

Torino Process in Ukraine



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МІНІСТЕРСТВО ОСВІТИ І НАУКИ
МОЛОДІ ТА СПОРТУ УКРАЇНИ

Analysis of the system of vocational education and training in Ukraine in the framework of the “Torino Process”

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ACRONYMS AND ABBREVIATIONS

ETF	European Training Foundation
ICT	Information and Communication Technology
ISCED	International Standard Classification of Education
MESYSU	Ministry of Education, Science, Youth and Sports of Ukraine
NAPS	National Academy of Pedagogical Sciences of Ukraine
NQF	National Qualifications Framework
STPVED	State Targeted Programme of Vocational Education Development
UAH	Ukrainian hryvna (currency)
VET	Vocational education and training

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EXECUTIVE SUMMARY

Ukraine is currently experiencing major social and demographic trends in the form of a shrinking and aging population, a high level of premature mortality amongst people of working age and an increased migration outflow of wage workers with vocational and complete higher education. This, combined with changes in economic relations, the transformation to new economic development principles and the decline in prestige of working trades has resulted in a shift from the training of skilled workers to the production of specialists with higher education. This situation is expected to result in severe labour shortages in the near future and forecasts for 2015 see only 25-40% of the industry need for skilled workers being met in most regions of the country.

The social and economic context urgently calls for efficient operation of the vocational education system in training skilled workers while the following internal challenges also remain to be addressed:

- the inadequate forecasting of labour market demand in relation to socio-economic development strategies;
- employers' passive attitude toward solving problems within the VET system;
- VET schools are allocated only limited state and local budget funding for the development and implementation of system reforms;
- the current legal framework is weak on the professional training of workers;
- and the national and regional management system for qualitative changes in VET is largely ineffective due to inconsistencies in the power and functional structures relating to VET;
- there are neither scientifically well-founded conceptual basis for VET development nor cost estimate methodology for training skilled workers at VET institutions providing full exploration of the complexity, knowledge content and material (training equipment) intensity levels of occupations and learning outcomes.

In spite of the above, positive efforts have been initiated to reformulate and update the VET system as a flexible and open system for lifelong learning, with the involvement of all social partners. Since the preparation of "Torino Process 2010" Report two years ago, public policy has led to a number of achievements including:

- **improvements to the legislative and regulatory framework**

The new laws "On Employment" (Verkhovna Rada of Ukraine, 2010a), "On Social Dialogue in Ukraine" (2010b), "On the Professional Development of Employees" (Verkhovna Rada of Ukraine, 2012a), "On the Organization of Employers, their Associations, the Rights and Guarantees for their Activities" (Verkhovna Rada of Ukraine, 2012b), "On Public Associations (Verkhovna Rada of Ukraine, 2012c), "On Amendments to Some Laws of Ukraine to Improve the Management of Vocational Education and Training" (Verkhovna Rada of Ukraine, 2012d), "On the Development and Placement of a State Order for Training Specialists, Scientists, Scholars, Educationalists and Workers as well as for Skills Upgrading and Retraining of Labour Force" (Verkhovna Rada of Ukraine, 2012e) came into force in Ukraine.

The strategic documents have been produced: "The Concept of the State Targeted Programme of VET Development for 2011–2015" (Cabinet of Ministers of Ukraine, 2010), "The State Targeted Programme of VET Development for 2011–2015" (Cabinet of Ministers of Ukraine, 2011a), "The National Strategy of Education Development in Ukraine for 2012–2021" (Cabinet of Ministers of Ukraine, 2011d), "The Strategy of State Personnel Policy for 2012–2020" (President of Ukraine, 2012a) as well as regulations have been formulated, for instance, in "The Procedures of Employment of VET Graduates Trained in Accordance with the State Order" (Cabinet of Ministers of Ukraine, 2010c) and in the circular letter "On Introduction of Policies to Ensure Equal Opportunities for Women and Men at VET Training Institutions of Ukraine" (Ministry of Education and Science of Ukraine, Department of VET Education, 2010).

VET increased economic efficiency

It has been approached by improving the "State Order"¹ mechanism through medium-term forecasts of the types of specialists needed in the labour market with a due account of proposals from central power bodies,

¹ "State Order" means publicly financed enrolment in higher and vocational education. The term is inherited from the Soviet planning system when government "ordered" skilled workers and specialists from the education and training system for the needs of the national economy.

local authorities and social partners. The “professional development of employees in enterprises, their training, certification and proficiency testing under the results, including non-formal learning” component of the lifelong learning system has been upgraded. A model of cooperation among all stakeholders is developed to ensure that the VET system responds to the needs of employers, with a correlation between results and national and regional economic needs. VET has seen some decentralisation in the transfer of certain powers from the central government to the local level enhancing the role of local authorities in human resource development.

- **VET quality improvement**

The VET content is standardised: in 2011, for the first time in the history of Ukraine, a National Qualifications Framework (NQF) was developed as a new regulatory framework model to shape the relationship between the education and labour sectors, setting benchmark levels for all future sector and cross-sector qualification frameworks and professional standards. An Interagency Working Group was created to work on the development and implementation of national VET standards, and preparations are well underway on a methodology for occupational standards and conceptual approaches to new generation national VET standards. Guidelines on national VET standards for specific trades have been approved. These use a competence-based approach that provides for standardisation of outputs rather than processes. The structural components of a quality monitoring system are being put into place, with assessment ratings for vocational training institutions proving a particular success. This model combines internal and external evaluations that aim to monitor both regional and sector needs by using quantitative and qualitative indicators.

- **better affordability of VET**

Modular training programmes are introduced offering vertically or horizontally arranged sets of modules particularly focused on professional, key and other competencies. Thus, experimental modular curricula and programmes have been developed for 22 vocations in sectors such as: services, trade, tourism, catering and restaurants-hotels. Recognition is now given to informal in-service training. Progress is made in introducing ICT, with 12 VET students per desk-top PC, 100% public vocational schools have access to Internet. Also, now 80% of vocational schools have their own websites and 50% use local networks for training, production, administrative and management activities.

- **status value enhancement of VET**

The prestige enhancement of VET is considered as an integral part of the state strategy under the “Wealthy Society, Competitive Economy, Effective State” Presidential Programme of Economic Reforms for 2012–2014” (2010). Moreover, the State Targeted Programme for Vocational Education and Training Development for 2011-2015 (STPVED) (Cabinet of Ministers of Ukraine, (2011a) sets forth to raise the status value of blue-collar occupations. New methods to enhance prestige are introduced such as professional skills competitions among students and teachers where winners are granted scholarships by the President of Ukraine. There is also an initiative about the revitalisation of vocational guidance in high schools.

- **intensified efforts toward integration in the common European space**

Methodological benchmarks of the NQF (Cabinet of Ministers of Ukraine, 2011b) which has been elaborated with the support of the European Training Foundation (ETF) and the Council of Europe are in line with EU and international community approaches to future VET development. Integration is facilitated through implementation of international projects such as: the ETF Project on the Improvement of the VET provision through Anticipation and Matching of Skills, Social Partnership and Optimisation of Resource Utilisation (2011–2013) in the Dnipropetrovsk region, and; the Ukrainian-Canadian Project on the Decentralisation of Vocational Training in Ukraine (2005–2012).

The Government of Ukraine pursues a deliberate policy on improvement of the VET system characterised by consistency, integrity and openness that are evident in: (i) the strong resourcing plan and five-year term of the STPVED; (ii) plans for stronger relationship-building within VET reform, and; (iii) intensified and more flexible cooperation with social partners and the international community (as witnessed by the legislative platform, cooperation models, increased conceptual understanding and use of technologies and best practices).

For the VET system to be developed further in Ukraine, the following elements are needed: implementation of scientific labour market development forecasting that would respond to the true conditions and trends in the economy; creation of a mechanism for interaction among central, regional authorities and social partners in drawing up a state order for training of skilled workers; transformation to a VET quality management model based on administering qualitative changes in the system rather than controlling VET institutions, and; full financial support for STPVED implementation.

A. VISION OF VET SYSTEM DEVELOPMENT

Government, business and civil society perspectives on VET system development

Under STPVED (Cabinet of Ministers of Ukraine, (2011a), the medium term Government outlook will focus on the development and implementation of about 300 national standards for specific new generation occupations by 2015. The plan will consider social, economic and environmental strategies and challenges alongside the available resources to produce a framework that will contribute to: increased employment of professional technical education institution graduates, ensuring that course content is relevant to the needs of the current labour market; implementation of the new procedure for drafting and allocation of State Orders for training skilled workers in vocational-technical schools; modernisation of materials and the technical resource base of public vocational schools; the creation of centres for the implementation of innovative technologies; application of ICT in the training and production processes through the creation of e-libraries as well as equipping computer classes; strengthening and consolidation of the role of local authorities and local governments, employers and public organisations in determining the direction and scope of training in line with labour market needs; ensuring the effectiveness of social partnerships, increased funding and investment, and; raising the prestige of the working professions.

The long-term perspective on the development of VET has not changed since the previous Torino process analysis in 2010 where the sector was expected to create conditions favourable to good quality workforce training. This training was expected to conform to the priorities of national social and economic policies, while meeting the needs of individuals, society and the state and ensuring equal access to VET.

The strategic prospects for VET development in Ukraine, as declared by the Government, are built upon the consolidated views of all stakeholders. MESYSU established a practice to agree legal and strategic documents with other ministries and social partners, especially the Federation of Employers of Ukraine and the Federation of Trade Unions of Ukraine, which are the largest such bodies in the country. Evidence of this perspective can be seen in their contributions to development of the NQF (Cabinet of Ministers of Ukraine, 2011c) and implementation measures. At the same time, future tactical planning reflects the interests of each group regulated by consensual agreement.

Development and sustainable development

Ukraine signed the “Agenda for the 20th Century” Programme of Actions in 1992 and joined the international community in supporting the idea of sustainable development. Dealing with the consequences of the 1986 Chernobyl disaster gave the concept particular pertinence for the nation. The need for sustainable development is envisaged within the National Strategy of Education Development for 2012–2020 (Cabinet of Ministers of Ukraine, 2011d) which dedicates one key area of public education policy to the reorientation of educational content for sustainable development.

Analysis shows that implementation of STPVED (Cabinet of Ministers of Ukraine, 2011a) is expected to directly influence the transition to environmentally sound economic development through the inclusion of ICT in the educational process, the creation of digital libraries and the introduction of technology innovation centres.

Priorities and methods for mainstreaming this perspective

STPVED (Cabinet of Ministers of Ukraine, 2011a), envisages regional VET development programmes and the inclusion of programme activities and measures into the State Programme of Economic and Social Development of Ukraine for each year, providing details of the funding needed to implement this programme from both state and local budgets. The programme outlines performers, volumes and sources of funding, and establishes deadlines for implementation and indicators for monitoring progress.

B. EXTERNAL EFFICIENCY: PROBLEM SOLVING IN THE DEMOGRAPHY, ECONOMY AND LABOUR MARKET AREAS

Social and demographic impact on demand for professional skills

According to the State Statistics Service of Ukraine, Ukraine had a population of 45.6 million people in 2011. Ukraine is practically a mono-ethnic state where Ukrainians make up the vast majority of the population although more than 100 other nationalities are represented in minority ethnic groups.

