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Executive summary

In 2010, as part of its mid-term support strategy, the European Training Foundation (ETF) conducted a first cycle of reviews of vocational education and training (VET) policies and systems in all its partner countries and territories known as the Torino Process. This exercise was led and supported by ETF, and aimed to introduce regular evidence-based policy assessments in ETF partner countries every two or three years in an attempt to: a) document analysis of the internal efficiency of national VET systems; and b) examine the contribution of VET policies and systems to the broader policy objectives of sustainable economic and social development in each partner country, allowing policy-makers to assess future policy options and propose appropriate actions to support national VET policy.

Ukraine was one of the ETF partner countries that fully supported the idea of joint, evidence-based VET policy assessment and the use of these outcomes in further development of VET system modernisation policies at the national level. After discussing the Torino Process policy assessment approach and methodology with the ETF, the Ministry of Education and Science of Ukraine accepted responsibility for collection of the required evidence and preparation of the Torino Process report as an integral part of its efforts to develop a National Concept of VET System Reform in Ukraine. Preparation of the Torino Process report by the Government of Ukraine has been facilitated by the ETF through a participative methodology based on the collection and analysis of evidence on the key policy objectives, trends, challenges and needs.

The long-term aim is for the Torino Process to become a guided self-assessment tool for policy-makers across all ETF partner countries to support the development of national policy, monitoring of policy implementation and evaluation of policy effectiveness. Ukraine and several other ETF partner countries opted to apply the Torino Process in a self-assessment format from the outset. The Torino Process report and the National Concept of VET System Reform were prepared in parallel during 2010 with clear cross-referencing, mainly related to analysis of system reform requirements and key recommendations for VET reform actions.

The ETF has supported Ukraine in the current self-assessment process, working with the Government, national experts and social partners through the stages of analysis and draft report preparation, and in a series of consultations, seminars and bilateral discussions. ETF experts reviewed the draft Torino Process report on several occasions and provided comments and feedback to the authors. The ETF believes the Torino Process exercise is highly valuable as it prompts analysis of policy for the national VET system on the basis of the collection and examination of hard evidence prior to the proposal of new policies or changes to existing ones. It also triggers an internal process of evidence-based policy for evaluation of the effectiveness of VET and efficiency in the use of public funds allocated to the education and training system.

The ETF accepts that government self-assessments may reflect the existing and inherited strategic planning traditions of partner countries and that the tools available for the analysis of evidence in such self-assessments may not always allow Governments to draw clear reform priorities and implementation actions from the hard evidence - and this to some extent true of the present Ukraine self-assessment Torino Process report. The ETF will continue programme assistance to support evidence-based policy analysis and policy formulation as part of the VET reform process in Ukraine and will work jointly with Government counterparts, employers, national experts and other stakeholders to define EBP methods and tools, and to help policy-makers incorporate these into daily policy process.

The Torino Process Report has allowed the ETF to cooperate with the Government of Ukraine to the next level and has provided invaluable experience in supporting the drive for evidence-based policies to improve the VET system in order to ensure its quality, efficiency, effectiveness and relevance to the demands of a modern transition economy like that of Ukraine.
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Summary of recommendations for VET policy reform in Ukraine

This report stresses the urgent need for redirection of VET to meet economy and labour market demand and to provide for the acquisition of new skills. Such action requires improvements in the quality, relevance and efficiency of VET provision and enhanced cooperation between educational service providers and the labour market. This paper calls for better balance between supply and demands in the labour market, principally through effective cooperation between educational institutions and employers. The Government self-assessment report highlighted the following reform actions as key priorities:

- Creation of a VET quality assurance system (through the development of quality models, generation of new competence-based educational standards, quality monitoring and evaluation, etc.);
- Development of a new generation of occupational and educational standards and the national qualifications framework;
- Review of VET content and the development and implementation of modular, competence-based education curricula;
- Improvement of the teacher training system for VET institutions;
- Achievement of effective social partnership through the regular involvement of social partners in VET development;
- Introduction and piloting of new tools to forecast skill needs in order to create an interface with VET system development and to adjust the education service provision to the changing needs of the economy and labour market;
- Recognition of informal and non-formal learning as an integral part of continuous professional development and training;
- Updating of the current regulatory and legal framework (through improvements to current legislation and new regulations) and particularly the creation of a framework for the effective involvement of social partners in the development new occupational and educational standards, education provision and quality assurance in education;
- Improvements to the monitoring or tracer system on the work placement of graduates;
- Development of new legal and organisational frameworks for VET provision based on the principle of autonomy for educational institutions;
- Optimisation of the existing VET network in accordance with long-term economic priorities;
- Improvement of VET governance based on public-private partnership;
- Diversification of financing mechanisms and sources (decentralisation of financing management and functions to the local level, per capita financing, etc.);
- Social promotion to improve the status of training for a trade (vocational career guidance services, cooperation with Public Employment Service (PES) to develop promotional and information materials, provide general secondary schools with computer terminals, run competitions and present awards for professional skills, etc.);
- Introduction of relevant international experience (international projects and analysis of work experience in other countries).
Vision and state of the art in vocational education and training

1. What is the vision and understanding of VET in Ukraine?

‘Vocational Education and Training’ (VET) covers the bracket of ‘Technical Vocational Education’ (TVE) that provides initial training, retraining and skills upgrading for skilled workers. This is offered alongside basic and complete general secondary education in Technical Vocational Education and Training (TVET) institutions of various types that operate under several forms of ownership, as well as in the in-house training system operated by various companies. Training is offered for workers in labour grades 1-8 in levels that are awarded depending on the complexity the skills involved in a trade.

In some official publications the term ‘vocational education’ is defined as the process of training and enhancement of the knowledge and skills necessary for performing a particular type of labour activity.

In Ukraine, VET is viewed as a flexible instrument that can be adapted to the changing backdrop of economic transformation. The VET sector is in need of a new understanding of the role and responsibility of the various stakeholders and cooperation with social partners must be made more efficient.

Consequently, Ukraine has adopted a strategic target to ensure provision of a high quality VET system to satisfy the needs of citizens, society and the labour market. This will be achieved through: new mechanisms to regulate education, review and renew the structure and content; development of the basic curriculum and the practical aspects of VET, and; creation of a continuous training system that will ensure Ukrainian competitiveness on the global level.

VET (TVE) is currently characterised by the following quantitative indicators:

- As of October 2010, there were 873 state-owned TVET institutions of various types functioning in the country under the Ministry of Education and Science, with approximately 405,800 students and more than 46,300 management and teaching employees.

- Students in the state vocational schools are mostly graduates from comprehensive schools.

- Two thirds of all students complete general secondary education alongside their vocational education.

- There are a further 920 education institutions operating under other forms of ownership and answerable to other authorities in the country. These provide vocational training for the regular labour force.

Enterprises also provide in-house training to cover initial training, retraining and skills upgrading for their own workers. The training period is usually less than one year, which is defined by the curricula according to the types of training. Vocational in-house training is taught by executive employees and other specialists, and by instructors selected from among skilled workers.

Scientists, specialists in technical vocational and higher education, social partners and other stakeholders are actively discussing the need to develop a unified understanding of ‘Vocational Education and Training’ and the legal definition of the term.

The Ministry of Education and Science has commissioned a glossary of key terms in higher and TVE in order to enable international comparison.
2. What has changed in the country over the last two years?

Over the last two years, the VET system in Ukraine has undergone significant changes linked to the need to ensure continued competitiveness. The foundations have been laid for future VET reform with the following objectives:

- Renewal/review of vocational education content based on the development of a new generation of competence-based occupational standards, with the direct participation of employers. An Occupational Standard Regulation and Occupational Standard Model have been developed and inter-sector working groups have been established to approach the development of competence-based standards in the following areas: hotel, restaurant and catering (HORECA) services, tourism, public catering, commerce, the agro-industrial sector, light industry, construction and mining. Draft standards are under evaluation in education institutions.

- Decentralisation of VET system management through delegation of some tasks to the local management level. In 2010, the authority to appoint directors for state vocational education institutions was delegated to the regional arms of the executive power; a new procedure has been instituted for the appointment and dismissal of directors of state educational institutions and institutions subordinate to the Ministry of Education and Science of Ukraine, and; the concept framework for the decentralisation strategy is being developed.

