

Session 9-3

Developing LMIS in the Republic of Belarus: strengthening cooperation with employers

Eastern Partnership Platform 4 – 8th thematic workshop

Make it Match Belarus Team

Milano, 27-28 June 2019

Plan of the presentation

1. Need for, and areas of taking employers' views into account
2. Improving the National System of Qualifications
3. Findings of the pilot employers survey
4. Next steps

1. Need for, and areas of taking employers' views into account

- Efficient LMIS is based on a continuous inter-agency cooperation of all labour market and education system participants.
- Employers' opinion on the future needs in skills and qualifications acts as a basis for forecasting and creating development plans for educational institutions.

S. Kasperovich, Head of the Main Department for Vocational
Education, Ministry of Education

- “We have made notable progress in minimising the gap between the labour market needs and workers supplied by Belarussian educational institutions”
- “We would like to see a more active involvement of workforce customers not just in paying for their training but rather in shaping the content of education”

//Ministry of Education on the “unneeded specialists,” new occupations and placements. Interview to TUT.BY dated May 29, 2019/ TUT.BY

What is needed to achieve this:

- quantitative and qualitative measurement of the demand,

- involvement of employers in education process,

- recognition of individual (including non-formal) learning etc.

These areas require appropriate institutional setting to be created

Areas where employers' views should be taken into account when forecasting skills needs

1. To develop and adopt the National Qualifications Framework and occupational standards
2. To finalise employers questionnaire on anticipated workforce demands, carry out the enterprise survey, and process the results
3. To carry out anticipation of future skills in the context of digitalisation of the economy

These areas were identified in the Republic of Belarus as next steps for improving LMIS (in Dublin, September 2018)



Educational Institution
“Republican Institute for Vocational Education”

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2. Improving the national system of qualifications of the Republic of Belarus

**in the framework of the EU project “EMPLOYMENT AND VOCATIONAL EDUCATION AND
TRAINING IN BELARUS”**

Main project beneficiaries: Ministry of Education, Ministry of Labour and Social Protection, Ministry of
Economy

Project implementation period: from March 2017 to March 2021

The project was approved in March 2018 by Resolution of the Council of Ministers of the Republic of Belarus

Yulia Sycheva,
Vice Rector for Research and Methodology of the Republican Institute for Vocational Education,
PhD in Pedagogy, Associate Professor

**National
Classification
014-2007
“Occupations”**



New edition

**National
Classification
006-2009
“Vocational
occupations
and clerk jobs”**

ОБЩЕГОСУДАРСТВЕННЫЙ КЛАССИФИКАТОР
РЕСПУБЛИКИ БЕЛАРУСЬ

ОКРБ 014-2017

ЗАНЯТИЯ

ЗАНЯТКІ

Министерство труда и социальной защиты Республики Беларусь
Минск

NEW ELEMENTS OF THE NATIONAL QUALIFICATIONS SYSTEM

National Qualifications Framework

A document containing a summarised description of qualification levels and pathways of acquiring them

Sectoral Qualifications Councils

Develop sectoral qualifications frameworks and occupational standards in specific sectors of the economy

Educational standards

Are developed on the basis of occupational ones

Sectoral qualifications frameworks

Determines a unified scale of remeasurement to qualifications necessary for performing labour activity in a certain sector

Occupational standards

A characteristic of content of work functions and qualification requirements needed to perform those functions

System for the assessment and certification of qualifications

Ensures the validation of level of qualification, whether acquired formally or non-formally

Strategy for the Improvement of the National Qualifications System of the Republic of Belarus (Resolution No. 764 of the Council of Ministers of the Republic of Belarus dated October 24, 2018)



- **Stage 1** (2018–2020): developing legislative framework and organisational work on implementing new elements of NQS.

Objectives:

- to develop qualification levels, procedure and criteria for referencing of work functions described in occupational standards with the levels;
- to develop occupational standards for priority types of economic activities (worker occupations and clerk jobs);
- to develop new generation educational standards and curricula-related documentation;
- to develop and adopt regulatory legal acts (to amend and update existing ones) in labour and education domain in order to introduce new NQS elements.

Stage 2 (2021–2025): implementing new elements of NQS in the labour market and in the field of education.