The main social and demographic trends include:

- population decline - the population of Ukraine fell from 51.7 million to 45.6 million over the 1991-2011 period;
- aging and depopulation - leading to further reductions in workforce regeneration and increasing demographic pressure on the working population;
- high levels of premature mortality - 73% of which occurs among the working age population;
- migration - increased migration outflow of wage workers with vocational and complete higher education to the CIS and other countries, jeopardising full staffing of domestic production with skilled workers.

These trends will lead to labour shortages in the near future given that the general oversupply of college graduates (80% of all graduates) and the expected increase in industrial production over the next 6 to 8 years will lead to a dramatic increase in demand for skilled workers in essential occupations.

In addition the vocational qualification structure of the workforce in Ukraine still shows a significant proportion of low-skilled labour, due above all to non-progressive structural changes: inflexibility, rigidity and low responsiveness of vocational qualification structure to structural shifts in the economy within the labour market and low occupational mobility.

Traditionally, there has always been a high percentage of workers in elementary occupations within the working population and the proportion of skilled workers recently decreased further from 13.4% in 2000 to 11.8% in 2011. Over the same period, the share of employees in services and trade increased slightly from 11.3% in 2000 to 15.0% in 2011.

Key economic sectors

The key economic sectors for 2012 include the processing industry (and metallurgy in particular) as the main budget formation industry, with lesser contributions from the chemical, transport, agriculture, retail, telecommunications, construction and tourism areas. The economy of Ukraine is going through the industrial stage of development with about half of its GDP generated in the manufacturing sector. The situation does vary, however, from one region to another, with more intensive development of the services sector in some of these.

The government uses the State Order for training as a tool to help meet the demand for skills in the economy and labour market. This mechanism is used to conclude bilateral agreements between the government and companies or employers.

Government help for small and medium-sized enterprises

The issue of improved professional skills is actively addressed at both national and regional levels. In 2011, Ukraine developed its first NQF (Cabinet of Ministers of Ukraine, 2011c) with the support of the ETF and the Council of Europe in collaboration with employers. The plan is to harmonise all sector and cross-sector qualification frameworks the levels given in the NQF. Further work on NQF implementation in the VET system envisages the development of a number of regulations, including a thorough change in approach to the development of national VET standards on elements ranging from processes to learning outcomes.

At the regional level, the programmes adopted for the training of qualified workers vary according to the specific features of each region. Thus, the 2011–2015 programme on skilled worker training for the Vinnytsia region was expanded to introduce new skills training for workers in the meat, dairy and baking industries, alongside new occupational streams such as: travel agent, insulation systems installation and florist.

Major labour market trends

In recent years, patterns of change in business needs for employees have reflected the macroeconomic changes in the economy. The substantial decline in production observed during the crisis has led to an increase in the number of unemployed people and a decrease in vacancies submitted to employment services by enterprises. There has also been a decline in figures for permanent residents and the labour force. However, workforce contraction is running ahead of resident population reduction, meaning that any drop in the unemployment rate is due more to shrinkage of the economically active population than to any employment of unemployed people.

Predictive estimates up to 2020 indicate that the demographic processes shaping the dynamics of the resident population and its structural characteristics will result in a 1.8% decrease in the economically active population by then.

Analysis of forecast data on the volume of professional employment for all occupations shows: employment in industry is gradually stabilising following the decline during the crisis; employment in transportation and communications will fall by 3%, and; employment in construction will increase. A significant 51% decline of employment in agriculture is forecast, while employment in the services sector is set to rise by 35.9%.

Informal economy and employment

According to calculations from the Ministry of Economic Development and Trade of Ukraine, the volume of the shadow economy in Ukraine has been in the range of 28% to 39% of GDP over the past five years: 28% in 2007, 34% in 2008, 39% in 2009 and 38% in 2010. According to the World Bank (2012b) the informal sector of Ukraine employed 4.6 million workers in 2010; a number that represents 22.9% of all employees. The dynamics are also disappointing as the informal sector employed 4.5 million people in 2009 (22.1% of total employment) and the number had increased to 4.7 million by 2011 (23.1% of the total employed population aged 15–70 years). Informal employment is particularly prevalent in rural areas and among those with low qualifications. Informal employment of hired workers is widespread among young people, with the largest volumes of such posts concentrated in the construction, trade and service sectors. Most informal workers are employed as skilled manual workers, service employees and sales workers. The network of sector-specific vocational schools generally meets labour market demands in both the formal and informal economies. As of 1 September 2012 there were 990 vocational schools in Ukraine providing training in the following sectors: 345 industrial, 250 agricultural, 183 construction, 155 services, 51 transportation and 6 communications.

Initial and continuous VET compliance with employers and labour market requirements

The following mechanisms are in place to ensure VET system compliance with employer and labour market requirements:

- VET service customer satisfaction surveys: since 2008 MESYSU has been conducting employer surveys with the number of respondents increasing year on year (20,000 in 2008, almost 33,000 in 2009, 34,000 in 2010 and about 38,000 in 2011). Employer estimates for 2012 gave the percentages of graduates who meeting their needs as: 73% on knowledge, 74.3% on skills and 71.3% on experience.
- analytical studies: MESYSU considered the results of international analysis on the most in-demand professions in the world and the conclusions of the Federation of Employers of Ukraine on shortage professions for the enterprises of Ukraine in their development of the State Order for qualified personnel training in 2012 (while international analysis produced a list headed by skilled workers, engineers and representatives of trading companies the Federation of Employers requirements were for engineer-technologists, designers, agronomists, agricultural engineers, operators, mechanics, operators of industrial equipment, locksmiths, electricians and gas welders).
- requests from regional employment centres: the regional and municipal state administration offices on education and regional employment centres exchange information on numbers of VET graduates and vacancies for manual workers in the labour market. The entities monitor of the type of occupation and analyse student employment data.

Despite these positive aspects, however, the identification of labour market needs still presents a serious problem in developing the State Order for skills training. At present, the State prepares the Order as a customer and is represented by the MESYSU which holds the agreements concluded between VET schools

and enterprises or employers. The full details and consolidated indicators from the total volume of these Orders in all of the 35 areas of economic activities are then coordinated with the Ministry of Economic Development and Trade and the Ministry of Finance and later approved by the Government. This model was found to be ineffective in many ways and the need to develop a new State Order based on a targeted approach and the forecasting of labour market needs was identified. Thus, a new Law “On the development and placement of State Order for training specialists, scientific, scientific-pedagogical and regular labour force, training and retraining (postgraduate education)” (Verkhovna Rada of Ukraine, 2012e) has been adopted envisaging the formation on the basis of medium-term forecasting of skills needs in the labour market and considering the proposals of central executive authorities, local authorities and social partners.

Entrepreneurship and relevant skills within VET

The development of entrepreneurship among Ukrainian youth is seen as an important objective of the educational system within the context of the global movement toward the formation of key competences in the younger generation. To this end, the national standard on basic and senior secondary education contains a “social studies” section that offers a “housekeeping and manufacturing” thread containing segments entitled “entrepreneurship” or “entrepreneurial activity and its main types”. All VET suppliers must meet the national standard and provide learners with the given information for them to obtain senior secondary education.

From 2001, a subject known as “Principles of economics” was added to the compulsory core curricula of general education establishments, the main purpose of which was to develop entrepreneurial spirit among students. The subject comes complete with educational-methodological support in the form of a programme, textbooks, manuals, worksheets and thematic planning.

In addition, all the VET suppliers in the general professional disciplines block provide a subject entitled “Fundamentals of industrial economy and entrepreneurship” that is also envisaged in all national standards on specific working professions. Contributions are also made to the promotion of entrepreneurship ideas and the development of relevant skills among students and teachers of VET schools through implementation of the “Skills for employability” project (2012–2015) which aims to improve the quality, relevance and effectiveness of business education programmes in VET schools. This project operates with the supported of the Saskatchewan Institute of Applied Science and Technology (Canada) in the Anton Makarenko Professional-Pedagogical College in Kyiv, the Higher Vocational School of Catering Services and Tourism in Lviv, and the Ivano-Frankivsk Higher Vocational School of Hotel and Tourism Management.

Increasing the external economic efficiency of the VET system and its timely response to change

Active measures are being taken to respond adequately to labour market requirements and to improve the State Order mechanism in line with the needs of employers. Action is also underway toward recognition for qualifications obtained within informal learning and for developments toward lifelong learning within the education system. These initiatives contribute to the external economic efficiency of VET.

C. EXTERNAL EFFICIENCY: SATISFYING SOCIAL NEEDS IN THE AREA OF VET AND DISSEMINATION OF SOCIAL INTEGRATION PRINCIPLES

VET system attractiveness

The attractiveness of the VET system in Ukraine is ensured at the state level by:

- flexibility - VET is provided at levels ranging from primary to post-graduate courses and it is available in different organisational forms including training in VET schools and higher educational establishments offering in-house, full-time, part-time, evening and distance learning models. Citizens can choose the path that best meets their needs and level of education. Legislation defines the educational and skill requirements at each level of learning in a way that enables students to transfer smoothly from one stage to the next;
- availability of social guarantees - in accordance with Article 38 of the Law of Ukraine “On vocational education” (Verkhovna Rada, 1998) VET school students are provided with the following guarantees of social protection: the period of VET school study is counted as work experience providing entitlement to the benefits envisaged for certain categories of workers; VET graduates from full-time

education who have studied for 10 months or more are entitled to paid leave at the enterprise from the first three months of employment;

- material incentives - VET students are paid bursaries while studying (from 1 September 2012 the Government of Ukraine increased the bursary from UAH 200 to UAH 275 for the first time since 2008 and future government priorities state the intention to make bursaries equal for VET and higher education students); the state provides a guarantee that graduates trained under the State Order will get a first workplace appropriate to the profession they have obtained on the basis of bilateral and multilateral contracts (between the VET school and the training customer and between the customer, student, trainee and VET school respectively) under the Resolution "Procedure on the employment of VET graduates trained in accordance with the State Order" (Cabinet of Ministers of Ukraine, (2010c).

However, VET courses and the working professions are still not viewed as an attractive perspective by youth for a number of reasons. In the 2010/2011 academic year, 550 students went into higher education establishments against only 95 going into VET out of every 10,000 people. For every one student entering VET, 6 students opted for higher education in an off-balance pattern that is out of step with both the labour market and the technological achievements required from training. According to expert assessment from the Verkhovna Rada (Parliamentary) Committee on Science and Education of Ukraine, 80% of labour market interest was for the working professions and less than 20% for specialists with higher education.

As a result, two of the six objectives of the STPVED (Cabinet of Ministers of Ukraine, 2011a) are aimed at enhancing the prestige of blue collar occupations. The stated objective of "Creating social promotion of the prestige of the working professions" envisages career guidance activities among young people involving trades unions and employers, and the provision of retraining for unemployed and employed individuals in line with the needs of both citizens and the labour market. At the same time, the aim entitled "Recovery of prestige for the working professions through career guidance for the population" highlights issues related to career guidance in the media, competitions, exhibitions and careers fairs. Exhibitions and fairs have been widely held at provincial and city levels within the framework of the STPVED since 2011.

A further objective: "Increasing the prestige of the working professions" also figures as a priority in the National Personnel Policy Strategy 2012–2020 (President of Ukraine, 2012).

