



**WORKSHOP: Solving future skills challenges in the Danube region**

**June 11/12 2019, Chisinau, Republic of Moldova**

**Elena Trocin: July 1<sup>st</sup>, 2019**

## 1.1 Introduction

39 participants from 7 Danube region countries: Moldova, Romania, Ukraine, Serbia, Montenegro, Czech Republic, Slovakia, representing ministries, National employment Offices, NGOs, VET centers, universities, chamber of commerce.

## 1.2 Keynote Speech

### 1.2.1 Skills for the future: managing transition

Anna Gherganova spoke about the changes that are happening and will happen next 4 years, according to the World Economic Forum and will have a considerable impact on future jobs and skills:

- Four technologies, ubiquitous high-speed mobile internet, artificial intelligence, widespread adoption of big data analytics and cloud technology will be **drivers of changes with an impact on jobs and skills**. By 2022 85% of companies surveyed by World Economic Forum are likely or very likely to adopt these technologies;
- **Trends in robotization** will be more limited over 2018-2022. Robot adoption rate differs significantly across the sectors, with 23% to 37% of companies planning this investment, depending on industry. Oil and Gas industry - stationary robots; Financial industry – humanoid robots;
- **Changing geography of production, distribution and value chains**. By 2022, 59% of employers surveyed will change the composition of their value chain and modify geographical base of operation;
- **Changing employment types**. Automation will lead to some reduction of full-time workforce (50% of companies);
- **A new human-machine frontier within existing tasks**. In 2018 71% of task hours are performed humans, compared to 29% by machines; by 2022 – 58% task hours performed by humans and 42% by machines; 75 million jobs may be displaced by a shift in the division of labour between humans and machines; 133 million new roles may emerge due to the division of labour between humans and machines; Increasing demand for data analysts and scientist, software and applications developer, ecommerce and social media specialist; expected to grow roles that leverage distinctively “human skills” – customer service workers, sales and marketing professional, training and development specialists, innovation managers; will appear wholly new specialist roles related to understanding and

leveraging the latest emerging technologies – AI and machine learning specialists, big data specialists, process automation experts, information security analysts, user experience and human-machine interaction designers , robotic engineers; Growing skills instability – the proportion of core skills required to perform a job that will remain the same is expected to be about 58%, meaning an average shift of 42% in required workforce skills over the 2018-2022; a reskilling is imperative – by 2022, no less than 54% of all employees will require significant re-and up skilling; sharply increasing importance of skills – analytical thinking and innovation, active learning , technology design, “human skills” such as creativity, originality and initiative, critical thinking, negotiation, flexibility, complex problem solving, emotional intelligence, leadership.

Anna Gherganova mentioned that in the framework of these changes it is important **to have information on current supply meeting current skills needs**. Individual, firms, education, training providers need to make decision about which education, training and career path will offer the best returns in the country context.

**Strategies to manage the changes** are different in case of countries – drivers of technologies and countries recipients of technologies.

**Countries drivers of technologies** will focus on developing of systematically R&I policy, with focus on SME; promote the use of digital technologies in all areas of education and training; promote universities of applied sciences; develop skills in software and algorithm development; teaching key digital skills in primary schools nationwide.

In case of **recipient countries** improving and up skilling traditional sectors is needed; reshaping educational systems, exploring new more participatory governance models and improving capacities for monitoring and foreseeing change in labour markets. Research, data analyses and assessments are increasingly important building knowledge about future skills.

To manage changes, education and training systems need to be open and ready to embrace change: access to lifelong learning opportunities, inclusive education, more flexible qualification systems.

Priority becomes development of strong basic skills, transversal competences and professional skills for youth. Soft skills such as creativity and critical thinking are key features of “human labour. The active support of teachers is a must to achieve reform objectives. Adult learning becomes crucial as far more people will need to have affordable access to opportunities to update and upgrade their skills and learn new skills at different stages in their lives. Skills development needs to be coupled with career guidance and career management skills to enable people to navigate present and future labour markets. Vocational education and training has a particular role to play in the future of skills, as the skills mix required for the future is best acquired through blended ways of learning in close proximity to the world of work.