Objectives:

- to develop NQF and criteria for assessing quality of qualifications;
- to develop and implement the procedure and criteria for the allocation of quality assessed qualifications to appropriate levels;
- to develop a mechanism for operation of *independent qualification assessment and certification system*;
- to decide on the number of qualification levels and provide their description

Sectoral qualifications councils: a bridge between the labour market and VET system

Council for the Development of Qualifications System – Regulation approved by Resolution No. 229 of the Council of Ministers dated April 28, 2019

Regulatory legal framework for SQCs:

- Model Regulation on Sectoral Qualifications Councils approved by Resolution No. 36 of the Ministry of Labour and Social Protection dated July 28, 2017

Tasks of Sectoral Qualifications Councils:

- identifying main areas of future development of the respective economy sector;
- *organising cooperation* between public authorities, employers (employers' associations), trade union, academic, research and educational organisations in the area of improving regulatory legal acts and other administrative documents governing the NQS and workforce training system;
- *participation in forecasting skilled labour demand*;
- supporting the development of NQS and *development of occupational standards* for promising and economically relevant types of activity;
- developing the mechanism and tools for the *assessment and certification of qualifications*.

Active sectoral qualifications councils (SQCs) in the Republic of Belarus



**Ministry of Labour and
Social Protection of the
Republic of Belarus**

**Ministry of Housing and
Utility Services of the
Republic of Belarus**

**Ministry of Industry of the
Republic of Belarus**

**Ministry of Architecture and
Construction of the Republic of
Belarus**

**State Committee on Property
of the Republic of Belarus**

**Ministry of
Communications and
Informatisation of the
Republic of Belarus**

**Belarus High Technologies Park
(IT field)**

**Ministry of Economy of the
Republic of Belarus**

Template of occupational standard and methodology guidelines for its development were approved on June 28, 2017 by Resolution No. 37

ПРОФЕССИОНАЛЬНЫЙ СТАНДАРТ

« _____ »
(наименование профессионального стандарта)

Раздел 1

Общие сведения

1. Настоящий профессиональный стандарт разработан на вид трудовой деятельности _____
(наименование вида трудовой деятельности)

2. Настоящий профессиональный стандарт может применяться в организациях, осуществляющих следующие виды экономической деятельности¹:

Код секции (подсекции)	Код раздела	Код группы	Код и наименование класса (подкласса) ВЭД

3. Настоящий профессиональный стандарт распространяется на занятия, входящие в состав класса (подкласса) ВЭД _____².

Раздел 3

Примерный перечень профессий рабочих и должностей служащих³:

Код	Наименование профессии рабочего, диапазон разрядов (наименование должности служащего)	Уровень квалификации ⁴

Раздел 4

Перечень обобщенных трудовых функций, трудовых функций выделенных в данном виде трудовой деятельности

Обобщенные трудовые функции (ОТФ)		Трудовые функции (ТФ)		Уровень квали-фикации ⁴
Код	Наименование	Код	Наименование	
ОТФ_1			ТФ_1.1	
			ТФ_1.2	
			...	
ОТФ_2			ТФ_2.1	
			...	
...			...	

3

Раздел 5

Характеристика обобщенных трудовых функций

5.1 Обобщенная трудовая функция

(код) « _____ »
(наименование обобщенной трудовой функции)

Уровень
квалификации

Требования к образованию и обучению работника

Требования к опыту практической работы

5.1.1 Трудовая функция

(код) « _____ »
(наименование трудовой функции)

Требования к образованию и обучению работника

Требования к опыту практической работы

Трудовые действия (ТД)

ТД_1

ТД_2

...

Требования к знаниям

Требования к умениям

Специальные условия допуска к работе

Другие характеристики

Дополнительные сведения:

“Occupational standards will form the basis of new generation curricula and education programmes in the system of special secondary and higher education”

“Basically, sectoral councils together with all stakeholders should formulate qualification requirements for future workers based on which the education system would create educational standards and curriculum documentation”
The mentioned approaches were reflected in the new version of the Code on Education of the Republic of Belarus

I. Karpenko, Minister of Education

at the republican workshop on “Promising areas of developing special secondary education,” May 28, 2019 (BELTA)

Source: <https://www.belta.by/society/view/professionalnye-standarty-ljagut-v-osnovu-obrazovatelnyh-programm-novogo-pokolenija-karpenko-349035-2019/>

Cooperation of VET institutions, public authorities and employers



Abstract from the curriculum for “Industrial and Civil Construction”