The Law of Ukraine "On the professional development of employees" of 12 January 2012 (Verkhovna Rada of Ukraine, 2012) defined informal education for the first time in legislation, describing this as "the acquisition of professional knowledge, skills and experience through an unregulated place of acquisition, duration and form of education". The Law envisages confirmation of the informal learning outcomes of employees and states that centres for the recognition of informal learning outcomes will be created within the State Employment Service.

Adoption of the NQF (Cabinet of Ministers of Ukraine, 2011c) in 2011 also contributed greatly toward the recognition of informal learning outcomes.

Adult education for employment or training within VET

Ukraine has adopted the concept of lifelong learning and, to this end, has embarked upon the rapid development of an adult education sector supervised by the Ministry of Social Policy and the State Employment Center.

Increasing the employment chances of adults is particularly relevant for Ukraine in view of the post-crisis resumption of demand for almost all groups of occupation and the current imbalance in the labour market. About 60% of the Ukrainian workforce are said to work in fields for which they do not have formal qualifications and 25% have reported willingness to sacrifice their professional background in order to find gainful employment. In addition, the level of skills of the majority of workers significantly lags behind employer requirements and the World Bank report "World Bank – Ukraine Partnership: Country Program Snapshot. April 2012" informs that 20% of companies in Ukraine are not satisfied with the skills of their employees. At the same time, employers are reluctant to invest in the professional development of employees for a variety of reasons, dedicating an average of only 0.2% of total labour costs to this purpose against a figure of more than 1% in EU countries.

At present, employees undergo advanced training once every 12 years on average, although once every 5 years is the recommended frequency. Over one million employees undergo professional training each year and directly upgrade qualifications in industry, a number that accounts for 9% of the recorded headcount.

One positive aspect of the situation in Ukraine is the good level of interaction between the various education sectors involved in adult education, primarily the interaction between the employment services and vocational schools. The volume of adult education in vocational schools is, on average, one-quarter of the total number of graduates. In terms of the forms of training provided in 2011, vocational schools released: 34.5% of graduates with professional training and complete secondary education, 36.5% with complete secondary education, 20.9% with some training (unemployed people and business employees), 3.7% with improved qualifications (unemployed people, business employees), and 4.4% with professional but incomplete secondary education. Adults are trained in short modular programmes for occupations such as “electric welder”, “computer operator”, “tailor and cutter”, “barber”.

The adult education system in Ukraine also envisages training for unemployed people. From January to June 2011, the State Employment Service organised training courses for 118,100 individuals against 116,600 in the same period of 2012. In the 2011-2012 academic year, 315 of the VET schools in Ukraine delivered training for unemployed people in 478 occupations.

One of the areas of the greatest diversification in adult education comes in vocational schools offering training for unemployed people run by the State Employment Service. There are already 10 such vocational schools in Ukraine.

A number of important legal acts have been passed in Ukraine to develop an adult education system capable of meeting the current level of social and industrial development, including:

- The Law “On the professional development of employees” (Verkhovna Rada of Ukraine, 2012a) aimed to ensure the effective functioning of the professional development system for employees of enterprises, institutions and organisations, and confirmation of the informal learning outcomes of their professional training, certification and qualifications. The law defines employer obligations on the periodicity of employee training (at least once every five years) and it envisages the participation of trade unions and employers' organisations in the provision of professional development for employees. The Law provided the first national definitions of terms such as the “professional training of employees”, “formal and informal training of employees” as well as a legal, organisational and financial framework for the system of employee professional development, certification procedures and proficiency testing. Under the Law, the functions for the confirmation of informal learning outcomes are assigned to centres for the recognition of professional learning outcomes at the State Employment Service.
- The Law “On employment” (Verkhovna Rada of Ukraine, 2010a) defines a vocational training system that will include: people completing primary vocational training in educational establishments and other institutions providing training for skilled workers; employees who undergo primary training, retraining and skills upgrading as part of their job, and; unemployed people seeking employment who require a primary vocational training, retraining and professional development;
- The Personnel Policy Strategy for 2012-2020 (President of Ukraine, 2012a) aims to develop the staffing system, improve the formulation mechanism of the State Order for specialist training and form a balanced system for managing careers advice for young people. As part of the “Advanced training and retraining” thread, the Strategy envisages establishment of a coherent system to assess knowledge and skills gained as a result of training, retraining and professional development in accordance with the skills needed to perform the work in a particular occupation and the implementation of a system for continuing professional training.

Civic-mindedness and sustainable social development within VET

Active citizenship can be developed in students, in particular through:

- educational activities under implementation of Model Regulations on the organisation of educational activities in vocational schools (Ministry of Education and Science of Ukraine, 2002) which define the purpose, objectives, forms and methods for educational activities to develop national and human morality, spirituality and culture;

- the activities of the student councils of self-governance and the organisation of regional meetings of student council leaders from vocational schools (Ministry of Education and Science of Ukraine, 2007);
- organisation of the all-Ukrainian military-patriotic “Sokol” or “Jura” games for children and youth (Ministry of Education, Science, Youth and Sports of Ukraine, 2012g) to educate young Ukrainian patriots in the principles of national dignity, increased self-awareness and active citizenship while promoting a healthy way of life within the Concept of National-Patriotic Youth Education (Ministry of Education and Science of Ukraine , 2009a).

Ukraine only recently started working towards the goal of student-centred education that will take their interests into account. The government states that this goal can be achieved through the transformation of learning in compliance with a competence framework. New state standards on secondary education coming into force on 9 January 2013 focus on developing key and subject competencies in students.

The vocational education sector saw state VET standards begin to be developed for specific occupations as part of a competence-based approach.

Main social integration issues in Ukraine

According to the Human Development Report (UNDP, 2011) Ukraine comes 76th in the ranking of world countries on the Human Development Index.

According to official data, relative poverty in Ukraine stood at 24.1% (2010) showing a decline from the 26.4% of 2009. At the same time, analysis of level dynamics during the last ten years shows the problems in poverty profiles, in particular, the high values of poverty indicator among employed people against a relatively stable background situation in the country.

One of the main problems facing Ukraine is the current unemployment of 8.7% of the population (World Bank, 2011), falling disproportionately upon the youth in a particularly alarming fashion. According to the ILO, youth unemployment in Ukraine is currently running at 20%, meaning that many higher education graduates are unable to find a job.

According to research reported in the European Commission Social Security and Social Inclusion Report (EC, 2009) the key vulnerable groups in Ukraine are children, elderly people and unemployed individuals, low-paid workers (a national characteristic of employment in Ukraine), the rural population, people with disabilities and those of Roma ethnicity.

The Roma have the lowest educational levels of all the national minorities in Ukraine. The average length of education for an individual in Ukraine in the 2001 census was 10 years, but for the Roma population the same indicator gave a mere 5.2 years of study. Some 68% of Roma are unable to read at all or have difficulties in reading and 59% are unable to perform simple calculations or have problems with numeracy.

The Crimean Tatars form another vulnerable group. Research by the National Institute for Strategic Studies (2009) showed that in 2008, the majority of Crimean Tatars (71%) had secondary or specialised secondary education, 17.8% had higher or incomplete higher education and 10.1% had incomplete secondary education.

VET access for vulnerable groups

Under Ukrainian legislation, all Ukrainian citizens are guaranteed equal rights to VET according to their abilities and inclinations.

The policy of equal opportunities in the acquisition of a first profession, re-training and the upgrading of skills is implemented within the framework of Law “On ensuring equal rights and opportunities for women and men” (Verkhovna Rada of Ukraine, 2005), MESYSU Order “On implementation of the principles of gender equality in education” (Ministry of Education and Science of Ukraine, 2009c) and MESYSU Letter “On introduction of policies to ensure equal opportunities for women and men in vocational schools of Ukraine” (Ministry of Education and Science of Ukraine, Department of VET Education, 2010). A total of 240,133 students graduated from vocational schools in 2011 of whom 149,072 were men and 91,061 women.

The Ukrainian-Canadian “Decentralization of vocational education management in Ukraine” Project (2005-2012), operating within the framework of cooperation between the UNDP and European Commission, helped

produce a gender analysis of state standards on competency-based vocational education and recommendations on the integration of the social- and gender-related needs of women and men for the effective exercise of their professional interests and skills in the labour market. The results of this analysis are included in the MESYSU comprehensive recommendations.

Section seven of the Law “On vocational education” (Verkhovna Rada of Ukraine, 1998) envisages social protection for vocational school students and representatives of vulnerable population groups, particularly orphans, children not in parental care and those with special needs. These groups are guaranteed preferential treatment when enrolling in vocational schools, they receive material assistance, are given revitalizing periods during training and they are assisted with employment and housing. Moreover their training or retraining is directly funded from the state budget.

MESYSU figures state that 17,800 orphans and children not in parental care were recorded to have studied in the vocational schools under its control by 1 January 2012.

A further 6,369 students from these groups had been revitalized at state expense during the period from June to August 2012.

The right to non-competitive admission for persons with disabilities is guaranteed by the rules on admission to vocational schools, and, as of the close of 2011, there were 6,362 students with physical and mental disabilities enrolled in these schools. In addition, these students have guaranteed access to curricula and programmes appropriate to their specific needs in accordance with the requirements of state standards on vocational education. These students have access to specially developed instructional-technological cards, test tasks and reference notes and their classrooms are equipped with the required facilities, materials, tools and course books.

Individuals with disabilities are provided with training in vocational schools on the basis on their interests, their specific medical conditions and regional economic needs. These groups are offered training in the professions of: “computer operator”, “office worker”, “DTP operator”, “secretary to management”, “plasterer”, “tailor”, “tile maker or tiler” and others. Some of the new licensed professions even ensure guaranteed employment or the possibility of self-employment.

In order to improve the system for training people with disabilities in vocational schools and to promote social integration, an annual all-Ukrainian competition is held for the “Professional education of disabled individuals and persons with special needs in vocational and technical schools”.

Special training groups are regularly created for students with similar issues (problems with hearing, vision, mental development, cerebral palsy, etc.) and 130 such groups exist today.

However, students with special needs are most commonly integrated into mainstream education. For instance, in the Autonomous Republic of Crimea, 123 people with disabilities study in 19 of the 30 vocational schools and, in the Volyn region, there are 181 people with disabilities, making up 10% of all students in some vocational schools in this area.

MESYSU figures state that 5,700 people with special needs studied in the vocational schools under their jurisdiction on 1 January 2012.

Equal rights to employment are guaranteed under the Law “On employment” (Verkhovna Rada of Ukraine, 2010a), and particular mention is made of the right to protection from any form of discrimination in employment on the basis of race, skin colour, political, religious or other beliefs, membership of trade unions or other citizen associations, sex, age, ethnic or social origin, financial position, place of residence, linguistic or other characteristics.

Priorities for improving the external effectiveness of VET

The priorities in improving the external efficiency of the VET system are: strengthening of vocational guidance through the STPVED (Cabinet of Ministers of Ukraine, 2011a); professional development of employees; recognition of informal learning outcomes under the Law “On the professional development of employees” (Verkhovna Rada of Ukraine, 2012a), and; introduction of the continuous personnel training system as part of the National Personnel Policy Strategy for 2012–2020 (Cabinet of Ministers of Ukraine, 2011c).

