

OPTIMISATION OF THE NETWORK OF VOCATIONAL EDUCATION AND TRAINING PROVIDERS IN UKRAINE

ASSESSMENT OF OPTIONS FOR POLICY ACTION

PRIME



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EXECUTIVE SUMMARY

Background

In July 2014, the Verhovna Rada (Parliament) of Ukraine adopted a new Law on Higher Education that has a significant impact on vocational education and training (VET) provision. According to the new law, the higher education institutions of the first and second accreditation levels (ISCED 4/4B) will need to go through a process of re-accreditation to qualify for the provision of higher education qualifications. If they do not, they must migrate to the VET system. The Parliament and the Ministry of Education and Science (MoES) estimate that the enforcement of the law will lead to the transfer of approximately 200 institutions. In the same year, the Cabinet of Ministers of Ukraine adopted a resolution on delegating powers and financial responsibilities to the sub-national level of governance, kick-starting a decentralisation reform that envisages that VET will be funded from local budgets¹.

Through a process of consultation between the European Training Foundation (ETF) and the MoES, it was decided that the Projecting Reform Impact in VET (PRIME) methodology could help to identify options for policy action that can maximise the opportunities presented by the legislation, while minimising the inevitable trade-offs.

PRIME in Ukraine was prepared and carried out by the MoES, the regional education authorities of three pilot regions (Dnipropetrovsk, Vinnitsa and the City of Kyiv) and the ETF. The project was based on vertical (MoES and regional education authorities) and horizontal (VET institution heads, employers) consultations, and its deliverables were generated in a series of meetings in Kyiv, Dnipropetrovsk and Vinnitsa, as described in the following sub-sections. Phase 1 of the project was devoted to problem (background) analysis and scenario building, Phase 2 to the assessment of anticipated impact, and Phase 3 to the operationalisation of findings through financial analysis.

Problem and starting point

Ukraine has a large network (almost 900) of publicly financed VET schools providing initial vocational education and training (IVET) qualifications for the skilled workers and middle-level managers who are required by the labour market. The analogous qualifications portfolio is provided by the higher education institutions of the so-called first and second accreditation levels (colleges and *tehnikums/uchilischa*). There are currently more than 500 such institutions in the country.

To sustain VET provision under the new legislative circumstances, both national and local authorities have a strong incentive to minimise costs and ease the management burden, by reducing the number of VET providers and improving the efficiency of the VET network. However, decisions about closures and mergers of schools and adjustments to their type are difficult because of the implications such actions can have on staff, access to education and training, funding, and other areas of policy and management.

The reorganisation of the provider network and the redefinition of profiles of a number of VET institutions is an opportunity to intervene in a number of important areas. A redefined VET sector needs a deep restructuring in terms of governance, the institutional network of providers, funding and personnel. In particular, this means that the options for action defined and assessed with the help of PRIME in Ukraine aim to establish an appropriate typology of VET institutions to accommodate the new situation; an improved model of funding and managing new VET institutions; social guarantees

¹ Resolution of the Cabinet of Ministers of Ukraine No. 333-p of 1 April 2014 *On approval of the concept of reforming the local self-government and territorial organisation of power in Ukraine*.

for the students and personnel of new VET institutions; and an optimised and more effective teaching and training workforce.

Assessment process

The assessment process was carried out with the help of PRIME consultative analysis – structured consultations in stakeholder groups featuring a representative mix of participation roles in the VET system, including administrators, teachers and trainers, students, parents and researchers. Consultative analysis is the process of transforming their individual knowledge into collective analytical potential through a structured discussion, the outcomes of which are judgements about actions, their impact, and the feasibility of action choices.

The deliverables of the PRIME project were generated in a series of meetings in Kyiv, Dnipropetrovsk and Vinnitsa. The assessment process went through the following key stages: definition of categories for action and policy intervention within each category; definition of impact assessment criteria; judgements about impact; and choice of course of action. The stages were implemented in three phases:

- Phase 1: Background analysis and scenario building,
- Phase 2: Impact assessment,
- Phase 3: Operationalisation of findings.

The project helped to consolidate group-owned options for policy action, definitions of impact assessment criteria, and judgements about the impact of actions according to these criteria. The options for action are presented in the next sub-section, followed by the outcomes of impact analysis.

Options for action

Instead of designing fragmented solutions that would serve one stakeholder group at the expense of another, PRIME participants decided in favour of developing a 'synthesis' scenario for action (SSC). This foresees options for coordinated interventions in areas of key importance for the future of an optimised VET system (legislation, provider network, funding and staff policies), and takes on board the perspective of multiple stakeholder groups.

The options for action under each of these categories are described below.

In the area of legislation, the SSC suggests the adoption of a framework Law on Education and a Law on VET as a prerequisite to start and guide deep educational reforms. Actions include the creation of new types of VET institutions with an integrated offer of initial and continuous VET; the definition of rights and responsibilities at all levels of governance and VET management; the simplification of licensing of study programmes; the abolition of VET-type degrees at universities; and the introduction of measures to incentivise teachers and trainers to accept work in disadvantaged locations.

In the area of provider network optimisation, the SSC proposes the migration of a certain group of institutions of the first and second levels of accreditation to the VET system. The network of VET institutions could thereby be rationalised according to national and regional needs and the use of existing premises. The rationalisation should be carried out in a way that does not limit the constitutional right of citizens to free IVET. Some VET institutions with a sub-critical number of students might have to be closed down, and others merged. An additional option is to establish new, multi-disciplinary types of VET provider (VET centres, colleges and lyceums).

Regarding financial resources and budgeting, the SSC foresees the introduction of funding from multiple channels, such as the state budget, regional budget, tuition fees, services fees and private donations. To compensate for differences in economic strength between regions, the SSC proposes to introduce a system of differentiated subsidies from the state budget and to grant VET institutions more

financial autonomy, including commercial bank accounts through which they can dispose of the so-called 'money earned by ourselves'.

Finally, the SSC recommends the introduction of transparent criteria for taking difficult decisions about dismissals or profile adjustments of staff. Within reasonable limits, alternative career pathways, or opportunities to retrain or transfer to an administrative position, should be offered to those dismissed. The process should start with external assessment of the profiles of teachers and trainers in the VET system with a view to projecting staffing needs in the long term, and developing a roadmap for the development of the VET teachers' workforce in Ukraine.

Impact assessment results

Criteria

The choice of impact assessment criteria was guided by the necessity to find answers to questions that concern the implementation of the SSC in the real-life, professional context of PRIME participants. The two main questions were as follows.

- Are the actions purposeful?
- Are the actions feasible?

Responses to the first question were deemed to be best summarised under the heading of **effectiveness**. As an impact criterion, it is defined as the extent to which, all other things being equal, the proposed policy action will achieve the goals in its action category. Regarding the second question, the PRIME group identified resistance to change by stakeholders as the most significant of the factors that could have an impact on the feasibility of actions. The stakeholders were divided in two major groups – authorities, and beneficiaries from and/or participants in VET. The main criteria for the buy-in to change in both groups were **political acceptance**, defined as the likelihood that the intervention under assessment will be accepted and owned by the national and regional authorities, and **social acceptance**, defined as the likelihood that the intervention under assessment will be accepted and owned by VET professionals and beneficiaries (society).

The judgement options for each criterion were limited to three: viable (V), ambivalent (A) and problematic (P).

Impact

A good compromise between feasibility and effectiveness is one of the features of successful policies. Compared to other SSC categories for policy action, interventions proposed in the category **legislative framework** hold the best prospect of success while requiring the least compromise by those concerned. The high overall level of acceptance of actions in this category reflects a certain propensity of authorities and stakeholders alike to address problems by creating new legislation.

However, isolated action in the area of legislation is unlikely to have the desired long-term effect if it is not accompanied by meaningful change in the remaining three categories – provider network, funding and staff policies. The following sections provide an overview of the anticipated impact of interventions in each category. In all of them, there is at least one intervention that stands out as the optimal one in terms of viable compromise between political and social cost, and effectiveness.

Actions in the area of legislation

The adoption of a new Law on Education is expected to be a more viable option than the adoption of a Law on VET, because the latter might trigger considerable resistance from the staff of VET and higher education institutions who perceive that changes enshrined in the VET Law could decrease their status. At the same time, their ability to effectively block or undermine the changes is very limited, and their buy-in could be secured through secondary legislation that addresses their concerns. In terms of choice of policy action, the results of the assessment suggest that, instead of a trade-off between two

fundamental pieces of primary legislation, it is better to implement all actions in this category, but in the right sequence. It is necessary to start with the Law on Education and then move on to adopting a Law on VET. As a framework law, the Law on Education will create the preconditions for VET reform by ensuring coherence between VET and other sub-segments of the education system, introduce a contemporary understanding of VET and establish a qualifications structure enabling the development and implementation of study programmes that meet the requirements of the labour market, particularly vocationally (professionally) oriented study programmes and qualifications. The PRIME consultation group reached a consensus that, on that basis, it will be easier (and more desirable) to introduce a new Law on VET.

Actions in the area of provider network

As far as the provider network is concerned, of all interventions the one with the best chance of sustainable impact, with manageable 'side-effects', is the decentralisation of management of the VET provider network. Certainly, there are some risks, such as the lack of readiness on the part of the regions to carry out the necessary decentralisation reforms, and unpreparedness on the part of Ukrainian civil society to be an active player in adopting decentralisation ideas. Furthermore, education authorities at both central and regional levels note the need for a transition period that could save the VET provider network from what participants call 'destruction'. However, the decentralisation of the management of VET institutions is a component of the wider decentralisation movement in the country and, despite some concerns, the regional authorities strongly support the full transition of ownership and management to the regional level. The decentralisation of the management of VET institutions is an arrangement to which both VET providers and the regional level of governance aspire, as they hope that in this way the provision of VET can be brought closer to the needs of the regions.

Actions in the area of funding

The highest-scoring policy option is the one with interventions aimed at improving the mechanisms for allocating the budget for VET. It features important but challenging elements such as the development and implementation of per-capita funding, the improvement of tendering procedures for communal expenses, and the introduction of correction coefficients for funding to be based on the complexity of study fields/programmes. This is expected to result in a better system of funding – better to the extent that it allows the regions and the VET providers to meet the needs of learners more effectively, while rewarding those VET institutions that are already operating in a commercially and socially successful way.

Actions in the area of staff policies

In the challenging area of staff policy adjustments, it was judged that a focus on improving the working and employment conditions of teachers and trainers would have the optimal impact. A combination of increased autonomy, additional incentives and opportunities for professional development for teachers is likely to become a driver of improvement on various levels. There are certain trade-offs. The financial implications associated with this intervention, as well as the need to devolve responsibility for content and implementation of the curriculum to providers and individual teachers/trainers, are likely to meet resistance from authorities on national and sub-national levels. However, the improvements in working conditions of teachers and trainers are likely to be positively perceived by both VET professionals and society, and the changes will benefit learners. In sum, in the current atmosphere of openness and civic engagement in Ukraine, the buy-in by the broader public and the education professionals is likely to help overcome the resistance.

1. INTRODUCTION

1.1 Background to this work

Ukraine has a large network (almost 900) of publicly financed VET schools providing IVET qualifications for the skilled workers and middle-level managers who are required by the labour market. The analogous qualifications portfolio is provided by the higher education institutions of the so-called first and second accreditation levels (colleges and tehnikums/uchilischa). There are currently more than 500 such institutions in Ukraine.

In July 2014, the Verhovna Rada (Parliament) of Ukraine adopted a new Law on Higher Education that has a significant impact on VET provision. According to the new law, the higher education institutions of the first and second accreditation levels will need to go through a process of re-accreditation to qualify for the provision of higher education qualifications. If they do not, they will be transferred to the VET system. The Parliament and the MoES estimate that the enforcement of the law will lead to the transfer of approximately 200 institutions to the VET system. This requires measures to rationalise and optimise the network of VET providers, particularly at regional level.

Through a process of consultation between the ETF and the MoES, it was decided that the PRIME methodology could help to maximise the opportunities offered by the reforms associated with Ukraine's new Law on Higher Education. The task was to design viable policy actions to optimise the VET system of Ukraine and to assess the impact of these actions in key areas of reform. Subsequently, PRIME identified the areas as legislation, VET provider network, funding of VET, and staff policies.

PRIME in Ukraine involved three pilot regions: Dnipropetrovsk, Vinnitsa and the City of Kyiv, which was added as a pilot region during the second phase of the project. The implementation of the PRIME methodology in Ukraine consisted of the following phases:

- Phase 1: Background analysis and scenario building,
- Phase 2: Impact assessment,
- Phase 3: Operationalisation of findings.

This report summarises the results of the work carried out in Phases 1 and 2. The summary of Phase 3 is available in a separate document. Annex 1 provides a technical overview of implementation of PRIME in Ukraine.

1.2 PRIME

What is PRIME?

PRIME is a methodology for consolidating and validating evidence on the likely impact of policy actions. It is built around a step-by-step process that helps countries to compare their options for action towards a strategic goal and to identify which of these could achieve it in the best possible way.

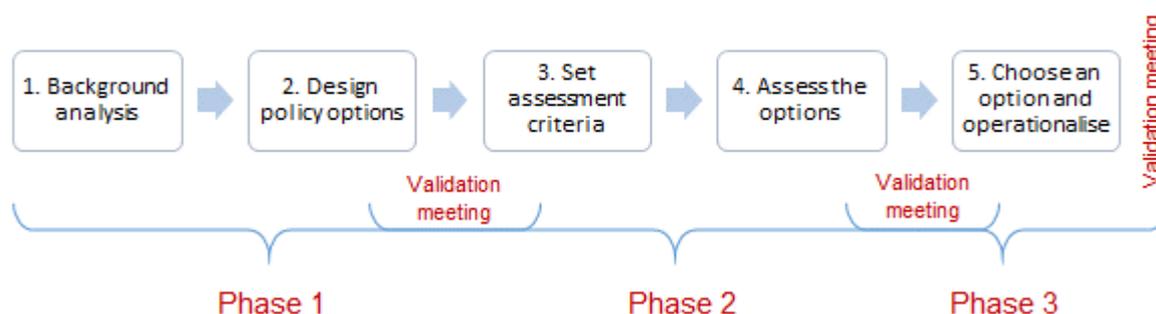
The first aim of PRIME is to assist authorities and stakeholders to find the optimal course of action to achieve a strategic goal. The second aim is to increase capacity for informed reflection and coordinated decision-making among all participants in the exercise. The assessment process takes stock of what has already been achieved and, to the extent necessary, takes into consideration the specific context of regions and stakeholders. In this way, it adds value to previous efforts (if any) in dealing with the issue at stake.

How does it work?

Logic and implementation steps

PRIME follows a sequence of logically connected steps, undertaken in the three phases of implementation (Figure 1.1).

FIGURE 1.1 PRIME LOGIC AND STEPS



The first phase of PRIME (analysis) encompasses steps 1 and 2, the second phase covers steps 3 and 4, and the third phase is devoted to the operationalisation of the chosen policy option.

Phase 1 commences with a detailed background analysis of the problem on which PRIME is focused. This analysis relies on a literature review (starting with the evidence collected and analysed in the Torino Process), contextual inputs and data analysis. It culminates in the identification of issues to be addressed through policy action or, where the issues are known, in their confirmation, and the design of options for action.

In Phase 2 (assessment), the options for policy action are assessed for impact. The process includes a definition of the assessment criteria and the assessment itself. The latter is built around an effort to develop a proper understanding (including through site visits) of the specific context of the stakeholders and institutions concerned with the problem and with actions towards its solution. The deliverables of Phase 2 are impact reports (judgements) for each policy option. The assessment criteria typically focus on aspects such as the effectiveness of policy actions in achieving the strategic goal, possible side-effects and the anticipated monetary and other costs associated with implementation.

Finally, Phase 3 of PRIME (operationalisation) is devoted to an operational analysis of one option for action with a view to preparing a roadmap (blueprint) for implementation. The blueprint might cover multiple operational dimensions, such as timing, distribution of implementation responsibilities, and sequencing of implementation steps, or might focus only on one, for example, cost.

The end of each phase is marked by a validation event, which closes the preceding phase and opens the next one. For example, the validation event for Phase 1 confirms the background analysis and the options to be assessed, and opens the discussion about the assessment criteria. Following the same logic, the validation event at the end of Phase 2 confirms the assessment of options and the selection of one of them, and launches the work on operationalising the chosen option. The final meeting at the end of Phase 3 summarises the PRIME results and facilitates a discussion on the follow-up to PRIME.

A consultative approach to analysis

PRIME generates content by mobilising the contextual knowledge and professional expertise of PRIME participants. They are selected in order to ensure that the PRIME group features a

representative mix of participation roles in the VET system, including administrators, teachers and trainers, students, parents and researchers.

The PRIME methodology assumes that the cumulative expertise of a heterogeneous group of VET professionals and beneficiaries is a valuable source of potential solutions, but also that this expertise is likely to be fragmented. The validation meetings are therefore designed to stimulate and structure the group discussions around the main deliverable for each phase – issues, criteria and impact analysis, and operational guidance – in a way that transforms the individual knowledge of PRIME group members into collective analytical potential. PRIME defines as consultative analysis the process of mobilising the analytical potential of the group through a structured discussion. The application of consultative analysis to assess the impact of actions according to predefined criteria is called consultative multi-criteria analysis (CMCA) and is at the core of the PRIME methodology.

The benefit of applying a CMCA in PRIME is that it builds the capacity of the participating institutions and stakeholders for holistic ex-ante impact assessments in the area of VET, and this is important as a long-term contribution to more efficient and effective public policy making. Furthermore, CMCA-assessed proposals for action are likely to be more far-sighted and better planned, have a stronger buy-in from stakeholders, and benefit from a more streamlined support from the donor community than if CMCA is not used.

2. ESTABLISHING A BASELINE: PROBLEM (BACKGROUND) ANALYSIS IN UKRAINE

The background analysis of the post-secondary education system in Ukraine revealed numerous issues, and these will be discussed in the following sections. The issues were identified and analysed in the course of the PRIME launch meeting in Kyiv and the Dnipropetrovsk scenario-building meeting. The background analysis was validated at the validation meeting in Kyiv.

2.1 General issues

The various attempts at educational reform undertaken during the past two decades have lacked a systemic approach. At the top political level, four major agents have presented their vision of reform: parliament, the president, the government and the MoES. This section has been compiled mainly on the basis of the report by Kasianov (2015).

The Government of Ukraine presented its version of educational reform in the programme approved by the parliament in December 2014. The programme includes:

- the establishment of new rules and procedures for the accreditation and licensing of educational establishments;
- the creation of a new independent system of quality assessment in higher education;
- the introduction of financial autonomy for higher education institutions;
- the alignment of state orders (a certain number of study places per specialisation that are funded through the public budget) to the real needs of the labour market;
- the reform of pre-school education, secondary education, VET and out-of-school education through the introduction of a new general Law on Education and Law on VET;
- the integration of education and science (creation of technology and science parks);
- the adoption of a new version of the Law on Scientific and Technological Research.

General issues affecting the higher education system in Ukraine are as follows.

- The current network of higher education institutions substantially exceeds the country's requirements.
- Diverse subordination of higher education institutions and the decreasing number of students has led to inefficient management of the higher education system and its poor economic performance, causes duplication, and creates difficulties in setting the number of study places to be funded through the budget (state order) and in delivering the expected output, leading to significant financial losses that adversely affect the quality of education.

Key issues for higher education institutions of the first and second accreditation levels before the adoption of the Law on Higher Education can be summarised as follows.

- The study programmes of some institutions do not meet the requirements of the national economy, and graduates are unable to find jobs in their field of specialisation.
- Some institutions lack licences for conducting Bachelor's studies.
- The number of budget places in the state order is distributed unevenly across regions, there is failure to comply with these allocations, and the volumes stated in the state order are altered at the time of execution by some institutions.
- The system of recruitment and remuneration does not allow teachers in technical schools and colleges to progress to the top of the pay scale.

- Many institutions have outdated infrastructures and lack established contacts with industry.

The infrastructure and learning environments of VET institutions are seriously outdated. In 2011 about 60% of their equipment had been in use for more than 20 years, 36% for between 10–20 years, and only 4% for less than 10 years.

2.2 Issues identified within the framework of international evaluations

Since 2010, Ukraine has conducted three rounds of self-assessment on national VET reform progress and policy within the Torino Process. The country's social and economic context urgently requires the efficient operation of the VET system in training skilled workers, while the following internal challenges also remain to be addressed (ETF, 2015).

- Forecasting of labour market demand in relation to socioeconomic development strategies is inadequate.
- Employers have a passive attitude towards 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 with regard to the training of skilled workers.
- The national and regional management system for qualitative changes in VET is largely ineffective because of inconsistencies in the power and functional structures relating to VET.
- There is a lack of a scientific conceptual basis for VET development and cost-estimation methodology for training skilled workers at VET institutions. Such a concept and methodology should provide a full exploration of the complexity, knowledge content and material (training equipment) intensity levels of occupations and learning outcomes.