2.2. Специальный цикл	7	26	1840/1476	610
2.2.1. Профессиональный модуль «Производство отделочных работ»	1	5	388/504	152
2.2.1.1. Строительные машины и оборудование	I/I	1	94	30
2.2.1.2. Технология производства отделочных работ		2	100	12
2.2.1.3. Конструктивные элементы зданий		1	110	26
2.2.1.4. Информационные технологии в профессиональной деятельности		1	84	84
2.2.1.5. Учебная практика				
2.2.1.5.1. По геодезии на строительном объекте			72	
2.2.1.5.2. По отделочным работам			144	
2.2.1.5.3. Для получения квалификации рабочего «Штукатур 4-го разряда», «Облицовщик-плиточник 3-го разряда»			288	
2.2.2. Профессиональный модуль «Производство каменных работ»	1	2	164/576	30
2.2.2.1. Гражданские и промышленные здания	I/II	1	110	24
2.2.2.2. Технология производства каменных работ		1	54	6
2.2.2.3. Учебная практика				
2.2.2.3.1. По каменным работам			144	
2.2.2.3.2. Для получения квалификации рабочего «Каменщик 4-го разряда»			432	
2.2.3. Профессиональный модуль «Строительство зданий и сооружений»	3	9	724/252	242
2.2.3.1. Инженерные сети и оборудование		1	70	16
2.2.3.2. Строительные конструкции	I/II	2	200	100
2.2.3.3. Технология строительного производства	I/II	2	226	56
2.2.3.4. Монолитное домостроение		1	56	16
2.2.3.5. Эксплуатация зданий и сооружений	I/III	2	126	40
2.2.3.6. Усиление конструкций и оснований		1	46	14
2.2.3.7. Производственная практика				
2.2.3.7.1. Технологическая			252	
2.2.4. Профессиональный модуль «Организация и управление производством строительно-монтажных работ»	2	10	564/144	186
2.2.4.1. Организация строительного производства	I/III	1	90	36
2.2.4.2. Нормирование труда и сметы		1	90	20
2.2.4.3. Экономика строительства	I/III	2	100	30
2.2.4.4. Психология и этика деловых отношений		2	96	30
2.2.4.5. Документация мастера		1	56	24
2.2.4.6. Автоматизированные системы управления в строительстве		1	24	20
2.2.4.7. Управление строительным производством		1	54	10
2.2.4.8. Предпринимательство в строительстве		1	54	16
2.2.4.9. Проектно-сметная практика				

Building a modular workforce training system on the basis of occupational standards

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I. Occupational standard

ПРОФЕССИОНАЛЬНЫЙ СТАНДАРТ "Оператор добычи нефти и газа"			
Профессия:	Оператор добычи нефти и газа	Код профессии:	ДМГ 35-0001-172
Полномочия:	1) Оператор добычи нефти и газа 2 разряда 2) Оператор добычи нефти и газа 1 разряда 3) ...	Квалификационный уровень:	1 2 ...
Требования к профессиональным умениям, знаниям, навыкам:			
Умения/знания/навыки/действия:	Требования к профессиональным умениям	Требования к профессиональным знаниям	Требования к профессиональным навыкам
1) Оператор добычи нефти и газа 2 разряда	Применять профессиональные умения и профессиональные знания	Применять профессиональные знания	Применять профессиональные навыки
2) Оператор добычи нефти и газа 1 разряда	Применять профессиональные умения и профессиональные знания	Применять профессиональные знания	Применять профессиональные навыки
3) ...	...	...	...
Требования к профессиональным умениям, знаниям, навыкам:			
Умения/знания/навыки/действия:	Требования к профессиональным умениям	Требования к профессиональным знаниям	Требования к профессиональным навыкам
1) Оператор добычи нефти и газа 2 разряда	Применять профессиональные умения и профессиональные знания	Применять профессиональные знания	Применять профессиональные навыки
2) Оператор добычи нефти и газа 1 разряда	Применять профессиональные умения и профессиональные знания	Применять профессиональные знания	Применять профессиональные навыки
3) ...	...	...	...
Требования к профессиональным умениям, знаниям, навыкам:			
Умения/знания/навыки/действия:	Требования к профессиональным умениям	Требования к профессиональным знаниям	Требования к профессиональным навыкам
1) Оператор добычи нефти и газа 2 разряда	Применять профессиональные умения и профессиональные знания	Применять профессиональные знания	Применять профессиональные навыки
2) Оператор добычи нефти и газа 1 разряда	Применять профессиональные умения и профессиональные знания	Применять профессиональные знания	Применять профессиональные навыки
3) ...	...	...	...

