAPs per region and for the whole organization is used as one of five 'quality-related' key performance indicators, together with 13 'outcome' indicators and 30 'output' indicators.

- Branch offices and caseworkers: caseworkers' turnover, number of jobseekers per caseworker, average time spent with each jobseeker, rate of successful exits per branch office/per caseworker, number of registered vacancies per jobseeker, share of registered vacancies successfully filled, etc.

### Best practice 7: The Balanced Scorecard to compare local offices in Austria

In the Austrian PES, the Balanced Scorecard (BSC) aims for an objective comparison of local PES offices and regions in terms of their performance. This performance tool addresses many aspects of PES performance. 25 indicators cover a variety of quantitative outcomes, process and quality-oriented targets such as reintegration rate of active measures, services to employers, call center services, and management processes. The BSC is weighted to take account of key resource dimensions, including staffing and budgets, and different local situations. The tool is used to benchmark the performance of the 100 local PES offices. The performance of an office is measured using different methods: calculation of office specific 'expectation-result', benchmarking across two different types of 'office-clusters', fixed reference figures for all offices. The BSC is a self-steering instrument but also a tool for the federal office and regional branches to monitor local offices. In that way, low and high performers within one cluster are identified and encouraged to share knowledge on performance improvement.

Collecting the key indicators allows to set up performance management, which makes critical information on performance results available for managers at all levels of the organization, enabling rational decisions to be made on the priority of resources. If performance information is linked to the budget cycle, the information can also be utilized to improve effectiveness as part of the budget cycle.

#### Best practice 8: Incentive regime in Estonia

In the Estonian PES there is a widespread use of incentives for the employees with several elements covering both monetary incentives and soft incentives. The basic principles of the incentive regime are that incentives should be based on transparency and fairness, e.g. a share of their wages is based on incentives. At the same time, they use also nonmonetary incentives: a rating of top 10-counsellors and annual rewards for people and teams.

In addition, PES often carry out case-effectiveness analyses, which are usually done in-house and consist of looking at the relationship between resources, activities and outcomes, i.e. who much does it cost the PES/a PES branch to successfully place a jobseeker back on the labor market. More in-depth analyzes may additionally look into efficiency of scale, that is whether available staff, expenditures, or outputs such as activities are optimal to achieve the highest rate of return on the labor market.

Finally, and more often every year, PES will carry out rigorous impact evaluations of their ALMPs. Some countries have institutionalized this, such as Denmark, which never scales up a new measure before testing out a pilot at a rather small scale and evaluating the impact of that pilot on the probability to transition back on the labor market. France and Germany also evaluated regularly new options of service delivery or ALMPs in order to allocate resources to the most performing programs and scale down those with limited impact on jobseekers. These sophisticated impact evaluations are usually outsourced.

#### Best practice 9: Impact evaluations ran by the Danish National Labor Market Board

The Danish government designed randomized control trials (RCTs) to obtain evidence on the effectiveness of all ALMPs introduced since the mid-2000s. The Danish National Labor Market Board runs on average 2 RCTs per year and disseminates the results through a knowledge bank (data repository, conferences, interactive debates, etc.) to foster the active participation of the research community. Most impact evaluations not only look at the impact of the various pilots on the transition back to work, but they also

carry out cost-benefit analyses, to determine which programs are the least costly to reduce unemployment rates/spells.

### 5.1.7 Engaging employers

**Research in OECD countries identifies two general models for developing relationships with employers.**

These include the organizational models in which PES counsellors that work with both employers and jobseekers and those where PES have dedicated employer relationship staff. For example, in France, the PES has formal agreements with large company networks and industry sectors concerning recruitment support. Both organizational models have strengths and weaknesses. While generalist staff may be better positioned to match their clients with employment opportunities, there is a risk that their attention becomes heavily focused on jobseekers, to the detriment of employers. Likewise, while dedicated staff can offer more specialized support to employers, there is a risk of disconnection between services to employers and jobseekers.

**Regardless of the model, research in the EU suggests a number of relevant cross-cutting principles for strengthening employer engagement.** For one, PES staff need to be knowledgeable about employer needs, particularly in the local labor market they are serving. Regular trainings and seminars for frontline staff can be of value. Finding an appropriate combination of different channels for employment contact – from face-to-face to telephone to online services – can be the best way to find a balance between effectiveness and efficiency in serving employers.

## 5.2 Information Systems

**On a global scale, a standardized open-source or commercial MIS that would effectively support all the tasks seen above is not available.** Such a MIS system would need to include many different subcomponents: the core information management in a PES, the provision of services and the interaction with the unemployed and the employers, the monitoring and evaluation of ALMPs, as well as administrative functions. In most cases, customized MIS are being developed on an ad-hoc basis, as each organization or government agency has different requirements depending on the policies pursued in their specific context. The available systems are usually tailor-made solutions, developed progressively in-house, having different levels of maturity, and covering a wide range of functionalities set by each country's legal framework.

### 5.2.1 The Greek OAED

**The OAED or public employment service of Greece's reform shares similarities with the Moldovan case.**

Greece's active labor market policy is undergoing reform focused on program design and the delivery mechanism. As per common European Union practices, Greece is moving from an ad hoc to a more systemic approach in managing active labor market programs (ALMPs). The goal as laid out in the Strategic Framework for the redesign of ALMPs prepared by the Ministry of Labor, Social Security and Social Solidarity is to implement a new ALMP model comprising the following elements: (i) shifting towards a new model of ALMP delivery whereby a menu of ALMPs is available on a continuous basis to the

unemployed; and (ii) strengthening the provision of counseling (including profiling) to the unemployed in order to support, assess, and guide them appropriately.

**Currently OAED uses OPS<sup>27</sup> as a fundamental IT tool to support its core operations.** Based on the infrastructure of OPS, a number of services (subsystem of e- services and portal) have been implemented in order to automate time consuming business processes, and thus free up counselors' time for more qualitative services to the unemployed and employers. The OPS is very rich in functions and has a high level of maturity from an implementation point of view, while at the same time it is fully integrated into OEAD's operations (e.g. basic registration and profiling of the unemployed, management of personalized action plans, processing of unemployment benefits, ALMPs run by OAED, electronic submission of applications forms and CVs for participation in both active and passive labor market programs, electronic update of the unemployment card, etc.). For the support of the available ALMPs, besides OPS, a number of information systems (interoperating with OPS) are utilized in order to streamline the involved processes and provide means for the realization of a monitoring and evaluation framework of ALMPs.