**Implications for the future education:**

- supports a diverse range of higher education provision
- promotes flexible learning over an individual’s lifetime
- provides a broad skills base
- encourages and embeds stronger partnerships between higher education and employers, especially small- and medium-sized enterprises (SMEs)
- enhances partnerships to develop transferable skills and provide work experience
- develops better intelligence about future demand
- brings higher education, employers and policymakers together to develop more agile, flexible and responsive collaboration between the higher education sector and employers

**Government plays a key role** in providing an overarching strategy that brings together and enhances the range of policies and interventions that support skills development and educator–employer engagement, including higher level skills, to ensure a ‘whole-skills’ policy approach.

It is important to facilitate the development and sharing of more robust, comprehensive and adaptable intelligence about future skills needs across sectors and localities. This approach needs to be supported at both national and local level, including being embedded in sector deals, and with skills advisory boards providing a strong foundation for local industrial strategies.

**Policies to support employer to provide opportunities for work experience should be a priority, especially among SMEs.**

Universities should ensure that they enhance and improve their role through:

- having an integrated strategy that captures, builds upon and enhances the feedback gained through existing partnerships
- committing to increasing employer advice and input, work experience opportunities, and the delivery of enterprise skills
- extending their relationship with students beyond graduation to include careers advice, skills provision and engagement with alumni to enhance employer advice and input
- Employers and universities must also test and develop existing partnership approaches and collaborative processes to ensure that they will be both robust and agile enough to succeed in an increasingly uncertain and disrupted future
- having a co-ordinated, effective and clear employer engagement service

### **1.2.2 Measuring qualifications and skills mismatching: concepts, indicators and methodologies**

Mrs. Valentina Stoevska the representative of the Department of Statistics of the ILO has made a presentation on measuring qualifications and skills mismatching. The reporter has presented the information on Guidelines on measurement of qualifications and skills mismatches of persons in employment adopted In October 2018, at the 20th International Conference of Labour Statisticians (ICLS). Particularly, she has mentioned that the guidelines define various measures of inadequate labour absorption such as skill mismatch and qualification mismatch that can complement the existing measures of labour underutilization, in particular unemployment, time-related underemployment and potential labour force, as well as measures of inadequate employment. Then, the reporter presented the reasons for measuring qualification and skill mismatches. She stated that qualification and skills have a large impact on individuals' labour market outcomes such as: poor utilization of human capital, if persistent -negative consequences and potential cost which is for the workers (for overeducated/overskilled) is

expressed by lower wages, lower job satisfaction, loss of motivation, higher on-the-job search, unrealized expectations, lower returns on investment in education, higher the risk of being out of employment (for undereducated/underskilled), for employers -lost productivity, increased absenteeism, higher turnover, lower growth, less innovation and for the society -wasted education costs, higher unemployment benefits, lost income tax revenues. Next, some statistics on Mismatch by level of education were presented per countries which participated in the OECD Survey of Adult Skills (PIAAC) (2012, 2015).



Then, the causes of the qualification mismatch were presented such as: business cycle, life cycle stage, work/family preferences, quality of jobs, etc.

Next, the audience became familiar with the most important definitions, such as: formal qualifications and non-formal qualifications, skills, skills types; and with the basic concepts such as: mismatched by qualifications and mismatched by skills.

After that, the methods for measuring the qualifications and skills mismatches were presented: normative, statistical and subjective approaches In this regard, the reporter has figured out the data achieved in the result of the comparison of the above mentioned methods.

Also, in the presentation has been presented the analysis of mismatch indicators with the related data provision.