T_F1.2 Masonry constructions of simple and medium difficulty

Advantages of building the training system on the basis of occupational standards:

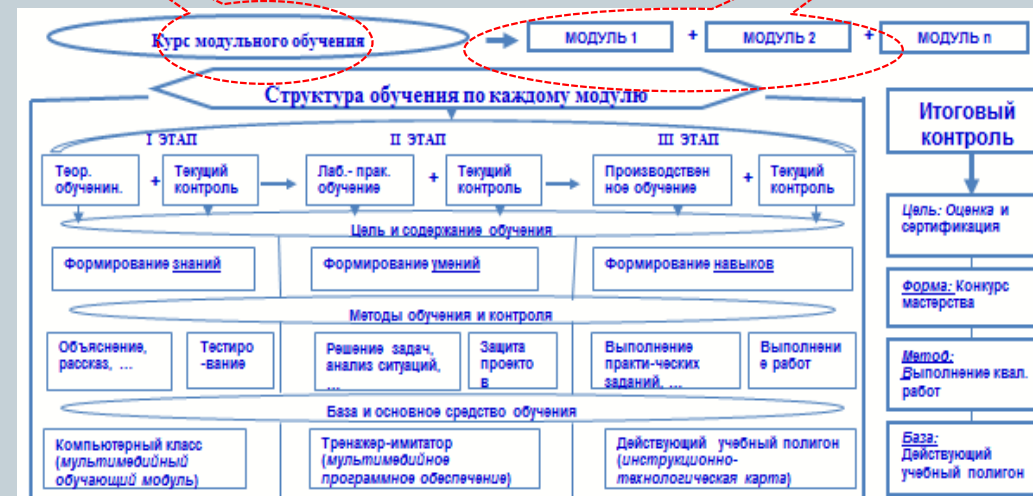
- Adaptation of training programmes to employers' requirements;
- Shorter duration of training;
- Direct involvement of employers in the training process;
- Bridging the gap between theory and practice;
- Quick adaptation of graduates to workplace conditions;
- High motivation for acquiring knowledge and skills at work

II. Educational standard (module-based programme)

ФУНКЦИОНАЛЬНАЯ КАРТА	
Основные функции:	Функциональные модули
Главная цель: Провести профилактический осмотр и текущий ремонт оборудования добычи нефти и газа	А.1. Провести профилактический осмотр и текущий ремонт оборудования добычи нефти и газа А.2. Проверка и замена резины, климатической герметики стержней-клинки А.3. Проверка и замена резины стержней-клинки А.4. Проверка и замена резины стержней-клинки
Module 2 «Stonework»	
А.1. Соблюдение правил техники безопасности А.2. Оснащение первой медицинской помощи А.3. Поддержание порядка на рабочем месте А.4. Устранение добычи нефти и газа	

30–40% of theory

III. Module-based learning technology



70–60% of practical skills



3. Findings of the employer survey on workforce demands

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- Elena Shirokaya,
Consultant of the Employment Policy Division, Ministry of Labour and
Social Protection of the Republic of Belarus

**Cooperation of governmental bodies
in determining the economy demand in workforce**



Resolution of the Council of Ministers of
the Republic of Belarus No. 1016 dated
December 28, 2017



**Ministry of the Economy of the
Republic of Belarus**

- development of demographic projection

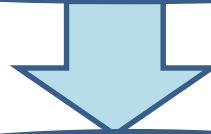
**Ministry of Labour and Social
Protection of the Republic of Belarus**

**- development of forecasted labour
force balance and workforce demand
anticipation**

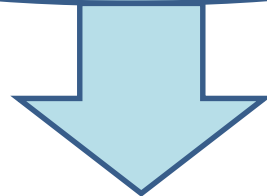
**Ministry of Education of the Republic
of Belarus**

- determining enrolment benchmarks

**Ministry of Labour and Social
Protection of the Republic of Belarus**



Employer survey



Questionnaire method to forecast workforce demand
for 2019–2023
for 399 occupation and qualification groups of the
National Classification 014-2007 “Occupations”
by 18 types of economic activities





2 sections

Economic:

aimed at assessing financial stability of enterprises

- revenues from sales,
- production volume

Social:

aimed at quantitative estimation of workforce demand by occupation and qualification groups

- anticipation of the ongoing workforce demand on the basis of natural age-based growth;
- anticipation of additional workforce demand on the basis of production expansion and creation of new jobs

INFORMATION ABOUT RESPONDING ORGANISATION:

- postal address;

- email address;

- company tax number;

- type of ownership;

- economic activity code;