- Implementation of new forms of cooperation between vocational education, business and industry. State TVET institutions offer a basis on which to establish joint training centres for the trades most 'in demand' on the labour market. Many operate with the active participation of companies or on the initiative of enterprises, a situation that assures a high employment rate for graduates. For example: the Kiev VET School of Jewellery works in close cooperation with the Jewellery Association of Ukraine to provide training for workers from all regions of the country, offering 100% guaranteed employment for all graduates.

- Implementation of information and communication technologies in the production and training process. Almost all State TVET institutions have adequate numbers of computers and 95% now have access to the Internet.

- Some improvements have been made in terms of adjusting the volume and content of staff training to the demands of regional labour markets.

- In 2010, there were increased volumes of training for workers arranged through direct contracts agreed with employers in the 'high demand' trades of industry, construction, commerce, agriculture and transportation.

- Regional training programmes have been developed to target skilled workers and are being implemented in almost in all regions of Ukraine.

- 43 TVET institutions have completed consolidation programmes in line with the dynamics of production and labour market infrastructure development.

A draft Programme for Optimisation of the Existing Network of TVET institutions was developed by the Ministry of Education and Science of Ukraine in 2010 in order to implement Resolution1 No. 1396-r of the Cabinet of Ministers of Ukraine of 5 November 2008 in accordance with the related proposals made by the regional departments of education and science. The programme aims to achieve optimal use of financial, human, methodological

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1 On Introduction of Changes into the Plan of Actions aimed at Satisfying the Labour Market Demands for Skilled Workers
and learning resources by educational institutions, although this consolidation process by no means implies a reduction in student numbers or the dismissal of employees.

The system of advanced training for teaching staff of education institutions has improved in quality. Staff are now able to study in new, practically-oriented programmes in specially established institutional facilities based on the best TVET institutions provides state-of-the-art technologies and equipment. A draft Regulation on Advanced Training for Teaching Staff in TVE has been developed for this purpose.

Steps are being taken to enhance the efficiency of in-house training, action is underway on implementation of the Concept Document for the Development of the Staff Advanced Training System to 2010, approved by Resolution No. 158-r of the Cabinet of Ministers of Ukraine on 20 March 2006. Annual sessions of the Interagency Consultative Board on staff in-house training are held under the Ministry of Labour and Social Policy, allowing employers, trade union representatives, education authorities, educational institutions, scientific organisations and sector ministries to discuss issues of concern.

Comprehensive school graduates now undertake ‘unified independent knowledge testing’ as a matter of course, the results of which are used to gain entry to educational institutions of various levels - a system that is currently being improved.

3. How does the country translate the adopted vision or understanding into policy measures?

A range of important government documents on VET are being implemented to translate the adopted vision and understanding of the role and tasks of VET into policy in the country.

For instance, the Decree of the President of Ukraine of 18 September 2004 On Additional Measures Regarding Improvement of TVE in Ukraine aims to enhance the role of TVE in socio-economic and cultural development and to meet citizens’ needs to update their own professional skills.

Order No. 42, Issues Regarding Management of Some State TVET Educational Institutions Subordinate to the Ministry of Education and Science of Ukraine, adopted by the Government on 21 January 2009, provided for implementation of a new mechanism allows educational institutions to seek funding from various sources and budgets in three regions following a trial period and the development of a new action plan to 2020.

In order to address the issues relating to teaching staff for TVET institutions, Resolution No. 535 of the Cabinet of Ministers of Ukraine of 11 June 2008 ruled that previous manufacturing experience was to be counted as teaching experience for specialists opting to move from the enterprise sector into teaching. This resulted in increased salaries and a greater opportunity to attract industrial specialists into education and to reduce the rate of staff turnover.

State educational standards were initially established for 170 working professions on the basis of Resolution No. 1135 of the Cabinet of Ministers of Ukraine of 17 August 2002. These were developed and agreed with the partners concerned, then approved and put in force in TVE. There are a total of more than 4,000 professions specified in the State Classifier of Professions DK 003-95 and most of these are covered by vocational staff training within the in-house training system, meaning that TVE as such is not required in most professions. However, state TVET institutions currently offer vocational training for skilled workers in 530 professions.

The need for improved VET quality and consideration of employer demands on curriculum content have prompted the Ministry of Education and Science, the National Academy of Pedagogical Sciences, the Ministry of Labour and Social Protection and other stakeholders to search for new approaches to the structure and content of educational standards.

The fact that agreement on all the draft legislative acts in VET has been firmly established between the Ministry of Labour and Social Policy of Ukraine, other interested central bodies of executive power, social partners, the Federation of Employers, Confederation of Employers and Federation of Trade Unions means a firm basis has been established for translating the
adopted understanding of VET into concrete actions on policy implementation. This allows for their comments and proposals to be taken into account.

4. What are the priorities?

Ukrainian national policy aims to establish a vocational education system that can adapt in a continual and highly flexible manner to labour market demand and training requirements, hence, quality assurance, accessibility and efficiency are essential determining factors.

The focal points in priorities for VET development therefore concentrate on innovation in the scientific and technical and educational sectors, orientation towards professional competence and the creation of a unified national qualifications framework.

The Concept for Vocational Education and Training Development and Resolution No. 10-1-3 of the Board of the Ministry of Education and Science of Ukraine of 27 August 2009, specifically outlines the following tasks:

- Creation of a quality assurance system in the VET area (through the development of quality models, methodologies for quality control and new generation competence-based educational standards, as well as through monitoring and quality assessment, quality indicators, etc.);

- Diversification of the financing system (through the transfer of management and financing functions to the regional level, usage of various financial sources and budgets, results-based allocation of funding, development and implementation of per capita financial regulations);

- Modernisation of the management system in VET (through the delegation of a range of authorities from the centre to the regions);

- Update of the current regulatory and legal framework (through improvement of current legislation and the development of new regulatory legislation);

- Social promotion to improve the image of the working professions (activation of career guidance for the public, cooperation with the PES to develop promotional and information materials, providing comprehensive schools with computers providing information on the labour market, competitions in professional skills, etc.).

5. What are the major difficulties (e.g. in designing, implementing, monitoring policies and/or in addressing priorities) and issues at stake?

Although there have been many positive changes in the TVET area over the last few years, it would be premature to assume this completely satisfies the demands of society and the national economy.

The current VET system still has the following flaws:

- A gap between workforce demand and supply on the labour market.

- Lack of responsibility from educational institutions on the outcome of their educational activities;

- Insufficient financing in the sector.

There has long been a perceived need for qualitative changes in the interaction between the central and regional bodies of the executive power in terms of VET operation and development. In the present context, the lack of clearly defined legal mechanisms means delegating VET system management to the regional level may result in the administrative
‘loss’ of many buildings, rooms, areas of land, and may lead to unfounded restructuring of a number of the state-owned TVET institutions.

Full autonomy of state-owned TVET institutions remains a problem issue, mainly in terms of economic independence. At the moment, for instance, state-owned TVET institutions are unable to transfer funds from one item to another and they are unable to use any extra money earned money to provide rewards or bonuses for teaching staff.

Greater investment must be attracted into the TVE system; and financial incentives and rewards for both economic entities and teaching staff must be introduced to encourage this.

The current political and financial instability of the country leads to long bureaucratic processes in gaining official approval and passing legislative acts. This situation hampers any attempts to seek a rapid response to these and other urgent problems, forming the main obstacle to overcoming:

- Inconsistencies between active legislation and the stated goals of intensive VET system development in line with the International Education Area. Legislation has still not been established on: decentralised VET system management; administrative autonomy for educational institutions; the role of social partners in TVET development; independent evaluation of the knowledge obtained by graduates from TVET institutions and official approval for knowledge, qualification and skills achieved in the work process; recognition of non-formal and informal education; development of the continuing education and lifelong learning system, etc.

- Excessive government regulations on financial and economic activities and labour relations in vocational education combined with a lack of funding and insufficient flexibility in the use of funding (at present this is tightly linked to given items of expenditure).

Discussions of the need for a new regulatory and legal framework are currently underway at various levels in Ukraine in order to resolve these problematic issues and ensure further VET reform.