Challenges still to be resolved within the framework of a coherent national strategy are: youth employment, finding a first real job for young people and retraining of employees.

D. INTERNAL EFFICIENCY AND QUALITY OF INITIAL AND CONTINUING VET

Definition of quality in VET providers

In the National Doctrine of Education Development (President of Ukraine, 2002) quality of education was declared a national priority and a prerequisite for national security; it is stated in the document that education quality is determined on the basis of state education standards and public assessment of educational services.

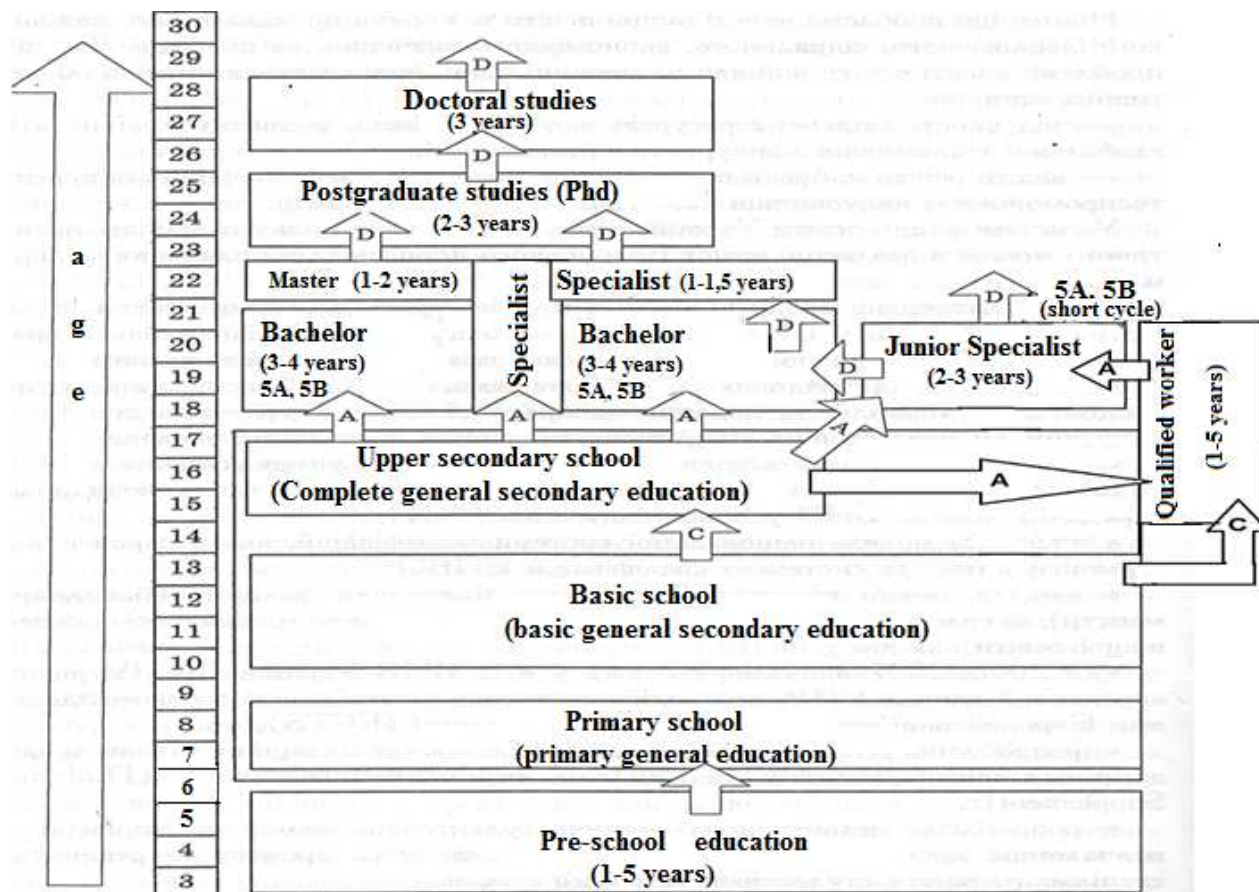
MESYSU identified the tools needed to ensure VET quality as: the implementation of national standards for specific new generation occupations and ICT plans; the provision of new equipment and facilities for vocational schools, and; the publication of modern textbooks and pupils and teacher guidebooks.

At the national level, quality is measured through a systemic survey, while many of the educational establishments complete self-evaluation that examines their training provision for factors that may affect the competitiveness of the employees they produce. Such factors include: quality of teachers; quality of educational process methodology; quality of training programmes; quality of training facilities, and; quality of school management. Similar evaluations are performed in preparation for the licensing of new professional streams of training.

The quality of general education delivered to vocational school students is determined by national evaluation (within a framework of external independent assessment through standardised tests and the State Final Examination) and participation in international comparative studies. Up until the present, Ukraine only participated in TIMSS 2007 where the nation ranked 25th out of 59 countries for 4th grade students and 26th for 8th grade students.

An outline of current VET provision

The VET system in Ukraine consists of initial VET (which can be studied after graduation from primary school alongside a diploma in complete secondary education or after graduation from primary school without the diploma) and continuing VET, within the framework of lifelong training. There are no restrictions on graduates moving on to higher levels of education.



Note: C – certificate; DG – diploma of graduation; C– Degree

Advantages and disadvantages of VET provision

Professional standards and qualifications including core competencies

The Law “On vocational education” (Verkhovna Rada of Ukraine, 1998) established that the state VET standard contains: curriculum outlines for the training of skilled workers; curriculum outlines for the school subjects envisaged in training plans and professional-practical training plans; a list of basic compulsory education facilities; a monitoring system to log the knowledge, skills and abilities of pupils and students, and; criteria for the certification competencies. The state standard on VET was developed by the MESYSU and approved by the Cabinet of Ministers of Ukraine.

The state standards for specific trades are developed by the MESYSU in consultation with social partners and are then agreed with the Ministry of Social Policy and relevant associations within regional employers' organisations.

The process of developing standards for specific professions started following approval of the “state list of occupations for training of skilled workers in vocational schools” under Cabinet of Ministers of Ukraine Order № 117 of 11 September 2007 (Cabinet of Ministers of Ukraine, 2007). This standardisation process will affect the primary training and retraining threads and the skills improvement sector.

Standards were developed for 205 courses that will be submitted for approval and implementation in the first half of 2012. These included 76 courses for industry, 31 for agriculture and the processing industry, 23 for transport, 22 for construction, 17 for trade and catering, 13 for the mining industry, 10 for utilities and 4 for the Ministry of Emergency Situations, including “manufacturer of metal artworks”, “electric welder for ships”, “operator of compressor units”. These standards consider a modular training approach and reduce the duration of training.

The appearance of extended job descriptions that covering between three and five single professions provides evidence of a clear trend toward the introduction of new production technologies and changes in the labour force qualification structure. For example, the standards for “multi-skilled machine operator”, “builder-finisher”, “operator of IT networks” and others are now virtually complete and have entered the testing phase.

The involvement of employers and scientists has been a positive element in the development of national standards for specific occupations. For instance, the E. Paton Institute of Electric Welding and the National Academy of Sciences of Ukraine developed a new generation national standard for the profession of “Welder” that approved new training content for this profession. Furthermore, the course considered the ISO international quality standard, relevant industry certification of vocational school graduates and new approaches to learning and competency assessment.

The STPVED (Cabinet of Ministers of Ukraine, 2011a) envisages the development and implementation of about 300 national standards for specific new generation occupations.

Adoption of the NQF (Cabinet of Ministers of Ukraine, 2011c) in 2011 turned over a new leaf in the standardisation process by introducing competency-based standards development. Within the framework of the Action Plan on NQF implementation (MESYSU, Ministry of Social Policy of Ukraine 2012d), an Interdepartmental Working Group on VET standards development and implementation was created by Cabinet of Ministers of Ukraine Resolution on November 2011 (Cabinet of Ministers of Ukraine, 2011b) to coordinate the activities of central authorities, employers and social partners. This implementation process also brought progress on the methodology for the development of professional standards and conceptual approaches to the creation of national new generation VET standards. At the same time, approval was given for methodological recommendations to produce national standards for specific professions based on a competency building approach focussing on the standardisation of results rather than processes (MESYSU, 2012e). .

Initial work on the development and experimental verification of the latest standards was started in a number of vocational schools in accordance with these recommendations, pursuant to MESYSU Order “On the introduction of latest standards for higher and vocational education” (MESYSU, 2012f) and with the help of social partners. Close work with social partners led to drafting of the national standard for the profession of “assistant to steelmaker” at level 4 of the NQF. The draft was given a positive assessment by employers at the Azovstal and Illyich steel plants and the basic vocational schools developed the relevant curricula on the basis of the standard.

Curriculum

Modular training programmes are today replacing the traditional approach, including new elements such as the in-house training system. The traditional programmes were built as a set of theoretical and practical disciplines, focusing on common approaches and methods in professional activities within strict terms of learning, whereas the modular training programmes have inherent flexibility as they are organised in the form of horizontal or vertical sets of modules, each focused on specific learning outcomes. The new modules include an integrated set of professional, key and other competencies needed to perform a specific employment function and the specific needs of students are taken into account in determining the duration of the training course (as is the case for the new national standard for the profession of “welder”).

For the first time ever, modular programmes were developed for young workers in vocational schools in the form of training plans and for 22 professions in the sectors of services, trade, tourism, catering and the restaurant and hotel area. These are now being tested in public vocational schools in six regions. This approach will result in a constantly updated set of modular programmes for professional qualifications that aim to ensure effective adaptation to labour market needs.

Regional services and industry institutes were involved in updating the electronic database of sample VET curricula and programmes. A curricula database is being compiled (including integrated models) for training level II and III skilled workers in vocational schools, and 220 such plans had been logged by the end of 2012.

The e-bank of sample training plans and programmes for training skilled production workers contained 388 sets of documents by 1 July 2012 and is currently being updated.

Textbooks and other teaching materials and equipment

The publishing of textbooks for vocational schools presents quite a serious problem for Ukraine. Within the last ten years only 30% of the planned number of textbooks have been published and no textbooks at all have been published for the last four years due to a lack of funding. The Government has taken a number of measures to improve this situation:

- In order to provide vocational schools with the new generation textbooks, especially for priority occupations such as engineering, metal processing, instrumentation, mining, transport, communications and agriculture, MESYSU Order “Textbook for vocational schools” (Ministry of Education and Science of Ukraine, 2009e) approved the sector targeted programme for 2010–2012, which envisages an increase in the total amount of financing, including alternative sources. The plan is to publish 53 various textbooks and teaching aids worth a total of UAH 30 million, five of these in 2012. At present, the results of programme implementation monitoring show the planned literature is mainly published with funding from alternative sources. One positive example from 2010 was the provision of textbooks entitled: “Plaster systems and machines for finishing,” “Curvilinear and broken forms of plaster cladding” and “Technology and commodity of drywall systems” to vocational schools for the construction industry as the result of financial support worth UAH 350,000 from SE Knauf Marketing. At the same time, a legal framework must be developed for active employer involvement in the preparation and publication of textbooks;
- Cabinet of Ministers of Ukraine Resolution No 781 “Some issues on the provision of textbooks and teaching aids to students of higher educational establishments, pupils of general secondary and vocational schools and preschool institutions” (Cabinet of Ministers of Ukraine, (2010b) states that textbooks for vocational schools must be republished once every five years.
- The STPVED (Cabinet of Ministers of Ukraine, 2011a) contains an objective on the development and publishing of textbooks, teaching aids and reference materials, with plans to develop and publish a total of 500 textbook items within five years.