- product (works, services) sales revenue, production volume;

- factual listed number of employees as of the date of filling in the questionnaire, and demand for employees to fill vacant jobs projected until 2023

Results of forecasting the total workforce demand by 9 key occupation and qualification groups

Code	Description of occupation groups according to the National Classification 014-2017 “Occupations”	persons				
		2019	2020	2021	2022	2023
	Total	...	...	...	...	...
1	Managers	...	...	...	...	...
2	Professionals	...	...	...	...	...
3	Specialists	...	...	...	...	...
4	Employees providing office administrative services, consumer services, preparation, processing of information and accounting	...	...	...	...	...
5	Employees in the services sector, trade and related activities	...	...	...	...	...
6	Trained skilled workers of agriculture, forestry, fish-breeding and fishery	...	...	...	...	...
7	Trained skilled workers of industry, building and construction, and related occupations (except for workers falling into group 8)	...	...	...	...	...
8	Engine and machine operators and other workers operating, maintaining and servicing equipment and machines, assembly workers	...	...	...	...	...
9	Unskilled workers	...	...	...	...	...

Improving the employer survey



Improving the questionnaire form, adjusting it to acquire quality data on the demand in skills and competences

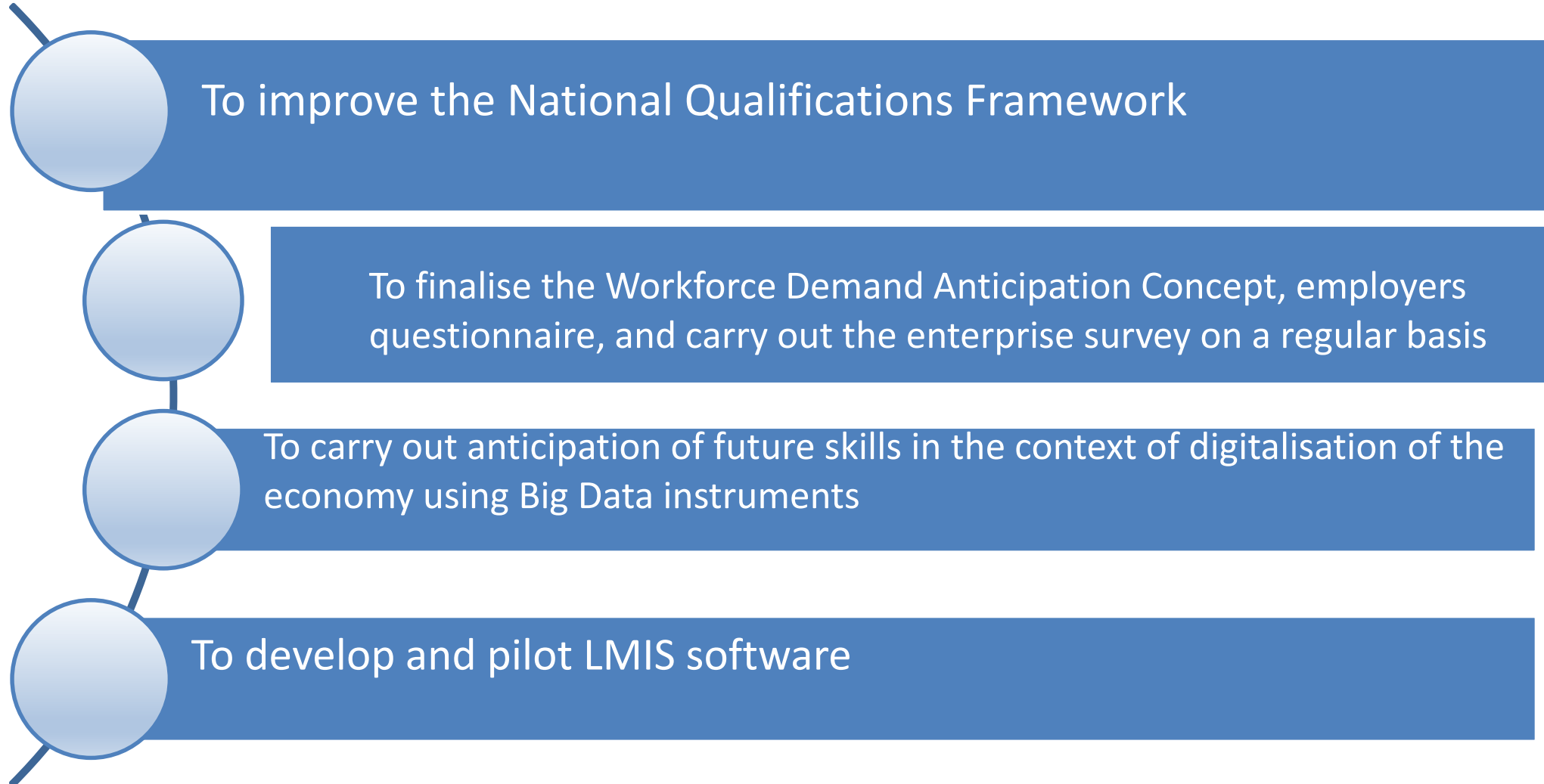


Improving the scope and structure of sampled population of enterprises



Processing of results

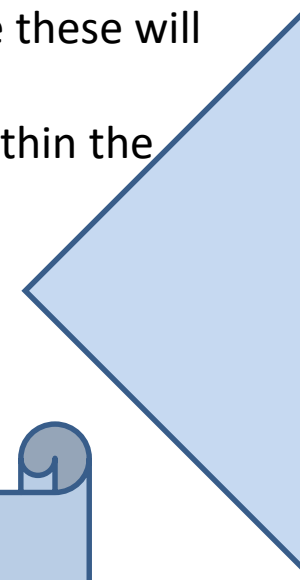
4. Next steps



The new system shows what occupations will be in demand in the future but it does not generate new areas and occupations, especially in the conditions of digitalisation of the economy

HeadHunter company named 15 perspective occupations and specialities of the future for the next 15 years

Experts believe these will become mass occupations within the next 10 years



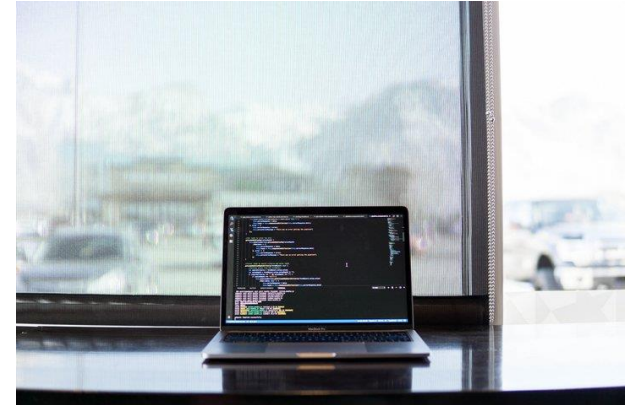
- 1. Bioengineer***
- 2. Renewable energy engineer***
- 3. Smart environment designer***