### 1.3 "Mapping" of the different countries

Key challenges/positive development/things to improve with regard to skills mismatch measuring/skills matching:

#### Moldova:



#### Challenges:

- lack of systematic analyses on skills mismatch, reduced human capabilities for data analysis and interpretation
- lacking LLL system, low participation of

population/employees LLL

- passivity of the private sector in terms of involvement in the training process;
- low awareness of companies on their role in skills developing
- low flexibility of educational institutions to adapt to labour market changes
- lack of clear methodologies for evaluation of mismatch by qualifications/skills
- labour force migration
- aging of population
- high share of employment in agriculture (30%)

**Positive developments:** establishment of LMO, creation of sectorial committees, development of occupational standards, developing of NQF, carrier guidance system within NEA

## Romania:

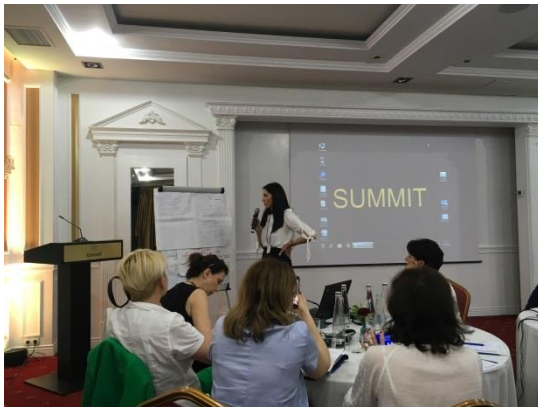


- low participation of population in LLL

**Positive developments:** developed dual learning, covering 60% of trainings

## Montenegro:

- different regions development levels
- expansion of seasonal work
- increasing number of vulnerable groups
- lack of systematic analyses on skills mismatch, reduced human capacities for data analysis and interpretation
- labour force migration
- aging population



## Positive developments:

implementation of employers surveys, implementation of dual education, carrier guidance system

## Serbia:

- lacking cooperation between training providers and employers
- reduced human capacities for data analysis and interpretation
- labour force migration



- negative demographic trends



**Positive developments:** new law on NQF, implementation of employers surveys, LLL programme

### Czech Republic and Slovakia:

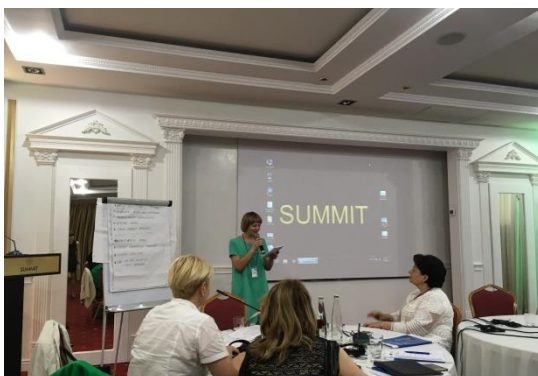
- lack of data on skills mismatch and labor market forecasts
- lacking cooperation on the labour market
- bad dissemination of data on labor market



**Positive developments:** implementation of dual learning, development of NQF, promoting development of digital competences

### Ukraine:

- labor market demand and supply gap
- low awareness of companies on the benefits of engaging in skills training
  - centralizing funding of policy implementation



**Positive developments:** approval of vocational-education strategy, promotion of private/public

partnerships in training processes, implementation of dual learning

### **What is needed to improve in the Danube region?**

- legal framework on dual education
- motivate implication of employers and employees in trainings
- NQF should be revised
- Improve collection, analyzing and interpretation of data on skills, including at regional level
- Systematic approach to predict labour market demand and supply
- Improve cooperation between schools and employers
- Improve LLL systems
- Increase the participation of population in LLL
- More flexibility for educational institutions to adapt to labour market needs

#### **1.4. Concrete activities/projects on skills matching**

The first presentation of the projects implemented under the auspices of the Danube Transnational Program was done by Romanian representative Ms. Florentina Vasilescu.

