



The European Union's Programme
IPA Component IV
 Human Resources Development

DELIVERABLES

Internal documents were created to ensure sustainability of knowledge base of the local staff (HERMAC manual, data manual)

Forecasting report was presented and discussed to illustrate expected dissemination of obtained results. This report summarizes provided results and was publicly discussed during the Validation Workshop. International authorities such as ILO and IMF presented their remarks.

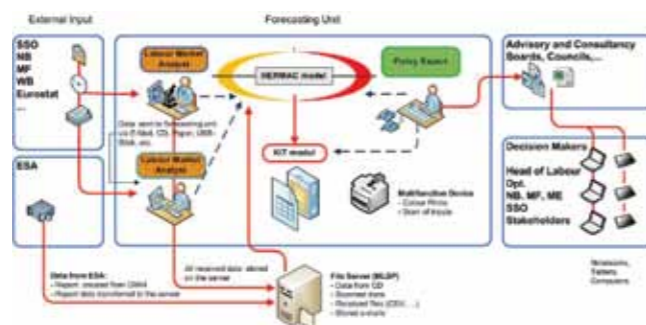
TRAINING

Comprehensive training was provided by the short term experts to ensure a proper utilization of the introduced modelling and forecasting system for the Ministries staff. Intensive on-site technical training focused on theoretical and methodological issues of forecasting system was delivered for the MLSP staff. Additionally, a couple of analytical seminars and workshops were carried out for relevant stakeholders to ensure proper understanding of provided results and their use in policy recommendations.



SUSTAINABILITY

The interinstitutional co-operation through the exchange of information, data sharing and regular meetings between the MLSP, SSO, MF, NB and academics in the field of forecasting of the labour market was established. Additional tools were developed together with the local staff and they are implemented at the MLSP forecasting system. Tools can be updated, maintained and further developed by local staff. Moreover, supporting manuals were created to ensure the sustainability of the project. Inter-institutional coordination and cooperation with social partners as regards long-term forecasting was reinforced.



Twinning Project "Support to the National Employment Policy" aims to develop capacity for long-term forecasting of the labour market and build up capacities for monitoring and evaluation of the employment policy

COMPONENT 1

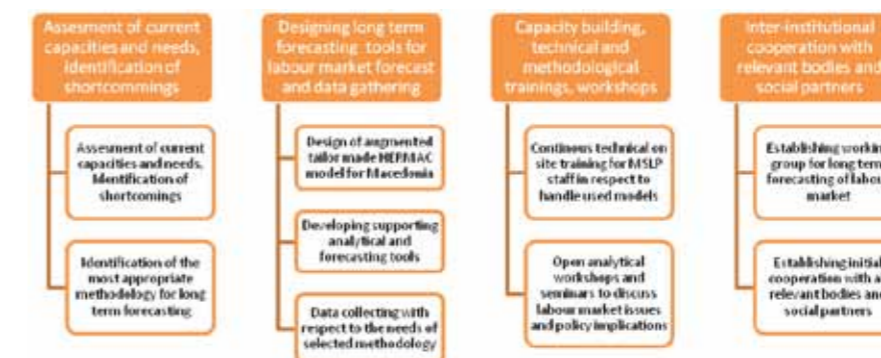
Development of a long-term forecasting of the labour market by building up forecasting capacities of the Ministry of Labour and Social Policy

General long-term labour market forecasting system was introduced and implemented at the Ministry of Labour and Social Policy to support the decision makers in developing well aimed labour market policies.

The ministry staff used their improved analytical and econometric skills to develop and utilize a number of specific and unique modelling tools in order to provide most advanced labour market structural forecasts in the country.

MAIN ACTIVITIES

Component 1 was targeted on increasing analytical capacity of the Ministry of Labour and Social policy and development of the long-term forecasting system reflected in the following structure:



ASSESSMENT AND CAPACITY BUILDING

Identification of needs and shortcomings together with establishing initial cooperation with all relevant partners leads to selecting the most suitable methodology and approach to fulfil the goals.