- 4. Robotics specialist (including medical robotics)***
- 5. Cybersecurity specialist***
- 6. Alternative energy specialist***
- 7. Psychologist / Neuropsychologist***
- 8. Bioinformatics specialist***
- 9. Coder/software developer***
- 10. Design Engineer***
- 11. 3D-printing Engineer***
- 12. Genetic engineer***
- 13. VR Designer***
- 14. VR Architect***
- 15. Biopharmacologist***

To introduce new occupations in Belarussian educational institutions, they must be ordered. Universities can also take the initiative but they have to prove there is a need for the occupation.

Belarus High Technologies Park (HTP) prepared a guidebook for entrants where one can find the full list of faculties (17 faculties of Belarussian HE institutions) training IT specialists, find out what they teach and, most importantly, what are your job opportunities after graduation.

There are several online job search and CV portals in Belarus. Analysing their data would help identify the most in-demand skills and competences.

Such analysis requires tools



Source: Чему научат и куда распределят? ПВТ составил гайд для абитуриентов, которые хотят в IT (What are they teaching and where will they place graduates? HTP's Guide for school-leavers who want to go IT) // 24 May 2019, 13:20. TUT.BY
source: <https://news.tut.by/society/638542.html>

The Republic of Belarus holds a course for digital economy:

Decree of the President of the Republic of Belarus No. 8 “On the Development of Digital Economy” (December 21, 2017) envisages measures for liberalisation of entrepreneurship conditions in the field of IT, development of IT sector, and broader use of digital technologies in the economy

In March 2019, the Ministry of Education adopted the Concept for Digital Transformation of Processes in the Education System of the Republic of Belarus for 2019-2025

Draft Concept of Programme of Socio-Economic Development the Republic of Belarus for 2021-2025 has been developed. It includes the following sections:

- Forming new professional skills and competences
- Digitalisation of education



Thank you!