The first hand experience has been presented by Ms. Florentina Vasilescu from the National Centre for TVET Development, Romania who has presented the NCTVETD institution with its mission, objectives and responsibilities. Then, the specific information on VET system of Romania was presented in particular, the reporter was focused on presenting the Initial VET System (iVET), Work Based Learning in Romania, Dual system in Romania and the Strategic Planning Model In TVET – each component was described accordingly, with the presentation of the relevant data on the subject.



Then the reporter has described the management structures and strategic planning documents that are developed by them. Particularly, she figured out that there are Regional Consortia- CR, Local Committees for Development of Social Partnership- CLDPS and Schools' partners-board CA which are responsible for developing the

tools according to their hierarchical position namely: Regional Education Action Plan (REAP), Local Education Action Plan (LEAP) and School Action Plan (SAP). Next, Ms. Vasilescu has brought several good examples of the projects implemented in the Romania under the auspices of the Danube Transnational program such as: ***Targeted capacity building of VET partnerships in the Danube Region for the effective modernization of VET systems***. As result of this project was possible to establish the frame for a common capacity building across Danube countries for relevant VET actors through reinforcing regional, national and transnational partnerships in the Danube countries. And another project entitled ***“Title of excellence,,– a mechanism for quality assurance in TVET schools***, implemented at local level by the stakeholders group, and multiplied in three more counties – thanks to that project was possible to strengthen the capacity of the local vet actors and of the stakeholder group and to reach excellent level of cooperation based on the implemented actions, and international experience sharing actions. This local level result will be the central objective of our multiplication actions, to extend the results at national level, and later to ensure the visibility within the Danube Observatory.



The next good example of the project implemented under the auspices of the Danube Transnational Program ***was WeB4YES Western Balkan Civil Society Organizations for Youth Employment*** presented by Ms. Alexandra Durovic, expert researcher from the Belgrade Open School, Serbia. Ms. Durovc has described the motivation of the project that served the basis for the project development and implementation: Low participation of CSOs in decision-making processes; Efficient exchange of knowledge and best practice examples between CSOs in the region requires a platform for a structured dialogue – one that is nonexistent at the moment; Youth unemployment and skills mismatch is recognized in the region as a burning topic. According to the Ms. Durovic thanks to the project the young unemployed citizens of the WB region has been provided with the opportunities for employability enhancement and employment and the some recommendations for improvement of youth employment and

entrepreneurship at regional and national level have be developed and the policy advocated.



The last good example of the project presented at the workshop session, was the Moldovan project “Girls Go IT” presented by Mr. Abayomi Ogundipe, the director of the NGO “TEKEDU”. The project was focused on preparing the girls and young women for Tech Jobs. The program has supported 22 girls placed in tech jobs and also, established local network of GirlsGoIT

clubs in 17 regions in Moldova.

### **Main outcomes of the day 1:**

**Challenges in the Danube region** with regard to skills mismatch measuring/skills development:

- There is an essential gap between labor force demand and supply
- Lack of involvement of employers in training/skills development
- Lack of efficient partnerships between training providers and employers
- Low participation in LLL
- Lack of systematical analyses on skills mismatch
- Social exclusion of vulnerable groups
- Labour force migration and negative demographic trends contributing to the waste of labor force skills

**Positive developments** in the Danube region with regard to skills mismatch measuring/skills development:

- Implementation and further development of VET, including dual learning in the Danube Region countries. Vocational education and training has a particular role to play in the future of skills, as the skills mix required for the future is best

acquired through blended ways of learning in close proximity to the world of work.

- Establishing career guidance systems in the Danube region countries. Skills development needs to be coupled with career guidance and career management skills to enable people to navigate present and future labour markets.
- Implementing employer's surveys – important source of information on skills mismatch.
- Appropriate legal framework in the field of active labor market policies, that plays a significant role in skills development of unemployed people.
- Developing of the NQF in the Danube region countries.