External efficiency: Addressing economic and labour market needs

1. What are the three main economic challenges that shape the demand for skills?

The following three economic challenges are vitally important for the country at present: competitiveness, SME development and sustainable development, as these are the main determinants of the demand for skills.

The ability to quickly adapt to the existing competitive conditions is becoming the most important factor for successful and sustainable development in Ukraine.

One of the key challenges to the Ukrainian economy today is the need to improve competitiveness in both the domestic and global market places.

Workplaces are being created, restructured or liquidated as part of the economic restructuring, SME development is being activated and there is workforce movement between economic sectors, industries and regions.

The main labour market tendencies in 2008 were:

- Increase in economic activity from 71.7% to 72.3% of the working age population;
- Increase of employment rate from 66.7% to 67.3% of the working age population;
- Decrease of 7.2% in self-employment;
• Decrease of 15.9% in the economically inactive population;
• Increase of 3.4% in the number of unemployed registered with the PES;
• Increase of 0.5% in the number of unemployed (as calculated by the International Labour Organisation [ILO] methodology).

Moreover, according to data from the PES, there was a shortage of skilled workers such as: machine-tool workers (filling only 22% of all available jobs), mechanics for maintenance services and monitoring operations on production equipment and machinery (15%). Employer demands for workers in metallurgy, mechanical engineering, mining operations and construction was growing (offering jobs for around 45,000 people).

All the above shows a clear need for VET to be redirected towards economy and labour market needs and the acquisition of new skills—a process that requires enhanced cooperation between the educational services sector and the labour market.

TVET institutions, education and scientific authorities have focused their efforts on labour market monitoring through the attraction of social partners, and related efforts to determine the demand for skilled workers. Cooperation with the employment services and immediate employers is being enhanced at the local level.

There are more opportunities opening for continuing training and also work-based learning schemes in enterprises. Courses on SME development are being introduced into educational programmes with an emphasis on new skills and competences as identified through functional analysis, i.e. by questioning employers.

The main outlook for the future places emphasis on the creation of a new workforce model to assure national competitiveness and sustainable development. The details of the model will be dependent on qualitative (not quantitative) indicators and will ensure a balance between labour demand and supply.

Efforts will be made to ensure a significant increase the professional mobility of workers through improved vocational training, optimisation of the existing TVET network in accordance with long-term economic requirements and improvement and democratisation of TVET government though the introduction of public-private management partnerships.

2. How successful has the VET system been in addressing these challenges?

These questions can be answered by systematic analysis of improvements to the mechanism used to determine how well the changing national demand for skilled workers is being covered by training at educational institutions. Labour market monitoring showed figures for youth enrolment in state-owned TVET institutions increased from 2009 to 2010 by 14.2% for the services sector; 13% for food and commerce; 12.2% for transport and communications; 10.3% for agriculture; 10.5% for industry, and; 6.5% for construction.

Employment indicators are also poorer that would be desirable due to the economic challenges described above, the current labour market situation (especially the current financial crisis) and ongoing demographic issues.

Ukraine is responding by highlighting the importance of adult vocational education in a situation where the market dynamic dictates the need for advanced skills training (or skill conversion) for every individual in the course of his/her professional career. In 2009, more than 1.3 million employees accessed training within in-house systems for the professions needed in production.

Education institutions also offer a variety of adult educational programmes for adult training, including those requested by the employment service and companies. Some 75% of TVET institutions provide training for both the unemployed and employed population.

In recent years, the Ministry of Education and Science, other central bodies of the executive power, employers, customer organisations and directors of TVET institutions have initiated
sector-based All-Ukrainian Meetings (industry, services, construction, transport and communications, agroindustry, etc.) to address current challenges and direct VET efforts toward labour market needs. The outcomes of these meetings are being used as the basis for inter-sector actions that are currently being implemented. These encompass certain joint areas of activity that will form part of an-going process.

The country is also taking steps toward legal recognition of forms of non-formal education of individuals that are already widely developed in practice.

3. To what extent are enterprises involved in VET policy implementation?

VET developments during the current period of economic change have facilitated wider employer participation in various phases of the educational process. Employers are now on the qualification commissions that award students their certificates; they also participate in discussions on new draft legislation related to VET, and in the development of occupational and educational standards, curricula and education programmes.

Active cooperation with business was instrumental in the inauguration of schools for innovative technologies in the textiles industry, agroindustry, transport, HORECA and tourism sectors.

The lack of prospective economic interest and tax concessions means most enterprises (especially small and medium-size concerns), irrespective of their area of activity, are not ready yet to invest resources in: providing high-quality youth training at TVET institutions; providing students with workplaces for field experience; implementing programmes for schemes to help graduates adapt and ‘fix at the workplace’ (labour turnover among graduates in their first year of employment is primarily due to low wages). Most enterprises state their attitude to these issues is motivated by considerations of economic instability and uncertainty about further development.

A round table discussion entitled ‘Forming a New Model of the Skilled Worker’, held in December 2008 and organised by the Ministry of Education and Science together with the Federation of Employers, encouraged enterprises to become involved in VET policy implementation and provided a clear indication that dialogue between the government, employers, teaching employees and members of the public is of crucial importance. The issues discussed included how to supply the labour market with a skilled regular labour force and how to improve training quality at educational institutions in line with employer demands.

In order to involve employers further in the VET assessment process, state educational institutions have been conducting surveys of both employers and school graduates for the last three years.

In the 2009 survey, for example, 26,000 (or 75%) of the employers polled indicated some improvement (due to their direct involvement in the educational process) in the professional qualification level of young worker-graduates. Around 65 % of the polled employers believed that on-site instruction and support is important in the adaptation and ‘fixing at the workplace’ of young workers. As a rule, 77% of graduates remain at the same workplace after completing their first year of work; and 64% of graduates are able to find a job on their first attempt.

4. What blocks the current VET system from ensuring a better response to changing economic needs?

The following are the main factors that prevent the VET system from ensuring a better response to changing economic needs:

**Internal factors** – the quality of vocational training (primarily, for skilled machine-tool workers, workers in mechanical engineering, the mining industry and factory workers from various other sectors) does not always correspond to employer demands and the number of students completing courses at educational institutions is insufficient to satisfy quantitative
labour market demands; the existing education resource-base of educational institutions does not fully provide for high-quality education. At present 60% of equipment in use at educational institution has an average service life of more than 20 years and 36% has been in use for 10-20 years. This situation has largely been caused by insufficient funding in the strictly itemised budgets where 90% of funding is dedicated to covering wages, scholarships, food, communal utility payments, and only 10% goes towards development of the educational institution. Insufficient funding of the VET system negatively affects its ability to respond to changing economic needs and the need to significantly extend sources of financing is currently a hot issue.

**External factors** – demographic trends such as the ageing of the regular labour force and the large number of highly skilled workers reaching retirement and requiring replacement highlight the need for more vocational training; the lack of documents regulating relations with social partners impairs the efficiency of cooperation; the continuing high level of centralisation hampers enhancement of the role of the regional bodies of the executive power responsible for VET development, and; the lack of legislation regarding non-formal and informal education further blocks the process.

5. What actions have been undertaken for breaking down such barriers and for addressing the challenges?

The state system of vocational career guidance for the population entered a stage of renewal from 2007 (according to Cabinet of Ministers of Ukraine Resolution: On Approval of the Action Plan Aimed at the Development of Vocational Guidance for the Population). The Council on Issues of Vocational Guidance for the Population was created under the Cabinet of Ministers of Ukraine in January 2009 with representatives from the labour and employment services, education and scientific authorities, unions of employers, public organisations, scientific organisations and other stakeholders.

This initiative has provided annual vocational guidance services for approximately 1 million students from comprehensive schools and other educational institutions.

Annual professional craftsmanship contests are held for students of TVET institutions as part of an effort to improve education quality. As a rule, the contests are conducted in five professions selected from the various economic activities that are highest in demand on the labour market.

The winners of each contest (from 1st to the 6th place) receive a special scholarship from the President of Ukraine under the Regulation on Scholarships Established by the President of Ukraine for Prize-Winners and Participants of All-Ukrainian Professional Craftsmanship Contests among Students of TVE Institutions approved by Decree No. 1562 of 28 December 2004 of the President of Ukraine.