A negative trend can be seen in the physical and technological obsolescence of the materials and technical equipment of vocational schools, especially in the engineering, agriculture, printing profiles, transport and communications courses where obsolescence runs at between 96% and 98%. The workshops and training farms currently use many outdated techniques, 60% of which date from more than 20 years ago, 36% from around 20 years ago and only 4% from within the last 10 years.

The STPVED (Cabinet of Ministers of Ukraine, 2011a) provides objectives on modern equipment and technology for vocational schools alongside recommendations on textbooks and plans are in place for the updating of 220 vocational schools in the 2011 to 2015 period.

Network of public and private training providers

According to MESYSU data, as of 1 September 2012 the network of institutions preparing workers for the economy consists of 990 vocational schools, including 868 vocational schools under MESYSU control, 75 training centres at penal institutions, 47 structural units in higher education establishments and 868 training institutions of other types distributed across 35 areas of economic activity (Figure 2).

**The network of vocational schools in Ukraine
(as of 1 September 2012)**

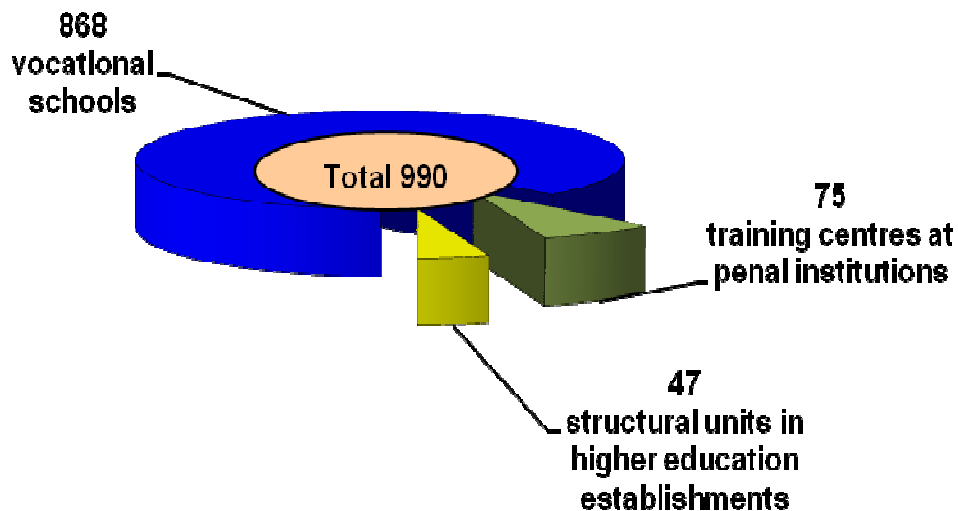


Figure 2

The overall structure of vocational schools in Ukraine is 96.8% public and municipal schools and only 3.2% private vocational schools.

Of the 990 vocational schools: 345 train workers for industry, 250 for agriculture, 183 for construction, 155 for the service sector, 51 for transport and 6 for communication (Figure 3).

**The network of vocational schools in Ukraine by economic branches
(as 1 September 2012)**

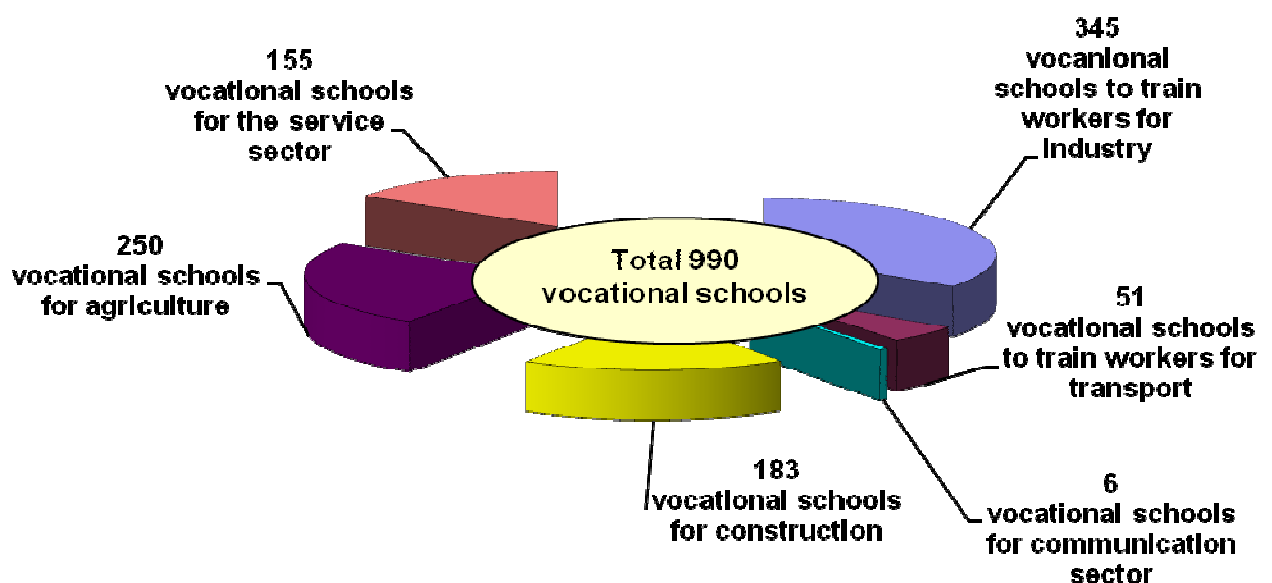


Figure 3

In 2011, the number of students and trainees in vocational schools totalled more than 381,000 and every second student received training in two or more professions.

The State Order for personnel training in vocational schools in 2011 allowed training for 199,296 individuals including the sectors of: industry 63,838; construction 35,040; transport and communications 22,611; light industry 14,118; supply and trade 35,177; services 12,482, and; agriculture 16,030.

In 2011, the vocational schools trained 240,133 individuals (62% men, 38% women; 3% orphans and children not in parental care; 1.0% persons with physical and mental disabilities). Of these, 75% received basic training and the other 25% had vocational education and training.

The dynamics of the employment of public VET graduates has remained stable in recent years at a constant rate of 84% or more (Table 1).

Table 1

<i>Years</i>	<i>Graduating students</i>	<i>The number of graduates employed by profession (%)</i>
2005	268,600	84.2
2006	267,900	85.3
2007	259,600	88.0
2008	246,500	88.1
2009	223,500	84.1
2010	208,700	84.0
2011	225,800	84.2

The remaining graduates either continue training in higher education establishments, join the army to perform their military service or become self-employed. Half of all students get a full secondary education alongside their professional training.

These buoyant figures obscure a less optimistic future than is initially apparent as there is generally a decrease in the numbers still in jobs six months after initial employment by job placement (the number is 62 – 72%), and at three years after graduation the figure stands at about 25–30% due largely to the fact that the legislation does not regulate employer responsibility to ensure the adaptation and career development of vocational school graduates. Consequently, some graduates are not employed in their trained profession, they may be low-waged and some will not encounter the mentoring opportunities and incentives they need for professional growth. These elements, coupled with sometimes inadequate social protection, result in an outflow of a large number of graduates from enterprises.

Apart from the state vocational schools, some higher education establishments at accreditation levels I to IV also provide training, retraining and advanced training services.

VET also provides a system of vocational training for production personnel, meaning that more than one million employees of enterprises and organisations are trained by them each year.

Improvements are being made to the network of institutions that provide workforce training for the economy in order to comply with the economic structuring of the regions of Ukraine outlined within the framework of the 2010-2014 “Prosperous Society, Competitive Economy, Effective State” Economic Reform Programme (Committee on Economic Reform of the President of Ukraine, 2010) and the STPVED (Cabinet of Ministers of Ukraine, 2011a). Moreover, a plan for VET school reorganisation is on the way with: mergers and enlargements (the efficient use of financial, material and human resources is far more possible with enrolment of at least 500); changes in the status and names of vocational schools; improvement of the VET management mechanism through the transferral some functions of state vocational school management into the field, and; development of regulations regarding optimisation of the vocational schools network.

In 2011-2012 the “Improvement of vocational education system through forecasting and adaptation of skills, social partnership and improved use of resources” project was implemented in the Dnepropetrovsk region with the support of the ETF. The objective of this project is to develop the vocational school network optimisation procedure in accordance with regional economy labour force needs in terms of the professions and types of economic activity on offer.

Teacher skills and professional development

According to the 1998 Law “On vocational education” (Verkhovna Rada of Ukraine, 1998) the teaching staff of vocational schools and VET institutions included: teachers, teachers of vocational training, educators, practical vocational training instructors, senior trainers, senior trainers of vocational training, instructors of vocational training, educational psychologists, social integration teachers, heads of physical education, heads of vocational schools and heads of scientific and methodical teaching institutions, their deputies and other employees whose work is related to the organisation and provision of the educational process.

The educational process in vocational schools is provided by about 49,000 teaching employees, including vocational training instructors, teachers, educators, senior instructors, directors, deputy directors, practical psychologists, social teachers (Figure 4). However, many vocational schools have empty posts and staffing levels of vocational schools currently stand at about 90%.

