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**THE STATE OF LABOUR MARKET
INFORMATION SYSTEM (LMIS) IN BELARUS:
PARTICIPANTS, INFORMATION RESOURCES,
INTERACTIONS**

**СОСТОЯНИЕ ИНФОРМАЦИОННО-
АНАЛИТИЧЕСКОЙ СИСТЕМЫ ТРУДА (ИАСРТ)
В БЕЛАРУСИ: УЧАСТНИКИ,
ИНФОРМАЦИОННЫЕ РЕСУРСЫ,
ВЗАИМОДЕЙСТВИЯ**

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Key words: labour market informational system, skills anticipation.

Ключевые слова: информационно-аналитическая система рынка труда, прогнозирование навыков.

Abstract. This article explains how Belarus' labour market information system (LMIS) was organised, the reflections and changes of LMIS during 2016-2017 and the prospects for the future. Some awareness of problems related to the developing LMIS in Belarus was formulated. Main results of the work for construction LMIS in Belarus following ETF seminars and project in the context of Platform 2 are shown. Perspective development trends of LMIS formation in Belarus are: expansion of forecast methods (surveys, econometric and mathematical methods), diversity of LMIS products, upgrade of data collection and processing methods for labour market

information and that on personnel demand, use of Internet services, portals and platforms, development of public-private partnership during the creation of LMIS.

Аннотация. Статья содержит анализ организации информационно-аналитической системы рынка труда и прогнозирования навыков в Беларуси (ИАСРТ), направления ее изменений в течение 2016-2017 годов и перспективы на будущее. Выделены недостатки существующей системы. Показаны основные результаты работ по ее построению под влиянием семинаров и проекта ЕФО в рамках Программы II Восточного Партнерства. В качестве перспективных направлений развития ИАСРТ в Беларуси выделены: расширение используемых методов прогнозирования (опросы, ЭММ), разнообразие продуктов ИАСРТ, совершенствование методов сбора и обработки информации о рынке труда и потребности в кадрах, использование интернет технологий, порталов и платформ, развитие государственно-частного партнерства в построении ИАСРТ.

By 2016 year Republic of Belarus has a good institutional framework for LMIS. This framework includes:

Decree № 972 issued by the Council of Ministers of the Republic of Belarus on 19.07.2011 «On some issues of making the order for training of personnel»;

Decree № 62/68/125 issued by the Ministry of Economy, the Ministry of Labour and Social Protection and the Ministry of Education of the Republic of Belarus on 30.10.2015 ordered to summon 2 working groups:

- on ongoing planning of personnel training to work out enrollment plans for educational institutions;
- on improvement of medium- and long-term skills anticipation to identify general requirements to the information system and skills anticipation and to coordinate the work on its development and implementation.

The structural scheme of LMIS is developed which includes the following three modules: 1. Economy; 2. Labour market; 3. Professional education (table 1).

Table 1 – A fragment of the structural scheme of information system and skills anticipation

Module 1. Economy	Module 2. Labour market	Module 3. Professional education
The Ministry of Economy	The Ministry of Labour and Social Protection	The Ministry of Education
Demographic forecast. Manpower balance forecast (resource and distribution segments) – the employed and the unemployed. Forecast of the employed distribution among kinds of economic activities	Labour supply forecast. Unemployment forecast . Skills anticipation across professional and qualified groups. Development of workforce qualification reference guides and professional standards	Estimation of enrollment plans of educational institutions. Forecast of the number of trainees by levels of their training and graduation. Development of educational standards. Order for personnel training

In 2016 in Belarus a project “Labour market information system (LMIS) and skills anticipation: baseline study and capacity building” was realized. The project was done at the initiative of ETF to support the government improving the LMIS construction in Belarus.

The main source of information on labour market in Belarus is the National Statistical Committee. It accumulates the following information: demography (Annual Statistics and bulletins), population structure (Annual Statistics and bulletins), manpower balance (Bulletin of Statistics), Survey of households on employment matters (LFS, since 2012). Based on these data the Ministry of Economics makes demographic forecasts and manpower balance forecasts. The Ministry of Labour and Social Protection generates the following information: the number of those applied to employment agency, vacancies and the registered unemployed.

Surveys of households on employment matters (Labour Force Survey – LFS) are held quarterly since 2012), but results are not in open access. The first time selected results are published in Bulletin “Socio-Economic Situation of the Republic of Belarus, January 2017”. According to selective surveys of households the employment level comprised 66.7 % in 2016 (68.1 % – in 2015), including working age population (male – 16-59 years old, female – 16-54 years old) – 80,9 % (82 % – in 2015). According to the sample survey of households the actual unemployment level comprised 5.8 % of economically active population in 2016. According to the Ministry of Labour and Social Protection the level of registered unemployment comprised 0.9 % of economically active population by the end of January 2017 (1.1 % – by the end of January 2016).