Order No. 770 of the Cabinet of Ministers of 27 September 2010 Of Introduction of Changes into the Procedure for Assigning to Workplaces Learners and Students of TVET Institutions for Industrial Training and Field Experience aims to facilitate the issue of training quality for young workers.

An All-Ukrainian competition ‘The Working Profession – 2009’ was staged to improve the public perception of the working professions because the demand for skilled workers increases annually on the labour market leaving a deficit that is aggravated by demographic issues.

Resolution No. 223 of 19 March 2008 from the Cabinet of Ministers of Ukraine sets out a list of professions and specialties in which employers can be granted a subsidy in exchange for providing an initial job opportunity for a young person. In 2008, UAH 32 million was earmarked for this purpose. This resolution was carefully prepared on the basis of labour market analysis that was later discussed with the Coordination Committee on Employment Promotion consisting of employers and trade unions.

In 2009, a new Procedure for the Formation and Placement of the Government/Demand was developed and implemented for the training of specialists, teaching and scientific staff and
workers to meet state needs; this procedure ensures the involvement of PES, employers and other stakeholders in this process, thus enhancing the efficiency of social partnership.

The Plan of Measures Aimed at Satisfying the Labour Market Demand for Skilled Workers 2007-2012 (as per Resolution No. 886-r of 17 October 2007, of the Cabinet of Ministers of Ukraine) is currently being implemented.

A new Procedure for Job Placement of TVET Institution Graduates was developed and put into force by the Cabinet of Ministers of Ukraine Resolution Approving the Procedure for Job Placement of TVET Institution Graduates, the Training of which was Held on the State Demand No. 784 of 27 September 2010, which aimed to create conditions to help graduates find jobs in the profession for which they have trained and to facilitate employer participation in the job placement process (bilateral work contacts involving the educational institution and employer, and trilateral arrangements between the graduate, employer and educational institution with clearly determined contractual obligations, responsibilities and rights).

Changes were also introduced to the Regulation on the TVE Institution in order to enhance efficiency in educational institutions.

The Concept for the state-sponsored Target Programme for TVE Development for 2011-2015, approved by Resolution No. 1723-r of the Cabinet of Ministers of Ukraine of 27 September 2010, has been developed and approved.

This document aims to break down barriers and address current challenges in assuring: cooperation between providers of educational services and the market; improvement of the TVET management system; further quality improvement of regular labour force training; extending the autonomy TVET of institutions; formation and enhanced efficiency of the social partnership system; financial diversification and orientation toward final outcomes, establishment of a lifelong learning system, etc.

A State Target Programme for TVE Development in Ukraine 2011-2015 is currently being developed.

External efficiency: Promoting equity and addressing social demands for education and training

1. What are the three main social challenges that shape the demand for skills?

The current socio-economic situation of Ukraine sees the demand for skills shaped by the following major challenges:

- **demography** (the population fell 180,000 from 2008 to 2009—3.9 people per 1,000—there is ongoing ageing and an outflow of skilled workers from enterprises due to retirement, making replacement with younger workers necessary);

- **long-term unemployment** (the national average in Ukraine at the end of 2008 stood at 10 unemployed per vacancy, many of whom required retraining or skills upgrading);

- **migration** (in 2009 migration ran at 0.3 per 1,000 people and despite extensive demand on national labour market demand, a fair number of skilled workers sought jobs abroad for various social reasons).

There are practically no regional differences between ethnic groups.
2. How successful has the VET system been in addressing such challenges?

These challenges were mostly approached by: increasing the volume and number of areas covered in vocational training for young skilled workers at TVET institutions; increasing the number of employed workers; timely on-site retraining or skills upgrading; and implementation of active policy measures on the labour market. The PES sent 245,200 unemployed for vocational training and 79.3% of them for skills upgrading.

75% of the state TVET institutions were involved in providing training for the unemployed assigned by the employment service.

In 2008 the PES helped to find a job for nearly half of all the unemployed (43.3%), 48.6% of whom were women and young people under 35 years-old.

In 2009 overall, one in every five people employed in agriculture, animal husbandry, forestry, the processing industry, commerce, auto repair and household appliances repair lost their job. Among them, manual and skilled workers accounted for more than a half.

In January 2010 there was a 29.5% decrease in the number of people finding a job in comparison with January 2009. Women made up 50.7% of the total and young people under 35 years-old made up 54.1%. At the end of January 2010, the ratio of job vacancies to unemployed persons was 10:83.

Budgetary expenses for Active Labour Market Policy measures accounted for 0.121% of GDP in 2008.

3. What has been done to improve the attractiveness of VET?

Systematic measures have been taken to assure the transparency and flexibility of the VET system and to establish a continuing education system in order to improve the attractiveness of the sector.

The Ukrainian VET system currently has a good structural arrangement (from initial to post-graduate levels) and it is well-developed, allowing citizens to select the form of learning best suited to their educational needs - TVET, higher education, in-house training, full-time or correspondence tuition, extramural education or distance learning, participation in seminars, conferences or master-class workshops, etc. The law defines educational qualification requirements at each level of training (from the lowest to the highest qualifications) allowing for transition between various strands and levels of education.

For example: in 2009, 6.5% (against 5.6% in 2008) of graduates from TVET institutions continued their education at higher educational levels within the education system.

4. How successful has the VET system been in providing learning opportunities to all citizens?

The VET system in Ukraine aims to provide educational services for all citizens (including the most vulnerable) allowing for skill upgrading, promoting active citizenship and personal development for the purpose of assuring gainful employment and promoting equal opportunities on the labour market.

The letter of instruction developed in the framework of a Ukraine-Canada joint project on the implementation of equal opportunities and social justice in policies for training production and teaching and educational processes at the TVET institutions of Ukraine (approved by the Academic Council of the Institute of Innovative Technologies and Educational Content of the Ministry of Education and Science, Protocol No. 8 of 29 October 2008) provides definitions of citizens belonging to the most socially vulnerable groups and determines special measures to assure the implementation of the concept of equal opportunities and social justice to them.
According to the Law of Ukraine On Provision of Equal Rights and Opportunities for Men and Women (of 8 September 2005, No. 2866 [iv, Registration Code 339420] 2005), TVET institutions shall provide learning opportunities for all interested citizens (including the most vulnerable regardless of sex) to obtain their first working profession and to undergo retraining or skill upgrading.

Among students enrolled in the TVET institutions, there are almost 6,000 individuals with special needs, 66,800 students from broken families, and 18,900 orphans and cared for children. Directors and senior staff at these institutions concentrate on adaptation, improved health and employment for the above categories of students. There were 239,400 young graduates from TVET institutions in 2009, of whom 1,900 had special needs and 7,400 were orphans and cared for children.

In total, 218,500 skilled workers graduated and 84% of workers were employed in a profession through contracts with enterprises.

In-house training of company staff for skill refinement and gainful employment constitutes an important part of the vocational education system. In 2008, 11.6% of staff listed as full-time employees received training of this kind paid for by their employers. 290,100 people (or 2.6% of the total) either obtained their first profession or were retrained; 1,022,700 individuals (or 9.0% of ‘accounted-for’ full-time employees) improved their skills (including 437,700 women and 585,000 men).

Skill upgrading for factory workers in in-house training system occurred on average once every 11 years, against the 5 years stated in current legislation. This means there is a failure to promote the practice of improving priority skills and competences even though a number of mainly larger enterprises provide on-site vocational training for their workers every two to three years. These enterprises are highly market-oriented and aim to be flexible in order to maintain the lead in their respective sectors of the economy, they motivate their staff by offering an almost endless alternate ‘work-study’ mode of employment. (One example of this approach can be seen in the Novokramatorsk Machinery Construction Plant in Donetsk Oblast, an innovative and educational enterprise oriented toward collective intellectual development).

It is also important to mention that the form of vocational in-house training especially actively conducted by employers since 2001 (as indicated by the dynamic of statistics) is connected to the need to increase labour productivity and ensure company competitiveness. This process requires regular updating with new skills and competences, allowing the company to continually transform and improve products or services on the basis of constant improvement of the quality, mobility, adaptability and initiative of human resources.