Ukraine's Torino Process report for 2014 pinpoints the following areas for further development of the VET system:

- the introduction of a scientifically based system for forecasting labour market trends that takes into account the actual conditions and trends in the economy, and the creation of efficient mechanisms to ensure cooperation between central and regional authorities and social partners with respect to publicly financed investments in VET and skills development;
- a change in the management model for VET institutions' activities to one based on quality enhancement and management;
- comprehensive financial provision for the VET system;
- social promotion of VET to enhance the prestige of blue-collar occupations and to create a positive image of VET schools, including regional exhibitions of skilled worker occupations and activation of career guidance and counselling services for children and young people.

However, there is a noticeable gap between VET policy statements and what has actually been rolled out in terms of new VET actions, or even considered in the draft Law on VET. Key issues such as further decentralisation, improvement of the state ordering system, strengthening of the involvement of the social partners, and employers' financial contribution to VET have been on the policy agenda for many years without significant progress having been made (European Commission, 2015).

The World Bank reported that 'in 2010, 4.6 million people in Ukraine worked in the informal sector, equivalent to 22.9% of total employment' (Nezhyvenko, 2013) (World Bank, 2013). This percentage has increased since 2001. Thus, many people gain their very first practical skills through informal employment. In other words, the informal employment sector – through the workplace training it offers – represents an alternative arm of the total VET provision in Ukraine.

2.3 Issues relating to legislation

The IVET system in Ukraine provides qualifications for skilled workers who are in demand in the labour market. Unfortunately, this limited understanding of VET has been incorporated into the Constitution of Ukraine, which creates serious legal problems in restructuring the VET system.

A new Law on Education has been drafted. This framework law envisages major changes, including in the structure of the education system, the models of governance and funding, certification of teachers, and quality assurance systems (see Annex 2). At the same time, amendments to the Constitution are being considered.

The MoES has prepared changes to the Law on VET. These are aimed at decentralisation and deregulation of the sector, the involvement of employers in sector development, and the establishment of a more flexible structure for VET institutions. However, it is unclear when this law will be adopted.

Stakeholders participating in the Kyiv fact-finding meeting repeatedly emphasised the need for a comprehensive package of legislative acts regulating lifelong learning, including the framework Law on Education. They underlined the difficulty of drafting a new Law on VET before a framework Law on Education is ready.

The legal framework governing VET is complex both in terms of the number of documents and in terms of their detail, the number of different authorities issuing legal documents and their status within the hierarchy of legal documents. Many legal documents that have significant influence on the VET system are issued by authorities other than the MoES.

There seems to be a tendency to develop VET legislation without sufficient prior development of a commonly agreed VET policy to be expressed in a particular law. The drafting and adoption of legal acts is too often a substitute for policy making.

The elaboration of a national development strategy for the VET system has been a public policy priority since 2010, when the Concept of the National Target Programme for VET Development in Ukraine was adopted, and this was confirmed by the National Programme for VET Development in Ukraine for 2011–2015 (Resolution of the Cabinet of Ministers of Ukraine of April 13, 2011). Currently, the strategic vision for the development of the VET system is represented by the National Strategy for Education Development in Ukraine for the period up to 2021 (2013) (approved by the Decree of the President of Ukraine No 344/2013, 25 June 2013) and the Draft Concept of Education Development in Ukraine for the period 2015–25.

The National Strategy for Education Development in Ukraine for the period up to 2021 provides for the following:

- development and implementation of VET standards for occupations and cluster qualifications, including the updating and approval of an optimised list of skilled worker occupations (reducing the overall number through integration);
- the updating and approval of the classifier of occupations (reducing the number of occupations through integration);
- the optimisation of the network of VET institutions of different types, vocational focus and types of ownership, taking into account demographic projections, regional specificities and labour market needs, the increasing independence of schools and the creation of industrial and training complexes;
- improvement of the mechanism for state order formation of skills training to take into account the current needs of the economy and the regional labour markets as well as the demand from society;

- enhancement of the training, retraining and further training of VET teachers;
- introduction of two-level training in VET schools: level 1 – Skilled Worker, and level 2 – Junior Specialist (Master, Technician).

Unfortunately, far too often these strategies are not backed with appropriate resources.

2.4 Issues relating to governance

The system of governance in the education sector was created in the 1990s on the Soviet model, which served the needs of a centrally planned economy. Educational governance in Ukraine is based on the principle of vertical hierarchy, where every lower level reproduces the organisational schemes and modes of action of the upper levels. At the same time, the nature of the relationship between different tiers of the hierarchy is vague, and in many cases is contingent on informal ties and relations between representatives of different constituencies. In the absence of indicators of quality of governance, the effectiveness and efficiency of governing institutions are usually assessed on the basis of their competence in organising paper flows and reporting. This section has been compiled mainly on the basis of the report by Kasianov (2015).

According to the Law on Education (1991), governance in education is conducted by central state governance bodies (executive power) and local self-governance bodies. The nature of the relationship between central executive bodies and local state administrations is complicated. The distribution of power and responsibilities is not clearly outlined. Legislation provides general rules and principles that can be applied in a biased way by civil servants. Norms and regulations stipulated by bylaws can be, and often are, contradictory.

The system of governance in education is centralised. However, centralisation refers mainly to the number of bureaucratic procedures and to the reporting and producing/reproducing of an excessive quantity of regulations and normative documentation. In all other terms, the system provides numerous opportunities for dispersed responsibility. As a result, the whole system of governance proves to be ineffective. The duplication and overlap of functions is the most common problem. Property management is the responsibility of all bodies in the hierarchy.

The National Tripartite Economic and Social Council was formed to ensure policy integration between interlinked policy areas. This could serve as a model for policy integration between VET and interlinked policy areas.

According to the existing governance model for VET institutions, stakeholders are not involved in the strategic management of institutions.

2.5 Issues relating to the qualifications structure and network of VET providers

The Kyiv fact-finding meeting revealed a need for a new type of higher education, namely a Professional Bachelor's degree that is relevant for the labour market and that complements the more academically inclined Bachelor's degree stipulated in the Law on Higher Education. This would mean a three-level system of VET qualifications:

- skilled worker,
- junior specialist (and junior bachelor's),
- professional bachelor's.

If this system is to be implemented, it will require an amendment to the Law on Higher Education or appropriate formulations in the national standard for the Bachelor's qualification.

Currently, the MoES governs the process of study programme portfolio development at VET institutions through the licensing and accreditation of such programmes. This process is cumbersome and time consuming, and does not allow flexible responses to labour market needs. The stakeholders acknowledged the approach adopted in Estonia (see the section on VET reform in Estonia): instead of licensing and accrediting individual study programmes, groups of study programmes are licensed. As a result, VET institutions are autonomous in the development and implementation of new programmes within the framework of a licensed study programme group.

The Junior Bachelor's qualification is not clearly defined in the new Law on Higher Education. There is as yet no corresponding higher education standard. This new qualification and its respective study programmes are apparently intended to be compatible with the short study cycle as defined by the Bologna Process. This type of qualification is aligned with level 5 of the European Qualifications Framework for Lifelong Learning (EQF).

The Law on Higher Education stipulates that 'after this Law comes into force, the diploma of Junior Specialist (initial higher education) shall be deemed equivalent to the higher education diploma of Junior Bachelor'. Nevertheless, the draft Law on Education aligns the Junior Specialist qualification with level 4 of the Ukrainian national qualifications framework (NQF), and the Junior Bachelor's qualification with level 5 of the NQF.

The awarding of the Junior Specialist qualification is currently split between the VET and higher education sectors. From 1992, the Law on Education (1991) made it possible to transfer some VET programmes leading to a Junior Specialist degree to higher education institutions of the first and second accreditation levels (tehnikum, college). According to the Law on Higher Education (2002), the Junior Specialist is not seen as a full higher education degree, and is not compatible with the Bologna degree system.

To solve this problem, the new Law on Higher Education (2014) introduced a Junior Bachelor's degree, which has caused a great deal of discussion and misunderstanding. Because of the lack of a national standard for Junior Bachelor's, it is impossible to understand the difference between the Junior Specialist and Junior Bachelor's qualifications.

2.6 Issues relating to the model of funding of VET

Legislation allows funding from a number of sources, including state central budget (formed by the government), state local budgets (formed by local councils), funds provided by legal entities, private entrepreneurs and bodies, charitable donations, grants, development loans, credits, and payments and fees from private persons. The main documents enacting all money flows are the Budget Code and the Law on State Budget, approved annually. This section is compiled mainly on the basis of the report by Kasianov (Kasianov, 2015).

The state is a major supplier of funding for education. Its share in the funding of education increased from 75% in 2007 to 85% in 2012, while the share of funding by private companies decreased from 1.1% to 0.7% and by households from 24% to 15%. According to data from the MoES, in 2012 the proportion of public expenditure on education allocated to VET was around 6%, while for higher education it was around 30%. In the same year, staff salaries accounted for almost 79% of budget expenditure. This expenditure structure provides neither a basis nor incentives for institutional development.

In 2014 the government initiated changes in education sector funding under the decentralisation strategy. The major change is that the distribution of central budget funds is delegated to the MoES. The educational subvention operated by the MoES (UAH 43.4 billion) is directly transferred to local budgets to cover government-guaranteed services. A separate line is reserved for subvention to VET

institutions (UAH 5.8 billion) to be distributed through local budgets. The calculation of the subvention is based on the previous year's budget. It is difficult to see how this will work in the current situation of economic crisis. To alleviate the differences between regions, 1% of the total subvention will be reserved for levelling purposes.

A National Fund for VET was proposed to the parliament's Standing Committee on Education and Science in January 2012. The present draft Law on VET includes articles on the establishment of training funds. It is therefore relevant to consider how such a mechanism will function at oblast level and what its systemic impact will be in terms of maintaining a homogeneous VET system.

The funding system for education is the subject of debate in various groups within the sector and beyond. The major theme of the discussions is the decentralisation of funding and the introduction of the 'money follows the student' principle. Those who support this idea argue that the current per-student calculations are ineffective and that they allow huge over-expenditure. The idea's opponents argue that this scheme might work in large cities, but it will be ineffective in small cities and rural areas. The majority of VET providers are in favour of implementing the 'money follows the student' principle.

The funding of VET institutions is currently achieved entirely through the State Treasury. Many VET institutions have other sources of income (de facto multi-channel funding) besides those relating to educational services, including income from enterprises and donations. However, these institutions do not have the right to use this money to develop the infrastructure, to motivate staff or for other purposes. Moreover, there is a danger that this will be considered as a for-profit activity. Under such circumstances, it is difficult for VET institutions to attract private money, particularly from enterprises.

In order to accommodate multi-channel funding, VET institutions need more financial autonomy, similar to that of higher education institutions, including the right to open their own bank accounts. However, this has to be balanced with full accountability for the financial decisions taken.

The current system of state-commissioned study places does not take into account the different levels of complexity and different needs in terms of infrastructure and consumables in study programme groups. There is an obvious need to introduce differentiated complexity coefficients for study programme groups.

Stakeholders have also emphasised the need to preserve study groups smaller than the normative 25 students for priority occupations, and the need for differentiated student scholarships in specialities. Social guarantees for students, teachers and other staff members have to be covered from the VET institution's budget. At the same time, the budget must guarantee a minimum level of resources to maintain and develop the infrastructure in accordance with licensing and accreditation requirements.

2.7 Conclusions and recommendations from prior third-party analysis

In the critical analysis prepared by the Institute for Development of Education, Kasianov draws the following conclusions, which are also relevant for the post-secondary education sector (Kasianov, 2015).

1. The sector does not satisfy the current needs for Ukraine's economic and social development. In many cases, the institutional design, and the modes of thinking and acting of the previous system are reproduced by contemporary actors. The discrepancies between societal expectations and what the system delivers result in growing discontent and mistrust in education, and particularly in VET.
2. The majority of problems cannot be attributed only to the sector itself: most are caused by, and interconnected with, other areas of the national economy and social life. The low salaries and poor social status of education professionals are basically dependent on the economic performance of

the country as a whole. The problems associated with ineffective governance and management cannot be solved without changes in the administrative system and without some decentralisation of power. The ineffective system of funding cannot be cured without changes in basic budget legislation (budget code).

3. The sector suffers from a combination of over-centralisation and dispersion of responsibilities, and from excessive regulation and functional overload of its constituents, combined with a lack of effective control and low implementation standards.
4. All previous reform attempts were aimed at technical adjustments of existing institutions and institutional and educational practices to changing conditions.
5. Four major obstacles are foreseen for the further promotion of educational reforms.
 - The reform is almost completely based on a top-down approach. The MoES acts as a major commissioner and implementer. The reform programme (concept) is being prepared by a local expert team, which lacks specific expertise and capacities (particularly in the fields of the economics of education and finances).
 - Financial support for the reform is lacking. The reform needs continuous focused expertise and policy-analysis support. It also requires additional funding, which is difficult to envisage under current economic and financial conditions.
 - Substantial parts of the education sector at all levels either do not understand or do not want reform. Therefore, additional efforts and resources are needed to organise an awareness and advocacy campaign.
 - The reform requires continuous dedicated effort: it will take at least 10 years for it to reach its major goals. Under current conditions, when there is pressure from society to take action, it is important to identify and implement reform components that have potential to bring an immediate effect. However, some of these, such as the optimisation of the schools network or a reduction in the number of teaching staff, will not be viewed favourably by society.

It is possible to identify certain areas of intervention that could have immediate systemic effects and that will not meet systemic opposition:

- optimise the functions of governing and managing institutions at all levels and clearly delineate their competences, powers and responsibilities;
- revise some of the control and supervisory functions of the MoES, and enhance the analytical and policy-analysis capacities of its institutions;
- radically reduce the number of regulations and the amount of reporting documentation, and minimise paper flows;
- include Ukraine in international assessment systems;
- launch the National Agency on Quality of Higher Education.

2.8 Conclusions from the PRIME background analysis

The adoption of the new Law on Higher Education in July 2014 radically transformed the existing structure of post-secondary qualifications and institutions in Ukraine. In particular, the law:

- adapted the Ukrainian higher education system to the European Higher Education Area (EHEA) by introducing:
 - three cycles (plus short cycle) of higher education according the principles agreed within the framework of the Bologna Process;
 - higher education qualifications of Junior Bachelor's, Bachelor's, Master's and Doctor of Philosophy;
 - a credit system compatible with the European Credit Accumulation and Transfer System (ECTS);

- a quality assurance system for higher education following the European Standards and Guidelines for Quality Assurance in the EHEA;
- abolished the four levels of accreditation of higher education institutions;
- streamlined the typology of higher education institutions, introducing three types of institution: university, academy/institute, and college;
- abolished some types of higher education institution, such as tehnikums and conservatories;
- abolished the educational qualifications of Specialist and Candidate of Science.

The implementation of the new Law on Higher Education will have major organisational, social, financial and personal implications for the whole post-secondary education sector. The borderline between the VET sector and the higher education sector will be based on whether or not a provider is entitled to offer higher education programmes and award corresponding qualifications (including Junior Bachelor's). This means that for many higher education institutions of the first and second accreditation levels, legal status becomes vitally important. For them, this is also a question of prestige and image.

The background analysis has revealed many systemic issues relating to the post-secondary education sector. Key issues such as further decentralisation, improvement of the state ordering system, strengthening of social partner involvement, and employers' financial contributions to VET have been on the policy agenda for many years without significant progress having been made. The newly emerging VET sector needs a deep restructuring in terms of governance, the institutional network of providers, funding and personnel. In particular, this means defining:

- an appropriate typology of VET institutions to accommodate the new situation;
- the model of funding for new VET institutions;
- the model for managing the network of VET institutions;
- social guarantees for the students and personnel of new VET institutions.

These issues are specifically tackled in the PRIME project. The reorganisation of the provider network and the redefinition of profiles of a number of VET institutions is an opportunity to intervene in several important areas. The optimisation of the provider network implies optimisation of the teaching workforce. The latter is likely to bring about a need to rationalise staff.

Observations by national and international experts indicate that the involvement of the social partners and stakeholders is poor, both when policies are being formulated and when subsequent legislation is developed and implemented. Consultation with affected and participating stakeholders and with the public at large has a vital part to play in improving the quality of VET. This is especially critical when social partnership holds part of the solution to the key challenges identified.

BOX 2.1 LIST OF ISSUES IDENTIFIED THROUGH THE BACKGROUND ANALYSIS

1. Adoption of the new Law on Higher Education is not the real reason for VET reform in Ukraine. The problems requiring a solution have been accumulating over the past two decades at least.
2. Meeting the needs and expectations of the labour market is a strategic issue and at the same time a strategic aim for VET and higher education development. Optimisation of the VET institution network is just one of the measures for achieving this goal.
3. The legal framework is just one of the instruments of the national education policy. Strategic development plans at the state, regional and institutional level, equipped with resources and measurable indicators, are the most important tools for implementing public policy.
4. A holistic approach to quality assurance (internal and external) is a precondition for success.
5. The involvement of stakeholders and the systematic training of implementers are of vital importance.
6. The role of VET and higher education institutions is not fully conceptualised in the context of lifelong learning. In particular, continuing vocational education and training (CVET) provision is covered by VET institutions to a fairly limited extent.
7. Strategies for development of VET and higher education at national and regional level are lacking. As a consequence, the MoES does not have any master plan for restructuring and rationalising VET provision in the new context created by the adoption of the Law on Higher Education.
8. The network of IVET and higher education institutions meets the needs of neither society nor the national economy. Moreover, the MoES is not able to centrally manage the network of VET and higher education institutions.
9. The qualitative and quantitative matching of skills supply (particularly from IVET and higher education institutions) to labour market needs at national and regional level is vague. As a result, the structure of state-commissioned study places does not reflect the real needs of the labour market.
10. The development of the VET and higher education sectors during the past two decades has basically been driven by the initiative of VET and higher education institutions without proper governance from the state and the regions. Nevertheless, some positive developments can be mentioned.
 - a. Many VET and higher education institutions have moved from offering narrow profiles to offering multiple profiles.
 - b. Ukraine has a substantial number of good institutions thanks to excellent leadership, enthusiastic staff and students, and supportive stakeholders.
11. In order to attract more students, some higher education institutions are also offering study programmes leading to Skilled Worker qualifications, without having the proper infrastructure, experience, or qualified teachers.
12. For all groups of stakeholders (internal and external), it is unclear why the Junior Bachelor's qualification has been introduced and what the difference is between the Junior Specialist and Junior Bachelor's qualifications.
13. It is important to assign appropriate NQF levels to types of qualifications:
 - a. Professional Bachelor's – level 6;
 - b. Junior Specialist – level 5;
 - c. Junior Bachelor's – level 5;
 - d. Full secondary education certificate – level 4.

3. DESIGNING EFFECTIVE RESPONSES

The term ‘scenario’ is defined by Merriam-Webster Online Dictionary as ‘a description of what could possibly happen’. In policy analysis, a scenario is interpreted as a tool that describes a possible set of future actions (Moniz, 2005).

The scenario method is a description of a possible future situation, including the path of development leading to that situation. Scenarios are not intended to represent a full description of the future, but rather to highlight central elements of a possible future and to draw attention to the key factors that will drive future developments (Kosow & Gassner, 2008).

In the PRIME project in Ukraine, the scenario method is used to highlight key elements of a possible optimisation algorithm for VET institutions and to draw the attention of all stakeholders to the main factors that will drive future developments. In addition, the scenario technique is used by PRIME for communication and exchange of ideas between stakeholders at national, regional and institutional level, and to draw the attention of authorities to important issues in the VET sector.

The Dnipropetrovsk scenario-building meeting (16–18 February 2015) was aimed at building scenarios for policy action that would be assessed in the course of Phase 2 of PRIME. The scenario building entailed two steps. The first was to define categories of issues that must be taken into consideration when building the scenarios, while the second was to build scenarios in response to these issues.

3.1 Definition of action areas (categories)

Categories were defined using the following methodological approach:

- a scenario is not a comprehensive image: it represents only segments of reality;
- certain segments/features/factors are considered to be relevant, while others are ignored (Kosow & Gassner, 2008).

Such an approach allowed the core expert team to define a list of categories. These were used as framing devices to mark the most important features. Five categories for analysis were proposed to the stakeholders as being the most important for the VET system reform in Ukraine:

- legal framework,
- provider network,
- funding,
- staff policies,
- communication.

The selection of these five categories preceded theoretical and empirical analysis (desk research and a range of consultations with the stakeholders). The Dnipropetrovsk scenario-building meeting used an action matrix of PRIME methodology with the five categories. The consolidated action matrix based on the opinions expressed by the participants at the meeting is presented in **Table 3.1**.