Conclusions:

1. The Republic of Belarus has an ample statistical database on the demographic situation, manpower, the employed across the types of economic activities, categories of personnel; however, there was no consistent methodical approach and statistics on the number of employed across professional and qualification groups;
2. Information on the number and structure of the unemployed is collected in two databases (based on the results household surveys and current data of the Ministry of Labour and Social Protection);
3. There is available information on the current demand for trades and positions and their supply, collected from agencies of labour, employment and social security, and the web-site of the Ministry of Labour and Social Protection;
4. Information on volume and structure of personnel training forecast by state agencies in accordance with specialities (fields, specializations) qualifications (trades, positions) is collected with the use of CAS “Goszakaz & Priyom” (Government Order and Enrollment) of the Ministry of Education, however not all companies participate in it;
5. Employers surveys are held regularly;
6. There are available surveys of current vacancies and resumes (on the web-site rabota.tut.by),

7. There is currently no available information on perspective demand for professional skills.

Progress in the development of labour market information system in Belarus during 2016 was discussed in March 2016, where the ETF held in Minsk workshop “Towards a Better Performing Labour Market Information System (LMIS)”.

Topics of discussion on the workshop were:

- are all collected data used?
- is there any duplication in collecting the information by various ministries?
- what balance of quantitative and qualitative data and forecasts should be?
- who is key users of LMIS results?
- what directions to improve the forecast methodology are actual for Belarus?
- what should resulting products of LMIS be and how should they be presented to users in the national economy?
- perspectives of using Internet-resources and platforms for forecasting of labour market and economy’s demand for personnel, etc.

It can formulate some awareness of problems related to the developing LMIS in Belarus:

- lack of information, on professional skills in particular, aggregated method of presenting the labour market information (without micro-data);
- limited access to a number of statistics for civil society;
- data inconsistency for vacancies across professions and qualifications between those provided by government agencies and private agencies;
- need for harmonization of professional and educational standards;
- need of harmonization of the standards being used between system modules;
- predominant orientation of the system to macro level and insufficiency of its products for population.

Main results of the work for construction LMIS in Belarus are:

1. Change in perception of LMIS as a multilevel system which includes various information sources, forecast methods, and is designed for various users.
2. Necessity to expand the set of forecast methods being used, participants, users and products of LMIS (short-term and long-term forecasts, tracking of graduates employment, economic and mathematical methods, surveys).
3. Harmonization of standards between system modules.
4. Refinement of problems and roles during interactions between key Ministries.
5. Expansion of partners network for development of on-line resources and platforms to forecast personnel supply.
6. Changes in requirements to statistics and labour market databases and those on demand for skills.
7. Refinement of further steps in development of LMIS.

Perspective development trends of LMIS formation in Belarus are the following: expansion of forecast methods (surveys, econometric and mathematical methods), diversity of LMIS products, upgrade of data collection and processing methods for labour market information and that on personnel demand, use of Internet services,

portals and platforms, development of public-private partnership during the creation of LMIS.

JEL code O31, O32

**ADAPTIVE APPROACH TO FORMATION AN
INNOVATIVE STRATEGY OF THE FIRM-
DEVELOPER UNIQUE NEW TECHNIQUE**

**АДАПТИВНЫЙ ПОДХОД К ФОРМИРОВАНИЮ
ИННОВАЦИОННОЙ СТРАТЕГИИ ФИРМЫ-
РАЗРАБОТЧИКА УНИКАЛЬНОЙ НОВОЙ
ТЕХНИКИ**

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Ключевые слова: высокотехнологичный инновационный продукт, разработка новых продуктов, инновационная стратегия, прогнозирование, управление НИОКР

Abstract. The article deals with the problems of forming the strategy of innovative development of the firm-developer of unique new technique as a high-tech innovation product. An approach is proposed to construct an analytical tool designed to visualize the transition from a basic strategy to alternative options in case of failure of one or several major projects. With strategic planning, it is possible to replace risk projects from the R&D portfolio with standby projects from the innovation portfolio.

Аннотация. Рассмотрены проблемы формирования стратегии инновационного развития фирмы-разработчика уникальной новой техники как высокотехнологичного инновационного продукта. Предложен аналитический инструмент для визуализации перехода от базовой стратегии к альтернативным вариантам в случае неудачи одного или нескольких основных проектов. При стратегическом планировании предусматривается возможность замены рискованных проектов из портфеля НИОКР резервными проектами из портфеля инноваций.

Introduction. The key conditions for achieving the leading position in the high-tech markets is the ability to create complicated technical systems with a high level of novelty and enough competitiveness. This especially true for unique new technique (UNT) which are created to suit individual customer requirements and are manufactured in single copies or small-scale. For UNT need to take into account the increased risk of failure to reach the desired result, and other specifics of their