The training being provided on-site by employers at their own expense is generally of a narrow-purpose and short-term nature concentrating on continuous improvement of the employees’ professional skills. However, the in-house training system will be further improved and developed because of the overall importance of this sector in the general structure of vocational education.

5. What actions are foreseen for addressing such challenges?

The following actions are foreseen to address existing challenges in the field of TVE:

- Changes and amendments to legislation and other regulations on the issues of further expansion of state and public joint management of the system (through the participation of social partners in these processes);

- Improved balance between supply and demand on the labour market through activation of cooperation between educational institutions and employers;

- Improved quality of VET (through renewal/review of content, the development of occupational and educational standards, refinement of the teacher training system);
• Implementation of tools to provide incentives for the employers participating in the VET development process (through the introduction of tax concessions);

• Improved monitoring of work placement of graduates from various educational institutions (through an annual interview with employers and graduates);

• Provision of an efficient social partnership system by means of regular involvement of social partners in VET development and refinement;

• Introduction of related international experience (through the implementation of international projects and analysis of work experience of other countries).

The draft Law of Ukraine on Professional In-Company Personnel Development was developed to resolve problems in the area of in-house training provided for company staff, in coordination with interested bodies within the central executive power, social partners and more than 600 enterprises before it was submitted to the Verkhovna Rada (Supreme Council or Parliament) of Ukraine for further approval.

All the problems regarding TVE will be approached through constructive dialogue and cooperation with all stakeholders through meetings, panel discussions, seminars and conferences. These will be organised and held on a regular basis and regulatory legislation will be drawn up.

Internal efficiency, quality, governance and financing

1. What are the three main problems concerning internal efficiency and effectiveness in the VET system?

The current VET system faces three major needs: to improve system management, to diversify financing and to improve the quality of skilled workforce training at educational institutions.

An active response is also required in relation to: the lack of a unified approach to quality management in TVE among national institutions; the lack of multilevel financing mechanisms for educational institutions; imperfections in the system to stimulate employer participation in workforce training; ineffective partnership between regional bodies of the executive power, businesses, and educational institutions; low salaries for teaching staff (in 2008, the average salary of a full-time employee in the educational sector was UAH 1,448, or 80.2% of the average salary - UAH 1,806). Some of the necessary actions are being performed at various levels of management to address the above problems.

2. How is the overall performance of the VET system assessed and how is quality defined, assured and measured at provider and at system/policy level?

Executive Order No. 55 approved by the Ministry of Education and Science of Ukraine on 02 February 2009, determines efficiency indicators for TVET institutions in Ukraine and advises on the methodological application of such indicators. Efficiency indicators are currently available for: work placements, content of education and educational and methodological support, training, and teaching staff.

Methodological recommendations were developed for monitoring the work placement of TVET institution graduates and these were sent to the target destinations. This set of recommendations states there will be monitoring of educational service quality. Results from last year's survey of employers conducted in all regions indicated that 72.9% of the 26,000
respondent employers considered the skill level of TVET institution graduates sufficiently high.

Regional educational and methodological departments are conducting annual monitoring of results from educational institutions and related information and analytical materials are prepared depending on the conclusions drawn.

The next step in this direction will involve the development of a software package for measuring the efficiency of educational institutions.

In 2009, within the framework of the Tacis project Improvement of Regional VET Management methodological recommendations were made on self-assessment for educational institutions that were approved for 6 pilot fields and then passed on to the regions to be used in practice.

3. Which governance and financing mechanisms are implemented and/or envisaged to improve efficiency and quality?

Social partner involvement is one of the important governance mechanisms for VET quality management. Almost all TVET institutions sign agreements with employers on the subject of in-house training and the subsequent work placement of their graduates.

At present, an active process is underway in the search for optimal forms of financing for TVET institutions in order to allow for diversification and the decentralisation of resources.

From 2010, once an appropriate detailed mechanism is fully developed, VET schools will be able to take funding from various sources and budgets and closely tie the economic needs of a region (or enterprise) to the knowledge and skills obtained at VET schools. This means that resource management will be more directly linked with the point of service delivery, improving the quality of decisions made on the performance and efficiency of individual TVET institutions and the system as a whole. Decentralisation will provide an opportunity for local self-government agencies to make optimal decisions on workforce training and will enhance social partnership.

This mechanism will mainly be instrumental in the distribution of budgetary funds on the basis of the results obtained (not the regulatory paperwork as was the case previously), providing stimulation to directors of TVET schools as they become responsible for compliance with established VET quality standards.

For the last three years, the state TVET institutions in three regions (Kharkov and Lviv Oblasts, and the City of Kiev) have been experimentally funded from the local budget.

Ukrainian enterprises (companies, firms) are struggling to improve their competitiveness in the domestic and external markets placing greater weighting on performance quality, which in turn requires improved skills and competencies amongst hired personnel. As a result, there are many examples of large enterprises spending between 1% and 2% of payroll funding on staff training. Meanwhile, most SMEs fund no training programmes at all for their employees, as these enterprises tend to consider the economic situation too unstable for staff training to provide any clear benefits.

4. How successful have VET reforms been in involving the main stakeholders in the design and management of VET policies and how are their capacities developed?

Employers’ organisations and employers themselves directly participate in VET reform (amendments to legislation, initiating and participating in seminars, conferences, forums, in the development of educational [occupational] standards, establishment of practical training centres and so on) but trade unions are insufficiently active in the design and management of VET policies, especially at the regional level. As a rule, they limit their activities to attending meetings on the invitation of education authorities even though they could play a more influential and weighty role.
5. Which elements of VET provision have been prioritised for increasing efficiency and quality?

The following activities have been prioritised for the year 2010 for the purposes of increasing VET efficiency and quality: advanced training for the teaching staff of TVET institutions; development and implementation of modular competence-based education programmes; development of a national qualifications framework.

6. What actions are foreseen for addressing the efficiency and quality challenges of the VET system?

Concrete measures to address challenges in the field of VET efficiency and quality system will be covered in the state-sponsored target Programme for TVET Development for 2011-2015 currently under development in accordance with the Concept for the state-sponsored target Programme for TVET Development for 2011-2015 approved by the government.

The following measures are planned to improve management: further redistribution of functions and authority from central entities to the regions; enhanced efficiency of state and public control of training quality; organisation of institutions to allow independent qualification and certification of TVET graduates and other categories of the population (replacing the current State examinations); incentives for investment in VET development from natural persons and legal entities; the organisation of a multi-channel VET-funding system, etc.

Development of independent TVET institution evaluation of the skills of qualified workers will form a great step forward in vocational education (with a 3rd or 4th level labour qualification assigned depending on the complexity of the profession). This change will occur in parallel with initial work on the National Qualifications Framework to cover all levels of VET for use in recognition of TVET certificates. This will also cover the outcomes of non-formal learning that will be now awarded formal legal recognition.

The plan is to eventually bring the Ukrainian TVET system closer to the VET modernisation process of the EU countries; this follows the framework of the Copenhagen process with the support of instruments such as the European Qualifications Framework (EQF), the European Credit Transfer System for Vocational Education and Training (ECVET) and the Common Quality Assurance Framework for VET in Europe (CQAF).

Innovation, partnership and entrepreneurship

1. What have been the major areas of innovation in VET provision?

One of the major objectives in Ukraine is innovative development of the national vocational schools system including implementation of up-to-date training aids and technologies in order to provide high-quality staff training.

There is clear understanding in Ukraine that innovative activity in VET forms the core of VET renewal; where the renewal will contribute to adaptation to the new economic, social, and demographic situation in the country while providing balanced relations between VET, the labour market and the educational services market. The development, testing, and implementation of innovations in the VET system are considered elements of a continuous process and a necessary component of the daily educational routine.

According to the regulation on the procedure for innovation activity implementation approved by Executive Order No. 522, dated 07 November 2000, of the Ministry of Education and Science of Ukraine, experiments are to be conducted in the TVET system at the All-Ukrainian and regional levels. Experimental teaching facilities created in TVET institutions will trial, test and determine the efficiency of new and socially important teaching and scientific ideas and technologies for training a skilled workforce.
Direct innovation in educational institutions has intensified significantly. New teaching technologies, information and communication technologies, non-standard forms and methods of teaching, production processes modelling and simulator training exercises are being implemented in the general educational process at TVET schools.