TABLE 3.1 CONSOLIDATED ACTION MATRIX

	Legal framework	Provider network	Funding	Staff policies	Communication
Objectives	To develop a comprehensive package of legislative acts for regulation of lifelong learning	To develop a system of professional educational institutions that will correspond with both individual and labour market demands on the basis of the efficient use of funds: 1. to ensure that individual demands are met in terms of professional development and the realisation of an educational trajectory for lifelong learning 2. to satisfy the demands of the labour market	1. To develop a system of multi-channel funding with state funding for protected items of expenditure 2. To guarantee financial autonomy for an educational institution to generate income and use the money earned (by making it possible for institutions to open bank accounts, withdraw accounts from the Treasury, open sponsor accounts)	To create conditions for quality in the performance of their duties by the personnel of an educational institution	
Risks	1. Development of legislation without the engagement of all stakeholders 2. Absence of social responsibility of employees	1. Mismatch between the demands of an individual and those of the labour market 2. Absence of an efficient labour market demand forecast 3. The loss of social functions in the event of educational institution closure	1. Transformation of educational institutions into 'for-profit-only' entities 2. The closure of educational institutions as a consequence of limited funding from the local budgets 3. The loss of social protection for students and teachers 4. The loss of buildings/premises and territories/ land by educational institutions 5. Problems in the tendering procedure 6. The fact that different items exist in the state budget to fund the training of Junior Specialist and Qualified Worker	1. Encroachment on the rights of the staff 2. Deterioration in the financial situation	
Principles	1. Simple and flexible licensing of educational programmes 2. Staff autonomy in an educational institution 3. Free choice of educational trajectories 4. Correspondence of the position held by an individual to their level of professional education	1. Equal access 2. Competitive ability 3. The absence of dead-end trajectories 4. Practicality 5. Step structure as an instrument to ensure lifelong learning	1. Money follows the student, taking into account the complexity of the educational pathway 2. Social protection insurance (stipends, salaries) 3. Transparency and openness 4. Efficiency of resource management	1. Transparency in the decision-making process 2. Clear criteria to assess the quality of personnel's work	

The *legal framework* category comprises all legislative and normative documents required by the VET sector for development following the adoption of the Law on Higher Education (2014). The *provider network* comprises all VET institutions (both VET and higher education institutions of the first and second levels of accreditation (according to the previous Law on Higher Education (2002): colleges, tehnikums and uchilischa)) in Ukraine that provide education for the Qualified Worker and Junior

Specialist qualifications. *Funding* comprises all forms and sources of VET institutions' funding, including the state budget and the private sector. It also includes all procedures relating to the financial activities of VET institutions. *Staff policies* deals with policies in the area of teachers' rights, their duties, and the financial and social aspects of teachers' work in a VET institution. The categories of *communication* and lifelong learning are defined as transversal and are therefore not listed separately.

Four key categories were selected by the stakeholders to launch the optimisation of the VET institution network within the provisions of the Law on Higher Education (2014).

- The first category is legal framework. In addition to the Law on Higher Education of 2014, two basic laws are to be adopted to facilitate the efficient optimisation of the VET institution network, namely the framework Law on Education and the Law on VET. The adoption of such laws will ensure the creation of a comprehensive package of lifelong-learning-based VET sector legislative acts. The participants were strongly in favour of VET systems without dead-end learning trajectories within autonomous VET institutions.
- The second category is provider network. New VET institutions that are formed as part of the optimisation process will fulfil a dual function, meeting both labour market demands and individual needs in terms of professional development and the realisation of lifelong learning trajectories.
- Funding is regarded as another key category that strongly influences the efficient functioning of a VET institution. Multi-channel funding (from the state budget, local budgets, private donations, etc.) will ensure sustainable functioning aimed at the provision of high-quality services. Another important factor is financial autonomy for VET institutions, which could be guaranteed by removing their accounts from the State Treasury and opening accounts with banks.
- The final category is staff policies, which are an integral component of the optimisation of the VET institution network. Creating conditions for high-quality performance of their duties by teachers is defined as a prerequisite for successful optimisation.

3.2 Synthesis scenario for action

The main objective of the SSC development was to propose policy that would take into account the interests and positions of all VET sector stakeholders, including both VET providers and VET administrators at the national and regional levels. SSC consists of four categories – legal framework, provider network, funding and staff policies – chosen by stakeholders.

The development of the SSC went through different stages and scenario prototypes. In all of them, 'provider' refers to all types of VET institutions (professional technical uchilishcha (PTU), higher PTU, tehnikum, college), and 'authorities' refers to national and regional authorities (MoES and regional departments of education and science).

The work focused on defining target areas (categories) for policy action, and on outlining major interventions and corresponding actions in each one of them. The categories remained:

- legal framework,
- provider network,
- funding,
- staff policies.

For each of the four categories for action in each scenario, the Dnipropetrovsk scenario-building meeting defined interventions (a broader notion for a group of actions) and broke them into smaller action steps.

BOX 3.1 THE 'PLOT' OF THE SSC

The aim of the VET institution network optimisation is to develop a system of VET institutions that meet the needs of individuals for professional development and the needs of the labour market for a qualified workforce, ensuring the efficient use of resources. To accomplish this, the framework Law on Education and the Law on VET will be adopted as necessary prerequisites to start deep educational reforms, including VET reform. The new legislation will introduce new types of VET institution (VET centres, VET colleges, VET lyceums) with integrated IVET and CVET provision, enabling individuals' continuing professional development and the realisation of lifelong learning trajectories; defining the rights and responsibilities of all levels of governance and management (state, regions, VET institutions); simplifying and making more flexible the licensing of study programmes; abolishing Qualified Worker training at universities (in tehnikums as structural units of former higher education institutions of the third and fourth levels of accreditation); and introducing state measures (additional social guarantees, salary incentives, etc.) to stimulate the work of teachers in unattractive study programmes (occupations) and in unattractive regions. The legislative and normative developments will provide a fair distribution of the burden of funding the VET system between governance levels, as well as improvement in the resource-allocation mechanisms.

The network of higher education institutions of the first and second accreditation levels will be transformed according to the Law on Higher Education: tehnikums and those colleges that do not fulfil the requirements of the Law on Higher Education will be transferred from the higher education to the VET sector. The network of VET institutions will be rationalised according to national and regional needs, and the use of existing premises. At the same time individuals' rights, including the right to free IVET, will be observed. Some VET institutions with sub-critical numbers of students will be closed down. New multi-disciplinary VET institutions (VET centres, VET colleges, VET lyceums) will be established as a result of mergers of existing VET institutions and former higher education institutions. Management of the VET institution network will be decentralised and the management of VET institutions modernised.

A multi-channel funding system (from the state budget, regional budget, tuition fees, services fees, private donations, etc.) for VET institutions will be developed and implemented. State funding of regional VET institutions will be provided through subventions from the state budget (differentiated subsidies from the state budget); VET institutions will be given greater financial autonomy, including their own bank accounts (separate from the State Treasury), and the opportunity to control self-generated income.

Transparent criteria will be adopted for taking difficult decisions on the dismissal of staff or the adjustment of their profiles, and the staff affected will be warned well in advance. Within reasonable limits, alternative career pathways, such as retraining or transfer to an administrative position, will be offered to dismissed staff. The process will start with an external assessment of the profile of the teaching staff in the VET system (including higher education institutions that will be transferred into the VET system) and the long-term staffing needs. This will include national consultations and will be presented in the form of a roadmap for VET teachers' workforce development in Ukraine. The results of the assessment will be used to optimise the VET teaching community. This process will be treated as part of the optimisation of the VET institution network.

Investments for attracting and training new VET teachers will be balanced with the investments required to retain and develop the teachers who are already in the profession. Decisions on whether to stimulate the supply of new teachers or invest in managing the excess human resource capacity that is already part of the VET system will depend on the results of the external assessment.

The following sub-sections present a detailed overview of the SSC.

Action category 1: Legal framework

Intervention 1

- 1.1 The framework Law on Education will be adopted as a necessary prerequisite to start deep educational reforms, including VET reform.

Action step for Intervention 1

- 1.1.1 A three-level system of VET with primary, secondary and higher professional education level programmes and qualifications will be introduced, including the Professional Bachelor's qualification.

Intervention 2

- 1.2 The new Law on VET will be adopted.

Action steps for Intervention 2

- 1.2.1 New types of VET institutions (VET centres, VET colleges, VET lyceums) will be introduced with integrated IVET and CVET provision, enabling individuals' continuing professional development and the realisation of lifelong learning trajectories.
- 1.2.2 The rights and responsibilities of all levels of governance and management (state, regions, VET institutions) will be more clearly defined.
- 1.2.3 The system for licensing study programmes will be simplified and made more flexible, for example, licensing by study fields or branches instead of by individual study programmes.
- 1.2.4 The training of Qualified Workers at universities (in tehnikums as structural units of former higher education institutions of the third and fourth levels of accreditation) will be abolished.
- 1.2.5 State measures (additional social guarantees, salary incentives, etc.) will be introduced to stimulate the work of teachers in unattractive study programmes (occupations) and in unattractive regions.

Action category 2: Provider network

Intervention 1

- 2.1 The network of higher education institutions of the first and second accreditation levels will be transformed according to the Law on Higher Education: tehnikums and some colleges (those that do not fulfil the requirements of the Law on Higher Education) will be transferred from the higher education to the VET sector.

Intervention 2

- 2.2 The network of VET institutions will be rationalised according to national and regional needs, and using existing premises. At the same time, individuals' rights, including the right to IVET, will be observed. Some VET institutions with sub-critical numbers of students will be closed down. New multi-disciplinary VET institutions (VET centres, VET colleges, VET lyceums) will be established as a result of mergers of existing VET institutions and former higher education institutions.

Intervention 3

- 2.3 Management of the VET institution network will be decentralised and the management of VET institutions modernised.

Action steps for Interventions 2 and 3

- 2.2.1 Stage 1: This is the development of a strategic and tactical platform for exchange on matters relating to the optimisation of the network of educational institutions (including higher education institutions of the first and second accreditation levels and VET institutions) in line with Ukraine's Law on Higher Education (2014), Law on Education (2015) and Law on VET (2015), including of working groups at national and regional levels for the development of a Strategy of Professional Education and Training Development in Ukraine, or Concept of Optimisation of Networks of Higher Education Institutions of First- and Second-level Accreditation and VET Institutions. The efforts at regional level should focus on the development of a regional roadmap for the optimisation of the educational institution network, to be submitted for approval by the MoES.
- 2.2.2 Stage 2: This refers to the actual restructuring process, focusing on the formation of a new type of educational institution based on several models, and on piloting this new type of institution. In parallel, the network will be optimised according to three models:

- Model 1: Formation of a single-type professional college by combining single-type higher education and VET institutions (taking into account the preservation of educational institution locations, sometimes even in different rayons of a region).
 - Model 2: Formation of a multi-type regional centre for professional education and training by combining different types of educational institution (located close to each other) for the training, retraining and career enhancement of Specialists and Qualified Workers, as well as the profile education (education with an in-depth focus in a specific subject, such as mathematics, physics, foreign language, or specialty etc.) of higher secondary school students (and awarding secondary education certificates).
 - Model 3: Integration of a higher education institution of the first or second accreditation level into the structure of a third- and fourth-level higher education institution as a sub-division.
- 2.2.3 Stage 3: This is the process of scaling up the piloted new institution, in particular the licensing, development and accreditation of programmes, opening bank accounts, formation of boards of trustees and self-government bodies, and appointment of a head teacher (MoES and region) and of teachers (by the head teacher).

Action category 3: Funding

Intervention 1

- 3.1 There should be a fair distribution between governance levels of the burden of funding the VET system.

Action steps for Intervention 1

- 3.1.1 A multi-channel funding system (from state budget, regional budget, tuition fees, services fees, donations, etc.) for VET institutions will be developed and implemented.
- 3.1.2 State funding of VET institutions will be transferred to the regional level with differentiated subsidies from the state budget.

Intervention 2

- 3.2 The mechanisms for the allocation of resources will be improved.

Action steps for Intervention 2

- 3.2.1 The mechanism of per-capita funding will be fully implemented.
- 3.2.2 The tendering procedures will be improved, in particular by abolishing tendering where there is a single supplier of utilities (electricity, water, heat, etc.), and by increasing the ceiling for tenders.
- 3.2.3 The state-commissioned study places in VET institutions will be financed based on complexity coefficients of study fields/branches.

Intervention 3

- 3.3 The additional revenues generated by the VET providers will be used more rationally.

Action step for Intervention 3

- 3.3.1 VET institutions will be given greater financial autonomy, including their own bank accounts and the opportunity to control self-generated income.

Action category 4: Staff policies

The reorganisation of the provider network and the redefinition of the profiles of a number of VET schools are opportunities to intervene in a number of important areas.

Intervention 1

- 4.1 The conditions of work of VET professionals will be improved.

Action steps for Intervention 1

In line with the aspiration to increase the autonomy of VET providers, as outlined under Intervention 2, and with the objective of creating the conditions for high-quality performance of their work by teachers, action in this area will comprise the following.

- 4.1.1 Guidelines will be developed to support the increased autonomy of teachers to adjust the pace and methods of teaching the curriculum.
- 4.1.2 The allocation of hours will be revised to allow time for peer exchange on students' progress and for mutual learning and professional development.
- 4.1.3 Both the professional development offer and the incentives to engage in professional development will be revised.
- 4.1.4 Mechanisms will be introduced to identify and reward teachers' improved performance.
- 4.1.5 A minimum wage will be guaranteed that is commensurate with the minimum wage of professionals with similar qualification requirements in other sectors of the economy.

Intervention 2

- 4.2 The strengths and weaknesses of the teaching workforce will be reassessed and decisions taken accordingly.

Action steps for Intervention 2

The optimisation of the provider network implies optimisation of the teaching workforce. The latter is likely to require the rationalisation of staff.

- 4.2.1 It is important to agree on transparent criteria for taking difficult decisions about dismissals or profile adjustments and to ensure that the staff affected are warned well in advance.
- 4.2.2 Within reasonable limits, alternative development paths, such as requalification or transfer to administrative positions, should be offered to some staff. For those teachers and trainers who have to be 'rationalised' without an option to requalify, a package of benefits and compensation payments ('social package') should be put together to ease the transition.
- 4.2.3 The process should start with an external assessment of the profile of the teaching workforce in the VET system (including institutions that will be transferred into this system), and of the long-term staffing needs. This should include national consultations and should be presented in the form of a roadmap for VET teaching workforce development in Ukraine. The results of the assessment will be used to design the optimisation process of the teaching workforce in VET. This process should be treated as part of the VET provider optimisation.

3.3 A note on the context of scenario implementation

External forces influencing the SSC

The external forces comprise political, economic and social factors.

The political transformations and military conflict in Ukraine have caused high levels of inflation, market recession and shrinkage of the economy. The external economic factors have resulted in a need to reduce education spending from the state budget, and the partial transition of VET institutions' funding to regional budgets.

An important factor influencing the SSC is the further integration of Ukraine into the European area for lifelong learning and into the common labour market. In particular, this makes it necessary to ensure that the Ukrainian VET system is compatible with European standards.

Another external factor that substantially influences the implementation of the SSC is the advanced stage of decentralisation in Ukraine. After the political crisis of 2014–2015, decentralisation is regarded as a vital condition for the country's future development. Decentralisation in the VET sector presupposes the transfer of major governance functions to the regional and institutional levels.

Driving forces for implementing the SSC

The most important driving forces behind implementing the SSC are as follows.

- The national government is a key driving force, and is responsible for the creation of a sound legislative and normative platform for efficient VET reform.
- The regional government is regarded as a driving force, and is responsible for the practical implementation of the optimisation process.
- The heads of VET institutions are considered important actors in the optimisation process.

4. IMPACT ANALYSIS

4.1 Definition of the impact assessment criteria

The assessment of the anticipated impact of SSC actions was carried out during the Vinnitsa impact assessment workshop (VIAW). The consultative analysis techniques applied in the preceding sessions in Dnipropetrovsk and Kyiv proved helpful in consolidating group-owned definitions of impact assessment criteria, and in bringing narratives together. The assessment detail is limited to the level of interventions for each action category.

The choice of criteria was guided by the necessity of finding answers to questions that concern the implementation of the SSC in real life, namely the professional context of PRIME participants. This represents a continuation of the hands-on approach to the analytical task that was adopted during the Dnipropetrovsk scenario-building meeting. There were two main questions.

- Are the actions purposeful?
- Are the actions feasible?

Responses to the first question were deemed to be best summarised under the heading of 'effectiveness'. The use of effectiveness criteria at the VIAW helped stakeholders to judge the theoretical prospect of actions bringing about the desired changes – theoretical, because the assessment against these criteria assumed a best-case scenario for implementation conditions.

However, real life rarely offers best-case conditions for policy implementation. For example, site visits to VET providers and regional authorities in the course of the PRIME exercise in Ukraine revealed that opinions on what needs to be done in key categories of the SSC differ considerably among stakeholder groups, and that there is a high level of resistance towards each other's ideas. Furthermore, communication between all those involved and across governance levels appeared to be deficient, and complaints about the scarcity of financial resources were common.

The month-long routine of regular exchange and structured cooperation among PRIME stakeholders had a consolidating effect on their otherwise heterogeneous group, and raised its efficiency and capacity to achieve an informed compromise. This was beneficial to the quality of consultative analysis, but it also created a risk that group members and their proposals might have become less representative of the stakeholder communities from which they come than was the case at the beginning of the PRIME exercise. For example, all SSC interventions designed by the participants during the Dnipropetrovsk scenario-building meeting require joint action by all sides involved. While this is commendable and contributes to the effectiveness of action, it also calls for a realistic assessment of the implications of practical implementation.

Therefore, the VIAW determined that judgements about impact must also take into account the 'consolidation effect' of PRIME on PRIME stakeholders and their suggestions by factoring in the prospect of resistance to change. To simplify the exercise, the potential sources of such resistance were categorised into two types – political and social – and associated with two generic groups of 'players': authorities (central and regional) and participants in VET (VET professionals and beneficiaries). The main criteria for assessing whether players had bought in to the changes were political acceptance and social acceptance. Annex 1 presents the respective 'checkpoints' used to formulate judgements against these criteria. In essence, the checkpoints represent the reform 'wish-list' of each of these groups, consolidated through information provided in interviews during the site visits for PRIME.

In summary, the impact assessment criteria applied for the judgements presented in this chapter are as follows.

1. **Effectiveness (E):** This is the extent to which, all other things being equal, the proposed policy action will achieve the goals in its action category. The main question is, if it is carried out, how will the proposed intervention fare in terms of effectiveness?
2. **Political acceptance (PA):** This is the likelihood that the intervention being assessed will be accepted and owned by the national and regional authorities. The main question is, if it is carried out, how will the proposed intervention fare in terms of political acceptance?
3. **Social acceptance (SA):** This is the likelihood that the intervention being assessed will be accepted and owned by VET professionals and beneficiaries (society). The main question is, if it is carried out, how will the proposed intervention fare in terms of social acceptance?

In Phase 3, the PRIME exercise worked on adding a fourth criterion, namely cost and financial management impact, and assessing a selection of interventions against it.

4.2 Impact assessment process

The impact assessment process comprised two steps.

Step 1: Primary judgement about impact

The first step focused on achieving a consensus on the likely impact of interventions included in the SSC. The judgements were passed following thorough, day-long discussions during the VIAW using the three assessment criteria already described. For each criterion, VIAW participants could use one of three possible judgements: viable (V), ambivalent (A) and problematic (P).

TABLE 4.1 OVERVIEW OF IMPACT ASSESSMENT CRITERIA, LEAD QUESTIONS AND JUDGEMENT OPTIONS

Criteria	Lead question	Judgement options
Effectiveness	If carried out, how will the proposed intervention fare in terms of effectiveness?	V, A, P
Political acceptance	If carried out, how will the proposed intervention fare in terms of political acceptance?	V, A, P
Social acceptance	If carried out, how will the proposed intervention fare in terms of social acceptance?	V, A, P
Cost and financial management impact	If carried out, what will be the cost of the proposed intervention and how will it affect financial management rules and practices?	PRIME Phase 3 (separate report)

Step 2: Secondary analysis of impact

The judgement options were limited to three in order to facilitate the second step in the assessment, a secondary analysis (the practice of analysing evidence that has already been gathered, either by someone else or on a prior occasion) of VIAW impact assessment results by category, intervention and criteria, carried out in preparation for this report. Each judgement option was associated with a numerical value, as follows: V = 1.0; A = 0.5; P = 0.0. The secondary analysis delivered information about the following:

- combined impact of interventions by category and criterion (E, PA, SA);
- viability of interventions (defined as the feasibility of implementation, estimated on the basis of the average value of VIAW judgements for each intervention and action category);
- viability of action categories;

- relationship between the anticipated benefit of actions and the effort required to generate that benefit.