**The OPS and OAED's subsystem of e-services and portal also provide tailored services for the unemployed and employers.** They do so by making use of both the database and data/information received through interoperability with other public body systems, as they have connections to external systems allowing the (semi)automatic update of status and other information. Currently, the functionalities of OPS are enriched with the integration of an online profiling instrument providing the means for a more effective orientation of the candidate beneficiaries to the ALMPs (counselors will be supported by the instrument). At the same time the National Institute of Labor and Human Resources (EIEAD) will provide access to all data related to the analysis of labor market to OAED.

**The demand-responsive training programs are administered through a well-developed information system that supports the entire process of training management.** The system has many features and allows to record many details. It centralizes the management of programs, trainees, training providers, and firms that provide internships. The system supports the full workflow, including program definition, announcement, applications, provider proposals (including curricula definition), registration, class management, scheduling, absenteeism recording, evaluation and grading, payments and digital documents recording (e.g. contracts and signed class curricula). It provides a good tool for daily operations for the program managing body and training providers and is also a good database for monitoring and data analytics.

**OPS is the core IT infrastructure for the support of wage subsidies along with the complement of e-services and a customer service tool (CRM<sup>28</sup>).** The CRM that has been developed under the framework of the reengineering of OAED. CRM facilitates communication and the provision of personalized services to the unemployed and employers, by making use of the relevant registries maintained by OAED. The registry of employers is enriched through interoperability with data/information drawn from various external systems.

---

<sup>27</sup> The OPS is the Greek acronym for MIS – Management Information System.

<sup>28</sup> CRM is at the final stages of data migration with OPS and will complement it at a later stage.

**Finally, in order to satisfy the requirement for an effective monitoring and evaluation framework<sup>29</sup> for the ALMP reform, an advanced reporting mechanism will be introduced.** As the OPS is a “Transaction-Oriented System” and in order to meet the high demands of reporting, a Business Intelligence System (namely, MIS of OAED for Administrative Information) has been developed as part of the reengineering framework of OAED. This MIS covers the increased needs for reporting by collecting and exploiting data/information from all the information systems of OAED. The MIS of OAED for Administrative Information will be extended in terms of data acquisition and analysis, in order to become the core infrastructure hosting the new monitoring and evaluation framework of ALMPs.

### 5.2.2 The German VLM Platform

**A very good example of an advanced information system supporting a PES in terms of effective information management and interaction with their clients, is the Virtual Labor Market (VLM) Platform in Germany.** The VLM platform in Germany has a specific group at which its services are aimed. The intervention primarily targets individuals who are either newly unemployed (0-3 months) or at risk of unemployment. The initial aim of the VLM project was to analyze and improve the case management system which was in use for Germany’s Public Employment Service. In particular, it was felt that the job-seeking tool available prior to VLM required improvements, as it was not fully fit for the purpose. The project took place at a point where a comprehensive reform of the German labor market was being implemented. The basic income support scheme had just been introduced alongside improved support services for long-term unemployed and disadvantaged groups. Eventually, the main objectives of the VLM project were revised to include (i) the development of a state-of-the-art job-seeking tool, attractive for employers as well as for job seekers, and (ii) the development of a more robust case management system to support the work of employment advisors.

**The VLM platform which was eventually constructed serves as a common platform for use by all labor market actors<sup>30</sup> and has three main components.** The platform was designed as an instrument to match job seeker profiles with companies with job vacancies and to help PES staff to administer client data and develop strategies for the reintegration of the job seeker into the labor market. VLM consists of three components that are closely interlinked:

- Jobbörse31 – an online job portal for job seekers and employers.
- VerBIS – the revamped case management system for supporting the PES’ core functions of employment services and careers advice. VerBIS also supports all processes linked to advice & guidance, job placement and the payment of unemployment benefits.
- JobRobot – an online ‘job-crawler’ that collates vacancies from company websites and posts them on the PES’ intranet.

---

<sup>29</sup> Generation of indicators and provision of an automatic alerting mechanism based on these indicators.

<sup>30</sup> These include PES, employers, job seekers, training institutions, public organizations, private recruiters, and third parties.

<sup>31</sup> [https://jobbboerse.arbeitsagentur.de/vamJB/startseite.html;jsessionid=7AN\\_uRxv1UEXJJROTjEvgNc5GIBC8a3RjlSAUxx563oYUIJKmZm!-412873705?aa=1&m=1&kgr=as&vorschlagsfunktionaktiv=true](https://jobbboerse.arbeitsagentur.de/vamJB/startseite.html;jsessionid=7AN_uRxv1UEXJJROTjEvgNc5GIBC8a3RjlSAUxx563oYUIJKmZm!-412873705?aa=1&m=1&kgr=as&vorschlagsfunktionaktiv=true)

**This integrated labor market system enables job seekers to perform different actions.** First, they have the option to manage their applications as well as generating and sending complete online applications according to employers' demands. In addition, there is a feature which enables suitable job alerts to be sent to the job seeker via email. The platform also allows for online registration for unemployment benefits. The integrated nature of VLM platform is best illustrated in the end to end process for job seekers outlined below:

1. The job seeker registers online for benefits (Jobbörse).
2. The job seeker creates their own profile (Jobbörse).
3. The job seeker is notified about an interview at the PES (VerBIS).
4. During the interview with an advisor, the job seeker's personal data and profile are reviewed. An integration plan is developed. (VerBIS).
5. The system runs a search process looking for matching job vacancies (VerBIS).
6. The job seeker receives a number of job vacancies (VerBIS).
7. The job seeker applies online for the job vacancies (Jobbörse).
8. The job seeker receives feedback from the company (Jobbörse).
9. The job seeker notifies the advisor about the outcome of the application process (VerBIS).
10. If the job seeker secures a job, they are 'checked out' of benefit payments (VerBIS).

There is a similar end-to-end process for employers which reinforces the fact that all the components of VLM are interlinked.

**Employers appear to value the system.** A case study on VLM<sup>32</sup> suggests that employers have a high regard for Jobbörse as a large number are registered and advertise their vacancies on the system. There appears to be a couple of reasons for this high level of engagement by employers:

- Employer confidence in the quality of matching suitable candidates to vacancies due to the comprehensive profiling of skills undertaken.
- The ease of access and usability of Jobbörse makes it attractive to employers.

**For both target groups, i.e. job seekers and employers, an intelligent search function based on competences provides added value.** All applicant profiles and job offers are recorded based on a consistent structure and integrated into the matching process. A specific matching technology<sup>33</sup> constitutes the core of VLM. Unlike other search functions which only provide search results that match all search criteria, the matching engine of the VLM facilitates the matching of datasets and shows to which degree these sets match. Therefore, job seekers searching for a job that matches their qualification and experiences in their home town also receive search results matching their profile only to a certain degree, but which might also be suitable (e.g. a job offer in a neighboring town that matches their experiences only to a smaller degree). The results are presented according to the degree of compliance. Furthermore, the matching-technology works 'bi-directionally', which means it is able to match the preferences of the job seeker with the vacancy but is also able to match the preferences of the employer with the demands

---

<sup>32</sup> Case study: A 'Virtual Labour Market Platform' for the Public Employment Service in Germany, GHK, December 2011

<sup>33</sup> [ELISE](#) by WCC Smart Search & Match

of the potential employee. The matching technology considers over 40 criteria with different weightings. In that way, not only the initial qualification of the job seekers is considered but also competences and learning outcomes they acquired via non-formal, informal or on-the-job learning or continuing training.