Some 73 TVET institutions in 20 regions work in collaboration with educational institutions from other countries, exchanging experiences and introducing new ideas.

Innovations in VET content are of special importance for the country. The state educational standard, introduced in the country from 2000 has been instrumental in shaping and modernising VET content.

There are currently ongoing joint efforts by the Ministry of Education and Science, Ministry of Labour and Social Policy, the National Academy of Pedagogical Sciences, methodological agencies and more than 3,000 employers to develop and test competence-based standards covering 12 different areas.

Serious consideration is given to the use of: new education technologies (modular presentation of education); distance learning; information, computer and telecommunication technologies, all of which will require technological innovation to guarantee implementation.

Organisational innovations on the basis of related international experience (like centralisation and decentralisation of VET system management, for instance) appear to have gained particular importance in the country.

2. Has innovation been supported by donor projects, national projects, VET policies?

State VET policy is constantly supportive of innovations in the VET field. Vocational education in Ukraine has great intellectual and creative potential and there is plenty of related experience in training of a skilled workforce.

Becoming a skilled worker is a long process that implies continuing upgrading of both theoretical knowledge and practical professional skills. Some intergovernmental cooperation agreements and international technical and consulting aid projects are being successfully implemented in the county, such as:

- **Reforming of TVE in Ukraine**—joint German-Ukrainian project, 2003-2009 based on German experience that contributed to the extension of professions, introduction of a respective section to the State Classifier of Professions DK 003-95 and development of approaches to educational standards for extended professions.

- **Improvement of the management efficiency of TVE at the regional level in Ukraine** - EU project, 2005-2010, based on international experience: initiated decentralisation of processes by delegating authority for certain issues to the regional level; contributed to a change in approaches to financing; established a social partnership system; provided quality assurance for worker training in educational institutions; established resource centres. Some of the methodological recommendations developed and published on these and other issues are currently being implemented.

- **Management decentralisation of vocational training in Ukraine** - joint Canadian-Ukrainian project, 2005–10, based on Canadian experience: contributed to problem solving in the reorganisation of TVE management; review of the system for upgrading the skills of teaching staff; assurance of equal opportunities and TVET accessibility; formation of approaches to the public regulatory bodies (for example consultative councils); enhancement of teaching and job-training process. Some of the manuals, draft documents and recommendations developed and published on these and other issues are now being implemented.
3. Are VET policies conducive to innovation; and if yes, how?

Government initiatives have combined with successful implementation of the international EU project Improvement of the Management Efficiency of TVE at the Regional Level in Ukraine and the joint Canadian-Ukrainian project Management Decentralisation of Vocational Training in Ukraine in the last five years. These projects have increased managerial capacity at regional level, and have also demonstrated the effectiveness of decentralising finance and administrative management to national and regional politicians, while preserving and strengthening subordination to national priorities for vocational training with the help of a decentralisation model. They have demonstrated the importance of partnership with social organisations and enterprises in the adoption of efficient and appropriate vocational training programmes.

These initiatives have led to economic innovations including new mechanisms for state funding of vocational education (development of the capitation funding, i.e. uniform payment payable on a per capita basis, drafting of a regulatory document to be approved by the Ministry of Finance) and diversification of sources of funding.

Resolution No. 42 of the Cabinet of Ministers of Ukraine of 21 January 2009, Issues Regarding Management of Some State TVET Institutions Subordinate to the Ministry of Education and Science of Ukraine is of special importance as it introduces the practice of funding from various sources and budgets, including regional budgets, from 2010.

Development of a social partnership with the labour market in VET will also form a leading trend in innovation.

The current objective is to improve the efficiency of social partnership and its practical impact to further VET development (with competencies rather than knowledge as the decisive element in meeting the new labour market requirements).

Partnership must be based on a system of direct agreements signed between educational institutions and employers although the lack of a legislative framework weakens the long-term effectiveness and future perspectives for cooperation between educational institutions and enterprises in a period of economic change.

Promotion of entrepreneurship is another of the main trends of national policy. In 2008, 7.7% of the total working-age population was employed in small businesses and the number of employees hired by small companies grew from 23.7% of all hired personnel in 2007 to 24.3% in 2008. Most of these are working in retail and wholesale trade, car repairs, real estate operations, and agriculture.

Many TVET institutions can therefore introduce training in professions connected with commercial activities. Training programmes include entrepreneurship issues and the PES also organises special training courses in entrepreneurship for the unemployed.

4. Which obstacles have been met to upscale or mainstream innovation?

Mainstream innovation is often held back by a lack of funding, a time lag in the development of high-quality methodological and scientific support and insufficient support (under-funding) of these processes by social partners.

The innovation process is also negatively affected by the lack of up-to-date legislative back-up.
5. What measures are foreseen to support innovation in VET and in which areas?

Central government bodies intend to use required measures to facilitate execution of innovative tasks in VET. According to the resolution of the Committee on Science and Education of the Verkhovna Rada of Ukraine (see Protocol No.35 of 11 March 2010) the following elements are planned for development and submission for government approval in 2010:

- New conceptual principles for improvement of the financial and economic activities of TVET institutions;
- An up-to-date calculation procedure for the cost of skilled workforce training (adjusted according to the complexity of the profession);
- A new technique for scientifically-based forecasting of labour market development, adjusted to existing programmes of economic sector development;
- A new mechanism for calculating demand for skilled workforce training;
- Conceptual principles for the National System of Qualifications and National Qualifications Framework.

A draft of the Law of Ukraine on Amending Certain Legislative Acts has already been prepared (on improved management of TVE). It introduces the following changes and amendments:

- In the Budget Code of Ukraine—the introduction of multi-channel financing, strengthening the role of local self-government bodies and executive power;
- In the Law of Ukraine on Education—improved quality TVE;
- In the Law of Ukraine on Local Self-Government in Ukraine—strengthening the role of local self-government bodies in workforce training, work placement facilitation and the introduction of multi-channel financing;
- In the Law of Ukraine on Publishing—renewal/review of TVE content;
- In the Law of Ukraine On TVE—improved management in TVE, delegation of authority and strengthening the role of local self-government bodies and branches of the executive power, improvements to the licensing/certification of in-house staff training, improvement of the educational content, increased requirements for directors of educational institutions, and property issues in TVE.
- In the Law of Ukraine on state support for the book publishing business in Ukraine.

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2 On Progress of Carrying Out, on the part of Ministry of Education and Science, together with the National Academy of Pedagogical Sciences, the Resolution Passed on 11 June 2008 by the Committee on Science and Education Regarding Legislative Enforcement as to Scientific and Methodological Support of TVE and Introduction of the Latest Achievements in Science, Technology, and Innovative Pedagogical Technologies in the Teaching and Job-Training Process
Annex 1

VET system structure, legal and institutional frameworks, additional data

1. Main structure of the system and its subsystems, main processes inside and outside the system.

The TVE system consists of TVET institutions of all forms of ownership and types of subordination, covering educational and methodological, scientific and methodological, scientific, teaching and job-training, teaching and commercial, publishing and printing, cultural and educational, physical and health-improving, data processing, and other enterprises, organisations, agencies and their administrative/managerial bodies. The general VET structure will continue to provide every citizen of Ukraine with an opportunity to receive vocational training at any chosen level: short vocational training programmes, applied (technical) baccalaureate, or academic baccalaureate. Citizens will be offered a constantly updated set of modular professional qualifications programmes in order to be able to adapt efficiently to labour market demands. New programmes will be optimised and open to all interested parties.

The major structural elements of the system of higher (tertiary) education are Universities, Academies, Institutes and Colleges. Higher (tertiary) education must become a social standard in 21st century society in order to provide Ukraine with adequate competitiveness in the global economy.

* What does the term VET system mean?

The term ‘vocational education and training (VET)’ is interpreted to mean the educational process that provides training in new technical vocational skills based on a person’s previously completed basic and general secondary education (in Ukrainian legislature the term ‘Technical Vocational Education’ [TVE] is used).

TVE covers a set of pedagogical and administrative measures aimed at providing citizens (workers) with vocational knowledge and skills in their chosen area of professional activity, on the basis of development of competencies and the acquisition of general and professional workmanship.