For this final point, the anticipated effectiveness (E) of interventions was interpreted as the benefit and their political and social acceptance as a proxy for the effort (cost) required to generate that benefit. (On completion of PRIME Phase 3, the cost dimension will be complemented with judgements about the monetary cost of action for selected interventions.) The numerical values of impact judgements were then used to construct a basic cost-benefit index (CBI) that illustrates the advantages and disadvantages of interventions in terms of required effort and likelihood of success. **Table 4.2** provides an example of a CBI statement for an intervention in action category 2 – optimisation of the network of VET providers. The range of the CBI is from -1 (minimum benefit at maximum effort/cost) to +1 (maximum benefit at minimum effort/cost).

TABLE 4.2 COST-BENEFIT INDEX – EXAMPLE FOR ACTION CATEGORY 2, INTERVENTION 2

Cat 2: Providers	Description	E	PA	SA	CBI
Intervention 2	Rationalise the network	A	V	A	
	<i>Numeric values</i>	0.5	1.0	0.5	0.25
Viable = 1.0 Ambivalent = 0.5 Problematic = 0.0		$CBI = E + \left(\frac{PA + SA}{2} \right) - 1$			

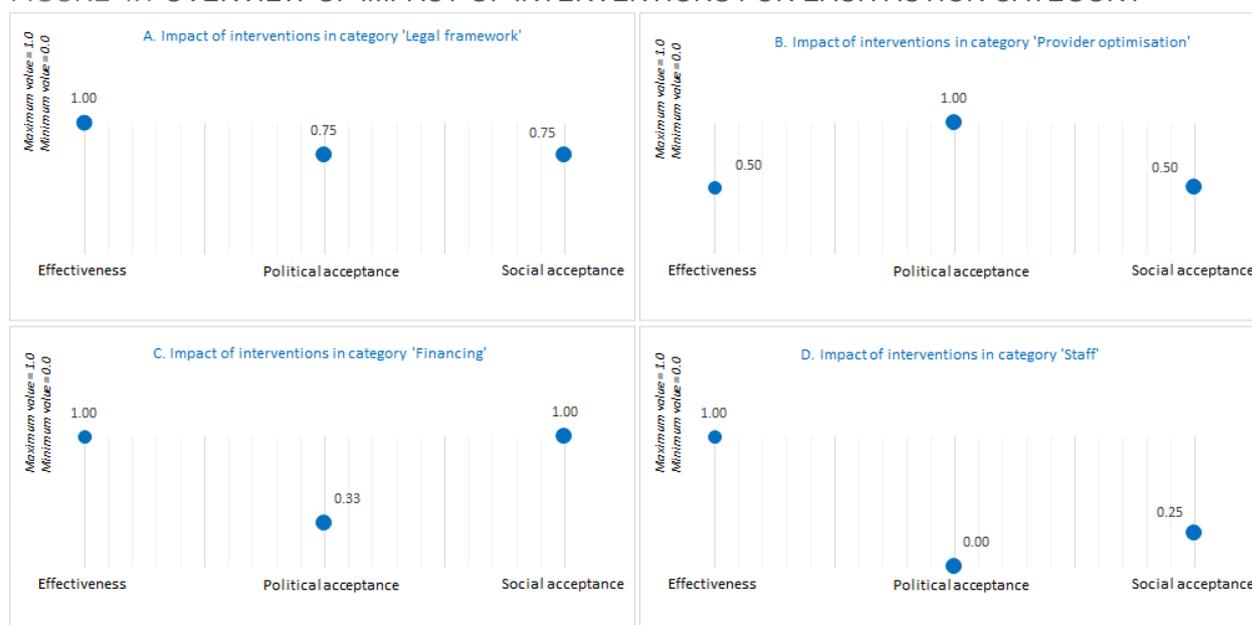
4.3 Summary of impact assessment results

Combined impact of interventions by category and impact criterion

One of the ways to achieve successful reforms is to design them to be both effective and acceptable. This is easier said than done. In reality, the most successful policy interventions are often those that manage to achieve a good compromise between acceptance (including cost) on the one hand, and effective action on the other. Otherwise, effectiveness without acceptance remains a theoretical possibility, just as acceptance without effectiveness is likely to lead to a waste of resources and time.

The secondary analysis reveals that action categories and corresponding interventions designed during the Dnipropetrovsk scenario-building meeting present a mixed message in this respect (**Figure 4.1** (A–D)).

FIGURE 4.1 OVERVIEW OF IMPACT OF INTERVENTIONS FOR EACH ACTION CATEGORY



For example, Figure 4.1(A) shows that category 1 (changes in the legal framework) holds the best prospect of success while requiring the least compromise compared to the other action categories. It is deemed to be viable in terms of both effectiveness (1.0) and political acceptance (1.0), and its interventions are expected to enjoy a high (albeit not the highest) level of social acceptance (0.75). The high overall level of acceptance reflects a point raised earlier in this report about the propensity of authorities and stakeholders alike to address problems by creating new legislation. The slightly lower value of social acceptance is due to the concerns of some VET providers that the new Law on VET might reaffirm the upstream migration from tertiary education to the VET sector, and bring about a range of negative consequences relating to institutional reputation, standing and attractiveness.

Perhaps less surprisingly, the category in which interventions are expected to pose the greatest challenge in political terms is the one concerning the funding of VET (Figure 4.1(C)). The VIAW discussions led to action proposals that are far-reaching (such as greater financial autonomy for VET providers, decentralisation of public funding and more efficient resource allocation), and hold a promise to be more fair and transparent than is currently the case. However, this is also the very impact that, at the regional level of authority, raises questions about financial sustainability and support from the central budget, and at the central level causes concerns about the tentative consequences of financial autonomy without proper accountability.

The picture is quite the opposite for interventions towards optimisation of the provider network (Figure 4.1(B)), which are all likely to be viable (1.0) in terms of political acceptance, but might be ambivalent or problematic in terms of effectiveness and social acceptance. The upstream migration from higher education to VET in particular and the prospect of school closures and mergers are likely to continue, causing considerable concern for a large proportion of VET providers, who are not able (or not willing) to cope with the shock of transition from one system and institutional setting to another. All interventions in this category are ambivalent in terms of anticipated effectiveness (0.5). Migrating providers from one system to another might cut them off from well-established networks and sources of income; the mergers of providers into regional VET centres might end up being only partially implemented because of insufficient resources; and a lack of management and quality assurance capacity might neutralise the positive effects of decentralisation.

The greatest discrepancy between anticipated effectiveness on one side and acceptance (social and political) on the other is in the area of reforms affecting staff working in VET (Figure 4.1(D)). The VIAW discussions led to a quick agreement on the interventions needed for this category, all of which were apposite and likely to have a maximum desired effect if implementation conditions were not a factor. The suggestions to increase pedagogic autonomy, improve professional development, create incentives for the improvement of teaching, and guarantee adequate wages are all well focused, reflect best international practice, and are needed. The same can be said for the suggested actions to optimise the teaching workforce by making it smaller, more effective and more flexible. Unfortunately, in terms of the interests of the authorities and stakeholders, the sum of these interventions is 0 as they are likely to lead to the kind of reciprocal resistance described at the beginning of this chapter. While teaching autonomy and adequate wages are likely to be welcomed by VET professionals, the possibility of cutting costs by optimising the teaching workforce will probably appeal to the authorities at the central level. Conversely, staff cuts are unlikely to be welcomed by those employed in the VET system, while suggestions to increase spending on items such as better incentives for professional development or compensation for those who lose their jobs will probably be less acceptable to the authorities.

Figure 4.2 (A–C) illustrates how the four action categories set during the Dnipropetrovsk scenario-building meeting fare against the assessment criteria defined during the VIAW.

FIGURE 4.2 OVERVIEW OF IMPACT OF INTERVENTIONS PER ASSESSMENT CRITERIA AND CATEGORY

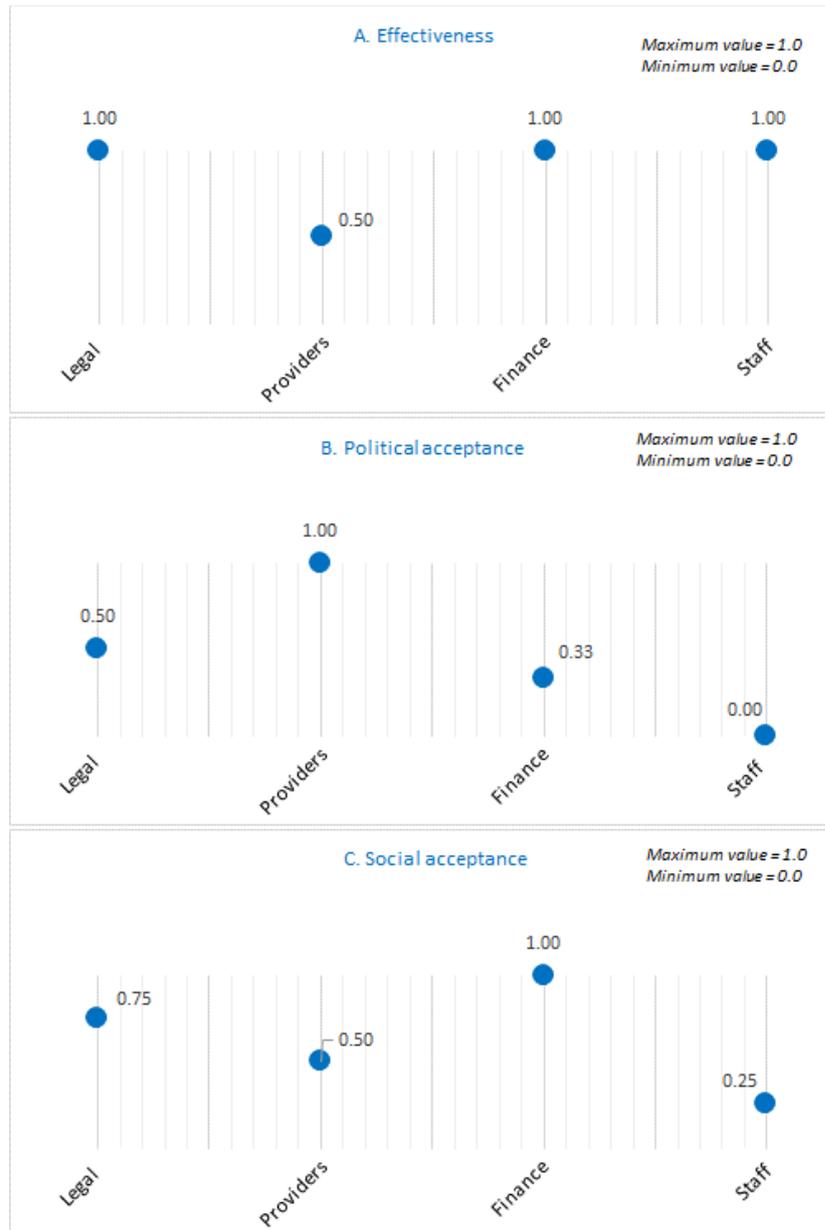
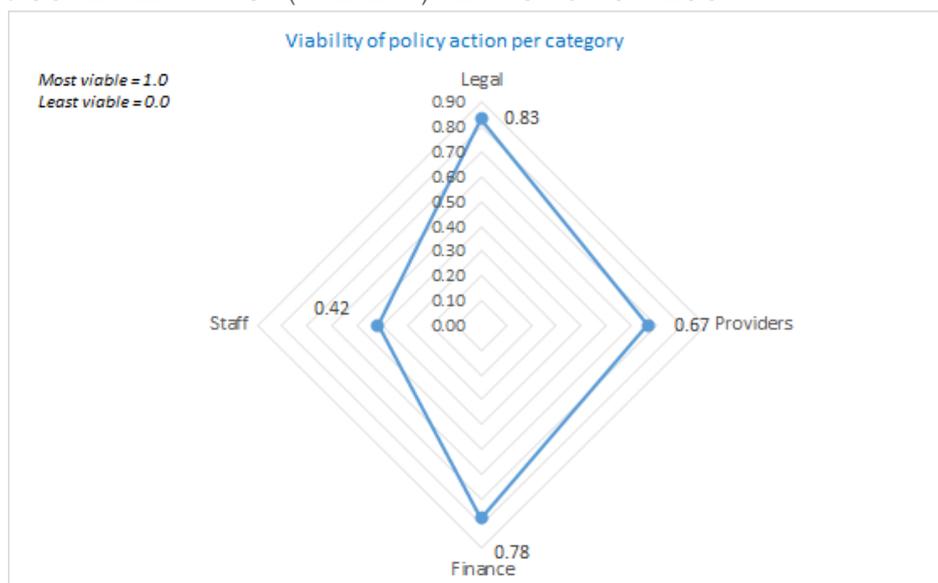


Figure 4.2(A) suggests that the conceptual and strategic work of designing the interventions and corresponding actions during the Dnipropetrovsk scenario-building meeting withstands the ‘reality check’ of impact assessment well. Under ideal implementation conditions, all interventions are expected to be as effective as possible in all but one action category (provider network optimisation). When it comes to the effort of implementation, some resistance is likely for action in all categories, either political (Figure 4.2(B)) or social (Figure 4.2(C)). Interventions in the area of staff are worst in this respect, whereas the discrepancy between action preferences of authorities and stakeholders is highest in the area of finance (0.33 for political acceptance and 1.0 for social acceptance – Figures 4.2(B) and (C)).

Figure 4.3 summarises these findings with an aggregate value for each action category.

FIGURE 4.3 COMBINED IMPACT (VIABILITY) PER ACTION CATEGORY



Cumulatively, the feasibility of interventions is expected to be highest with respect to legislative changes (0.92). In fact, at the time of finalisation of this report, the process of redrafting the Law on VET and the Law on Education was already under way. The feasibility of action in the area of funding of VET closely follows that for the legislation category. The relatively high value (0.78) is likely to be due to a consensus on all sides that changes are necessary in this area, albeit that there seems to be little clarity on the required scope and direction of such changes. The highly visible and disputed actions concerning the network of VET providers are not as viable as the significance of this action category calls for (0.67). This is largely due to the prospect of considerable trade-offs with each intervention in this category, and the low level of readiness of stakeholders to accept some of the suggested actions. Finally, it is anticipated that changes in the working conditions and employment situation of staff working in VET will be the most problematic of the VIAW-designed interventions, because of either the anticipated cost or the fear of a loss of employment. Changes in this action category are a sensitive issue in many other countries, including those that are members of the European Union (EU) and the OECD. Thus, if Ukraine decides to embark on implementing VIAW proposals in this category, it should be able to benefit from rich international experience.

Anticipated cost-benefit per intervention

The secondary analysis of VIAW impact judgements also dealt with the question of how the effectiveness of interventions (that is, the anticipated contribution of each to the respective reform goal) relates to the effort of overcoming social and/or political resistance (if any). To calculate the CBI for each intervention, the analysis first pulled together the average of PA and SA values and used them as a proxy for the average effort (cost) of implementation. The result was then used to quantify the extent to which the expected benefit of interventions (expressed through the value for impact criterion E) is proportionate to the effort required to implement them. The CBI value ranges from -1 (minimum benefit at maximum effort/cost) to +1 (maximum benefit at minimum effort/cost).

The results are presented in **Table 4.3** and show that none of the interventions has a CBI below 0, but also that only two (adoption of a new Law on Education and improvement of resource-allocation mechanisms) are expected to have a maximum effect at minimum cost. The migration of providers from one education sub-system to another emerges as the intervention with the lowest CBI value. In other words, the VIAW participants expect the resistance to implementation to be substantial enough to endanger or even neutralise the likely benefits of this particular reform step.

TABLE 4.3 COST-BENEFIT INDEX VALUES PER INTERVENTION

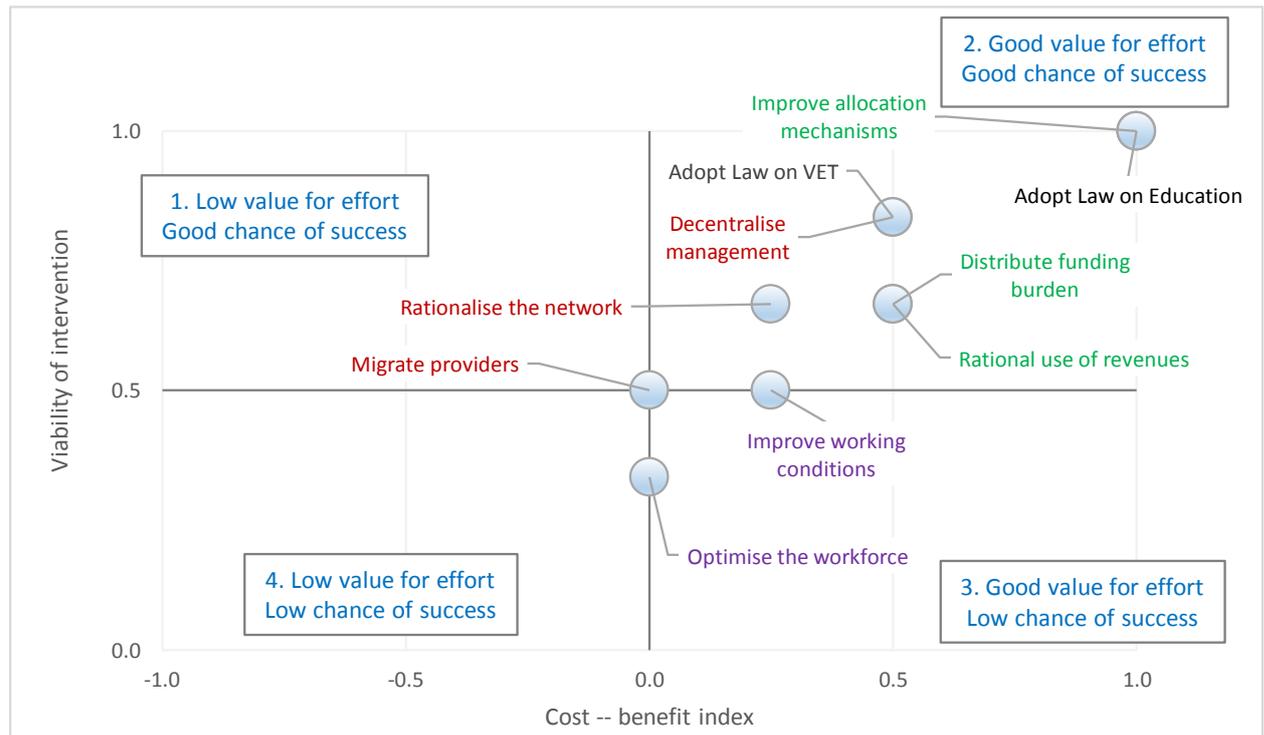
Category	Description	Criteria			Cost-benefit index
		E	PA	SA	
Legal					
Intervention 1	Adopt Law on Education	1.0	1.0	1.0	1.00
Intervention 2	Adopt Law on VET	1.0	0.5	0.5	0.67
Providers					
Intervention 1	Migrate providers	0.5	1.0	0.0	0.00
Intervention 2	Rationalise the network	0.5	1.0	0.5	0.25
Intervention 3	Decentralise management	0.5	1.0	1.0	0.50
Finance					
Intervention 1	Distribute funding burden	1.0	0.0	1.0	0.50
Intervention 2	Improve allocation mechanisms	1.0	1.0	1.0	1.00
Intervention 3	Rational use of revenues	1.0	0.0	1.0	0.50
Staff					
Intervention 1	Improve working conditions	1.0	0.0	0.5	0.25
Intervention 2	Optimise the workforce	1.0	0.0	0.0	0.00

It is important to note that the CBI is not intended to be a shortcut to policy decisions. It is too generic to be a substitute for the careful planning and analysis that SSC interventions would require in order to be successful. Rather, the information provided through the CBI can feed into the broader discussion of advantages and disadvantages of one intervention over another, and can help to put them all in a broader perspective.

Finally, **Figure 4.4** plots each SSC intervention against the CBI (on the horizontal axis) and its expected viability (on the vertical axis), expressed as the average value of judgements for the three impact assessment criteria. Interventions that are positioned in the lower half of the figure are problematic in terms of viability because of limitations in either effectiveness or acceptance. Those that are positioned above the horizontal axis are considered likely to be viable (feasible). The left half of the figure features interventions that are likely to bring less value for the effort invested, while the anticipated positive effect of those in the right half surpasses the efforts required to implement them.

The majority of VIAW interventions fall into the second quadrant of Figure 4.4, which means that they are expected both to produce good value for the effort and to have a good chance of success (are viable). The best interventions in this respect are in the categories of funding and legislation. They concern the adoption of a new Law on Education and the improvement of allocation mechanisms. The second best is another intervention from the legislation category, namely the adoption of a Law on VET. This is followed by the decentralisation of management, the rationalisation of the network of VET providers, the improvement of working conditions of staff, and the migration of providers from one sub-system to another. The worst intervention is the optimisation of the workforce: its feasibility is assessed as problematic, and the effort that is likely to be needed to implement it is sufficiently great to neutralise (but not exceed) the benefits.