**Finally, VerBIS (an internal IT-system) provides added value for the PES staff by supporting the PES' core functions, namely the provision of employment services and vocational counselling.** VerBIS may be seen as the core element of the VLM, since it constitutes around 75% of the entire project (Jobbörse represents around 20%, Job-Robot around 2% and online databases on vocational qualifications and other information, 3%). VerBIS supports all processes linked to counseling, job placement and the payment of unemployment benefits. Automatic functions and notifications facilitate the administration of client data and the four-step process of profiling, goal definition, selection of intervention strategies and implementation and monitoring.

**The VLM provides a centralized database and grants access to the client data for different user groups.** The scope of access rights differs according to the tasks of PES staff: receptionists, client counselors, the benefits department, employers' service staff and back office staff all have access to the compiled client data, but to a different extent. For instance, personal data like birth dates, addresses and financial details are not accessible for all groups alike. Consequently, VerBIS provides user-specific homepages with group-specific key search features and links.

### 5.2.3 Matching mechanisms

**A very important aspect is the existence of efficient matching mechanisms between the skills of the unemployed and the available job vacancies as well between the unemployed skills gaps and the available ALMPs.** In this area computerized solutions typically involve a number of elements: A comprehensive inventory of occupations that lists the skills, qualifications and experience required for entry; a tool that individuals can use to assess their own skills, interests and abilities and compare them to occupations that appeal to them; a database of ALMP opportunities again showing entry requirements, etc. Several international experiences in this area are summarized below.

#### Best practice 6: Examples of matching mechanisms

One of the best known and most comprehensive examples is O\*Net,<sup>34</sup> created for the U.S. Department of Labor, Employment & Training Administration. However, designing such a sophisticated resource with such a wide-ranging functionality from scratch is hardly feasible for most countries.

My World of Work<sup>35</sup> in Scotland, is a government funded portal that comprises a self-assessment element to determine each individual's skills, a job matching facility, and a training opportunity search function.

According to a recent CEDEFOP study<sup>36</sup>, the VDAB<sup>37</sup> in Belgium launched Competence-based matching in 2010. The vision was to develop a web application that would more precisely match the skills of the

---

<sup>34</sup> <https://www.onetonline.org/>

<sup>35</sup> <https://www.myworldofwork.co.uk/learn-and-train>

<sup>36</sup> Cedefop (2018)

<sup>37</sup> <https://www.vdab.be/>

unemployed to labor market needs. It is innovative because it combines a vacancy database with a skills database (developed by the Flemish Social and Economic Council, SERV) featuring a list of skill needs for most occupations. Jobseekers use the tool to indicate their skills profile (a personalized suggestion is made based on previous work experience and educational background). The application links this to the skills requested for vacancies and calculates matching scores, along with suggestions for skills and personal development opportunities. The philosophy is that vacancies can be relevant for a person who already has half or more of the required competences. The innovative VDAB matching system has proven valuable outside of Flanders. Malta's PES Jobsplus<sup>38</sup> uses the same system to match job seekers to vacancies. The technical part of the matching process, which does not require human intervention, takes place remotely on VDAB systems and servers.

The Czech Education and Work Web portal provides information to jobseekers to steer them towards a qualification required for subsequent matching to a job vacancy. It offers an overview of newly introduced short VET programs (vocational qualification, VQ) and vacancies. Through a matching process, jobseekers are guided to these vacancies and – where required – they are guided to take the necessary steps towards acquiring and using a VQ. The tool connects vacancy, course, provider databases and generic occupation overviews and helps jobseekers navigate the possibilities of the national qualifications framework. In April 2014, the portal had around 10.000 registered users who were provided with around 20.000 job offers linked to almost 800 generic professions, 2.000 training courses and about 500 VQ exams.

Finally, one example of an internship matching service is the UK's Graduate Talent Pool.<sup>39</sup>The program is aimed at recent university graduates and enables them to search for internships in UK organizations of any size from the public, private or voluntary sectors. It works by leading individuals to refine their search using filters like occupational area and location. Employers can post their internships on the site, subject to a transparent set of conditions.