VET is developed in close cooperation with the labour sector, i.e., with all sectors of the economy and social spheres. Market selectivity of VET dictates its primary orientation towards professional personal self-updating, and therefore also toward meeting the common needs of both the individual and society (meeting educational needs and providing well-qualified personnel).

TVE is a component of the general educational system of Ukraine.

The main influences on VET development are the demands of the economy, science and engineering, and renewal of production in line with high level information technologies.

*Concerning initial VET, what are the different routes and their specificities and qualification levels including apprenticeship, and the pathways between general education and VET, between VET and higher education?*

Transition from a lower VET level to a higher one is regulated in legislation by the Law of Ukraine On Education.

In particular, first level general education institutions (elementary school) provide initial general education, second level (basic/middle schools) provide basic general middle-level education, and third level (high schools) provide complete general secondary education combined with pre-professional training of high school seniors.

TVE has a three-level structure:
First level TVE provides a relevant qualification grade for professions with the execution of technologically simple production operations, allowing for production tasks to be completed under the supervision of a highly-experienced skilled worker. First-level training is completed with an evaluation session and award of the title of ‘skilled/qualified worker’ for a given grade/category of the acquired profession. Successful candidates are issued a standard certificate approved by the Cabinet of Ministers of Ukraine.

Second level TVE provides a relevant qualification grade for mass working professions with the execution of technologically medium-difficulty production operations in various economic sectors, allowing complex production operations to be completed to the required quality, on time, and independently (or with the help of technological charts, instructions, drawings, etc.) Second-level training is completed with an evaluation session. Successful candidates are awarded the qualification of ‘skilled/qualified worker’ for a given grade/category of the acquired profession and are issued a standard diploma approved by the Cabinet of Ministers of Ukraine.

The third level of TVE provides a high qualification grade in technologically complex, knowledge-intensive professions and specialties in various economic sectors, allowing for the completion of complex production operations. Third-level training is completed with an evaluation session. Successful candidates are awarded the qualification of ‘skilled worker’ for a given grade/category of the acquired profession and, when they have completed their course at an accredited TVET institution, they are awarded the qualification of a junior specialist with a standard diploma approved by the Cabinet of Ministers of Ukraine.

TVET institutions provide for citizens TVET needs. Graduates who successfully pass the qualifying evaluation are awarded the qualification of ‘skilled worker’. These institutions are open to students aged 15 and over and students are awarded a certificate of completed general secondary education along with their completed vocational training on graduation.

The system of in-house training of employees provides for professional short-term training (retraining) or apprenticeships for workers (the qualification of ‘skilled worker’ can be awarded). It also provides for advanced training with a subsequent increment in the grade/category of skill. Company employees with higher education generally undertake advanced training in short courses.

Institutions of higher education have the following accreditation levels: 1st level - technical schools and VET schools; 2nd level – colleges and similar schools, 3rd and 4th levels – Academies, Universities, and Institutes.

Institutions of higher education prepare specialists at the following educational and qualification levels: Junior specialist, Bachelor’s degree, Master’s degree.

*Concerning continuing training, briefly describe the different subsystems including adult education and labour market training.

Continuing education covers all forms and types, including adult education.

In Ukrainian usage, the term ‘continuing education’ is understood in the sense of a succession of three educational levels – from basic and complete general secondary education, technical vocational and higher education. The system of continuing VET includes the following three sections:

- The system of comprehensive school education (pre-professional training), TVET institutions and higher education institutions (regulated by the Laws of Ukraine On General Secondary Education, TVE, On Higher Education). Here the main objective is to provide initial vocational qualifications, primarily for young people.

- The system of in-house training (regulated by the Laws of Ukraine TVE, On Higher Education, and the Regulation On Vocational In-Company Staff Training approved jointly by the Ministry of Education and Science and the Ministry of Labour and Social Policy of Ukraine). The main objective of this training is the enhancement of staff efficiency; it is closely linked to job requirements within the workplace and, to a lesser extent, to general job qualifications.
The system of vocational training for unemployed citizens on request from the employment service (regulated by the Law of Ukraine On Employment of the Population). This type of education provides various types of training (except for a first higher education degree) in any continuing education system oriented towards the accumulation and refinement of knowledge, skills, and competencies suited to further employment, improved competitiveness in the labour market, gainful employment and a reduction in unemployment.

Adult education is an integral and, also somewhat stand-alone, part of the continuing education system.

The main objective of adult education is to provide continuing advanced training (retraining) of adult citizens to provide full satisfaction of their educational needs and to obtain high labour-market competitiveness.

Adult education mostly takes place within the in-house vocational education system, where companies determine their own staff needs for training.

TVET institutions work with the employment service and interested enterprises to determine requirements for adult education; they also conduct surveys and advertise their potential educational offer.

The National Doctrine for the Development of Education in Ukraine includes a separate chapter on continuing education and lifelong learning.

The role and importance of the private sector in both initial and continuing VET.

Although VET policies are already open to private involvement, the private sector still needs to participate in educational and training management more efficiently. In actual fact, the private sector concentrates mainly on the training of its own staff. Some of the enterprises that provide training for their own employees occasionally offer training to staff from other companies or private individuals willing to pay for their own training. Dialogue on the subject between the government and the private sector must be improved in future, and some legally-prescribed tax concessions must be introduced for participants prepared to invest in the development of the continuing VET system.

Approximately 1,000 private non-governmental TVET institutions have come on to the market, generally working in close collaboration with job centres that provide training for the unemployed.

2. Legal, institutional, regulatory and policy framework governing the different subsystems identified, and in particular:

* Governance of the system and its subsystems;
* The existence of dedicated agencies, councils and committees;
* Autonomy of VET institutions;
* Strategy/policy for adult training and what it covers;
* Lifelong learning strategy (on-going or in preparation, its main objectives, the role of VET in the strategy).


The education policy is drawn up by the Cabinet of Ministers of Ukraine and is implemented by the Ministry of Education and Science and its regional structures.

The Ministry of Labour and Social Policy of Ukraine is responsible for coordinating vocational training for hired employees in the workplace and for unemployed citizens on request from the employment service.
In Ukraine, the following structures function at both central and regional levels: TVE councils, employment assistance coordination committees, associations of employees of the TVET system, councils of directors and rectors of educational institutions at various levels, associations.

Serious efforts have recently been made toward granting autonomy to educational institutions, and schools in higher education have already been given partial autonomy. The draft Law of Ukraine on Higher Education, currently working its way through the Verkhovna Rada, introduces provisions regarding the regulation of autonomy for higher education institutions. Some provisions relating to autonomy for TVET institutions have also been introduced through the draft Law of Ukraine On Amending Certain Legislative Acts (concerning improvement of TVE management) produced by the Ministry of Education and Science of Ukraine.

The issue of adult education has gained special importance in Ukraine as market dynamics require continuing training and retraining of employees throughout their working lives. Current demographic patterns also imply that educational institutions providing educational services for both the youth and adult population will have to compete with each other to recruit students from the falling numbers available. Adult education is an important component in the national strategy for continuing education and training as the main objective of this sector is to facilitate comprehensive personal development throughout the course of the professional career of every individual. The employment services, scientific and educational institutions and other stakeholders have recently introduced the new ‘adult education week’ as an event to promote and celebrate this strand.

The creation of state-sponsored centres for adult training, advanced training and retraining will present a major challenge, as will efforts to increase the competency level of specialist trainers to provide adult training. Adult education departments must be created at all TVET institutions as a matter of urgency. Scientific institutions, particularly the National Academy of Pedagogical Sciences are currently examining these issues and appropriate proposals are expected in due course.

A draft Law of Ukraine on Post-Graduate Education has been developed to provide a legal framework for adult education that has been approved by all the stakeholders and submitted to the government for further consideration.

Lifelong learning is understood to include any purposeful education to improve personal knowledge, skills, and competencies where capacity is to be retained on a permanent basis.

