

# IMPROVING THE QUALITY OF DATA AND STRENGTHENING POLICY MAKING



This project is funded by the European Union

Project is implemented by:





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It is my pleasure to present this information leaflet - factsheet for our project. In this publication, we have tried to convey the nature and level of our activities, and the achievements our team, together with the beneficiary and stakeholders have gained. Of course, it was not possible to cover everything here, but at least we tried to emphasize the main events and activities - more information can be obtained on request.

On behalf of the members of the project team, I would like to thank everyone who contributed to get us here.



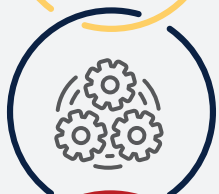
**EDUCATION AND TRAINING**



**EMPLOYMENT AND LABOUR MARKET**



**STATISTICS**



**POLICY MAKING**



**POLICY IMPLEMENTATION**



**POLICY MONITORING**



**PUBLIC INFORMATION**

## BENEFICIARY AND STAKEHOLDERS:

- ✓ MOES Ministry of Education and Science;
- ✓ MOLSP Ministry of Labour and Social Policy;
- ✓ SSA State Statistical Agency;
- ✓ ESA Employment Service Agency;
- ✓ VET Centre Centre for Vocational Education;
- ✓ BDE Bureau for Development of Education;
- ✓ AEC Adult Education Centre;
- ✓ MOISA Ministry of Information Society and Administration;
- ✓ SIE State Inspectorate for Education;
- ✓ SEC State Examination Centre;
- ✓ SLI State Labour Inspectorate;
- ✓ ISA Institute for Social Affairs;
- ✓ DPDP Directorate for Personal Data Protection;
- ✓ Projects and donor-based initiatives.

- ✓ Elementary Schools;
- ✓ Higher education institutions;
- ✓ Secondary VET Schools;
- ✓ Secondary General Schools;
- ✓ Adult Education Providers;
- ✓ Local Employment Centres;
- ✓ Social Work Centres.

Working groups established in collaboration with the Beneficiary institutions and stakeholders as a key drivers of the implementation process and a vehicle for ensuring a partnership-based approach and consideration of a wide range of stakeholder views in policy development and operational planning.

### Legal, policy and procedural framework regulating processing of data:

- A comprehensive analysis conducted and review report designed with recommendations for amendments on data protection provisions in the existing legislation;
- Developed set of administrative procedures and legal amendments to harmonise the respective laws with the legal requirements of the new Personal Data Protection Law;
- Supported beneficiary to draft the adjustments of the legal requirements for electronic data collection and processing;
- Standards for Privacy by Design and Privacy by Default, GDPR compliance of upgraded systems produced;
- Data protection officers and data security officers from beneficiary and key stakeholder institutions trained.

### Hardware and software infrastructure adaptation to support the improvement of data gathering, data management, forecasting and interoperability in and between the key institutions.

Assessment of the current status of IT Infrastructure at MOES, MOSLP and ESA.

### Support to the MOES for developing and setting up a single database integrating information:

- Analysis of the institutional needs, needs for report generation and data interchange;
- Report on data collection matrix and report on datasets content;
- Definition of new single database organization;
- Implementation of the new database model, data migration plan and development of required software components for the Information system in MOES based on the new database.

Definition of specification of software requirements for the new information system for the MOES.

Development of proposal for new coding standard of the qualifications in the NQF Register.

### Development and implementation of an online tool for electronic/digital collection, storage and processing of relevant individual data from MOLSP, MOES, ESA or other relevant institutions:

- Analysis of the data models and the available data in the electronic systems at MOLSP, ESA and other relevant institutions;
- Definition of the reporting requirements for the MOES, MOLSP and ESA;
- Design and implementation of the Data-warehouse system and Business intelligence for the MOES and ESA.

### Linkage of MOLSP, MOES, ESA databases via web services and Interoperability Platform:

- Analysis of the available services deployed in MOES, MOLSP and ESA;
- Analysis of the data quality, data registries and definition of data mapping tool;
- Implementation of Web services.

### Updating the forecasting model and increasing analytical capacity for working with the existing data and for forecasting:

- New forecasting model encompassing 20 economic sector;
- Analytical capacity of MOLSP staff for working with the new upgraded forecasting model developed;
- Long-term forecasting report produced.

### Institutional capacity building aimed to boost sector policy making and support the implementation, monitoring and information of the national employment, education and social inclusion strategies:

- Decision makers involved in policy making in the fields of labour market, education and social policy trained in evidence-based policy making and analytical process;
- Civil servants and representatives from key stakeholder NOGs trained in data entry and manipulation, statistical analysis, data management or data visualization by using statistical software;
- Software Business Intelligence;
- Alignment and unification of nomenclatures and classifications of qualifications and education levels.

### Trainings in collection and input of individual data in the software and database application for representatives/data officers from:

- Public primary schools, public secondary schools, private primary and secondary schools, public and private universities, accredited institutions offering adult education courses;
- Social Work Centres and Employment Service Agency.





## PROJECT IN FIGURES:

- Over 20 experts in the field of IT, education, employment, legal affairs and statistics were engaged in various project activities;
- In addition to the Steering Committee, 3 working groups and expert teams, representatives of approximately 30 institutions and organizations worked on various activities;
- 668 public and private primary and secondary schools and universities, accredited institutions offering adult education courses, Social Work Centers and Employment Service Agency were involved in training;
- Over 20 meetings of different working groups and a large number of individual consultations and meetings were organized within the Project.

### Highlighted story -

*Upgrading the HERMAC (Long-term labour market forecasting model) model which uses the system of econometric models and micro-economic LFS (Labour Force Survey) analysis. The activity aimed to improve the labour market related predictions and strategic decisions in the areas of education, employment and social policy.*

## MODEL

During the last year we have provided a significant update of the long-term labour market forecasting system at the Ministry of Labour and Social Policy. The updated methodology provides more robust results aimed to support decision making process related to the labour market and education policies. Current system meets the EU standards from the perspective of skills anticipation, matching occupation and education structure and predicting future imbalances.

The possible utilization of the official economic forecasts provided regularly by Ministry of Finance and National bank provides solid background for identification of baseline forecast. The partial automatization of data gathering from Eurostat and State Statistical Office shortened the future update process and provided more space to analytical department to focus on important analytical tasks and identification of possible development under various scenarios.

## CAPACITIES

The capacity building process during the project implementation as work life in general was affected by COVID situation. On the other hand, during all phases of the forecasting system development, weekly meetings aimed on discussion of methodology development, solving of data problems, presentations and remote trainings were held.

With additional hands-on training at the premises of Analytical department located in Ministry of Labour and Social Affairs the support to improve personal and analytical capacities was provided. The established cooperation with various stakeholders, such as State Statistical Office, should continue on regular basis and should contribute to the long-term sustainability and utilization of newly updated skills anticipation, system in North Macedonia.