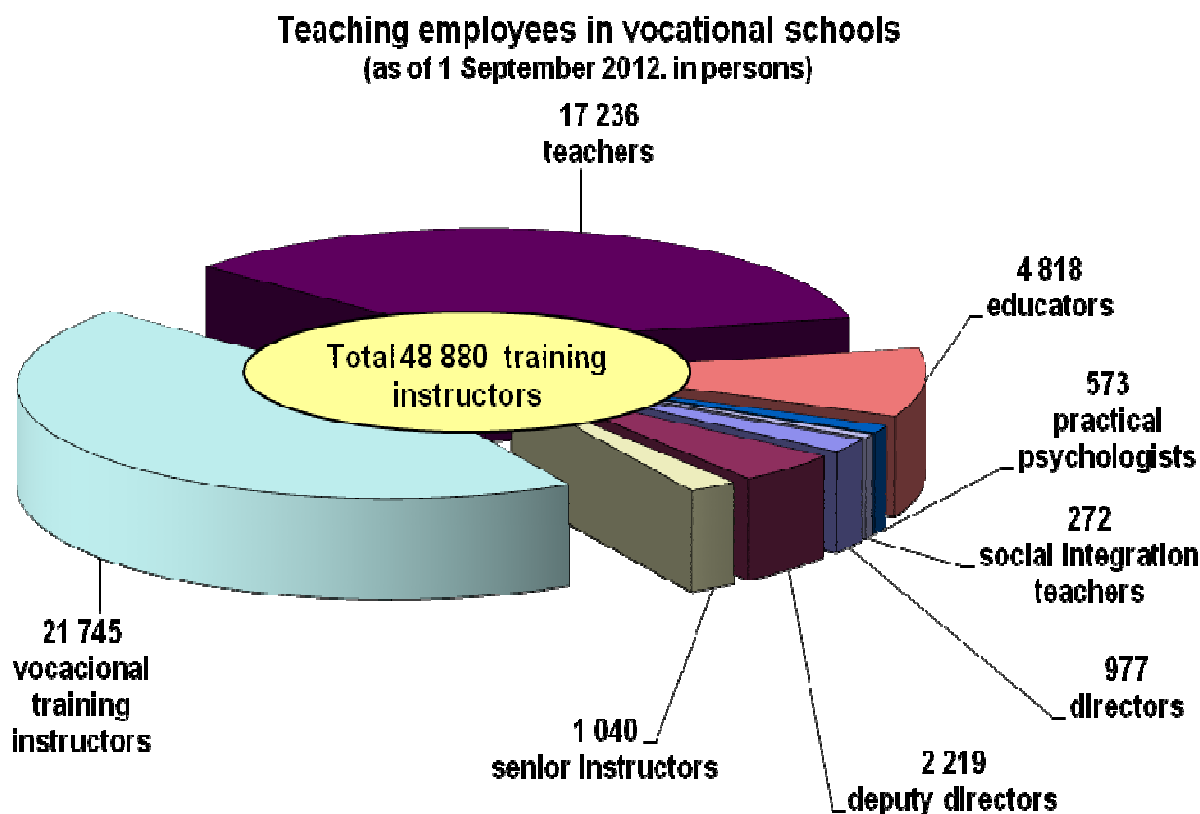


Figure 4

Cabinet of Ministers of Ukraine Resolution No 535 of 11 June 2008 (Cabinet of Ministers of Ukraine, 2008) aimed to improve staffing in state vocational schools by encouraging specialists to leave enterprise and work in these establishments. The plan allowed such teachers to consider their period of employment in enterprise as teaching experience that would be reflected in higher pay in order to attract people with industry experience to teaching.

It is important to point out that most teachers have a high level of education: more than 83% have completed higher education and 90% have good ICT skills as a result of their participation in the Intel Corporation® “Education for the Future” Programme of 2007. In most regions, this training was conducted by trained vocational school coaches and instructors who supported vocational schools. A total of 9,000 VET school teachers were trained up over a 5-year period.

Half of all directors, one in three deputies and more than half of all teachers in the vocational theoretical cycle have the appropriate skills. Most masters of vocational training have two or more working professions and have the necessary psychological and pedagogical skills.

Aging is a major problem within the VET teaching force. Most teachers are middle-aged or older, 30 to 60 years, and 10% are more than 60 years old. Only 12% of teachers in this field are under 30 years old.

The Law “On vocational education” (Verkhovna Rada of Ukraine, 1998) states that training of teachers in the state vocational schools will be paid for by the state budget of Ukraine while training for municipal vocational schools will be funded from the local budget and private VET schools will be made to fund their own training.

The procedure for training vocational training masters in public vocational schools is outlined in Ministry of Education and Science of Ukraine orders “On the professional development of vocational training masters of vocational schools” (Ministry of Education and Science of Ukraine, 2009b) and “On introduction of amendments to the Order of the Ministry of Education and Science dated 14.08.2009 No 749” (Ministry of Education and Science of Ukraine, 2009d).

Ukraine has a network of educational institutions that provide training for VET school teachers and MESYSU conducts the all-Ukrainian experiment on the improvement of working skills and training of vocational training masters in the basic vocational schools.

In 2011/2012 advanced studies courses were attended by 639 masters of vocational training for the 15 VET school profiles identified by MESYSU (Ministry of Education and Science of Ukraine, 2009d), moreover, 529 people gained improved qualifications in 2012. Further training of masters is a particularly relevant issue as around 12% of VET masters currently have only third category qualifications (equal to VET school graduate level) that a priori affects the quality of education.

The background situation of the formation of an information society in Ukraine means some of the more popular forms of further training for teachers are ICT-based: on-line training, distance learning, learning through the Intranet.

The all-Ukrainian Forum of vocational school masters of vocational training (initiated since 2012) has become another innovative form of training aimed at VET best practices dissemination.

Professional development for teachers is associated with a number of challenges, which include: a lack of national standards for advanced training, and rare offers of training for vocational masters and teachers at the enterprises that will be the end employers of the workforce.

Budgets of educational institutions including specific costs for VET students and additional sources of income

The Law “On vocational education” (Verkhovna Rada of Ukraine, 1998) declared that state and public vocational schools within the volume of the State Order will be funded by state and local budgets and that vocational schools will be able to access additional sources of funding through: payment received for training beyond the State Order, course training and retraining; income from work with enterprises during manufacturing practices and money earned from operations in educational workshops; the provision of paid services from a list determined by the Cabinet of Ministers of Ukraine, and; grants.

Vocational school budgets consist of the two sections of general and special funds. The general section contains income for the execution of basic functions by state-financed organisations. The special fund contains income for a specific purpose..

In 2010, average expenses per 9th grade VET student (International Standard Classification of Education level [ISCED] 3) stood at UAH 11,544 and for students completing secondary education (ISCED 4) it was UAH 13,037 (State Statistics Service of Ukraine, 2012).

Vocational school activities are mainly funded from the state budget which provides 90.5% of the total cost of VET against 1.5% from employers and 8.5% from household budgets (State Statistics Service of Ukraine, 2012).

Management staff of educational institutions

The management posts in vocational schools include: director, deputy director for training and production work, deputy director for educational work, head of physical education, methodologist and senior instructor of practical training.

Vocational schools are run by qualified directors, most of whom are highly experienced: 33% have been in the profession for more than 30 years; 30% have been working from 21 to 30 years; 21% from 11 to 20 years; 8% for 6 to 10 years, and; just 8% from 1 to 5 years (Figure 5).

The Length of Employment of Vocational Schools Directors (as of 1 September 2012)

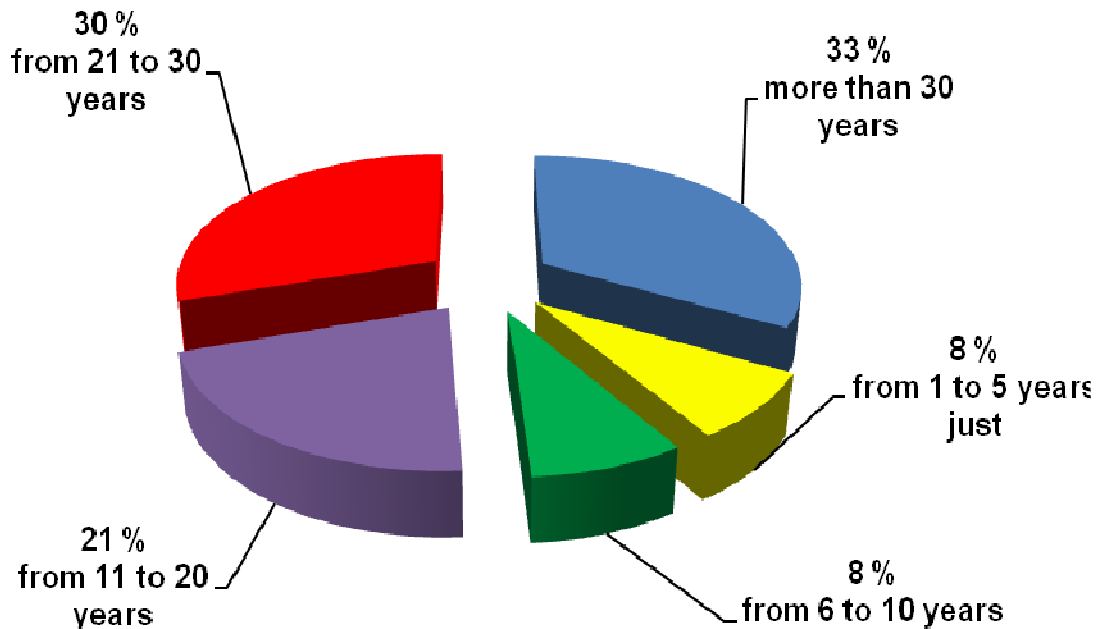


Figure 5

Up-to-date educational processes

A network of sector-specific hands-on training centres is being created to disseminate innovative educational technologies and information on modern equipment and tools. MESYSU issued Order No 694 "On the approval of provision on the training-practical centre (by sectors) of vocational schools" of 14 June 2012 (MESYSU, 2012h) to improve the practical training of students and trainees in vocational schools and the professional development of specialists in enterprises while introducing the latest production technologies into the educational process. There are currently 75 such centres in operation: 50 for the construction industry, 9 for the services sector, 8 for agriculture, 5 for industry and 3 for mechanical engineering. A good example of such a centre can be seen in the training course offered for the role of "flooring operative opened in 2012 through the Anton Makarenko Professional Pedagogical College of Kiev with the support of the Uzin Utz AG company (Germany), the Ministry of Economic Cooperation and Development of the Federal Republic of Germany and MESYSU.

Innovations in the learning process at vocational schools are supported by ICT. In the vocational schools of today there is one computer for every 12 students and all of the public vocational schools have an Internet connection, as do half of all hostels. Half of the schools also use local networks in training, production and administrative processes.

Hands-on training sites and the involvement of employers, schemes and apprenticeships

The <http://proftekhosvita.org.ua> web portal, created in 2008 with the support of the Ukrainian-Canadian "Decentralization of vocational training management in Ukraine" Project, focuses on the formation of an online VET database and rapid information exchange between the MESYSU VET Department, regional Education Management Offices and vocational schools.

Some 80% of vocational schools have their own web sites and MESYSU Order No 331 of 22 March 2012 (Ministry of Education, Science, Youth and Sports of Ukraine, 2012c) encouraged the further development of

information and the vocational space with its approval of the Regulation on the all-Ukrainian competition of VET school websites, which runs in two rounds at regional and national levels.

Since January 2012, the Department on VET Content of the Institute of Innovative Technologies and Education Content has been producing the following monthly scientific and methodical blogs: “Innovative experiences in vocational schools,” “Library of vocational schools” and “Educational work in vocational schools” on the <http://proftekhosvita.org.ua> web portal.

In order to increase employer participation in VET reform, the Law “On the organization of employers, their associations, the rights and guarantees of their activity” (Verkhovna Rada of Ukraine, 2012b) approved a provision on mandatory approval of the national VET standards by the relevant all-Ukrainian associations of regional employers’ organisations. These entities are also members of the Qualification Commissions on student certification and, moreover, they take part in discussions of draft legal acts, curricula and programmes.

Evaluation and certification

According to the Law “On vocational education” (Verkhovna Rada of Ukraine, 1998), the vocational schools and education management authorities implement current, topical, interim (or stage-by-stage) and final assessment of the knowledge, skills and abilities of students and trainees, to measure their competencies. These checks are carried out with the participation of employer and customer representatives. The final check envisages a state competency assessment that includes: a written qualifying paper (that will meet the requirements of the educational-qualification characteristics of each vocational school graduate at the relevant level of attestation) and an oral exam or thesis defence.

VET school graduates who successfully pass certification of their competency, are awarded the educational qualification of “skilled worker” in the profession obtained; graduates who pass the relevant training in accredited higher vocational schools or a VET Centre offering the correct level of accreditation, are awarded the educational qualification of “junior specialist”.