---

<sup>38</sup> <https://jobsplus.gov.mt/>

<sup>39</sup> <https://graduatetalentpoolsearch.direct.gov.uk/gtp/index>

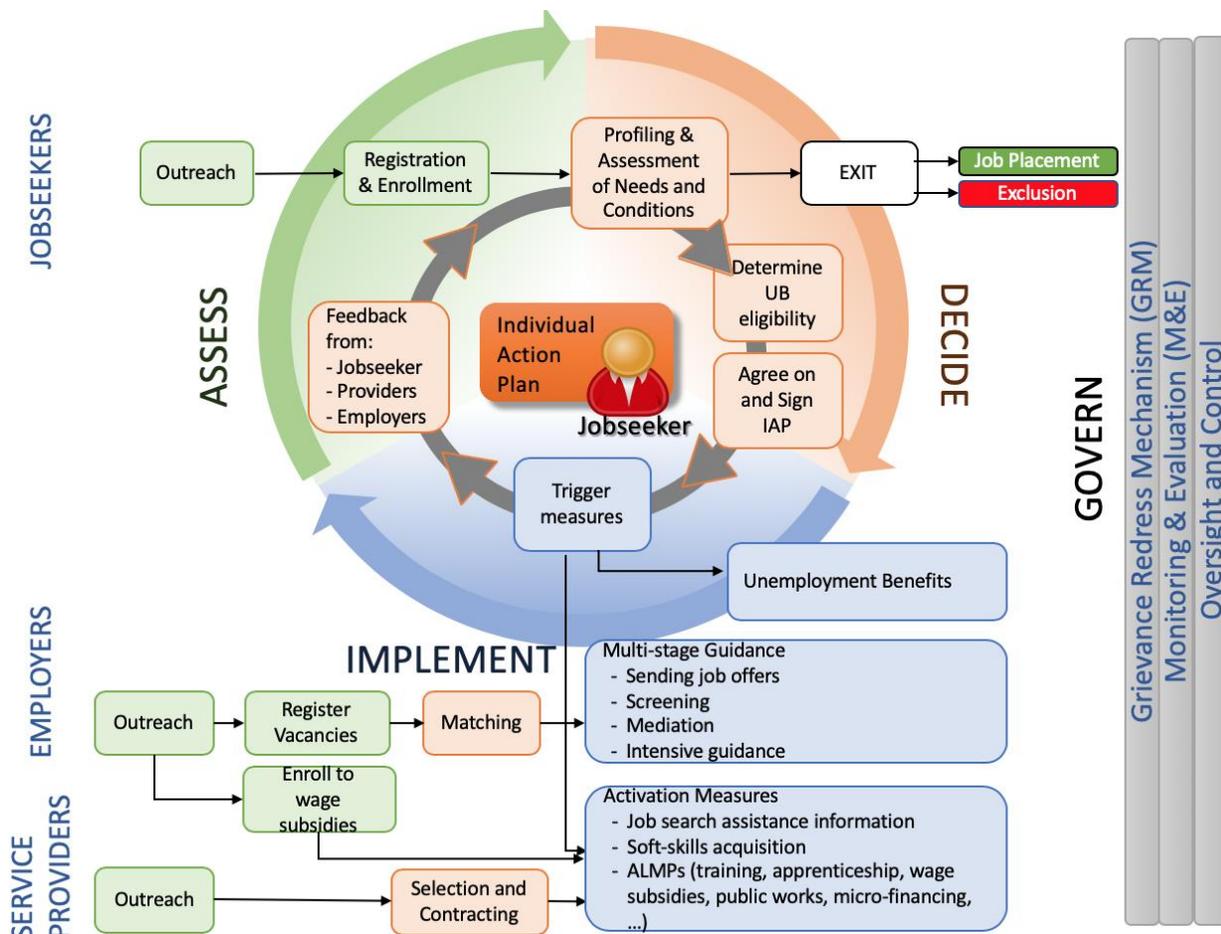
## 6 Conclusions

**The former assessment allows drawing conclusions to improve labor market service provision and the delivery chain in Moldova.** Based on the assessment provided in section 3, NEA needs to continue its undergoing reform to follow a client-centered approach and ensure that the ultimate goal of the agency is to bring jobseekers back to the labor market in the most efficient and timely way.

### 6.1 A client-centered operational model

First and foremost, it will be essential to clarify the new roles endorsed by the different stakeholders and the interaction between them all. These include Institutions (TS, NEA, MoHLSP, Ministry of Education, and social welfare services), clients (jobseekers and employers), and service providers (training centers, employers, subcontractors, etc.). **Error! Reference source not found.** gives an overall view of the interactions at all steps between these different actors.

Figure 9: Key elements of new operational model



**The second, and most important step, will be to describe a new operational PES model, moving away from a catalogue of independent procedures, to an operational model centered around the beneficiary.**

A client-centered approach, as described in **Error! Reference source not found.**, would entail the following iterative and incremental steps:

- Assess
  - Outreach (jobseekers, service providers, employers)
  - Register clients (jobseekers, potential service providers, employers' vacancies)
  - Profile jobseekers
- Decide
  - Individual Action Plan (IAP) for jobseekers
  - Selection of service providers for ALMPs
- Implement
  - Follow Individual Action Plan (IAP) for jobseekers (including services, ALMPs, payment of benefits and grants)
  - Services provided by service providers (trainings, etc.)
  - Matching/mediation between vacancies and jobseekers (for jobseekers and employers)
- Update (throughout the whole process)
  - Jobseekers: follow up progress through the Individual Action Plan (IAP), exit from the agency/system
  - Jobseekers: re-assess needs and conditions; provide options of re-profiling and re-negotiating the IAP based on new circumstances and feedback from jobseekers, employers and service providers
  - Service providers: enrollment of jobseekers, invoices, payments
  - Employers: removing filled vacancies
- Govern (throughout the whole process)
  - Grievance Redress Mechanism
  - Monitoring and Evaluation (M&E)
  - Oversight and process assessment

**The main task of a caseworker should be to guide the jobseeker and offer the most efficient combination of programs and services, and to do so in a manner that allows for non-linear processes.**

The current procedures are stand-alone description of processes are not linked to one another. The new operational model should hence improve the understanding of caseworkers, standardize their approach, and simplify their work. This could be attained by adopting a client/case-centric integrated pathway through general procedures and ALMPs, and business processes behind the measures presented as procedural steps, as well as link them to the Jobless interface.

**The adaptation of a client-centered approach will enable the caseworkers to have a “365 view” of any unemployed person or firm registered with the NEA at all times and it will provide the necessary means for the delivery of personalized services to the unemployed.** This approach will facilitate the effective interaction of the jobseekers and the employers with the agency (in terms of time spent and achieved

outcome) and it will provide the means for the efficient delivery and management of information in relation to the unemployed status (e.g., seeking for a new job, participates in an ALMP, receives unemployment benefit, etc.), their pathway in the agency and the options they have for their further engagement with the agency.

**The new operational model, based on a client-centered approach, may be labor intensive and demanding in terms of institutional capacity.** This model requires more frequent and high-quality interaction between caseworkers and clients (jobseekers, but also service providers and employers). To make such approach possible, the NEA should deploy revised information management that will use client-centered information systems and electronic communication tools to ease the work of caseworkers and staff, and improve/simplify the communication between the NEA, clients and stakeholders.

**NEA may also wish to consider adopting an integrated-case management approach.** NEA will have to integrate the different services provided to its clients (jobseekers, employers and service providers) and collaborate with other agencies that may provide complementary services in an integrated case-management approach. Figure 8 highlights the different services to be provided to actors of the labor market for services and programs directly managed by NEA.