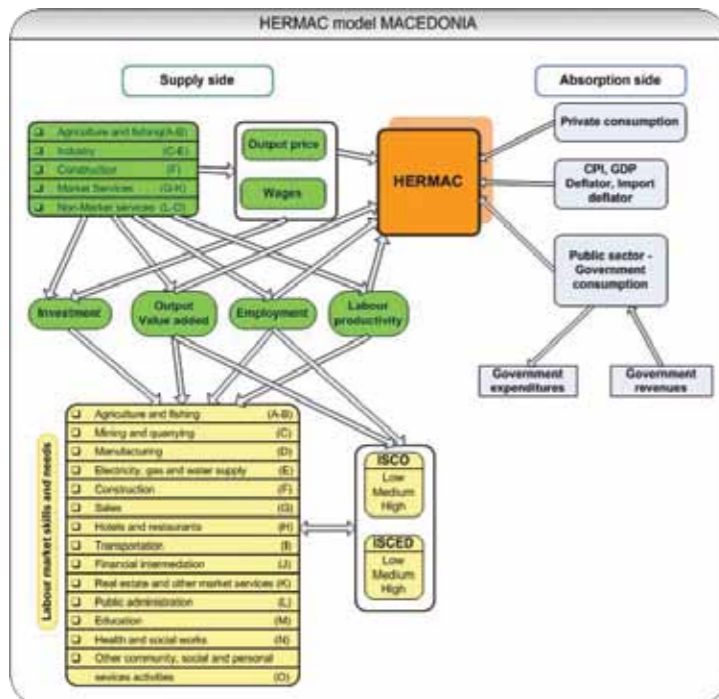
Two professionals have been hired in the MLSP to strengthen the analytical capacity at the MLSP and received extensive training during the project period. The established working group for labour market long term forecasting, consisting of experts from all relevant public bodies and social partners, discussed the current economic development, methodological issues and forecasting results.



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FORECAST

The long-term macroeconomic and labour market forecast in 3 scenarios until 2025 was developed and the BC Ministry's staff is able to generate their own forecast for economic development, to evaluate the forecasts and to come up with the suggestions for possible modifications of the macroeconomic and employment policies



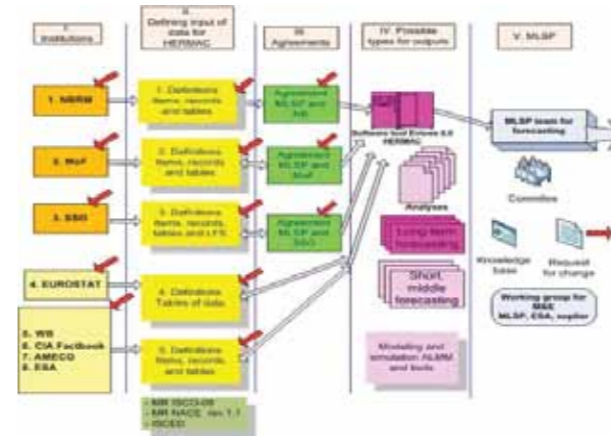
THE MODEL

The HERMIN model methodology was selected as most appropriate model for small and open economies with rather short and limited time series. Based on this model the HERMAC model has been developed as adapted forecasting tool to local conditions.

HERMAC model contains both demand and supply side of the economy able to provide forecasts of future production for 14 sectors, expectations about demand for labour by three qualification levels. The model consists of more than 400 equations.

Other analytical tools were developed and successfully used.

Moreover, additional several sub-models and analytical tools were created including the short-term forecasting model. The demographic model was designed and presented to analyse influence of possible demographic scenarios on the labour market. The stock-flow model was used for forecasting of labour supply and together with the education sub model provides forecasts for qualification mismatch.



DATA GATHERING

Cooperation with State statistical Office, National bank, ESA and the Ministry of Finance was established for data validation, clarifications of the data revisions, updates and identification of structural breaks.

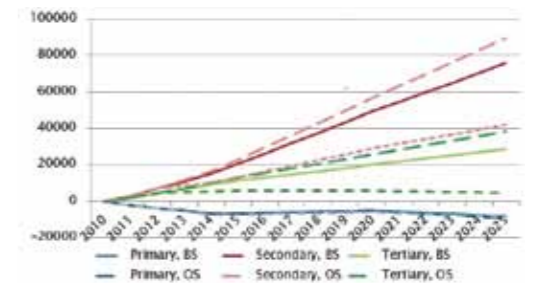
Macroeconomic indicators and individual LFS data were used as the crucial sources of information.

RESULTS

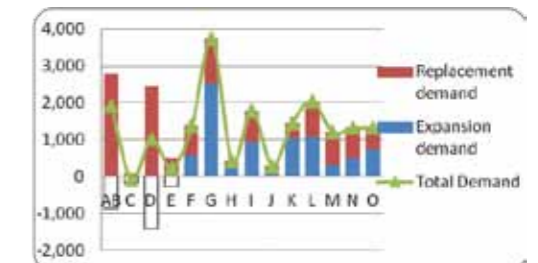
The applied methodology and available data resulted in the long-term forecast for several types of macro-indicators. Projections on both the demand and supply side of the economy were provided. The main results in long-term forecasts deal with forecasts of:

- Demographic development
- Labour supply by 3 education levels ISCED
- Economic activity
- GDP and main components
- Expected employment for 14 NACE sectors
- Expected employment by 3 occupation levels ISCO
- Employability indicator for 8 fields of education
- Replacement and Expansion Labour demand
- Initial qualification mismatch
- Estimation of working hours.

Additional demand for labour by education level



Average additional, replacement and total demand in period 2011-2015



Index of employability by particular fields of education