The Government is also currently considering the prospects of providing people who have trained in the VET system with documents to prove their mastery of individual training modules or blocks and they are also looking into the official recognition of informal learning outcomes.

Priorities for improved quality and efficiency of VET provision

The improvement of VET quality is seen as a national strategic objective outlined in all key state documents (the “Prosperous Society, Competitive Economy, Effective State” Programme of Economic Reforms for 2012-2014; (Committee on Economic Reform of the President of Ukraine, 2010), the “Prosperous Society, Competitive Economy, Effective State” National Action Plan for 2012 on the implementation of economic reforms for 2012-2014 (President of Ukraine, 2012b); the STPVED (Cabinet of Ministers of Ukraine, 2011a), and; the National Education Development Strategy in Ukraine for 2012-2021 (Cabinet of Ministers of Ukraine, 2011d).

It should be noted that the political declarations made within this area have begun to be put into practice since the last Torino Process report was written.

The government has named the following priorities: modernisation of VET content and the evaluation of results (standardisation of the content through approval by NQF (Cabinet of Ministers of Ukraine, 2011c) descriptors and the development of competency-based professional standards that will help in the transfer to a results-based education system; the creation of a quality monitoring system and the development and implementation of an indicators system for monitoring the effectiveness of vocational schools) and ICT implementation (equipping VET providers with modern ICT technology, connecting them to the Internet and introducing more recent e-learning ideas).

Plans are in place for the creation of a single body responsible for the evaluation of the qualifications and competences received within the VET system.

E. MANAGEMENT AND FUNDING OF THE INITIAL AND CONTINUOUS VET SYSTEM AND INSTITUTIONAL POTENTIAL FOR CHANGE IMPLEMENTATION

List of institutions and organisations involved in the development, implementation and monitoring/evaluation of VET

There is a multi-layered structure of entities involved in the development of the VET system in Ukraine. One positive aspect is the clear separation of functions at different levels in line with current legislation.

National level entities include:

- The Verkhovna Rada (Parliament) of Ukraine - develops and adopts constitutional provisions, laws and regulations, including the Law on the State Budget of Ukraine;
- The President of Ukraine - approves the relevant decrees, orders and instructions;
- The Cabinet of Ministers of Ukraine (Government) - takes the appropriate decisions and issues orders;
- The MESYSU - the central executive body on the development and implementation of state policy in the field of VET with coordination by the Cabinet of Ministers. The MESYSU defines the perspectives and priorities for VET development; drafts laws and the state list of occupations for the training of skilled workers in vocational schools; determines the state VET standards, model curricula and model training programmes, other normative and legal acts regarding the formation and development of VET; creates, reorganises and closes public vocational schools; carries out licensing and certification of all vocational schools under the control of all bodies, public or private; determines the basis for the State Order and labour market needs in terms of the volumes of training, retraining and skills improvement of qualified employees required in vocational schools; performs state inspections of vocational schools, enterprises, institutions and organisations to monitor the level of VET regardless of the form of ownership or control; organises and monitors compliance with laws and other regulations concerning the social protection of workers, students, vocational school trainees; manages the state-owned property used by controlled vocational schools in the manner prescribed by legislation; organises information support and statistical accounting for VET; organises scientific and methodological support of VET; implements the achievements of science, technology, new technologies and best practices in training and production processes; defines standards and provides logistical and financial support to controlled vocational schools; develops guideline rules of enrolment for vocational schools, regardless of ownership and mode of control.
- The Ministry of Social Policy of Ukraine - the main executive authority on the formation and support of state policy implementation in the field of employment and labour migration. It examines the activity rates and labour market trends, coordinates activities related to the vocational education of employees in the workplace, develops and approves the inter-industry qualification specifications and job descriptions for managers, professionals, experts, technical staff and professional workers that are included in the directory of job descriptions. The entity also: coordinates industry qualification specifications; develops the Classification of Occupations of Employees in the prescribed manner, preparing proposals on amendments and additions; prepares proposals to improve the organisation and regulation of labour standardization, and; develops and approves cross-industry labour standards; organises the work of the Council for guidance.
- The State Employment Service of Ukraine (under the Ministry of Social Policy) - provides professional training, retraining and advanced training for unemployed people;
- The State Inspectorate of Educational Institutions of Ukraine - conducts comprehensive inspections of vocational schools and oversees the certification examination. This body also monitors vocational schools in terms of compliance with: national standards; educational, scientific and methodological work; the use of scientific and educational potential and material resources; development of their materials and technical resources, and; employment of graduates.
- The State Accreditation Committee of Ukraine - provides licensing, certification and accreditation of educational institutions according to the professions covered by their training and retraining,

establishing and changing their status accordingly. In particular, it ensures compliance with state requirements on the quality of personnel training; coordinates and conducts the licensing, certification and accreditation of educational institutions, and; establishes the requirements and criteria for licensing, certification and accreditation of educational institutions.

- The National Academy of Pedagogical Sciences (NAPS) of Ukraine, and its Institute of vocational education in particular - develops a conceptual framework for VET

At the sector level: other ministries that govern vocational schools: organise the implementation of state policy for vocational education in the controlled vocational schools; determine the prospects for development of controlled vocational schools; establish, reorganise and close these, and; determine the scope of training, retraining and advanced training.

At the regional level:

- regional VET authorities - implement state policy in vocational education; develop and implement the appropriate regional policies; ensure the compliance of educational institutions with legal acts on VET within their territory; control compliance with state standards on vocational education in vocational schools, enterprises and all institutions that have a state license to conduct such activities; perform general management of the training and production, educational, instructional, financial, economic and business activities of state vocational schools, and; take responsibility for the organisation of training, retraining and advanced training for workers and the provision of vocational guidance.
- regional inter-sector Councils on Vocational Education - coordinate the implementation of state policy in vocational education at the regional level. Such Councils contribute to the: implementation of state policy in the field of training, retraining and advanced training for the workforce; development of vocational education, and; production of proposals regarding improvements in the economic regulation of vocational education development. They also support interaction between central and local executive bodies, local authorities, enterprises, institutions and organisations in the formation and use of labour potential.

The most positive aspects in the field of VET management are the following:

- consensus among all participants of the need to improve the governance system and move towards decentralisation. However, there is some concern that the transfer of management responsibilities to the local level (regions) in the current political and social conditions will lead to a substantial weakening of the vocational schools network;
- promotion of central government initiatives on modernisation of the management system, however their implementation has a non-systemic nature.

Challenges in management:

- lack of a single centre to coordinate the activities of the various entities responsible for all forms of VET;
- lack of a mechanism to separate powers between the different levels of state administration;
- excessive government control of the financial activities of VET providers combined with a lack of funding and lack of freedom in use of funds;
- lack of independence of VET suppliers (especially vocational schools) due to imperfections in the current legislation, which result in them failing to be fully responsive to employer and labour market needs.

Current trends in VET system management

Decentralisation is recognised to be a prerequisite of VET system adaptation to the needs of regional economies and there is a positive trend on this front. VET providers are currently able to shape the directions and scope of training offered in consideration of regional needs as long as they sign contracts for workforce training with specific enterprises prior to delivering the training. VET providers are authorised to monitor local labour market needs, cooperate with social partners and contact the Employment Service and other stakeholders. However, some functions and powers in the vertical power structure are not clearly delineated

and financial instability means that many companies are unable to easily determine their real future workforce needs or to ensure employment. As a rule, local governments tend to avoid these issues as they don't have the relevant management authorities.

As part of efforts to introduce an integrated approach to improve the VET mechanism, the Law "On amending several Laws of Ukraine regarding improvement of vocational training management" (Verkhovna Rada of Ukraine, 2012c) envisages the introduction of amendments to the Laws "On local government in Ukraine" and "On vocational education" in order to transfer certain central government powers across to the local level, strengthening the role of local authorities in the formation of workforce capacity.

The ETF actively supports decentralisation initiatives in Ukraine and their pilot project "Improvement of vocational education system through forecasting and adaptation of skills, social partnership and improved use of resources" was implemented in the Dnipropetrovsk region in 2011-2012. This project aims to develop the VET school network optimisation procedure, taking into account regional economic and labour force needs in terms of the professions and types of economic activity to be covered.

Quality assurance mechanisms

The traditional VET quality assurance mechanisms were certification of vocational schools and the licensing of professions, both of which were based on quality evaluation of input. Today, the dominant trend is toward an integrated results-based VET quality assurance system that will be coupled with the introduction of innovative approaches and technologies. Steps toward this goal have included:

- a broad NQF (Cabinet of Ministers of Ukraine, 2011c) that covers all levels of professional education, including informal learning;
- MESYSU initial implementation of a rating and assessment system for vocational schools in a model that combines internal and external evaluation aimed at monitoring both regional and sector needs using quantitative and qualitative indicators. Criteria for the rating assessment of vocational schools were approved by the MESYSU (Ministry of Education and Science, Youth and Sports of Ukraine, 2011) on November 2011, in a list that covers "I. The effectiveness of training and employment", "II. The content of training and teaching-learning software", "III. Teaching staff"; "IV. Funding and facilities", and; "V. Availability of VET and implementation of gender equality and social fairness". The Order also mentions development of a methodology for the rating and assessment of vocational schools and the use of an electronic database "Rating assessment of vocational schools" from 2012. This database will be used for annual monitoring of the effectiveness of vocational schools in the previous calendar year and the results of monitoring will be published on the official MESYSU web site and web portal <http://proftekhosvita.org.ua>. In 2011/2012 academic year the testing of the system of vocational schools rating assessment was successfully performed (Ministry of Education and Science, Youth and Sports of Ukraine, 2011a);
- a 4-year project for the all-Ukrainian monitoring of VET was initiated in accordance with MESYSU Order No 61 "On monitoring of the status and development of vocational education" of 31 January 2011 to define: the level of satisfaction with the educational services of VET schools in industry, construction, agriculture, trade, transport and communications; the organisational, resource, methodical and staffing potential of vocational schools; the level of administrative culture of the managers of vocational schools; the state of scientific and methodological support for the educational process, and; the degree of ICT use in vocational schools. Initial results provided a glimpse of a range of demand for various professions in the labour market, with the highest demand for such specialties such as "cook", "cook-barman", "painter-plasterer", "carpenter", "tile facers" and "welder" and the lowest demand for "clerk".
- the tools for evaluating the quality of training include national and regional contests on professional skills for vocational school students where the winners are awarded a Presidential scholarship. In 2012, five all- Ukrainian contests of professional skills were run in professions such as: "seller of food products", "travel agent", "car repairer", "installer of plasterboard structures". A total of 30 winners were awarded scholarships from the President of Ukraine (MESYSU Decision of the Board No 67-19 of 31 May 2012 and MESYSU Order No 750 of 27 June 2012).

Since the previous report within the Torino Process framework (2010), Ukraine has made significant progress in the field of VET quality assurance. At the same time, great challenges still remain in:

implementation of independent assessment of the professional qualifications of skilled workers in vocational schools; a qualifications certification system, and; further approximation of the VET system to the standards in developed countries, and the EU countries in particular, on the basis of introduction of the NQF.

Evaluation of social partner involvement

The current stage of VET system cooperation with social partners is characterised by a number of trends.