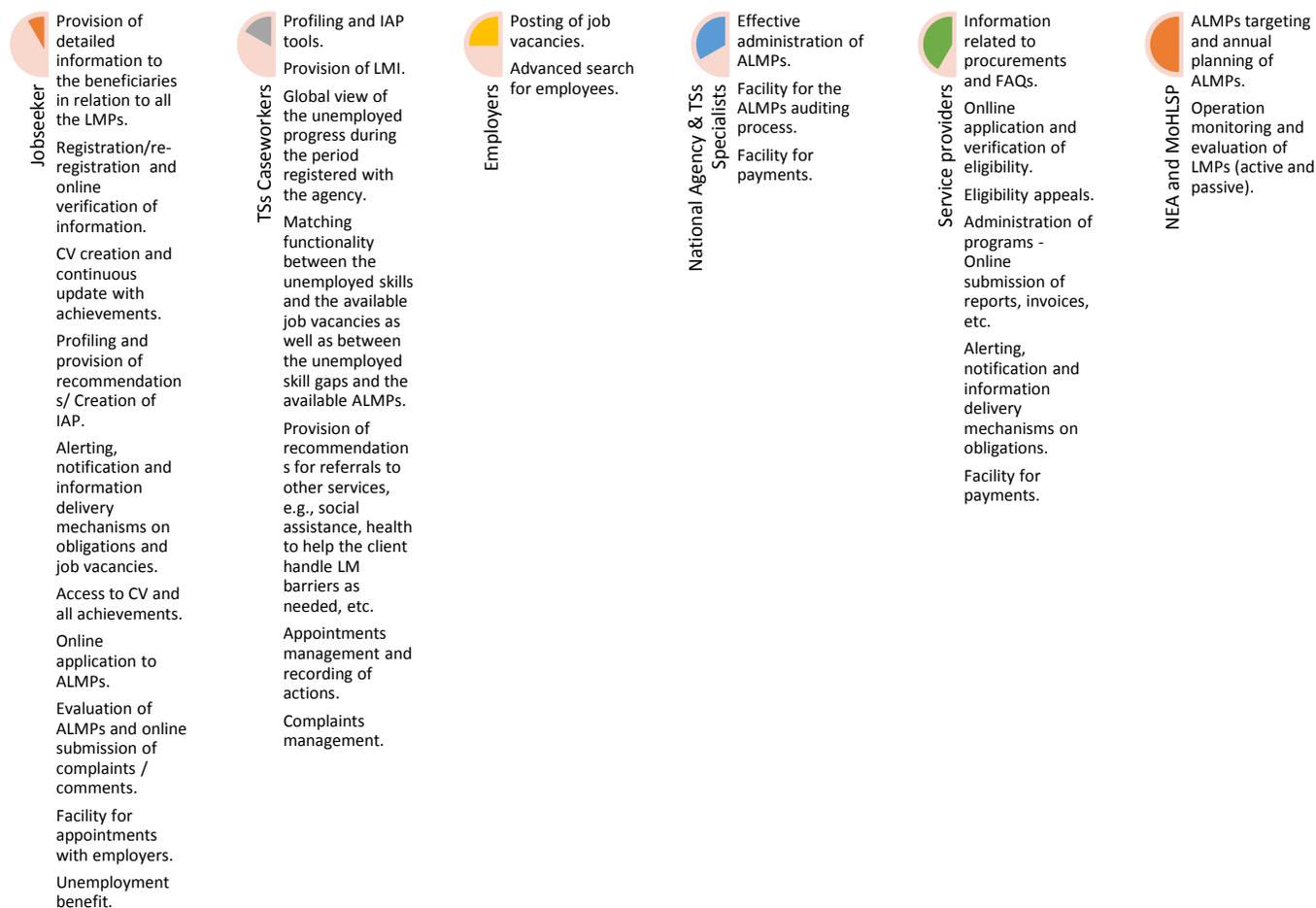
## 6.2 A revised MIS system

**With regards to information systems, developing a new**Based on the assessment provided in [section 4](#) the Jobless platform has reached the end of its life-cycle and the need for a new NEA MIS is evident. The new, revised MIS should not only facilitate the recording of actions related to all labor market actors as Jobless does, but, among others, it should provide the means for the streamlining of NEA's business processes through the provision of automations for time consuming tasks. It should also become a supportive tool facilitating the daily tasks of the caseworkers, freeing up their time and enabling them to provide more qualitative services to the unemployed and the employers. Finally, it should lead to a more efficient case management through the realization of a client-centered approach. Indeed, all the information, services and tools should be designed and developed having the unemployed as a starting point.

### **Vision Statement**

Overall, the new MIS will enable the NEA to execute all the key functions of a modern Public Employment Service (PES), namely: collection and dissemination of labor market information (LMI); employment counseling and career guidance; job placement and administration of passive and active labor market programs.

Figure 10: Services provided to all the labor market actors by the MIS



**The MIS should be designed in a modular approach.** This would entail that it favors reuse and thus allows the easy integration of mechanisms to support new active or passive labor programs and its easy setup in relation to new legislation over time. In

Figure 10 a list of services that the new MIS should provide for all the labor market actors is depicted.

**The new MIS should meet certain requirements.** The adaptation of a client-centered approach and the fact that counseling as well as labor mediation services are at the center of NEA’s public role, lead to a number of requirements in relation to the operating processes and functionality to be supported by the new NEA MIS. The key features of the new MIS system are listed below.

#### 6.2.1 Support the workload of TS caseworkers when servicing jobseekers

- *Enable the registration (re-registration) of unemployed people with the agency.* This would include the upload of required documentation, such as the creation/update of their detailed CVs (recording

their education level, skills, competences, previous experience, certificates, achievements etc.), in a continuous and simplified manner, and preferably online.

- *Support the profiling and the development of individual action plans (IAPs) based on the profiling outcomes.* All the necessary verifications should be made online by cross-referencing the unemployed information with the official records available, thus promoting NEA's paperless operations.
- *Assist the counselors and the unemployed through the delivery of efficient matching functionality.* Matching refers to both between the skills of the unemployed and the available job vacancies as well as between the skill gaps of the unemployed and the available ALMPs, based on the profiling outcome and the data recorded in the unemployed CVs. The same mechanism could be extended to support the provision of recommendations for referrals to other services/providers, e.g., social assistance, health to help the client handle LM barriers as needed, etc. In parallel the MIS should feed from Labor Market Information (LMI) and Labor Market Intelligence systems, if possible, to facilitate the counseling process.
- *Provide the caseworkers with a global view of the unemployed progress during the period registered with the agency.* This would include their pathway to find a job and information in relation to their progress when participating in ALMPs (acquired skills, certifications, individual reports, testimonials, reason for deregistration, financial data, etc.), whenever required. Moreover, the MIS should enable the TS staff to keep a journal (remarks/notes) on every communication they have with the unemployed, including the monthly appearance of the unemployed granted with the unemployment benefit, as well as the monitoring of the beneficiaries' activities related to the ALMPs.
- *Cater for alerting, notification and information delivery mechanisms to beneficiaries.* Various means should be considered, i.e., e-mail, Web Access, SMS, instant messaging. This information would relate to the beneficiaries' obligations stemming from their registration with the NEA (e.g., unemployment benefit, job opportunities, participation in the ALMPs, etc.).
- *Automated appointment management and record of actions.* Make available automations to support the management of appointments and the recording of the counselor's actions in relation to counseling sessions and employment interviews.
- *Enable the automated connection to the unemployment benefit processing module.* This feature will accommodate the calculation of the amount and the payment duration of unemployment benefits by the TSs (the payment of the unemployment benefit shall be realized by the National Social Security Agency), as well as the monitoring of the beneficiaries granted with the unemployment benefit.
- *Standardized template documents.* Templates would include profiling, reporting, cooperation agreements and contracts (among beneficiaries, service providers, employers and the agency), recording achievements, certification, etc.