FIGURE 4.4 COST-BENEFIT INDEX PER INTERVENTION



Pointers for policy action

A key message of PRIME in Ukraine is that the optimisation reforms are necessary, but also that they are likely to have implications in sensitive areas such as staff and funding. This means that for some of the sides (providers) involved in the process, the changes will require adjustment and imply difficult trade-offs.

Instead of designing fragmented solutions that would serve one stakeholder group at the expense of another, PRIME participants decided in favour of developing a 'synthesis' scenario for action (SSC). It foresees options for coordinated interventions in areas of key importance for the future of an optimised VET system (legislation, provider network, funding and staff policies), and takes on board the perspective of multiple stakeholder groups.

In the area of legislation, the preferred option suggested in the SSC is to adopt a framework Law on Education, as a basis for any subsequent legislative work. In the area of provider network optimisation, the suggested option is to modernise and decentralise the management of the VET provider network as a priority. This should be done as a prerequisite for sustainable optimisation of the VET network. Regarding financial resources and budgeting, the SSC impact assessment rates highly the option of introducing a better, fairer and more accountable funding mechanism, preferably based on a per-capita funding formula. Finally, in the area of staff management it is necessary to develop a roadmap for the development of the VET teaching workforce in Ukraine and the improvement of their working and employment conditions.

The next section provides a more detailed overview of VIAW impact assessment results.

4.4 Detailed impact assessment results

4.4.1 Impact in action category 1: Legal framework

FIGURE 4.5 OVERVIEW OF VIABILITY OF INTERVENTIONS IN THE LEGISLATION CATEGORY



The adoption of a new Law on Education is expected to be a more viable option than the adoption of a Law on VET, because the latter might trigger considerable resistance from the staff of VET and higher education institutions who perceive that changes enshrined in the VET Law could decrease their status. At the same time, their ability to effectively block or undermine the changes is very limited, and their buy-in could be secured through secondary legislation that addresses their concerns. In terms of choice of policy action, the results of the assessment suggest that, instead of a trade-off between two fundamental pieces of primary legislation, it is better to implement all actions in this category, but in the right sequence. It is necessary to start with the Law on Education and then move on to adopting a Law on VET. As a framework law, the Law on Education will create the preconditions for VET reform by ensuring coherence between VET and other sub-segments of the education system, introduce a contemporary understanding of VET and establish a qualifications structure enabling the development and implementation of study programmes that meet the requirements of the labour market, particularly vocationally (professionally) oriented study programmes and qualifications. The PRIME consultation group reached a consensus that on that basis it will be easier (and more desirable) to introduce a new Law on VET.

Intervention 1: Adopt the new framework Law on Education (see Annex 1)

Overview

Legal		E	PA	SA
Intervention 1	Adopt Law on Education	1.0	1.0	1.0

Action step 1

- Introduction of a three-level system of VET with primary, secondary and higher professional education programmes and qualifications

Anticipated effectiveness (lead question: *What signs of success can be expected for this intervention?*)

This intervention will create preconditions for the VET reform, coordinated with the reforms in the higher education sector as stipulated in the new Law on Higher Education. In the context of VET reform it is expected that the new framework Law on Education will:

- introduce a contemporary understanding of VET, offering flexible learning pathways between VET and higher education;
- establish a qualifications structure enabling the development and implementation of study programmes that meet the requirements of the labour market, particularly vocationally

(professionally) oriented study programmes and qualifications (Skilled Worker, Junior Specialist, Junior Bachelor's, Bachelor's and Master's);

- establish flexible types of VET institutions with substantial academic, organisational and financial autonomy;
- decentralise the governance of the VET system;
- establish appropriate model(s) for funding VET;
- establish a quality assurance system for VET that is compatible with the quality assurance system in higher education;
- stipulate social guarantees for students and education professionals.

The intervention will be judged to be effective if the reformed VET and higher education sectors meet the needs and expectations of the labour market better than is the case now, and particularly if the educational standard for the Bachelor's qualification stipulates a relevance for the labour market, i.e. the inclusion of Professional Bachelor's type qualifications.

Conclusion: Viable in terms of effectiveness (=1.0)

Anticipated political acceptance (lead question: How likely is it that the intervention will be accepted and owned by the authorities?)

This intervention will be politically viable because it will contribute to the modernisation of the education system in Ukraine, and will promote the concept of lifelong learning as it is understood in the EU.

Conclusion: Viable in terms of political acceptance (=1.0)

Anticipated social acceptance (lead question: How likely is it that the intervention will be accepted and owned by the stakeholders and those affected by the changes?)

If the reasons and implications of this intervention are carefully explained to the wider public and potential beneficiaries, it will enjoy broad social acceptance. It will be very important to clearly articulate the difference between the Junior Specialist and Junior Bachelor's qualifications.

Conclusion: Viable in terms of social acceptance (=1.0)

Intervention 2: Adoption of a new Law on VET

Overview

Legal		E	PA	SA
Intervention 2	Adopt Law on VET	1.0	1.0	0.5

Action steps 1–5

- Introduction of a new type of integrated VET institution
- Clarification of roles and responsibilities at all levels of governance
- Simplification of licensing procedures
- Abolition of training for Qualified Workers at the tertiary level of education
- Introduction of state-sponsored measures in support of teachers in less popular programmes and regions

Anticipated effectiveness (lead question: What signs of success can be expected for this intervention?)

In the context of VET reform it is expected that the new Law on VET will:

- introduce new types of VET institutions offering IVET and CVET programmes, enabling individuals' continuing professional development and realisation of lifelong learning trajectories;

- define rules and procedures for the merger of existing VET institutions;
- clearly define the rights and responsibilities of all levels of governance and management (state, regions, VET institutions);
- simplify the system for licensing study programmes, e.g. introduce licensing by study fields or branches instead of individual study programmes;
- establish appropriate model(s) for funding VET;
- abolish training for so called Skilled Workers at universities;
- introduce state measures (additional social guarantees, salary incentives, etc.) for teachers in unattractive study programmes (occupations) and in unattractive regions.

The new Law on VET will provide the legal framework for VET reform, particularly for restructuring and rationalising the network of VET providers, orienting all levels of governance towards a more efficient use of resources.

Conclusion: Viable in terms of effectiveness (=1.0)

Anticipated political acceptance (lead question: How likely is it that the intervention will be accepted and owned by the authorities?)

The main result of the interventions – the adoption of two key legal acts, namely the new framework Law on Education and the new Law on VET – will be the creation of a solid legislative and normative foundation for sustainable development of the VET sector in Ukraine, which is in the interests of all sides involved in the management of the VET system, at all levels of governance.

Conclusion: Viable in terms of political acceptance (=1.0)

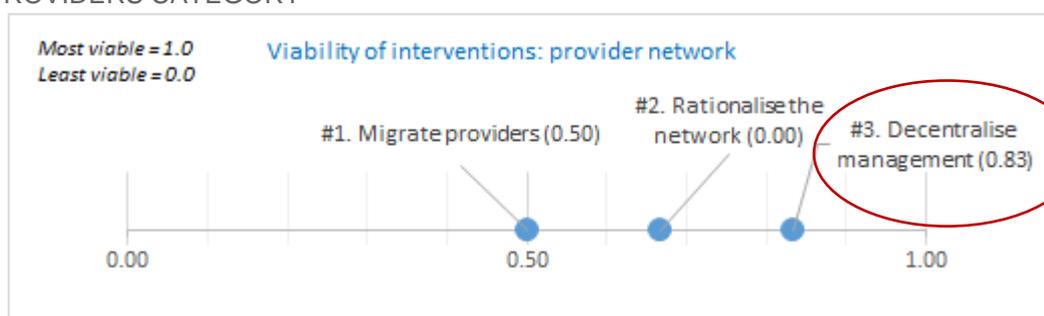
Anticipated social acceptance (lead question: How likely is it that the intervention will be accepted and owned by the stakeholders and those affected by the changes?)

This intervention might trigger considerable resistance from the staff of VET and higher education institutions who perceive that changes decrease their status. At the same time, their ability to effectively block or undermine the changes is very limited, and their buy-in could be secured through secondary legislation that addresses their concerns.

Conclusion: Ambivalent in terms of social acceptance (=0.5)

4.4.2 Impact in action category 2: Provider network

FIGURE 4.6 OVERVIEW OF VIABILITY OF INTERVENTIONS IN THE NETWORK OF VET PROVIDERS CATEGORY



As far as the provider network is concerned, of all interventions the one with the best chance of sustainable impact, with manageable ‘side-effects’, is the decentralisation of management of the VET provider network. Certainly, there are some risks, such as the lack of readiness on the part of the regions to carry out the necessary decentralisation reforms, and unpreparedness on the part of Ukrainian civil society to be an active player in adopting decentralisation ideas. Furthermore, education authorities at both central and regional levels note the need for a transition period that could save the VET institution network from what participants call ‘destruction’. However, the

decentralisation of the management of VET institutions is a component of the wider decentralisation movement in the country and, despite some concerns, the regional authorities strongly support the full transition of ownership and management to the regional level. The decentralisation of the management of VET institutions is an arrangement to which both VET providers and the regional level of governance aspire, as they hope that in this way the provision of VET can be brought closer to the needs of the regions.

Intervention 1: Migrating providers from the higher education to the VET system

Overview

Providers		E	PA	SA
Intervention 1	Migrate providers	0.5	1.0	0.0

Anticipated effectiveness (lead question: What signs of success can be expected for this intervention?)

This intervention will generate savings to the state budget, will trigger a more judicious use of financial resources, and will contribute to a more realistic profiling of VET providers. There are also some risks associated with the lower level of autonomy that exists in the VET system compared with higher education. A transition from the latter to the former (upstream migration) might effectively cut off some of the migrating institutions from existing sources of funding, thus endangering their standing, the quality of their training, and their survival. At the same time, those institutions that migrate downstream (from VET to the higher education system) might experience the opposite effects.

Conclusion: Ambivalent in terms of effectiveness (=0.5)

Anticipated political acceptance (lead question: How likely is it that the intervention will be accepted and owned by the authorities?)

The transfer of tehnikums and some colleges from the higher education to the VET sector is a component of national-level education authorities' education policy and is regarded as an instrument of the optimisation of the VET institution network, which aims to raise the quality of education. It is secured in legislation (the Law on Higher Education (2014)) and enjoys the support of the national education authorities. It also enjoys support from the regional authorities, who are under pressure for economic reasons to create a new type of VET institution that responds effectively to regional labour market demands. Besides, in the face of the possible transition of sources of funding from the national to the regional budget, regional authorities are extremely interested in all types of educational institution network. In the transition period (which is foreseen by the Law on Higher Education (2014)), regional authorities have already started the dialogue with higher education institutions on the possible trajectories of their further development.

Conclusion: Viable in terms of political acceptance (=1.0)

Anticipated social acceptance (lead question: How likely is it that the intervention will be accepted and owned by the stakeholders and those affected by the changes?)

VET providers who are expected to migrate upstream from higher education to the VET system are concerned about the decline in their reputation and income. On an individual level, professionals working in such institutions, as well as students and their parents, anticipate that the changes will have a negative social impact, and are likely to feel betrayed in their expectations. As in other countries, the attractiveness of VET in Ukraine is considerably lower than that of higher education.

Conclusion: Problematic in terms of social acceptance (=0.0)

Intervention 2: Rationalisation of the VET provider network

Overview

Providers		E	PA	SA
Intervention 2	Rationalise the network	0.5	1.0	0.5

Action steps 1–3

- Development of a strategic and tactical platform of educational institution network optimisation, including the establishment of regional VET centres through the mergers of smaller VET providers (Stage 1)
- Implementation of the restructuring plan and piloting (Stage 2)
- Scaling-up of the pilot to national level (Stage 3)

Anticipated effectiveness (lead question: What signs of success can be expected for this intervention?)

In essence, Intervention 2 could be effective, as the new type of VET institutions will implement more efficient models for study programme development and licensing reflecting labour market needs. Such institutions will provide both IVET and CVET. However, there are also some pitfalls.

For many years the VET and higher education institutions have been receiving funds only for protected expenditures and not for development. Establishing a new type of institution requires a large amount of capital spending on material and technical renovations as well as staff training. Ensuring adequate funding in this area (under conditions of budget deficit and a high level of inflation) will be the greatest risk in economic, political and social terms.

Another risk lies in the absence of medium- and long-term labour market forecasts in Ukraine, which makes it very difficult, if not impossible, to foresee the needs of the economy for qualified workers.

The closure of an institution (which is a legal entity) is a complicated procedure requiring the completion of a number of legal procedures, stipulated in the Labour Code, the Civil Code, the Economic Code, the Law on Trade Unions, etc., and the payment of benefits to the employees of an institution. The large number of working pensioners in such institutions (about 30%) will reduce such payments.

As some institutions train specialists not only for their own region but also for neighbouring regions, the closure of such institutions may have a negative influence on the economy of these other regions.

In summary, the effectiveness of this measure will depend on the success of the pilot and, more importantly, on its careful and well-planned replication in the rest of the VET system. There are multiple sources of potential failure, but there is also a high level of awareness about them.

Conclusion: Ambivalent in terms of effectiveness (=0.5)

Anticipated political acceptance (lead question: How likely is it that the intervention will be accepted and owned by the authorities?)

The formation of competitive VET institutions is strongly supported by the authorities. This intention is documented in the Law on Higher Education (2014) already adopted, and in the draft Law on VET, which at the time of finalisation of this report (2016) was still under discussion. The government and the parliament have declared (based on the demands of the economy) a need to develop a VET system that responds to the demands of the labour market and the interests of each individual.

Conclusion: Viable in terms of political acceptance (=1.0)

Anticipated social acceptance (lead question: How likely is it that the intervention will be accepted and owned by the stakeholders and those affected by the changes?)

Changes will be positively accepted (social acceptance) by:

- employers (on the basis that the new type of VET institution will meet the demands of employees and the labour market);
- students and their parents, if the new VET institutions guarantee employment in the profession on graduation and if the students receive stipends.

The closure of an educational institution is not a popular measure, although it is supported by the authorities at all levels. The national-level authorities support the idea of closure, for reasons of financial constraints. Such closures are also supported by the regional authorities, although in some cases the true political support for closure of higher education institutions may be rooted in the desire to acquire their premises in order to sell them or transfer them to private property.

At the same time, the closure of VET institutions will be negatively perceived by society because it will adversely affect certain groups of stakeholders:

- young people and their parents, especially those in remote/rural areas for whom such institutions fulfil the social function of providing equal access to quality education;
- teachers, heads and technical staff of the institutions, who will lose financial stability in the context of high levels of unemployment, especially in the regions.

As regards the possible impact of downstream migration of VET institutions into higher education, staff and students of these institutions are likely to welcome the change. However, according to the latest developments at the MoES level, under which the right to provide full-time secondary education for young people aged 15–16 is cancelled, such institutions will not be competitive and will become rivals of higher education institutions of the third and fourth levels of accreditation.

Conclusion: Ambivalent in terms of social acceptance (=0.5)

Intervention 3: Management of VET institution network will be decentralised and management of VET institutions modernised

Overview

Providers		E	PA	SA
Intervention 3	Decentralise management	0.5	1.0	1.0

Action steps 1–3 (see Intervention 2)

Anticipated effectiveness (lead question: What signs of success can be expected for this intervention?)

There are considerable risks associated with Intervention 3, namely a lack of readiness on the part of the regions to carry out appropriate decentralisation reforms, and unpreparedness on the part of Ukrainian civil society to be an active player in introducing decentralisation ideas. At the regional authority level this means that there may be a lack of transparent procedures on management, while at the VET institution level there may be only a low level of involvement on the part of parents and the community. This is why the education authorities at both central and regional levels note the need for a transition period that could save the VET institution network from destruction. The transition process could be used for the formation of boards of trustees and self-government bodies to ensure that the processes for appointing heads and recruiting staff are transparent. Time is also needed for the development of efficient procedures for the licensing and accreditation of programmes.

Conclusion: Ambivalent in terms of effectiveness (=0.5)

Anticipated political acceptance (lead question: How likely is it that the intervention will be accepted and owned by the authorities?)

On one side the decentralisation of the management of VET institutions is a component of the wider decentralisation movement in the country. Ukraine has purposely implemented decentralisation reforms by developing the legislative base together with corresponding instruments to implement legislative provisions following the political transformations during the period autumn 2013 to winter 2014. That is why it is considered politically acceptable in general by the central authorities. The decentralised management of VET institutions is also strongly supported by the regional authorities, which advocate the full transition of management functions from the central to the regional level.

Conclusion: Viable in terms of political acceptance (=1.0)

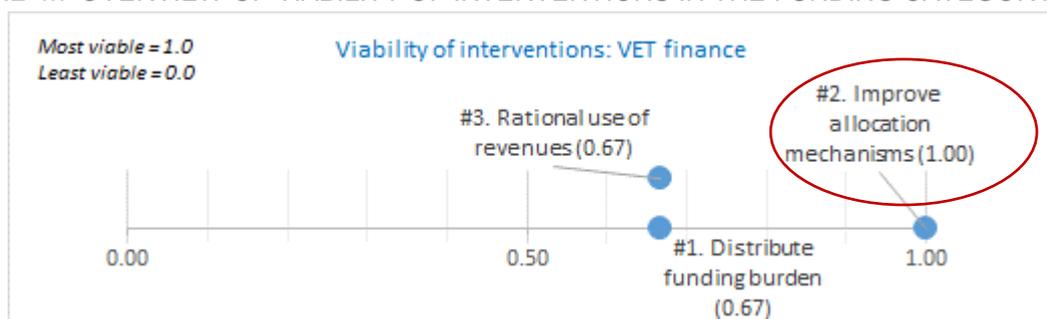
Anticipated social acceptance (lead question: How likely is it that the intervention will be accepted and owned by the stakeholders and those affected by the changes?)

The decentralisation of the management of VET institutions is an arrangement to which both VET providers and the regional level of governance aspire. The hope is that in this way the provision of VET can be brought closer to the needs of the regions, and that providers can cater for their institutional needs in direct communication with the regional education authorities, which will have the autonomy to address them faster and in a more effective way.

Conclusion: Viable in terms of social acceptance (=1.0)

4.4.3 Impact in action category 3: Funding

FIGURE 4.7 OVERVIEW OF VIABILITY OF INTERVENTIONS IN THE FUNDING CATEGORY



The highest-scoring policy option is the one with interventions aimed at improving the mechanisms for allocating the budget for VET. It features important but challenging elements such as the development and implementation of per-capita funding, the improvement of tendering procedures for communal expenses, and the introduction of correction coefficients for funding to be based on the complexity of study fields/programmes. This is expected to result in a better system of funding – better to the extent that it allows the regions and the VET providers to meet the needs of learners more effectively, while rewarding those VET institutions that are already operating in a commercially and socially successful way.

Intervention 1: Fair distribution of the burden of funding the VET system between governance levels

Overview

Funding		E	PA	SA
Intervention 1	Distribute funding burden	1.0	0.0	1.0

Action steps 1–2

- Development of a multi-channel funding system for VET institutions
- Transfer of state funding of VET institutions to the regional level and securing support through differentiated subsidies from the state budget

Anticipated effectiveness (lead question: What signs of success can be expected for this intervention?)

In the process of decentralising governance of the VET system and increasing the autonomy of VET institutions, there will be a common interest in defining and implementing mechanisms to ensure the fair distribution of the financial burden between the state budget, local budgets and private allocations. Unfortunately, the model(s) of funding is one of the less developed elements of the new draft legislation on education, including VET. In this respect, mechanisms similar to the ones stipulated in the new Law on Higher Education could be considered, including the actions suggested under this intervention.

As a result, VET institutions will widen their income base, and will be more motivated to generate additional revenue, which can be used for institutional development. This kind of development will be in line with similar developments in Europe and globally.

Conclusion: Viable in terms of effectiveness (=1.0)

Anticipated political acceptance (lead question: How likely is it that the intervention will be accepted and owned by the authorities?)

The opening and recognition of additional channels of funding is in the interests of all sides involved – the MoES, the regional education authorities, and the VET providers themselves. However, the delegation of responsibility for maintaining VET institutions to regional budgets is a source of potential tension and mistrust. While it is in the interests of the central-level funding authorities, the regional level of governance seems to have reservations about the anticipated effectiveness of equalisation mechanisms (subsidies and targeted grants). In the short to medium term, the political acceptance of measures introduced as part of this intervention might be undermined by mistrust at the regional level.

Conclusion: Problematic in terms of political acceptance (=0.0)

Anticipated social acceptance (Lead question: How likely is it that the intervention will be accepted and owned by the stakeholders and those affected by the changes?)

The social acceptance of this intervention depends on the direct impact it will have on the budgets of VET providers. It is likely that positive changes in learning conditions, enabled through direct partnerships with international donors, employers or partner institutions (abroad and at home), will lead to widespread acceptance by learners as direct beneficiaries of VET.