Discussions are currently underway on the conceptual basics of life-long learning between the Ministry of Education and Science of Ukraine, other central bodies of executive power, the National Academy of Pedagogical Sciences, regional centres for science and education and social partners. It is generally assumed that demand driven education should be person-to-person, periodic, well integrated and ongoing throughout a lifetime. Continual cooperation and dialogue at all levels of management and among all interested parties are essential if this is to be achieved, allowing for beneficial union and supplementation of all the existing education and training systems, improvement of the investment climate and better coordination of joint undertakings. Legislation and regulations are also needed to cover this strand.

3. Key data: main statistics or estimations and main trends in connection with the subsystems and routes identified above.

At the beginning of the 2008-2009 academic year, there were 20,969 general education institutions functioning in Ukraine, serving 4,616,717 students and employing 524,191 teachers. Some 226 of these were private general education institutions with 21,857 students and 4,923 teachers.

Government statistics state there were 1,018 TVET institutions operational during this period. They taught 436,700 students, including 12,300 unemployed (enrolled on request from the employment service) and 13,600 company employees.
In the 2008-09 academic year, there were 528 higher education institutions of the 1st and 2nd accreditation level with 399,300 students and 353 higher education institutions of the 3rd and 4th accreditation level with 2,364,500 students.

There has been a downward trend in the number of students at higher education institutions over the past seven years due to the difficult demographic situation.

At the same time, it should be noted that spending on educational services grew from UAH 2,014.5 million in 2007 to UAH 2,512.7 million in 2008.

**4. Key elements of VET reform (curricula reform, occupational/certification standards, qualification frameworks, etc.)**

The key elements of VET reform include:

- Development of a regulatory and legal framework for VET reform (a new draft Law);

- Development of a National Qualifications Framework, new generation standards, and a qualifications certification system (both mobility on the internal market and the international positioning of Ukrainian technologies depend heavily on how Ukraine implements mechanisms for the independent certification of qualifications);

- Improvement of the system for the advanced training and retraining of teaching and managerial staff in vocational education;

- Development of new organisational and legal frameworks – autonomy of educational institutions;

- Organisation of the continuing vocational education system, recognition of informal and non-formal learning.
Annex 2

Regulatory and Legal Framework.

The major organs and functions of TVE management are determined by the Law of Ukraine On TVE (1998).

The Law of Ukraine On Amending Certain Legislative Acts Regarding TVE passed by the Verkhovna Rada of Ukraine on 11 March 2003, registration No. 1158, made amendments to 11 Laws of Ukraine. All this has significantly improved organisation of the teaching and job-training process, its scientific and methodical basis, regional TVE management and the social protection of students; it has also attracted additional sources of funding and has created an opening for the introduction of tax benefits on the teaching and job-training provided by TVET institutions. Approval has been given at the legislative level for Ukrainian TVET institutions to seek funding from various budgetary sources (state and local).

The resolution passed by the Verkhovna Rada of Ukraine on 03 April 2003, registration No. 699, On the Current Conditions in TVE and Perspectives of TVE Development determines current conditions and perspectives for TVE development.

The resolution passed by the Cabinet of Ministers on 17 August 2002, registration No. 1135, approves the State Standard for TVE. This Standard establishes government requirements for TVE content, the educational level of entrants and applicants, and for the professional qualification level of graduates from TVET institutions.

The problematic issues of TVE development have been raised many times in Cabinet meetings and sessions of the Verkhovna Rada to the extent that the President of Ukraine signed the Decree On Additional Measures Regarding Improvement of TVE in Ukraine on 18 September 2004. The main purpose of this Decree is to strengthen the role of TVE in socio-economic and cultural development and to fully address the needs of citizens for professional self-fulfilment.

Changing conditions and demands on the labour market have prompted the approval of the following resolutions by the Government of Ukraine:

Registration No. 1396 On the Plan of Actions Aimed at Satisfying the Labour Market Demand in Skilled Workers of 5 November 2008 and registration No. 42 Issues Regarding Management of Some State TVET Institutions Subordinate to the Ministry of Education and Science of Ukraine of 21 January 2009. These documents helped to clarify and legally establish priority tasks for TVE on the understanding that successful achievement of these tasks will facilitate further development of TVE and satisfy the demand for skilled workers in the national economy. Furthermore, these documents provided the basis for a new action plan to 2012.

The resolution No. 42 outlines the main tasks to be achieved at both the national and regional level:

At the national level:

- Development of the State Programme for TVE Development to 2015; this Programme will define the measures required to modernise the material and technical bases of TVET institutions, to renew/review TVET content and increase the efficiency of advanced training for teachers and trainers;
- Development and implementation of new state standards for TVE in specific professions, in order to conduct skilled workforce training;
- Development of a calculation procedure regarding the cost of per capita skilled workforce training at TVET institutions, in order to use the figure obtained in planning the general rate of funding for TVET institutions;
- Development of a Draft Law on the encouragement of employer participation in workforce training, in investment policies for TVET institutions and the implementation of educational projects;

- Development of a National Qualifications Framework.

**At the regional level:**

- Annual monitoring of the regional labour market to determine the need for skilled workforce training;

- Development and implementation of long-term regional programmes for skilled workforce training to meet the requirements of the regional labour markets. For example, the Kiev City Worker and Worker of the Dnepropetrovsk Region programmes;

- Further decentralisation of TVET institution management; particularly on day to day issues such as funding, appointing VET school directors, lease of property.

**Achievement of these objectives will provide for:**

- VET that is continuously ahead of the game;

- Flexibility and interconnection between VET and economic development;

- Equal opportunities for high-quality vocational education in various population categories;

- Regionalisation of vocational education and adjustment to labour market demands;

- Vocational education united to the development of greater capacity and skills.
Annex 3

Statistics

The sample population survey on economic activity showed the monthly average total of economically active population aged 15-70 in 2008 was up by 0.3% on 2007 figures. This means 22.4 million people, or 93.6% of the population were engaged in economic activity while only 1.4 million people were qualified as unemployed (International Labour Organisation [ILO] methodology).

Examination of the age categories in the labour force show middle-aged citizens most widely employed (women aged 35-49, men aged 35-54), making up 44% of all registered full-time employees. Men have a higher rate of economic activity, at 69.8% of the total.

At the end of 2008, 6.1 million workers had complete, basic or undergraduate education, making up more than half of the working population (54.4%). Complete higher education was common in several spheres: education (70.4%), state administration (84.4%), scientific work (76.9%), air transport enterprises (74.9%), and health care (63.5%).

In 2008, employment for the entire population aged 15-70 in Ukraine increased to 59.3% from the 58.7% of 2007, moving up from 66.7% to 67.3 for the working age population.

One in five of the working population are engaged in the agricultural sector or industry, and one in six is in trade. Throughout 2008, the working population increased in several sectors: construction (up 14.9%), finance (up 12.2%), and trade (up 6.9%). Conversely, decreases in employment volume were recorded in the agricultural sector, state administration and domestic work.

The proportion of hired workers in the employment structure increased, while the number of self-employed fell to 4.6 million or 21.8% of the total volume of employment. The number of employees increased from 28.8% to 33.7% from 2007 to 2008.

Half of the working rural population were employed in the informal economy and the agricultural sector continued to offer the main activity in the informal economy (65.7%).

The average registered number of full-time employees in big and middle sized enterprises decreased by 23,700 or 0.2% from 2007 to 2008 to total 11.4 million people; 87.9% of employees leaving their jobs left due to turnover of labour and only 2.4% because of staff reductions.

Total employment was divided almost equally by gender. But there are imbalances in certain sectors as women make up 82.3% of employees in health and social care, 76.7% in education, 71.2% in the hotel and catering sector, 68.5% in finance and 66.9% in state administration. Male labour is traditionally prevalent in forestry 66.9%, the fishing industry 81.5%, construction 80.4% and river and maritime transport 73.8%.

In 2008, unemployment for those aged 15-70 in Ukraine affected 6.4% (ILO methodology) of the economically active population (against 7% in the EU countries). Increased unemployment was noted to affect more women than men, hitting the rural population hardest. The highest level of unemployment (ILO methodology) was seen in young people aged 15-24 (13.3%) and 25-29 (7%) with lowest levels for people aged 50-59 (4%).

The number of people registered as unemployed with the PES increased from 542,800 from 1 January 2010 to 546,600 on 1 February 2010 despite the employment stabilisation measures implemented by the PES during this period of financial and economic crisis.
Sources:


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