#### 6.2.2 Provide an online platform with information for all clients (jobseekers, employers and service providers)

- *Be complemented by a portal open to the public, advertising the labor market programs.* This portal should also provide the labor market actors (potential beneficiaries, training providers, employers, etc.) with information on job vacancies, allowances, training programs details, guidance for

beneficiaries, careers information, available on-the-job-training placements, FAQs, application procedure and guidance for training providers (TPs) and employers, benefits, links to careers information attached to each of the ALMPs, grievance redress procedures and timetables, etc. In addition, the portal should cater for online inquiries/complaints.

### 6.2.3 Provide an online entry point for all clients (jobseekers, employers and service providers)

- *The provision of individual accounts for all the labor market actors offering services to NEA (training providers, professional rehabilitation institutions and centers, employers, etc.).* This would enable an online communication channel between them and NEA to send in reports, invoices etc. and receive payments. Moreover, the MIS should provide alerting, notification and information delivery mechanisms through various means (i.e., email, Web Access, SMS, instant messaging) for the labor market actors in relation to their obligations stemming from their contracts with the NEA (progress reports, financial data, administrative tasks, etc.).

#### Jobseekers

- *Provide individual beneficiary accounts.* This would be accessed through the NEA Portal, and would be pre-populated by basic CV information with the capacity to hold: Profiling results, skills gap analysis, Individual Action Plans and counselor/ client updates, employer reports, testimonials, training provider reports and work-based supervisor reports plus completion data - certificates achieved and follow-on destination. All the above should be designed in a format that corresponds with the monitoring and evaluation criteria of the NEA.
- *Enable the unemployed to apply online for consultancy, assistance and support to start a freelance activity or a business.* This should also include being automatically updated on every step of the evaluation process (performed by electronic means) of their application.
- *Provide e-tools for the support of the monitoring and evaluation activities by the beneficiaries participating in the ALMPs.* E-tools refer to online questionnaires, e-surveys etc. The system should also provide for the effective submission of complaints and comments by the beneficiaries.

#### Employers

- *Provide an online mechanism for employers to offer job vacancies and apply to ALMPs.* These include for instance wage subsidies, on-the-job training placements and traineeship placements through the NEA Portal on a continuous basis. The MIS should also accommodate the application evaluation in an effective and timely manner.
- *Provide advanced search mechanisms for the employers to search for potential candidates in the unemployed database.* The MIS should also update the employers with possible matches over time, based on their preferences.

#### Service providers

- *Develop online service providers accounts.* This would allow service providers to update key information that is needed by the TS and NEA, such as attendance sheets, invoices, etc.

## 6.2.4 Facilitate administrative and planning processes (NEA and TS)

### Strategic planning

- *Facilitation for the annual planning of the ALMPs* (targeting and budgeting). This would be for both the TSs and the National Agency and would include accommodation of the annual procurement plan for the acquisition of services.
- *Enable the identification of vocational training needs as well as the other ALMPs targeting*. This should be done through access to Labor Market Information (LMI) and Labor Market Intelligence systems, if possible.

### Measures and services

- *The provision of an effective mechanism for the management of training programs and the beneficiaries/ trainees by the training providers and the employers (traineeships) as well as related reporting mechanisms*. This would allow the NEA specialists to administer and supervise the whole process around training activities, schedule, absenteeism management, certification, academic performance and exams, etc.
- *Facilitate the administration of all the ALMPs by the TSs' staff with the provision of advanced information management and reporting tools*. These would support the agency's daily operations (e.g., lists of pending tasks, progress reports by the service providers and approval/rejection process, financial management, operational monitoring of the programs and provision of automated alerts, etc.).
- *Facilitation for the disbursement of benefits to beneficiaries and service providers*. This should be done according to a planned schedule/achievement of pre-set key milestones and inspection of the submitted documents. It should include the generation of electronic payment slips which will then be forwarded to disbursing institutions. The system should also track feedback on actual payments made.

### Interaction with service providers

- *Accommodation of registers of approved service providers to deliver services (training, accommodation, rehabilitation, etc.) and provide the ability to enhance it on a continuous basis*. The providers should be able to apply online for inclusion in the registries, as well as submit an objection to NEA in case they are excluded from the registry. All the necessary verifications should be made online by cross-referencing the providers' information with the official records available, thus promoting NEA's paperless operations.

### Governance (M&E, audit, GRM)

- *Support for the specialists of the NEA*. This will include automations to streamline the auditing process of the ALMPs (online crosschecks of the information submitted by the service providers) and the provision of mechanisms for the support of on-site inspections (auditing assignments management and monitoring of inspections by the heads of the TSs, submission of audit reports online by the specialists, etc.).

- *Support an M&E framework under the new model of ALMP delivery.* This will include the ability to pull out key data– number of starts with a TP; number of starts who complete theory training, number of starts who are placed; number of starts who achieve a completion certificate; numbers who achieve a positive destination within given time periods; gender split for all of the aforementioned etc.. In addition, the ability to monitor and evaluate ALMPs based on skills acquisition and job outcomes, rather than solely program completion, should be provided.
- *Support for the performance monitoring and management of the organization.* This would include monitoring (and redistribute as possible) caseloads of caseworkers, performance monitoring of TSs, tracing of individual results/productivity to support HR decisions on promotions, learning needs, etc.
- *The provision of dashboards and alerting mechanisms for the high-level monitoring and supervision of the ALMPs.* This would focus on the Management team of the NEA and the MoHLSP.
- *The utilization of advanced technologies like Artificial Intelligence and Machine Learning.* These could, among others, provide models to analyze, match and predict based on the available data and provide the means for the design and implementation of more effective ALMPs.
- *Support for an effective grievance redress mechanism (GRM).* This would allow to enhance accountability and transparency in relation to the services offered by NEA to all the labor market actors. It should be provided through multiple uptake channels (NEA Portal, NEA MIS beneficiary and service providers accounts, email, TSs, phone, etc.), and with ability for grievances to be filled anonymously. The MIS should categorize, assign priority, route grievances to the appropriate entity, provide automatic acknowledgement of complaints, and ability to track grievances and assess progress being made to resolve grievances. Moreover, it should accommodate a knowledgebase (of past complaints and measures taken) to support the grievance redress process and support the necessary security mechanisms to enable grievances to be treated confidentially, assessed impartially, and handled transparently.

## 7 References

Cedefop (2018). "From Long-Term Unemployment to a Matching Job: The Role of Vocational Training in Sustainable Return to Work." Luxembourg: Publications Office. CEDEFOP reference series; No 107.