Conclusion: Viable in terms of social acceptance (=1.0)

Intervention 2: Improvement of the resource-allocation mechanisms

Overview

Funding		E	PA	SA
Intervention 2	Improve allocation mechanisms	1.0	1.0	1.0

Action steps 1–3

- Revision and implementation of a per-capita funding mechanism
- Improvement in tendering procedures
- Enabling the funding of state-commissioned study places in VET institutions to be based on complexity coefficients of study fields/branches

Anticipated effectiveness (lead question: What signs of success can be expected for this intervention?)

Per-capita funding is a common model used to fund study programmes and educational institutions across the world. To compensate for differences in equipment costs and consumables, complexity coefficients for study fields/branches are usually introduced. As a result, the efficiency of educational processes will increase, and VET institutions will be more motivated to attract and maintain more students. This is also the anticipated effect in Ukraine.

Conclusion: Viable in terms of effectiveness (=1.0)

Anticipated political acceptance (lead question: How likely is it that the intervention will be accepted and owned by the authorities?)

It is expected that this intervention, which will ensure a more efficient allocation of state budget resources, will be politically viable. In addition, the proposed changes in tendering procedures have been endorsed by educational authorities at all levels.

Conclusion: Viable in terms of political acceptance (=1.0)

Anticipated social acceptance (lead question: How likely is it that the intervention will be accepted and owned by the stakeholders and those affected by the changes?)

A sign of an efficient allocation mechanism is that resources are disbursed where they are most needed. A better system of funding should allow the regions and the VET providers to better meet the needs of learners, and will reward those VET institutions that are already operating in a commercially and socially successful way. Furthermore, better tendering procedures will reduce the possibility of corrupt transactions.

Conclusion: Viable in terms of social acceptance (=1.0)

Intervention 3: More rational use of revenues generated by the VET providers

Overview

Funding		E	PA	SA
Intervention 3	Rational use of revenues	1.0	0.0	1.0

Action step 1

- Allowing VET institutions more financial autonomy, including their own bank accounts, and the opportunity to control their self-generated income

Anticipated effectiveness (lead question: What signs of success can be expected for this intervention?)

If Intervention 1 is successfully implemented, VET institutions will gain greater financial autonomy, including their own bank accounts and the opportunity to control resources from self-generated income. As a result, VET institutions will be more motivated to generate additional revenue and to use resources more efficiently for institutional development, particularly for improving the infrastructure, thus offering additional social benefits for teachers and students.

Conclusion: Viable in terms of effectiveness (=1.0)

Anticipated political acceptance (lead question: How likely is it that the intervention will be accepted and owned by the authorities?)

This intervention could be politically problematic because of widespread mistrust towards increased financial autonomy, an acute lack of resources in the central budget created by the high cost of the anti-terrorist operation in the east of the country, and a perception of widespread corruption in the education system of Ukraine. Autonomy is traditionally considered to be an attribute of higher education. Therefore, this intervention is also somewhat problematic because of possible resistance by the strong higher education lobby in the country.

Conclusion: Problematic in terms of political acceptance (=0.0)

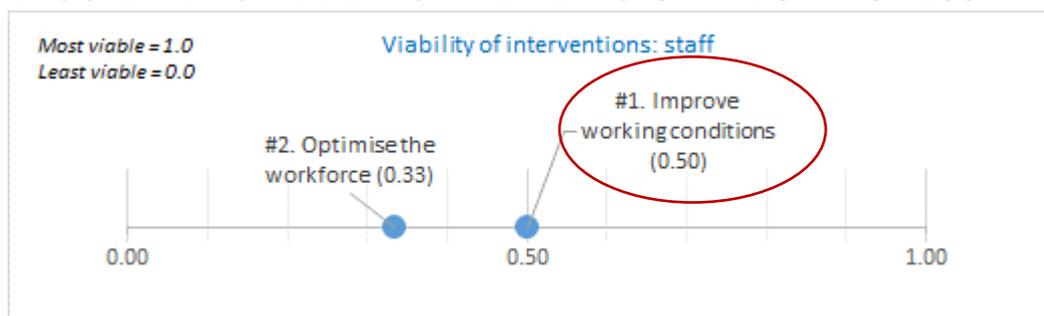
Anticipated social acceptance (lead question: How likely is it that the intervention will be accepted and owned by the stakeholders and those affected by the changes?)

This intervention will lead to the strengthening of already successful VET institutions that are in high demand, and will thus be perceived by society as a fair decision, provided that the revenues are invested to the benefit of improving the education and training process.

Conclusion: Viable in terms of social acceptance (=1.0)

4.4.4 Impact in action category 4: Staff policies

FIGURE 4.8 OVERVIEW OF VIABILITY OF INTERVENTIONS IN THE STAFF CATEGORY



In the challenging area of staff policy adjustments, it was judged that a focus on improving the working and employment conditions of teachers and trainers would have the optimal impact. A combination of increased autonomy, additional incentives and opportunities for professional development for teachers is likely to become a driver of improvement on various levels. There are certain trade-offs. The financial implications associated with this intervention, as well as the need to devolve responsibility for content and implementation of the curriculum to providers and individual teachers/trainers, are likely to meet resistance from authorities at national and sub-national levels. However, the improvements in working conditions of teachers and trainers are likely to be positively perceived by both VET professionals and society, and the changes will benefit learners. In sum, in the current atmosphere of openness and civic engagement in Ukraine, the buy-in by the broader public and the education professionals is likely to help overcome the resistance.

Intervention 1: Improve the conditions of work of professionals in VET

Overview

Staff		E	PA	SA
Intervention 1	Improve working conditions	1.0	0.0	0.5

Action steps 1–5

- Development of guidelines for increased autonomy
- Creation of conditions and incentives for peer exchange
- Revision of the professional development offer
- Introduction of mechanisms to identify and reward improved teachers' performance
- Guarantee of a commensurate minimum wage

Anticipated effectiveness (lead question: What signs of success can be expected in this category?)

The combination of increased autonomy, additional incentives and opportunities for professional development for teachers is likely to become a driver of improvement in several ways. First, it will introduce a new, positive dynamic in the teaching and training process, ultimately leading to the creation of a lifelong learning continuum that is owned by the teachers and trainers and that involves

VET providers and in-service teacher-training centres. Second, it will promote a culture of peer learning and exchange that will benefit both the teachers/trainers and the learners. Third, if it is enriched with access to up-to-date practical (on-the-job) training it will stimulate innovation and contribute to the competitiveness of VET output. Finally, the perspective of commensurate payment will help to rehabilitate self-esteem in the teaching profession, this being an important prerequisite for rediscovering VET teaching and training as a vocation.

Conclusion: Viable in terms of effectiveness (=1.0)

Anticipated political acceptance (lead question: How likely is it that the intervention will be accepted and owned by the authorities?)

The regulatory basis for reform in this direction is already in place with the Model Regulations on Teachers Attestation (MoES Order No. 930 of 6 October 2010) and the Procedure for Further Training of VET Teachers (MoES Order No. 535 of 30 April 2014). Furthermore, VET providers offer opportunities for individual professional development and provide pedagogical services in support of improvement at provider level (ETF, 2015). However, the financial implications associated with this intervention, as well as the need to devolve responsibility for content and implementation of the curriculum to providers and individual teachers/trainers, are likely to create difficulties on the side of the MoES and the regions. This is firstly because of resource constraints (which are to a large extent due to inefficiencies in resource use in VET) and secondly because of the absence of adequate standards of quality assurance and guidelines that would permit greater autonomy in formulating instruction.

Conclusion: Problematic in terms of political acceptance (=0.0)

Anticipated social acceptance (lead question: How likely is it that the intervention will be accepted and owned by the stakeholders and those affected by the changes?)

The improvements in working conditions of teachers and trainers are likely to be positively perceived by both VET professionals and society. The changes will also benefit learners and are therefore likely to enjoy their support. However, there is a risk of a selective approach to this intervention, according to which more conservative teachers and trainers might resist the change in approach to teaching while insisting on the personal benefits that come along with it. In view of the reportedly high share of professionals of retirement age who are still active in the VET system (accurate data is lacking), the likelihood of selective resistance to reform by those affected is high.

Conclusion: Ambivalent in terms of social acceptance (=0.5)

Intervention 2: Optimisation of the teaching workforce

Overview

Staff		E	PA	SA
Intervention 2	Optimise the workforce	1.0	0.0	0.0

Action steps 1–3

- Development of optimisation criteria
- Definition of alternative paths and criteria of access to non-teaching employment, and the setting up of a ‘social package’
- Assessment of long-term staffing needs and current workforce profile, taking into account the matching of supply and demand for teachers and trainers

Anticipated effectiveness (lead question: What signs of success can be expected in this category?)

The success of interventions in the area of staff policies will be measured on the basis of a) changes in the quality of teaching, and b) changes in the perceptions of teachers about their work and working conditions.

An assessment of long-term staffing needs and the current profile of the teaching workforce will prepare the ground for informed decisions about optimisation of the workforce, for communication about and justification for changes (even those that are painful), and ultimately for the development of a sense of ownership and understanding of what is being done, and why. This will contribute to the sustainability of the overall network optimisation effort.

Conclusion: Viable in terms of effectiveness (=1.0)

Anticipated political acceptance (lead question: How likely is it that the intervention will be accepted and owned by the authorities?)

If it is done in a transparent and informed way, the optimisation of the workforce should bring about efficiency gains. However, the burden of difficult decisions about cuts might prove to have too high a political cost to be feasible. Political acceptance will remain a challenge with respect to all action in this category. Staff optimisation will be efficient only if a new Law on Professional Education and other normative acts regulating in-service teacher training are adopted.

Conclusion: Problematic in terms of political acceptance (=0.0)

Anticipated social acceptance (lead question: How likely is it that the intervention will be accepted and owned by the stakeholders and those affected by the changes?)

The social cost of workforce optimisation will be very high, but it can be offset by a combination of adequate offers of alternative employment within the sector and proper compensation for the cancellation of contracts. Nevertheless, social acceptance will also remain a challenge throughout all action in this category.

Conclusion: Problematic in terms of social acceptance (=0.0)

4.5 International experience with some scenario actions

According to the forecasts, by 2020 more than half of the employees in the European labour market will be skilled workers, service workers or associate professionals. They will all require initial or continuing VET. The key question for VET development is how the knowledge, skills and attitudes of employees should be updated.

In the context of the PRIME project, international experience of developing the European area for lifelong learning and of reforming the VET and higher education sectors in EU Member States deserves special attention. The following three examples are used:

- reforming the VET system in Estonia;
- introducing professional higher education in Finland;
- merging non-university colleges in Norway.

4.5.1 Developing the European area for lifelong learning

The Lisbon European Council of March 2000 recognised the importance of developing high-quality higher education and VET to promote social inclusion, cohesion, mobility, employability and competitiveness. The Barcelona European Council of March 2002 called for the creation of a process specific to VET that would contribute to making European VET systems a world-quality reference by 2010. The Council also adopted a resolution on enhanced cooperation in VET in November 2002.

The Declaration of the European Ministers of VET and the European Commission, convened in Copenhagen in November 2002, launched the Copenhagen Process, which aims to improve the performance, quality and attractiveness of VET through enhanced cooperation at European level. The process is based on mutually agreed priorities that are reviewed periodically.

The Copenhagen Process encompasses:

- a political dimension, aimed at establishing common European objectives and reforming national VET systems;
- the development of common European frameworks and tools that increase the transparency and quality of competences and qualifications, and facilitate mobility;
- cooperation to foster mutual learning at European level and to involve all relevant stakeholders at national level.

The priorities set by the Copenhagen Declaration provide the basis for voluntary cooperation in VET aimed at:

- reinforcing the European dimension in VET;
- increasing information, guidance and counselling on, as well as the transparency of, VET;
- developing tools for the mutual recognition and validation of competences and qualifications;
- improving quality assurance in VET.

Common European frameworks and tools for VET include:

- Europass, a single framework for the transparency of qualifications and competences;
- European Qualifications Framework for Lifelong Learning (EQF) reference framework for transparency and comparability of qualifications;
- European Credit System for VET (ECVET) for promoting mobility and recognition of prior learning;
- European Quality Assurance Reference Framework for VET (EQAVET), establishing common principles of quality assurance.

The Bologna Process was launched in 1999 (Bologna Declaration) by the Ministers of Education and university leaders from 29 countries with the aim of creating an EHEA by 2010. This process is a non-EU initiative that has gradually developed into a major promoter of higher education reforms encompassing 48 countries. Taking part in the Bologna Process is a voluntary decision made by each country and its higher education community to endorse the principles underlined in the EHEA. Ukraine joined the Bologna Process in 2005.

In the framework of the Bologna Process, common European frameworks and tools for the EHEA have been developed:

- Qualifications Framework for the EHEA:
 - short cycle;
 - three cycles (Bachelor's, Master's, Doctorate);
- ECTS;
- European Standards and Guidelines for Higher Education.

4.5.2 Reforming VET in Estonia

The restructuring of the VET institution network in Estonia started in 1998 as a strategically planned process. The goal was to optimise the network of VET institutions by establishing larger regional VET centres and study-field-oriented institutions. As a result, the number of VET institutions decreased from 90 in 1991 to 44 in 2013 (38 VET institutions and 6 professional higher education institutions, including 30 state-owned VET institutions) offering initial and continuing VET programmes in 160 specialities.

The Estonian strategy for VET up to 2020 defines the following three strategic goals.

- Initial and continuing VET should meet the needs of the national economy.

- Increased quality in VET will lead to an improved image of VET in society, an increase in student numbers and better employability of graduates.
- The VET system should use resources efficiently, function in cooperation with other sectors of the education system and be accessible for all target groups.

Strategic planning since 1998 has covered five planning periods, with development plans formulated for 1998–2001, 2002–04, 2005–08, 2009–13 and 2014–18.

The following results have been achieved through strategic planning during the five planning periods since 1998.

- The structure of study programmes and qualifications and the number of graduates meet the needs of society and the economy.
- Cooperation with social partners and enterprises has improved.
- The quality of VET has improved and is more consistent across the sector.
- Study and career counselling systems have been developed.
- VET programmes and institutions have better links with other educational sectors.
- IVET and CVET opportunities are open to all groups of learners.
- The network of VET institutions has been restructured.

According to general perceptions, the following successes have been achieved:

- strategic planning with clear strategic objectives, measures and indicators, annual implementation plans, and regular evaluation of results;
- proper legal framework;
- stakeholder involvement;
- international cooperation.

The new Law on VET Institutions, which entered into force on 1 September 2013, foresees transferable qualifications entirely based on learning outcomes. Qualifications have been defined for levels 2–5 of the Estonian NQF (levels 2–5 of the EQF). These learning outcomes are described in the Vocational Education Standard and in respective occupational standards. According to the new law, VET is divided into IVET and CVET. An IVET qualification allows access to training at the next qualification level. In CVET individuals can acquire additional competences and also raise their qualification levels.

VET studies culminate in the achievement of the learning outcomes described in the curriculum for a qualification or a partial qualification. This is assessed by an external examination that is administered by employers. In VET at EQF level 5 ('specialised VET'), graduates can become 'technicians and associate professionals' or 'clerical support workers' according to ISCO 08.

Quality assurance in VET has followed the guidelines of the Copenhagen Process. As of 2014, the Minister of Education and Research is extending the right of VET institutions and professional higher education institutions to provide VET programmes (EQF levels 2–5) in study programme groups. A study programme group consolidates curricula of similar specialties. To extend this right, the study programme group is accredited. External evaluation takes place in four stages.

1. The VET provider conducts a self-evaluation of the study programme group and compiles a report.
2. An evaluation committee nominated by the Estonian Higher Education Quality Agency (EKKA) conducts an external evaluation of the VET provider and produces a report.

3. The quality assessment council for VET at EKKA takes a decision on the basis of the self-evaluation report and the external evaluation report and makes a proposal to the Minister of Education and Research regarding the extension of the right to conduct studies in the study programme group.
4. Based on the proposal of the assessment council, the Minister of Education and Research decides whether to extend the right to conduct studies in the study programme group for three or six years, or to refuse to extend the right to conduct studies.

IVET is mostly financed from the state budget on the basis of a state order. Around 5% of funding in IVET is private. Private VET institutions may apply for state-commissioned study places. State and municipal VET institutions may also provide fee-based services related to their main activities, such as CVET for adults, and use other sources of revenue, for example by participating in international projects funded from abroad.

The cost of a study place is calculated from the unified basic cost of the study place and the complexity coefficient of the study programme group. This funding scheme covers the salaries of teachers, managers and other staff of the VET institution, the cost of training materials and the overhead costs of all premises (heating, electricity, etc.). The basic cost of a study place for each budgetary year is established by the government. Investments in such items as equipment and premises are financed separately (mostly co-financed from EU structural funds over the past decade).

The number of study places within the group for a VET institution is approved for three years. Within the funded study programme group, the school has the right to develop and offer appropriate programmes, and to decide on the forms of study and on the number and time of admission of new applicants. At the same time, the school is obliged to fill all the state-funded study places during the whole calendar year. If the school cannot admit enough students in some programmes, it can use the funding to provide additional VET courses in the same group for students of basic or upper secondary schools, or to offer short training courses for adults.

An important aspect of the management of VET institutions is the wide involvement of stakeholders. This is accomplished through Advisory Boards, which are an obligatory element of the management structure of all VET institutions, irrespective of their form of ownership.

4.5.3 Introducing professional higher education in Finland

The main reasons for the institutional reform of post-secondary VET schools in Finland (in the early 1990s) were as follows:

- societal demand to increase access to higher education;
- inspiration from international experience (mainly in some European countries) to create alternative labour-market-driven and professionally oriented routes to traditional academic universities and higher education institutions;
- the need to reorganise a large network of inefficient and small-scale VET providers to create larger, multi-profile institutions serving the needs of regional economic development and the labour market; owners and founders of these institutions were in most cases municipalities/towns that decided to combine their resources and create consortia to run the new institutions (polytechnics).

The reform was first piloted in a few regions through a special government decree in which the new qualifications, curricula and modus operandi of the institutions were created and tested. Once the results of the pilots had been analysed and evaluated by experts and the government, the reform was extended to cover the whole (post-secondary) VET system. Over time these new institutions gained a

great deal of popularity and managed to attract an increasing number of students, particularly in popular fields of studies such as engineering, health care, tourism and hospitality, and culture.

Once the Bologna Process was introduced, the polytechnics were accredited as higher education institutions awarding Bachelor's degrees. The duration of studies, curricula and content were adjusted to match the principles and requirements of Bachelor's degrees. The requirements for teaching staff were also upgraded to allow applied research in institutions. A Master's degree was introduced only at a later stage (approximately 10 years after the start of the reform), as initially the majority of graduates continued their postgraduate studies (Master's, etc.) in traditional universities.

The polytechnics are primarily considered to be institutions providing a higher education degree (Professional Bachelor's) that leads to immediate employment rather than to postgraduate studies. This influences the choices of students seeking to enrol in polytechnic programmes who wish to study in practically oriented degree programmes that have a close link with the world of work. In traditional universities and higher education institutions the majority of students usually continue their studies to achieve a Master's degree. All the studies at polytechnics are closely linked to working life and to local enterprises, and students have a compulsory practice period (minimum five months) in the workplace.

4.5.4 Merging non-university colleges in Norway

In 1994, the non-university higher education sector in Norway underwent a major reorganisation when 98 vocationally oriented colleges were amalgamated into 26 new state colleges (Kyvik, 2002, Vol 44). These encompassed the former colleges of teacher training (25), engineering (15), health education (27) and social work (3), as well as the regional colleges (14) and various other institutions offering a specialist range of teaching programmes (14). The purpose of the reorganisation was to enhance the quality of administrative functions and academic work by creating larger administrative and academic units, to break down barriers between the former colleges, and to develop new and broader study programmes. In addition, economies of scale would allow a more efficient use of physical resources. In this respect, Norway places itself within an international trend that aims to reduce the number of small, specialised, single-purpose colleges and create a smaller number of larger, multi-purpose, multi-disciplinary institutions.

One of the aims of the reform was to change teaching, research and educational processes in the college sector. Merging small colleges into larger units will bring improved opportunities to adapt to changing societal needs and to develop new courses, as well as new combinations of teaching programmes. In addition, the restructuring was intended to enhance opportunities for closer contact and collaboration between staff across different teaching programmes, and to create conditions for the development of a common educational culture in the new colleges.

The restructuring of the college sector was also an administrative reform. As an element of the development of management by objectives in administration, decision-making authority and administrative tasks were to be delegated from the Ministry of Education to the colleges. From a governmental perspective, the amalgamated colleges have increased their administrative capacity and developed much more professional administrations than the individual institutions had before the reform.

A third goal of this reform was to increase cost-efficiency in the college sector. First and foremost, the government aimed to reduce expenditure per student through economies of scale in teaching and a more cost-effective use of premises and administrative staff. The objective of a more cost-efficient college system was achieved, though mainly as a consequence of factors other than those upon which the reform was based.

The mergers, which took place in 1994, have in many ways proved to be a successful reform. The colleges now have more competent administrations and professional leadership, have become far more visible and have acquired a higher status.