## **2. Day 2:**

### **2.1. Group discussions: What could be possible topics for co-operation projects? Presentations and discussions.**

#### **2.1.1. Project Idea 1: Consolidating the LLL systems in the Danube Region countries**

**Activity 1:** Comparative analyses of legal, regulator, institutional framework of participating in the project countries (identifying gaps of the LLL in participant countries, exchange of good practices, studying EU regulations on this issue, ect);

**Activity 2: Adjusting of** legal, regulator, institutional framework on LLL at national levels;

**Activity 3:** Piloting LLL adjusted systems (skills mismatch evaluation, evidence of training providers, development/authorization of training programmes, monitoring the quality of training, etc)



**Activity 3:** Finalizing of LLL systems at national levels, taking into account the gaps identified during the piloting.

Project partners: Ministries of Education, Ministries of Labour, NEA, National Authorities for ensuring quality in education, training providers.

### **2.1.2. Project idea 2:**

#### **1. Pilot study on qualifications and skills mismatches of persons in employment in Danube region**

In October 2018, the 20th International Conference of Labour Statisticians (ICLS) adopted Guidelines on measurement of qualifications and skills mismatches of persons in employment.

The guidelines define various measures of inadequate labour absorption such as skill mismatch and qualification mismatch that can complement the existing measures of labour underutilization, in particular unemployment, time-related underemployment and potential labour force, as well as measures of inadequate employment. These statistics will provide an adequate information base for a wide range of descriptive, analytical and policy purposes related to qualifications and skill development and would inform the ongoing policy debate on the relationship between skills and labour market outcomes.

Following the adoption of the guidelines at the ICLS, a set of model questions was developed for collecting information regarding the type and level of qualifications and skills possessed and required on the jobs that could be included in the ongoing labour force or other household based surveys, with a view of producing estimates of a skill mismatch.

It is proposed to conduct pilot studies in Danube region countries. The studies will include:

- Data collection on the level and type of qualification and skills possessed and used by workers
- Production of comparable set of indicators on statistics on qualification and skills possessed and used by workers, as well as mismatches by level of education, field of study and level and types of skills,
- Analysis of the data that would provide a better understanding of their impact on labour market outcomes and ensure that effective policy measures and tools are formulated to improve the quality and relevance of skills formation.

In order to meet the needs of various users, the data should be analyzed by sector, age, occupation, etc. depending on the country priorities, the focus of the analysis might be on young graduates, youth, elderly, etc.

The data collection should cover perceptions from the workers as well as employers' side. The ILO is available to provide technical assistance in the implementation of the project. For a full development of the project, it is necessary to partners and stakeholders, including national statistical office, Ministry of Labour, Ministry of Education, Employers' and Workers' organization.

**2.Promotion of VET in the Danube region:** Organizing various activities and strategies to make VET more attractive to young people, informing parents and encouraging companies to create apprenticeship positions.

2. **Regular exchange of knowledge and experiences** gained in building an enabling environment for qualifications and skills development, and solving the problems of qualifications and skills gaps and deficits.

### 2.1.3. Project idea 3: Women NEET and Pre-pension age Women

**Solution:** Developing the alternative services for the children homebased care services



#### **Actions:**

- Establishing the working groups and Local Public Authorities implication
  - Developing the legal framework
  - Identifying and training of the NEET women
- Identifying of the 50+ women and professional training as a kindergarten teacher
  - Piloting
  - Conclusions and final actions

**Outcomes:** enhancing the level of target group employment

**Stakeholders:** Ministry of Education, Ministry of Labor, NEA, LPA, professional training provider services, etc.

## **2.2. Funding tools for skills matching project ideas, DSP**



Ms. Andreea Pena Capacity building officer of the Danube Strategy Point has presented the topic on “Macro regional strategy framework for coordinated and efficient implementation of funding opportunities”. She has summarized the target, objectives and goals of the marco regional strategies. In addition, she has presented the recommendations 2020+ and future expectations. At the same time, she has figured out the role of DSP and presented the web-site where the stakeholder can find interested information for the future projects.