<http://data.europa.eu/doi/10.2801/785536>

European Commission (2012). "Activation and Integration: Working with Individual Action Plans Toolkit for Public Employment Services." DG Employment, Social Affairs and Inclusion.

World Bank (2016).

World Bank (2018). "The Albanian National Employment Service Functional Review: An Overview." Social Protection and Labor Global Practice (GSPDR), Europe and Central Asia.

## Annex I: Hosting Options and Available Services

### The NEA Data Center

Table 15: The NEA Data Center Information Systems and Infrastructure

<b>Jobless (Application Server)</b>	
Software	GlassFish Server 3.1.2, MySQL 5.6, Java 8 update 191, Java 7 update 17, GORDIC G3 Win, Java SE Development Kit 7 update 17, Development Kit 8 update 191
Hardware	<b>Model</b> - PowerEdge R710 <b>CPU</b> - Intel(R) Xeon(R) CPU X5675 @ 3.07GHz, 2 processors (6 cores per processor) <b>RAM</b> - 32 GB, <b>HDD</b> - DEL DELL PERC H700 SCSI Disk Device, 1 TB
Operating System	Microsoft Windows Server 2008 R2 Standard
<b>Jobless (DataBase Server)</b>	
Software	MySQL Server 5.6, Java 8 update 191, MySQL Workbench 5.2 CE
Hardware	<b>Model</b> - PowerEdge R710 <b>CPU</b> - Intel(R) Xeon(R) CPU X5675 @ 3.07GHz, 2 processors (6 cores per processor) <b>RAM</b> - 32 GB, <b>HDD</b> - DEL DELL PERC H700 SCSI Disk Device, 1 TB
Operating System	Microsoft Windows Server 2008 R2 Standard
<b>Active Directory Server</b>	
Software	Symantec Backup Exec 2015, STATA 15 MP
Hardware	<b>Model</b> - eserver xSeries 346 (IBM) <b>CPU</b> - Intel(R) Xeon(TM) CPU 3.00GHz, 2 processors (1 cores per processor) <b>RAM</b> - 8 GB, <b>HDD</b> - IBM ServeRAID SCSI Disk Device 320 GB
Operating System	Microsoft Windows Server 2008 R2 Standard

<b>Antivirus Server</b>	
Software	BitDefender Gravity Zone
Hardware	<b>Model</b> - eserver xSeries 346 (IBM) <b>CPU</b> - Intel(R) Xeon(TM) CPU 3.00GHz, 4 processors (1 cores per processor) <b>RAM</b> - 10 GB, <b>HDD</b> - IBM ServeRAID SCSI Disk Device 320 GB
Operating System	Ubuntu 16.04 LTS
<b>RLM AIS (Application Server)</b>	
Software	JBoss 5.1, MySQL 5.0
Hardware	<b>Model</b> - Dell Power Edge 2950 <b>CPU</b> - Intel(R) Xeon(R) CPU E5430 @ 2.66GHz, 8 processors <b>RAM</b> - 4GB <b>HDD</b> - 500 GB
Operating System	SUSE Linux Enterprise Server 10 (x86_64)
<b>RLM AIS (DataBase Server)</b>	
Software	SQL Server 5.0
Hardware	<b>Model</b> - Dell Power Edge 2950 <b>CPU</b> - Intel(R) Xeon(R) CPU E5430 @ 2.66GHz, 8 processors <b>RAM</b> - 4GB <b>HDD</b> - 500 GB
Operating System	SUSE Linux Enterprise Server 10 (x86_64)
<b>Intranet Server</b>	
Software	Apache HTTP Server 2.2.17, Kerio Connect
Hardware	<b>Model</b> - PowerEdge 2950 <b>CPU</b> - Intel(R) Pentium(R) III Xeon processor 2.66 GHz, 8 processors <b>RAM</b> - 4 GB <b>HDD</b> - DELL PERC 6/i SCSI Disk Device 450 GB
Operating System	Microsoft(R) Windows(R) Server 2003, Standard Edition

<b>Connection SIAAS Server</b>	
Software	Java 6 update 30, MySQL Tools 5.0
Hardware	<b>Model</b> – HP ProLiant ML 370 G4 <b>CPU</b> - Intel Xenon 3.40 GHz 2 processors <b>RAM</b> – 2 GB <b>HDD</b> - 200 GB
Operating System	Microsoft XP Professional SP2
<b>Labor Market Forecast (LMF) AIS</b>	
Software	Virtual Machine- SIA Prognoza Pieței Muncii (Laravel, Apache Server)
Hardware	<b>Model</b> - Dell PowerEdge R330 <b>CPU</b> - Intel Xeon E3-1220 v6 3.0GHz, 4 processors (4 cores per socket) <b>RAM</b> -16Gb <b>HDD</b> - SATA 3x 1TB Hard Drive , 2x 200GB Solid State Drive
Operating System	VmWare ESXi
<b>Web Server</b>	
Software	Pe acest server se dezvoltă web servicii
Hardware	<b>Model</b> – AWRDACPI <b>CPU</b> - Intel(R) Pentium(R) D CPU 3.00GHz, 2 processors <b>RAM</b> – 2 GB <b>HDD</b> - HDS728080PLAT20, 80 GB
Operating System	Microsoft(R) Windows(R) Server 2003, Standard Edition
<b>Server UNIAC (For Accounting)</b>	
Software	Hamachi, Hyper-V, Universal Accounting, Toad for Oracle, OpManager
Hardware	<b>Model</b> – <b>CPU</b> - Intel(R) Core(TM) i3-2130 CPU @ 3.40GHz, 2 cores <b>RAM</b> – 12 GB <b>HDD</b> - WDC WD10EZRX-00A8LB0 ATA Device, 1 TB
Operating System	Microsoft Windows Server 2008 R2 Enterprise

<b>Active directory Second Server</b>	
Software	Active Directory
Hardware	<b>Model</b> – OptiPlex 755 (Dell Inc.) <b>CPU</b> - Intel(R) Core(TM)2 Duo CPU E6750 @ 2.66GHz, 2 cores <b>RAM</b> – 4 GB <b>HDD</b> - ST3160815AS ATA Device, 150 GB
Operating System	Microsoft Windows Server 2008 R2 Standard
<b>Backup Portal Server</b>	
Software	MySQL Server 5.0, MySQL Tools for 5.0
Hardware	<b>Model</b> – D1409 (FUJITSU SIEMENS) <b>CPU</b> - Intel(R) Xeon(TM) CPU 2.80GHz, 1 cores per socket <b>RAM</b> – 2 GB <b>HDD</b> - FUJITSU MAS3367NC SCSI Disk Device, 140 GB
Operating System	Microsoft Windows 7 Professional

## MCloud

The MCloud Platform (<https://mcloud.gov.md/en/content/about-mcloud>) is a joint governmental information infrastructure operating on the basis of “cloud computing” technology. The “cloud computing” represents an IT services’ delivery model, allowing access, upon request and based on network, to all configurable and virtualizable computing resources (for example networks, servers, storage devices, applications and services) which can be made readily available with minimal administration or interaction with the supplier of these services’ effort.