4.5.5 Lessons learnt from international experience

National experience of reforming education is unique, being determined by the social and economic context and demands of a country. At the same time, there are common trends, and these could be considered as the ones that deserve attention in planning the reform process. Based on the three cases analysed, the following aspects could be regarded as important for successful implementation of the VET reform in Ukraine, particularly in relation to optimising the network of VET and higher education institutions.

- The reform requires political support and sufficient financial resources, and must be based on thorough impact analysis. Furthermore, economic conditions change continuously, and there are often difficulties in implementing measures in line with their initial intentions. Political support for a reform may also change over time as a result of new power constellations or changes in priorities.
- Organisational culture and traditions are important for understanding the relationship between intentions and results. Organisations have a history and an institutional culture that often represent a conservative element when internal or external actors attempt to change organisational behaviour. When public measures strongly contradict an organisation's norms and values, which are shared by the majority of its members, it may be difficult to carry out the implementation process in line with its intentions.
- The reorganisation is a long process comprising several stages, usually entailing the transformation of legislation at the national level and the transformation of the network and institutions themselves at the regional and local levels.
- Small-scale piloting of intended measures should be regarded as a necessary precondition for successful reforms.

5. CONCLUSIONS AND RECOMMENDATIONS

The Ukrainian VET system, like other VET systems that emerged from the Soviet era, had to redefine itself in a new and ever-changing socioeconomic context. Faced with the rapid dismantling of well-established relationships, not least the close links between VET schools and enterprises, the Ukrainian VET system needed to focus on core VET objectives. To meet these objectives, a system-wide and system-deep reform is needed that addresses the overall systemic challenges.

Viewing VET as a separate policy area is misleading because any VET challenge is closely linked to other policy areas. In particular, when options are being considered it will become apparent that solutions overlap with other policy areas. The National Tripartite Economic and Social Council could serve as a model for policy integration between VET and interlinked policy areas, including higher education.

A policy-learning approach will facilitate the establishment of policy-learning opportunities, such as continuous forums, enabling the formation of a critical mass of key VET stakeholders who gain additional competences in the art of VET policy reform. It is not a question of applying the VET approach taken by other countries, but a question of learning which VET approach the stakeholders can agree to by reflecting on the relevance of VET systems in other countries.

In Ukraine, the legal framework is now ready for a major review. However, the legal framework established in the early years of independence very much frames not only the direction taken by VET but also the current discussion of a modernised VET system. The preparation of a draft VET Law needs to be based on an effective policy-making process that clearly establishes stakeholders' commitment, especially in areas where stakeholders are seen to play a new and/or major role. The first step is the adoption of a Law on Education.

Decentralisation of VET cannot be separated from, and should be considered in the context of, public management and the decentralisation of public services in general. Decentralisation implies sufficient capacity for autonomous and accountable management by VET institutions and regional authorities – an area of development that should be given priority, for instance by activities to raise the capacity for independent management and administration on an institutional level.

As a result of the special VET funding system applied (the state ordering system), solutions to some of the key challenges lie outside the jurisdiction of the MoES. This means that the Ministry of Economy and Trade and the Ministry of Finance need to be directly involved. However, key to a meaningful dialogue is to establish a mechanism for effective and efficient allocation of resources, for instance through per-capita funding.

Finally, at the core of any change and improvement are the professionals working in the VET system, whose potential, working conditions and professional development needs have been neglected for far too long. A meaningful improvement should start with an investment in determining and then investing in the professional potential of teachers and trainers, which, in turn, calls for targeted improvements in their working and employment conditions. What is meant is not investment in infrastructure, but more autonomy to design and implement the curriculum in a way that best serves the needs of learners who come from diverse and often challenging backgrounds, with different expectations and potential for development.

ANNEXES

Annex 1. Application of PRIME in Ukraine

PRIME in Ukraine is prepared and carried out by the ETF in close cooperation with the MoES and the regional education authorities of the three pilot regions, the Dnipropetrovsk and Vinnitsa oblasts and the City of Kyiv. Ukraine has taken a leading role in PRIME by naming the theme for the exercise, identifying pilot regions, leading the generation of content and facilitating vertical (MoES and regional education authorities) and horizontal (VET institutions heads, employers) consultations. The ETF has provided technical support, including capacity building, analytical inputs and methodological support.

The deliverables of the PRIME project were generated in a series of meetings in Kyiv, Dnipropetrovsk and Vinnitsa, as described in the following sub-sections. This report has been finalised as an input to the PRIME Phase 2 validation meeting that took place in September 2015 in Kyiv. It summarises a consultative policy design and impact assessment process that commenced in September 2014.

Phase 1: Analysis

Kyiv fact-finding meetings

PRIME commenced in September 2014 with the first fact-finding meeting, which convened 30 representatives of major stakeholders:

- VET providers, including heads of VET institutions and higher education institutions of the first and second accreditation levels;
- VET system administrators, including representatives of the MoES and regional education departments;
- the Federation of Employers of Ukraine.

The purpose of the meeting was to introduce the concept of ex-ante impact assessment, map expectations of the PRIME exercise, confirm the choice of theme, and agree on the next steps. The second fact-finding meeting took place in December 2014 and facilitated stakeholder-driven background analysis of the issues at hand, and a discussion of the social and economic context, of who is affected, and of alternative courses of action. The validated results of the discussion are summarised in the list of issues presented in the section on establishing the baseline for the discussion in this report.

Phase 2: Assessment

The assessment phase of PRIME in Ukraine was dedicated to scenario building (PRIME step 2), and to the setting of impact assessment criteria and the assessment of impact (PRIME steps 3 and 4). Step 2 was carried out during a PRIME meeting hosted by the education authorities of the Dnipropetrovsk region (Dnipropetrovsk scenario-building meeting), while steps 3 and 4 were applied in a PRIME meeting hosted by the education authorities of the Vinnitsa region (VIAW).

PRIME Dnipropetrovsk scenario-building meeting (PRIME Step 2)

The Dnipropetrovsk scenario-building meeting aimed to build scenarios for policy action in preparation for the impact assessment. The scenario-building process took place in working groups, each with a rapporteur responsible for summarising the results. The scenario building took place in two sessions. The first session was devoted to setting the parameters (categories) of policy action, such as focus and scope. The second session was devoted to designing policy action that fits these parameters. The two-step approach was chosen to help to structure and focus the discussion and to produce concise, well-founded, comprehensive proposals for the authorities that are owned and supported by all

stakeholders. Annex 2 provides further detail on the workflow of the meeting. The final result was summarised in a synthesis scenario (SSC), presented in this report.

PRIME VIAW meeting (PRIME Steps 3 and 4)

The VIAW aimed to validate the actions proposed in the SSC, defining assessment criteria and carrying out ex-ante assessment of action impact in the policy categories set up during the Dnipropetrovsk scenario-building meeting.

The impact assessment process took place in four working groups, one for each policy action category, and each with a rapporteur responsible for summarising the results. The first VIAW session double-checked the suggested SSC interventions while the second focused on a discussion of the likely impact of interventions and actions in each SSC category. The assessment was complemented with peer visits to VET providers in the Vinnitsa region.

Annex 3 provides further detail on the workflow of the VIAW.

Phase 3: Operationalisation

In response to a long-standing request by the MoES to the ETF for support with reforms in the area of VET funding, it was decided that the operationalisation phase of PRIME would focus on the cost implications of the actions discussed and chosen in the course of the exercise. The results complement the impact assessment findings in the form of a report on financial implications and impact of the SSC, available separately.

Annex 2. The education system of Ukraine

Adoption of the new Law on Higher Education in 2014 radically changed the higher education and VET landscape in Ukraine. Therefore, the background analysis strictly differentiates between the situation before and after the adoption of this law in 2014.

It was decided to analyse the VET and higher education sectors collectively as the post-secondary education sector. The reason for this is the shifting of the borderline between these two sectors as a result of the adoption of the new Law on Higher Education.

The post-secondary education system before 2015/16

The Ukrainian education system has been in a state of transition ever since independence in 1991. The structure of education is stipulated by the Constitution of Ukraine (1996) and the framework Law on Education (1991), and further regulated by the Law on Higher Education (2002), the Law on VET (1998), the Law on General Secondary Education (1999), the Law on Pre-School Education (2001), and the Law on Out-of-School Education (2005). This legislation outlines the structure of education, educational and qualification levels, and tiers (stages) of education.

Post-secondary education in Ukraine is accessible to individuals who have completed basic or full secondary education, and leads to different VET and higher education qualifications. The system consists of VET and higher education providers. Higher education providers are categorised into four accreditation levels by the Law on Higher Education (2002). The VET and higher education programmes are offered by public (state-owned), municipal and private institutions. Different types of providers are entitled to award different types of qualifications (see **Table A2.1**).

TABLE A2.1 TYPES OF POST-SECONDARY EDUCATION INSTITUTION

Type of institution	Characteristics
VET school	A VET institution that provides study programmes for Skilled Worker qualifications in several connected specialities.
Higher VET school	A VET institution that provides study programmes for Skilled Worker and Junior Specialist qualifications in several connected specialities.
Tehnikum	A higher education institution of the first accreditation level or a sub-division of a higher education institution of the third or fourth accreditation level that provides study programmes for Junior Specialist qualifications in several connected specialities.
College	A higher education institution of the second accreditation level or a sub-division of a higher education institution of the third or fourth accreditation level that provides training for the Junior Specialist and Bachelor's education and qualification levels.
Institute	A higher education institution of the third or fourth accreditation level or a sub-division of a university or academy that provides training for the Bachelor's, Specialist and Master's education and qualification levels.
Academy	A higher education institution of the fourth accreditation level that provides training for the Bachelor's, Specialist and Master's education and qualification levels.
University	A higher education institution of the fourth accreditation level that provides training for the Bachelor's, Specialist and Master's education and qualification levels.

The VET system

The Law on VET (1998), Article 13, and the Regulation on Graduation from VET (1999) define three levels of VET.

- The first level of VET provides a Skilled Worker qualification in technologically simple occupations, primarily for the manufacturing sectors, by the following providers: specialist vocational courses, combined education and production centres, VET schools and other providers of equivalent status.
- The second level of VET provides a Skilled Worker qualification in occupations of medium technological complexity by the following providers: VET schools and higher VET schools specialising in various fields. It can also take place at the training centres of enterprises and other providers of equivalent status.
- The third level of VET provides a Skilled Worker qualification in technologically complex occupations by the following providers: higher VET schools (some of these institutions can be accredited at the first and second higher education levels); VET centres; centres for the training and retraining of personnel; other providers of equivalent status.

Junior Specialist programmes, which are also part of the VET system, have been governed by the Law on Higher Education since 2002. The Junior Specialist qualification can be obtained at higher education institutions of the first and second accreditation levels, as well as at higher VET schools. The number of VET institutions fell from 1 246 in 1990 to 968 in 2013.

As of 1 January 2015, the VET network consisted of 945 institutions. Of these, 940 are under the jurisdiction of the MoES and can be broken down as follows: 812 VET institutions; 33 VET institutions that are sub-divisions of higher education institutions; 19 educational institutions of other types, which also provide VET; and 76 training centres within the prison system. In total, 113 VET institutions are located in the occupied territory of Donbas (52 in Donetsk and 61 in Lugansk). According to data from the MoES, there are 314 000 VET students (18 400 of whom belong to vulnerable groups).

Training is conducted in 35 occupational fields and 520 professions by 17 200 teachers and 22 700 workshop trainers. In addition, apprenticeship or workplace training of students is conducted within companies and organisations (around 7 000 training sites).

The number of students in VET institutions has decreased from 643 400 in 1990 to 391 200 in 2013 as a result of the radical transformation of Ukraine's economy following independence, as well as demographic crises. Furthermore, VET is considered by the public to be a second-rate form of education, while certain sectors of the national economy suffer from a critical lack of skilled workers. Prospective entrants prefer to attend higher education institutions. In 2011 about 34% of students at state-owned VET institutions had disabilities or were from socially marginalised groups, while in 2013/14 the proportion was 28%. According to MoES data the ratio of students in higher education to students in VET institutions was 5.2 to 1 in 2013/14.

There has been a tendency for some VET institutions to seek a higher level of accreditation by changing their name. At the same time, universities have established VET colleges offering Junior Specialist programmes. Some VET institutions have been accredited as colleges, making it possible for them to award Junior Specialist diplomas and even Bachelor's degrees. Such developments have created some confusion as to the institutional demarcation between higher education and VET.

Some VET institutions also undertake CVET, which forms an important part of their income. The governance of CVET is split mainly between the MoES and the Ministry of Labour and Social Policy.

The higher education system

After Ukraine gained its independence, the higher education sector started to adapt to the new socioeconomic conditions. The main transformations included:

- a decrease in the number of higher education institutions of the first and second accreditation levels (training specialists and middle managers in technical specialties) from 742 in 1990 to 478 in 2013, and a decrease in the number of students enrolled in these institutions from 757 000 in 1990 to 345 000 in 2013;
- an increase in the number of higher education institutions of the third and fourth accreditation levels from 143 in 1990 to 325 in 2013, and an increase in the number of students enrolled in these institutions from 329 000 in 1995 to 1 724 000 in 2013.

The number of higher education institutions has increased as a result of:

- the transformation of the branches of institutions and universities in the regions into independent higher education institutions;
- the rearrangement of tehnikums and colleges into higher education institutions of the first and second accreditation levels;
- the establishment of private higher education institutions.

In 2014 the network of higher education institutions of all levels of accreditation included 803 institutions. Of these, 415 were state owned, 221 municipality owned and 167 privately owned. Higher education institutions of the first and second accreditation levels make up almost 60% of the total number of higher education institutions, while those of the third and fourth accreditation levels account for 40%. **Table A2.2** exemplifies the quantitative differences between post-secondary education providers at different accreditation levels.

TABLE A2.2 COMPARISON OF HIGHER EDUCATION INSTITUTIONS AT DIFFERENT ACCREDITATION LEVELS

	First and second accreditation levels	Third and fourth accreditation levels
Number of graduates (2013)	91 200	485 100
Number of teaching and research staff	36 300	158 900
Number of students per 10 000 inhabitants	72	380

The rapid expansion of the higher education sector has been the result of three major factors:

- the growing demand for specialists of all professions (previously some of them were trained outside Ukraine);
- the growing need for professionals for new sectors of the national economy (IT, trade, marketing, etc.);
- new societal factors (job opportunities, prestige).

The post-secondary education system after 2015/16

The new Law on Higher Education (2014) creates favourable preconditions for radical changes in the sector (decentralisation and increased autonomy of higher education institutions in line with the principles established for the EHEA, and the introduction of a quality assurance system that meets the requirements of the European Standards and Guidelines for Quality Assurance in the EHEA). Article 5 of the Law defines the levels of higher education as follows:

- initial level (short cycle, Junior Bachelor's), corresponding to the fifth level of the national qualifications framework (NQF);
- first level (Bachelor's), corresponding to the sixth level of the NQF;
- second level (Master's), corresponding to the seventh level of the NQF;
- third level (Doctorate), corresponding to the eighth level of the NQF;
- scientific level, corresponding to the ninth level of the NQF.

Article 5 of the Law on Higher Education specifies the following higher education qualifications:

- Junior Bachelor's – educational and professional degree that is obtained at the initial (short) cycle of higher education; the amount of training is 90–120 ECTS credits;
- Bachelor's – educational and professional degree obtained at the first level of higher education; the amount of training is 180–240 ECTS credits;
- Master's – educational and professional degree obtained at the second level of higher education; the amount of training is 90–120 ECTS credits; a Master's programme must include a research component of not less than 30%;
- Doctor of Philosophy – the first academic degree obtained at the third level of higher education on the basis of a Master's degree; the amount of training is 30–60 ECTS credits;
- Doctor of Science – the second academic degree obtained at the third level of higher education on the basis of a Doctor of Philosophy degree.

The holder of a Junior Bachelor's degree should be able to perform routine tasks defined for initial jobs in the relevant field of professional activity. Individuals can gain access to Junior Bachelor's degree studies on completion of full general secondary education.

The holder of a Bachelor's degree should be able to perform professional tasks in their chosen speciality. Individuals can gain access to Bachelor's degree studies on completion of full general secondary education.

Article 28 of the Law on Higher Education (2014) identifies the following types of higher education institution:

- university – specialist or universal higher education institution that offers study programmes at all levels of higher education, and conducts basic and/or applied research;
- academy/institute – specialist higher education institution that offers study programmes at the first and second levels of higher education, can provide training at the Doctorate level in specific disciplines, and conducts research;
- college – specialist higher education institution or structural unit of the university, academy or institute that offers study programmes at the Junior Bachelor's and Bachelor's level, and conducts applied research.

The law stipulates that the Junior Specialist qualification will be gradually phased out from higher education. Final and Transitional Provisions stipulate the following.

- Training for the qualification level of Junior Specialist that is carried out by higher education institutions and was initiated before this Law came into force shall continue for the period of study for the relevant study programme with issuance of the state-recognised documents certifying higher education – diploma of Junior Specialist. The last admission for Junior Specialist programmes shall take place in 2016.
- After this Law comes into force, the Junior Specialist diploma (initial higher education) shall be deemed equivalent to the Junior Bachelor's diploma. [This means that the Junior Specialist and Junior Bachelor's qualifications will belong at the same level in the Ukrainian NQF.]
- Higher education institutions delivering Junior Specialist study programmes shall have the right to continue delivering Junior Bachelor's programmes subject to holding the relevant licence. Licensure requirements for higher education institutions of the first accreditation level in order to receive a licence for Junior Bachelor's programmes shall be established by the central government agency on education and science. The first licence for the period of five years may be issued without a requirement to deliver Bachelor's programmes. Accreditation of Junior Bachelor's programmes shall be subject to common requirements according to this Law.
- Higher education institutions of the first accreditation level that during the five years of the Junior Bachelor's licensure period do not obtain a licence for Bachelor's programmes shall be classified within the VET system.

With the prospect of the transfer of some higher education institutions of the first accreditation level to the VET system, the VET Department of the MoES was mandated to draft the new Law on VET by 1 February 2015 as part of the Action Plan of the MoES for implementing the Law on Higher Education.

Annex 3. Political (authorities) and social (beneficiaries) acceptance 'checkpoints' for impact assessment Criteria 2 and 3

Summary of extreme case scenario for political acceptance

Legal framework

1. The framework Law on Education will be adopted as a prerequisite to start deep educational reforms, including the VET reform.
2. Training of Skilled Workers in universities (in tehnikums as structural units of former higher education institutions of the third and fourth levels of accreditation) will be abolished.
3. State measures will be introduced to stimulate the work of teachers in unattractive study programmes (occupations) and in unattractive regions.
4. A three-level system of VET with primary, secondary and higher professional education level programmes and qualifications will be introduced, including the Professional Bachelor's qualification.
5. The system for licensing study programmes will be simplified and made more flexible, e.g. licensing by study fields or branches instead of individual study programmes.

Provider network

1. All VET institutions will preserve their current status (type of institution, types of qualifications awarded), including tehnikums and colleges with their status as higher education institutions.
2. All VET institutions will retain their existing premises.

Funding

1. VET institutions will receive more financial autonomy, including their own bank accounts, and the opportunity to command the so-called 'money earned by ourselves'. To achieve this, some rules concerning taxation and relations with the State Treasury will be changed.
2. State-commissioned study places will be financed based on complexity coefficients of study fields/branches.
3. Money follows the student, i.e. the funding of study programmes depends on the actual number of students.
4. The tendering process for public utilities (electricity, water, etc.), where there is only one provider, will be simplified (abolished).

Staff policies

1. The conditions of work of VET professionals will be improved.
2. Social guarantees for students and staff will be preserved.

Summary of extreme case scenario for social acceptance

Legal framework

1. The framework Law on Education will be adopted as a necessary prerequisite to start deep educational reforms, including the VET reform.
2. Amendments to the existing Law on VET will be adopted, offering more flexibility concerning the types of VET institutions (e.g. VET centres, VET colleges, VET lyceums) and integrated provision of initial and continuing VET.

- The rights and responsibilities of all levels of governance and management (state, regions, VET institutions) will be more clearly defined.

Provider network

- The network of higher education institutions of the first and second accreditation levels will be transformed according to the Law on Higher Education, i.e. tehnikums and some colleges will be transferred from the higher education sector to the VET sector.
- The network of VET institutions will become more rational from the point of view of national and regional needs. At the same time, individuals' rights have to be observed. In this process some VET institutions and former higher education institutions could be merged into wider-profile VET institutions or centres. Some VET institutions with sub-critical numbers of students will be closed down.
- Management of the VET institution network will be decentralised. Regions will have more say in managing the regional network of VET institutions and defining their profile.
- VET institutions will be transformed into multi-disciplinary ones, and new types of VET institutions (VET centres, VET colleges, VET lyceums) will be established.

Funding

- Funding of VET institutions will be transferred to the regional level with some subsidies from the state budget.