The first one is the social partners' increased interaction and intensified involvement at the level of the creation of a strategic vision for VET development (a situation promoted by Ukrainian legislation, under which all normative acts in the field of VET shall be agreed by the Federation of Employers of Ukraine, the Confederation of Employers of Ukraine and the Federation of Trade Unions of Ukraine) which has resulted in:

- development of the NQF (Cabinet of Ministers of Ukraine, 2011c) in consultation with MESYSU and major social partners (2011);
- creation of an interagency group on the development and implementation of national standards on VET in accordance with governmental resolution (Cabinet of Ministers of Ukraine, 2011b) to coordinate actions between central government, employers and social partners;

The second trend is an intensified involvement of social partner representatives (as specific labour force customers) in the development of occupational standards, curricula and programmes and the modernisation of the material and technical capacity of vocational schools to provide targeted training for skilled workers. For example:

- memorandum on cooperation and understanding signed between the MESYSU, the Confederation of Employers of Ukraine and group of employers represented by LLC System Capital Management to develop and implement new professional standards in the field of energy, metallurgy and the mining industry;
- collaboration initiated between the MESYSU and a group of employers in the chemical industry, including such giants as JSC Rivneazot, PJSC Severodonetsk Azot Association, LLC AZOT of Cherkasy city and PJSC Concern Stirol, to prepare skilled workers for the chemical industry. Within the cooperation framework a list of occupations currently needed by the chemical industry was identified and plans were made to update the facilities of vocational schools with the help of enterprises;
- cooperation continued between the vocational schools for the construction sector with the manufacturers Henkel Bautechnik Ukraine and Knauf Marketing Ukraine. There are now 24 vocational training centres working on the implementation of Henkel Bautechnik Ukraine building technologies and 13 centres working with Knauf Marketing Ukraine technologies, which function on the base of vocational schools.

However, despite these positive examples, cooperation with social partners still remains a problematic issue with the following key problems:

- a lack of proper regulation of social partner involvement in the development of the state education policy. Important steps to solve a problem are taken at the national level by passing laws "On social dialogue in Ukraine" (Verkhovna Rada of Ukraine, 2010b) and formation of the National Tripartite Social and Economic Council working on issues related to professional training of the workforce (Presidential Decree No 347 of 2011), and; "On the organization of employers, their associations, rights and guarantees" (Verkhovna Rada of Ukraine, 2012b), which stipulated the mandatory approval of national VET standards with the relevant all-Ukrainian Associations of regional employers;
- reluctance among most social partners to invest in employee training. Funding allocated for the training of qualified workers by the whole business and production sector is equal to only 1–1.5% of Ukrainian GDP. This situation is partly explained by employer dissatisfaction with the quality of workforce training ordered;
- lack of systemic involvement of social partners in assessment of the skills of VET students and the accreditation of training providers.

5. Recent funding for secondary and post-secondary vocational education and adult education

Total spending on education in Ukraine in 2007 and 2008 amounted to 7.4% of GDP, rising to 8.5% of GDP in 2009 before falling slightly to 8.4% in 2010. The total budget was distributed to education providers as follows (State Statistics Service of Ukraine, 2012) (Table 2):

Table 2

Distribution of education spending by education provider (%)

ISCED level	2007	2008	2009	2010
ISCED 0	10.3	10.7	11.2	11.7
ISCED 1	12.6	12.7	13.0	13.6
ISCED 2	18.9	18.5	19.2	18.3
ISCED 3 – VET	9.1	8.8	7.1	7.2
ISCED 4 – VET	5.8	6.1	6.0	6.2
ISCED 5	41.6	41.5	42.0	41.4
ISCED 6	1.7	1.7	1.5	1.6

VET funding for 2008-2011 was characterised by the following dynamics (State Statistics Service of Ukraine, 2011) (Table 3):

Table 3

Years	Total allocation of consolidated budget, (UHR millions)	Allocations, in % κ	
		Total allocation	GDP
2008	3766,6	1.2	0.4
2009	4108,0	1.3	0.4
2010	5106,2	1.4	0.5
2011	5305,4	1.3	0.4

The activities of VET institutions within the scope of the State Order are funded from the State Budget of Ukraine, and 98.1% of students were enrolled under the State Order in 2011. The state and local budgets form a key source of financing. VET allocations for state-owned educational institutions are funded by the state budget and allocations from regional budgets are taken into account when determining the size of intergovernmental transfers for vocational schools in state and municipal ownership.

The main problem for vocational education in Ukraine is the limited funding of vocational schools from both public and local budgets, despite indicators showing growth in the sector. In fact, full funding is only provided for the budget items of salaries and utilities, which account for 55.0% and 9.0% of total funding respectively. In addition, technical and financial assistance from enterprises-customers has been suspended although it had previously constituted up to 50% of the funds available for designated targets. The lack of funds for institutional development and the implementation of comprehensive reforms reduce the quality and attractiveness of the system and the number of students and trainees of vocational schools decreased by 11% dropping from 107 per 10,000 of the population to only 95 per 10,000 between 2000 and 2010.

One positive aspect, however, is that total funding for vocational schools from the state budget increased by 15% in 2012.

The recording of investments in adult education at the state and private levels is not envisaged.

Donors such as international organisations and authorised foreign national agencies contribute to the development of VET in Ukraine mainly through the provision of technical assistance with the framework of relevant projects. The European Training Foundation provides active support for VET system modernisation projects in Ukraine in accordance with key areas of state policy (VET system monitoring as part of the Torino process, development of the NQF (Cabinet of Ministers of Ukraine, 2011c), optimisation of the VET schools' network, improvement of VET in the regions).

VET reform is also supported, in accordance with the policies of the European Union, by a Twinning project that envisages the development of recommendations on improvements to VET legislation.

Improving investment and resource management

The supreme government authorities of Ukraine have taken certain steps towards improving the financing of vocational schools, in particular, the points covered in the Law on State budget for 2011. As a result, a number of adjustments were adopted to eliminate disproportions when using new formula calculations including: counting the number of orphans among the VET students; consideration of the location of VET schools, especially those in inhabited mountainous areas, and; the application of equalisation coefficients.

However, the main problem with the current system is that financing is still approached without due consideration of the complexity and intensity of professions, or the outcomes of educational institutions in present market conditions.

In order to resolve this problem, the audience of the Committee on Science and Education of the Verkhovna Rada "On the participation of central and regional executive authorities, employers' associations in the shaping of labour potential of the country and training of skilled workers for the modern economy of Ukraine" of 21 December 2011 (Verkhovna Rada of Ukraine, 2011b) recommended the creation of new conceptual frameworks for the financial and economic activities of VET educational institutions. The responsible ministries and NAPS were asked to explore best practice for calculating the cost of training skilled workers and to submit their proposals to the Government in 2012.

In addition, measures have been taken to intensify self-funding of vocational schools by: increasing the range of educational services on offer to enterprises, organisations and individuals (short-term training, retraining and advanced training courses); leasing out assembly rooms and gymnasiums; manufacturing goods from raw materials and materials supplied by customers in accordance with the vocational training programmes, and; receiving charitable contributions.

Assessing institutional capacity for reform, innovation and the implementation of change

The country has developed a multi-level system of authorised institutional entities with a clear separation of functions defined at the legislation level. The intra-system links between the VET components, both horizontal and vertical, are properly worked out but the quality of structural links with other national systems sometimes does not meet present-day labour market requirements. The VET system is characterised by a significant predominance of vertical governance with some tendency to transfer certain functions to the regional and local levels. In general, there is an obvious strong capacity for change, as can be seen in the dynamic reform of VET systems in recent years. At the same time, there is a weak point in the lack of a single authoritative Centre for the development and implementation of a unified state strategy for VET system development as a whole, including both primary and continuing education.

Research for the development of a theoretical VET framework is being carried out in a number of research institutions under the MESYSU and NAPS. In order to implement the Decision of the Cabinet of Ministers of Ukraine on the creation of scientific-methodological centres of vocational education, the MESYSU has formed the Department on VET Content under the jurisdiction of the MESYSU Institute of Innovative Technologies and Education Content -and regional training centres. The NAPS of Ukraine now works with the Department on Vocational Education and Adult Education, the Institute of Vocational Education, Lviv Scientific-Practical Center of Vocational Education, Donetsk Institute of Post-graduate Education of engineering and teaching staff of the University of Education Management and Educational-Scientific Center of Vocational Education.

Their objectives are to: ensure methodological support for the implementation of state policy in VET; implement innovative teaching methods and technologies, and; conduct research into vocational education and develop the relevant proposals.

Specific problems in this area lie in the: lack of relationship between theory and practice, the vocational schools and labour market; weak emphasis on forecasting in the development of the national VET system and poor harmonisation with trends in VET development within the European Higher Education Area, and; insufficient implementation of monitoring of scientific developments.

Main improvement priorities for VET system governance and financing

Improvement of the VET management mechanism, and the financial security of this, is one of the key objectives of the STPVED (Cabinet of Ministers of Ukraine, 2011a).

The management priorities given in the National Strategy on Education Development in Ukraine for 2012-2021 (Cabinet of Ministers of Ukraine, 2011d) are: optimisation of the VET school network taking demographic forecasts and regional features into account; expansion of VET school autonomy, and; establishment of a central management body within the structure of the MESYSU to prepare information on labour potential for the national economy.

The National Action Plan for 2012 on the implementation of the “Prosperous Society, Competitive Economy, Effective State” Economic Reform Programme for 2012-2014 (President of Ukraine, 2012b) views modernisation of the VET school network as a component of single educational space development at the local level in the form of educational districts; plans are in place to develop a method of calculating the cost of training skilled workers on the basis of level of education and qualification by profession.

Under the Government of Ukraine Resolution (Cabinet of Ministers of Ukraine, 2010a), the educational districts are defined as voluntary associations of educational institutions in the pre-school, general secondary, extra-curricular, vocational and higher education system within administrative-territorial units that will create a common education space. In the VET context, the presence of an educational district is believed to improve vocational orientation and present a better training profile for youth.

In order to improve VET funding, a National Fund for Vocational Education was proposed in recommendations issued by the Verkhovna Rada Committee on Education and Science of Ukraine on 10 January 2012 (Verkhovna Rada of Ukraine, 2012).

Defining a model of state-public VET management is the most important issue in the future of VET governance, and adoption of the Law on Public Associations (Verkhovna Rada of Ukraine, 2012c) formed a definitive first step in the right direction.

The issue of funding has not yet been fully resolved and funding for STPVED (Cabinet of Ministers of Ukraine, 2011a) and other VET-related state programmes has been reduced in spite of the stated aim to improve material, technical and methodical support for the system.

The most important tasks that remain to be resolved are: increasing the autonomy of vocational schools in the management of material and financial resources; the transferral of operational management functions of vocational schools to the local level; the move over to multi-channel financing of vocational schools; the major changes needed in legislation on education and work; the formation of appropriate institutional mechanisms (for the regulation of qualifications and diplomas, assessment and recognition procedures and the certification of qualifications, such as sector Councils to develop professional standards and sector qualifications frameworks, an Institute for the coordination of all activities in the development and updating of qualifications and certification bodies); changes in the classification of occupations and educational programmes that are currently not fully correlated with labour market requirements, and; the creation of effective mechanisms for predicting the situation in the labour market in order to balance supply and demand.

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