The MCloud users are no longer bound to maintain a complex and costly infrastructure, but may access at any time, on demand and in online mode, networks, servers, storage devices, applications or services, nevertheless, the interaction with the supplier of such services being minimal.



The MCloud Platform is intended for the exclusive use of central administrative authorities and organizational structures falling within their spheres of competence, subordinated to the Government (CPA) and represents an innovative delivery model based on infrastructure, platform and software as services’ consumption.

The MCloud Platform has several objectives, including:

- streamline the IT resources through reuse and readjustment;
- exempt public institutions from managing their own infrastructure, so as to give them the opportunity to concentrate their efforts on the set objectives as well as to create value-added services;
- reduce the data centers maintenance costs through rationalization, consolidation and virtualization;
- minimize paper consumption within the governance process.

The MCloud Platform use and operation process within CPAs is governed by Government Decision No. 128 dated February 20, 2014 “On the joint governmental technological platform (MCloud)”.

The Regulation establishes the platform use and operation manner and determines the participants’ tasks and responsibilities regarding the relations associated with the use and operation of the platform in question (provider, operator, beneficiaries, and other participants). It should be mentioned that the Regulation provides both for general duties of the MCloud platform participants, as well as their duties depending on the type of provided services (Infrastructure as a Service - IaaS, Platform as a Service - PaaS, Software as a Service - SaaS).

## Software as a Service - SaaS

The SaaS (software as a service) type service is an IT service delivery model providing the Beneficiary with complete IT solutions. The Provider places at the Beneficiary's disposal the components necessary for the operation and management of IT solution, including of data. The responsibility for managing the service end users lies with the Beneficiary.

Currently, **SIGEDIA** is the only SaaS service offered by the Provider to the Central Public Authorities.

SIGEDIA stands for the integrated system of documents and public records management. SIGEDIA is a web-based, modern and flexible system allowing smooth exchange of documents, management of work processes, tasks and agendas etc. Currently, SIGEDIA is being piloted within 9 public institutions pursuant to the Government Decision No. 262 as of April 15, 2013 "On the integrated system of documents and public records management piloting".

## Platform as a Service – PaaS

The PaaS (Platform as a Service) type service represents an IT service delivery model, in which the Provider (the Electronic Governance Center) provides the Beneficiary (CPA) with a set of software components which can be used by the Beneficiary with a view to implementing his own electronic services. The following software components are provided within the MCloud Platform as part of the PaaS service:

**MPay** is the governmental electronic payment service which represents an informational tool by means of which various services may be paid online. Although MPay targets primarily the electronic services from the public sector, it may be successfully used for commercial services as well. The MPay service is institutionalized by the Government Decision No. 280 as of April 24, 2013 "On some measures for the implementation of the governmental electronic payment service (MPay)".

**MSign** represents an electronic service allowing application and verification of digital signatures, as well as exchange of digitally signed documents. The service provides signing tools – mobile signature and digital certificate. The MSign service is institutionalized by the Government Decision No. 405 as of June 02, 2014 "On the integrated governmental electronic service of the digital signature (MSign)".

**MPass** is the governmental authentication and access control service. The service provides several authentication mechanisms - mobile signature, digital certificate, username and password. The MPass service is institutionalized by the Government Decision No. 1090 as of December 31, 2013 „On the governmental authentication and access control service (MPass)".

**MNotify** is a technical application used to send notifications within the information systems held by the ministries, administrative authorities and organizational structures that fall within their competence, as well as by service providing public institutions. The Government's Draft Decision „On the MNotify Government Notification Service" was submitted for public consultation and approval.

**MLog** represents a centralized service which aims to provide a secure and flexible logging and auditing mechanism, ensuring registration of operations (events), produced in an information system at a given time. The MLog service is institutionalized by the Government Decision No. 708 as of August 28, 2014 "On the e-Government Logging Service (MLog)"

**MConnect** is a government service aimed at ensuring the exchange of information and data between public authorities. The given service is currently being piloting in accordance with the Government Decision No. 404 as of June 02, 2014 "On the interoperability platform piloting".

**PGRAP** is a joint platform designed to implement such electronic services as: online programming, registry and issuance of authorizations. By the instrumentality of PGRAP it is possible to develop such services

without making some programming program code adjustment related activities. The PGRAM service is institutionalized by the Government Decision No. 717 as of August 29, 2014 “On the government platform of registers and permissive documents (PGRAP)”.

Once approved the PaaS services integration request, the Beneficiary is provided with a set of integrating documents as well as a testing (bed) environment for the electronic services’ implementation and integration testing. At the same time, the Beneficiary is given access to a help desk system allowing quick settlement of inquiries and problems encountered during the use of PaaS software components. On necessity, the Beneficiary may also request assistance from the Provider within the process of Beneficiary’s electronic services integration with the PaaS software components.

#### Infrastructure as a Service – IaaS

The IaaS (Infrastructure as a Service) type service represents a model of IT service delivery, part of the MCloud Platform, in which the provider (the Electronic Governance Center) places the IT required resources at the Beneficiary’s (CPA) disposal, while the Beneficiary is responsible for the informational systems’ administration.

When the Beneficiaries require IaaS services, they actually receive a virtual data center environment providing them with computing resources (virtual processor, memory (RAM) and storage (hard drive space)) which may be remotely managed through the self-service tools made available by the Provider.

Thus, the Beneficiaries have the possibility to:

- Create, configure, start, stop one or more virtual servers;
- Install any available/held operating system or another system that can be chosen from the service catalog created by the provider;
- Install, configure any required software component;
- Create and configure virtual networks, firewalls and load balancers for the needed infrastructures.

Once assigned the requested resources, the Beneficiary is provided with an e-Learning System allowing quick acquaintance with the way of using the MCloud resources management tools, as well as a help desk system allowing quick settlement of problems encountered during the IaaS service use. At the same time, the beneficiaries have access to the whole series of physical and virtual security components (example: IPS/IDS systems, firewalls, etc.) made available by the Provider.

On necessity, the Beneficiary may also request assistance from the EGC when creating the ICT infrastructure as well as when migrating/installing informational systems on the required virtual infrastructure. The migration from the own infrastructure, hosted in server rooms, to the infrastructure as a service model, imply no changes in the way the applications or databases are used/accessed.