Staff policies

- The strengths and weaknesses of the teaching workforce will be assessed and appropriate decisions taken.
- The supply of new teachers will be adjusted to better match the new VET provider set-up.

Comparison of VET providers' and VET administrators' scenarios

Both scenarios foresee the adoption of a package of legislative documents as a necessary precondition for the reform of the VET institution network. At the same time, VET providers and VET administrators (representing different groups of stakeholders) have opposite views on some aspects of the VET institutions network reform (see **Table A3.1**).

TABLE 3.1 DIFFERENCES IN VIEWS OF VET PROVIDERS AND ADMINISTRATORS ON SOME ASPECTS OF REFORM OF THE VET INSTITUTION NETWORK

VET providers' position	VET administrators' position
<p>All VET institutions will preserve their current status (type of institution, types of qualifications awarded), including tehnikums and colleges with their status as higher education institutions.</p> <p>All VET institutions will retain their existing premises.</p>	<p>The network of VET institutions will become more rational from the point of view of national and regional needs. At the same time, individuals' rights have to be observed.</p> <p>In this process some VET institutions and former higher education institutions could be merged into wider-profile VET institutions or centres.</p> <p>Some VET institutions with sub-critical numbers of students will be closed down.</p>
<p>Social guarantees for students and staff will be preserved.</p>	<p>The strengths and weaknesses of the teaching workforce will be evaluated and corresponding decisions will be taken.</p>

Annex 4. Overview and results of the Dnipropetrovsk scenario-building meeting

Group 1 ('the designers')

Category: Funding

1. A multi-channel system of funding; possibility of obtaining funds from the budgets at various levels; all types of educational activities have to remain non-profit and should not be taxed;
2. The VET institutions' autonomy, i.e. possibility of opening accounts in banks, withdrawing accounts from the Treasury, and opening sponsor accounts and deposits;
3. Money follows the student; the full cost of education is funded; account is taken of the complexity factor of the educational pathway;
4. Differentiation of stipends as an instrument to develop a profession;
5. The principle of social protection insurance; VET institutions' budgets are to be balanced to ensure the remuneration of labour, stipends and other social payments; the budget lines that foresee the development of the technical and material base of a VET institution in line with the licensing and accreditation demands are to be protected;
6. Transparency and efficiency will be ensured by monitoring and reporting on the financial state and economic decisions demanding expenses, and the development of criteria for use of funds.

Category: Legislation

1. Development of a comprehensive legislative package: adopt the Law on Education and the Law on Professional Education, and amend the Law on Higher Education;
2. Development of bylaws; development of a lifelong learning programme; changes to the Classification of Occupations and the list of specialties and directions in accordance with labour market demands; development of provisions and criteria for the optimisation of the VET institution network, in line with economic expediency; risks are 1) the labour market, and 2) lobbying of interests by representatives of various areas of education.
3. Ensure flexibility in the Classification of Occupations, and its constant updating.

Category: Lifelong learning

1. Meeting the demands of individuals; developing a state order based on contracts corresponding to the regional development strategy, which is based on forecasts; ensuring a differentiated approach to optimisation; prioritising occupations that are important for the economy of the country and the regions, according to an updated list based on the differentiation of stipends for these occupations;
2. Maintaining the size of learning groups at fewer than 25 students for priority occupations;
3. Decentralisation of governance; preservation of occupations of inter-regional character, regardless of source of funding.

Category: Staff policy

1. Professional suitability tests;
2. Promotion of creative workers at state level.

Group 2 ('the secret boss')

Aim

Bringing VET institution provisions (occupations, qualification levels) into line with the demands of the economy (of a region, oblast, state).

Concrete activities

1. Monitoring of the activity of educational institutions (of first and second levels of accreditation and attestation) based on the developed indicators educational outcomes demand, prospects for the industry branch, economy of an institution);
2. Coordination of the planned projects at all levels (regional, national);
3. Development of all documents that are required for network optimisation.

Funding

Defining financial demands and the resources needed to conduct reforms and to ensure the functioning of the newly opened educational institution.

Staff policy

Using the staff of the reformed educational institution in a new one.

Legislative base

Adoption of a new Law on VET and modification of normative base used by MoES for the higher education institutions of the first and second levels of accreditation.

Risks

Concrete activities

1. The process could be implemented in the absence of appropriate legislative documents.
2. The process could be implemented by non-specialists in the VET area and in the economy.
3. The interest of all stakeholders may be lacking.

Funding

1. The difficulty of attracting funding from the regions because of the current requirements of a Budget Code.
2. The limitation of budget possibilities.

Staff policies

The existing staff in the 'pre-reformed' institutions may leave their positions, and it would be difficult to find new personnel.

Legislative base

It is impossible to reform the VET sector alone without modernising other education sectors. The Laws on Secondary and Higher Education should correlate with each other.

Principles

Concrete activities

The coordination of all stakeholders in the process of reforms, including employees, local authorities, trade unions, governance, VET providers and educators.

Funding

Obligatory participation of employees in the funding of a budget.

Staff policies

1. Preservation of the current resources in existing educational institutions.
2. Definition of a formula of requirements for VET educators in line with the current state of technological and industrial development.

Legislative base

Comprehensiveness and consistency of laws in all areas of education (primary, secondary, VET, higher, in-service).

Group 3 ('the workers')

	Provider network	Funding	Legislation
Aims	<ul style="list-style-type: none">■ Monitoring the demands of individuals regarding education■ Balancing demands■ Labour market forecast■ Creation of a multi-level VET system (initial, secondary, higher)	<ul style="list-style-type: none">■ Simplification of banking payments (Treasury payments)■ Cancellation of tenders for utility bills■ Cancellation of bans on equipment purchase■ Cancellation of requirements to conduct multi-channel funding	<ul style="list-style-type: none">■ Creation of working groups to develop draft Laws on Education and on VET■ Elimination of contradictions in the current legislation
Risks	<ul style="list-style-type: none">■ Early definition of social directivity (professional selection)■ Social defence functions	<ul style="list-style-type: none">■ Moratorium on disappropriation of premises, property and lands of an educational institution■ Preservation of non-profit status	<ul style="list-style-type: none">■ Information support for legislative initiatives■ New forms of educational process with employees' involvement
Principles	<ul style="list-style-type: none">■ Decentralisation■ Public discussion	<ul style="list-style-type: none">■ Introduction of voucher to obtain education (taking into account technologically complicated occupations)■ Public reporting of directors	<ul style="list-style-type: none">■ Autonomy of educational institutions

Annex 5. Overview and results of the Vinnitsa impact assessment workshop

Consolidated results of impact analysis

Category of action: Legal framework

Intervention	Action steps	Impact
The framework Law on Education will be adopted as a necessary prerequisite to start deep educational reforms, including VET reform.	<ul style="list-style-type: none"> A three-level system of VET with primary, secondary and higher professional education level programmes and qualifications will be introduced, including the Professional Bachelor's qualification. 	<p>Effectiveness:</p> <ul style="list-style-type: none"> Budgetary funds will be saved. The quality of education and training of workers will be raised. Employment, as well as labour market demand for VET graduates, will be increased. <p>Political acceptance:</p> <ul style="list-style-type: none"> The notion of 'professional education and training' will be legally regulated for both employees and graduates. <p>Social acceptance:</p> <ul style="list-style-type: none"> The changes will be negatively perceived by the lobbyists of higher education. The changes will be positively (in general) perceived by society (subject to a wide information campaign).
The new Law on VET will be adopted.	<ul style="list-style-type: none"> New types of VET institutions (e.g. VET centres, VET colleges, VET lyceums) will be introduced with an integrated offer of initial and continuing VET, enabling individuals' continuing professional development and the realisation of lifelong learning trajectories. The rights and responsibilities of all levels of governance and management (state, regions, VET institutions) will be more clearly defined. The system for licensing study programmes will be simplified and made more flexible, e.g. licensing by study fields or branches instead of individual study programmes. Training of Qualified Workers at universities (in tehnikums as structural units of former higher education institutions of the third and fourth levels of accreditation) will be abolished. State measures (additional social guarantees, salary incentives, etc.) will be introduced to stimulate the work of teachers in unattractive study programmes (occupations) and in unattractive regions. 	<p>Effectiveness:</p> <ul style="list-style-type: none"> The budgetary funds will be increased, as the economy will be developing more efficiently. Students will be better oriented towards their future profession. <p>Political acceptance:</p> <ul style="list-style-type: none"> The notion and the reality of 'profiled education and training' in secondary schools will be legislatively improved. <p>Social acceptance:</p> <ul style="list-style-type: none"> The changes will be negatively perceived by those educational institutions that could not achieve reforms within the timescale.

Category of action: Provider network

Intervention	Action steps	Impact
<p>The network of higher education institutions of the first and second accreditation levels will be transformed according to the Law on Higher Education: tehnikums and some colleges (those that do not fulfil the requirements of the Law on Higher Education) will be transferred from the higher education sector to the VET sector.</p> <p>The network of VET institutions will be rationalised according to the national and regional needs, and the use of existing premises. At the same time, individuals' rights, including the right to IVET, will be observed. Some VET institutions with sub-critical numbers of students will be closed down. New multi-disciplinary VET institutions (VET centres, VET colleges, VET lyceums) will be established as a result of mergers of existing VET institutions and former higher education institutions.</p>	<p>Stage 2:</p> <p>Actual restructuring, focused on the formation of a new type of educational institution based on several models; piloting of the new type of institution.</p> <p>In parallel, optimisation of the provider network.</p>	<p>Effectiveness:</p> <ul style="list-style-type: none"> ■ A new type of educational institution will be formed based on the application of new approaches to the educational process, new educational programmes, etc. <p>Political acceptance:</p> <ul style="list-style-type: none"> ■ The modernisation of the network of VET institutions is characterised by political acceptance because it is supported at both the national level (under conditions of financial shortages) and regional level (through the wish of the regions to orient the VET system towards the demands of the regional labour market). ■ The problem lies with VET institutions that train qualified workers for a number of (neighbouring) regions. <p>Social acceptance:</p> <ul style="list-style-type: none"> ■ The changes will be positively perceived by: <ul style="list-style-type: none"> • employers (given that the new types of VET institution will meet the demands of employees and the labour market); • young people and their parents, if new VET institutions guarantee employment by profession upon graduation, and if the students receive the stipends. ■ The changes may be negatively perceived by: <ul style="list-style-type: none"> • teachers/trainers, given the threat of dismissal; • trade unions and non-governmental organisations (NGOs) (wishing to gain political dividends from the situation); to avoid this, clear criteria will be developed, an information campaign will be launched, and trade unions and NGOs will be involved.

Category of action: Funding

Intervention	Action steps	Impact
<p>A fair distribution of the burden of funding the VET system between governance levels will be achieved.</p>	<ul style="list-style-type: none"> ■ A multi-channel funding system (from state budget, regional budget, tuition fees, services fees, donations, etc.) for VET institutions will be developed and implemented. ■ State funding of regional VET institutions will be provided by means of subvention from the State Budget (differentiated subsidies from the State Budget). ■ VET institutions will be given more financial autonomy, including their own bank accounts, and the possibility of commanding the so-called 'money earned by ourselves'. VET institutions' accounts will be removed from the State Treasury. 	<p>Effectiveness:</p> <ul style="list-style-type: none"> ■ VET institutions will increase their income for institutional development. ■ The quality of the educational process will be increased. <p>Political acceptance:</p> <ul style="list-style-type: none"> ■ The political pressure will decrease in the regions and in the state in general. <p>Social acceptance:</p> <ul style="list-style-type: none"> ■ Conditions for realising social programmes for VET employees (housing, accommodation, professional development, grants for students and teachers/trainers, etc.) will be created.
<p>There will be an improvement in the mechanisms for allocation of resources.</p>	<ul style="list-style-type: none"> ■ The mechanism of per-capita funding will be fully implemented. ■ The state-commissioned study places in VET institutions will be financed based on complexity coefficients of study fields/branches. ■ Tendering procedures will be improved (tenders will be abolished where there is a single supplier (of electricity, water, etc.), and the upper limit for tenders will be increased). 	<p>Effectiveness:</p> <ul style="list-style-type: none"> ■ The efficiency of the educational process will be increased (the funding depends on the number of students in an institution). ■ The paper flow will decrease. ■ Corruption will decrease. ■ The financial resources used in the abovementioned items will be released. <p>Political acceptance:</p> <ul style="list-style-type: none"> ■ The State Budget will be used more efficiently. ■ Improvements in the mechanisms for the allocation of resources are accepted by authorities at all levels <p>Social acceptance:</p> <ul style="list-style-type: none"> ■ The transformations will be perceived positively by those teachers/trainers who are ready to work. ■ The financial transformations will be supported by the staff and heads of VET institutions because they will simplify the financial procedures.
<p>There will be a more rational use of additional revenues generated by the VET providers.</p>	<ul style="list-style-type: none"> ■ VET institutions will be given more financial autonomy, including their own bank accounts, and the possibility of commanding the so-called 'money earned by ourselves'. 	<p>Effectiveness:</p> <ul style="list-style-type: none"> ■ The VET institutions will use their finances and resources more efficiently. ■ The material and technical base of VET institutions will improve. ■ The social protection of teachers/trainers and students will be ensured. <p>Political acceptance:</p> <p>The transformations will be supported by the authorities, but more social protection initiatives will be needed by society.</p> <p>Social acceptance:</p> <ul style="list-style-type: none"> ■ VET institutions will approve; the changes will be positively perceived by society.

Category of action: Staff policies

Intervention	Action steps	Impact
<p>The working conditions of VET professionals will be improved.</p>	<ul style="list-style-type: none"> ■ Teachers will be given the opportunity to select curricula, forms and methods of training. ■ Teachers/trainers will be given the right to develop and introduce their own educational programmes. ■ Forms of education will be diversified. In addition to lessons, this could include workshops, seminars, online training, etc. ■ Self-education and self-development of teachers/trainers will be intensified. ■ Motivation mechanisms for self-development will be introduced using material (wage rises, fee incentives) and moral stimuli. ■ A 'social package' for teachers/trainers will be introduced. ■ The average wage in the industry will be guaranteed. 	<p>Effectiveness:</p> <ul style="list-style-type: none"> ■ Lifelong learning systems will be developed in various types of institutions. ■ The quality of the educational process will be increased. ■ An efficient system of in-service teacher training will be implemented. ■ New pedagogical technologies will be implemented by teachers/trainers. ■ Self-development for teachers/trainers will be intensified. ■ The prestige of teachers/trainers in society will increase. <p>Political acceptance:</p> <ul style="list-style-type: none"> ■ Staff optimisation will be efficient only if a new Law on Professional Education and other normative acts regulating in-service teacher training are adopted. <p>Social acceptance:</p> <ul style="list-style-type: none"> ■ Working conditions for teachers/trainers will be improved. This will be positively perceived by society, although the additional jobs will be for the VET methodical centres and methodical cabinets in the regions. ■ The changes will be positively perceived by students and innovative teachers/trainers (if they are motivated financially). The resistance will be from conservative teachers/trainers.
<p>The strengths and weaknesses of the teaching workforce will be assessed and appropriate decisions taken.</p>	<ul style="list-style-type: none"> ■ The optimisation of staff should be implemented under the following conditions: <ul style="list-style-type: none"> ● transparency; ● monitoring the demand for teachers at national and regional level; ● improving professional competences of teachers; ● retraining and in-service training of teachers (if necessary); ● development and implementation of clear criteria to evaluate teachers' work. 	<p>Effectiveness:</p> <ul style="list-style-type: none"> ■ The changes will save state funds. ■ Teachers/trainers of a new level will be prepared. <p>Political acceptance:</p> <ul style="list-style-type: none"> ■ The decision will be supported by the national and regional authorities, but not always by trade unions and opposition political parties. <p>Social acceptance:</p> <ul style="list-style-type: none"> ■ Students and employees will approve.
<p>The supply of new teachers will be adjusted to better match the new VET provider set-up.</p>	<ul style="list-style-type: none"> ■ Investments in the initial training of teachers/trainers will be made, alongside investments in the professional development of working teachers/trainers. ■ An optimal balance is needed between the demand for initial and in-service training for teachers. ■ Teachers/trainers will have opportunities to gain new (additional) qualifications. 	<p>Effectiveness:</p> <ul style="list-style-type: none"> ■ The changes will save state funds. ■ An opportunity will be created to involve specialists from industry (if there is adequate financial reward). <p>Political acceptance:</p> <ul style="list-style-type: none"> ■ Changes in the legislation will require additional social initiatives. <p>Social acceptance:</p> <ul style="list-style-type: none"> ■ The VET system will approve; the transformations will be supported by employees, though not supported by higher education.

Political impact

The following aspects of political impact were identified by the participants.

- The notion of 'professional education and training' will be legally regulated, for both employees and graduates.
- The notion and the reality of 'profiled education and training' in secondary schools will be legislatively improved.
- The modernisation of the network of VET institutions is characterised by political acceptance because it is supported at both the national level (under conditions of financial shortages) and regional level (given the wish of the regions to orient the VET system towards the demands of the regional labour market).
- The problem lies with VET institutions that train qualified workers for a number of (neighbouring) regions.
- The political pressure will decrease in the regions and in the country in general.
- The State Budget will be used more efficiently.
- Improvement in the mechanisms for allocation of resources are accepted by authorities at all levels.
- The transformations will be supported by the authorities, but more social protection initiatives will be needed by society.
- Staff optimisation will be efficient only if a new Law on Professional Education and other normative acts regulating in-service teacher training are adopted.
- The decision will be supported by the national and regional authorities, but not always by the trade unions and opposition political parties.
- Changes in the legislation will require additional social initiatives.

Social impact

The following aspects of social impact were identified by the participants.

- The changes will be negatively perceived by the lobbyists of higher education.
- The changes will be positively (in general) perceived by society (subject to a wide information campaign).
- The changes will be negatively accepted by those educational institutions that could not achieve reforms within the timescale.
- The changes will be positively perceived by
 - employers (given that the new types of VET institutions will meet the demands of the employees and labour market);
 - young people and their parents, if new VET institutions guarantee employment by profession upon graduation, and if the students receive stipends.
- The changes may be negatively perceived by
 - teachers/trainers under the threat of dismissal;
 - trade unions and NGOs (wishing to gain political dividends from the situation); to avoid this, clear criteria will be developed, an information campaign will be launched, and trade unions and NGOs will be involved.
- Conditions for realising social programmes for VET employees (housing, accommodation, professional development, grants for students and teachers/trainers, etc.) will be created.
- The transformations will be perceived positively by those teachers/trainers who are ready to work.
- The financial transformations will be supported by the staff and heads of VET institutions because they will simplify the financial procedures.

- VET institutions will approve; the changes will be positively perceived by society.
- The work conditions of teachers/trainers will be improved. This will be positively perceived by society, although the additional jobs will be for the VET methodical centres and methodical cabinets in the regions².
- The changes will be positively perceived by the students and innovative teachers/trainers (if they are motivated financially). The resistance will be from conservative teachers/trainers.
- The students and employees will approve.
- The VET system will approve. The transformations will be supported by employees, but not supported by higher education.

Financial impact

The following aspects of financial (economic) impact were identified by the participants.

- The VET institutions will increase their income for institutional development.
- The quality of the educational process will be increased.
- The efficiency of the educational process will be increased (the funding depends upon the number of students in an institution).
- The paper flow will decrease.
- Corruption will decrease.
- The VET institutions will use their finances and resources more efficiently.
- The material and technical base of VET institutions will be improved.
- Social protection for the teachers/trainers and students will be ensured.
- The lifelong learning system in various types of institutions will be developed.
- An efficient system of in-service teacher training will be implemented.
- New pedagogical technologies will be implemented by teachers/trainers.
- Self-development for teachers/trainers will be intensified.
- The prestige of teachers/trainers in society will increase.
- The changes will save state funds.
- Teachers/trainers of a new level will be trained.
- An opportunity will be created to involve specialists from industry (subject to adequate financial reward).

Main conclusions from the workshop

The following main conclusion from the workshop in Vinnitsa can be drawn.

- The proposed scenario was positively assessed.
- The participants detailed the action steps in the categories, adjusting them to the dynamic situation in the area.
- The interventions and action steps proposed in the scenario are seen as effective by all three pilot regions.
- The interventions and action steps proposed in the scenario are seen as politically valid by the participants.

² Among other things, the methodological centres and cabinets are responsible for developing guidance on teaching practice and the implementation of the curriculum.

- The criterion of 'social acceptance' proposed to the participants for assessing action steps revealed the different positions of society members in relation to the reforms: the higher education Department of the MoES and the higher education institution heads still prefer to preserve the status quo for higher education institutions.
- In general, the assessment criteria revealed the acceptance of the reforms by the representatives of the regions.
- During discussion of the categories at the Dnipropetrovsk scenario-building meeting (16–18 February 2015), the category of 'communication' was not seen to be necessary by the participants. After intensive discussion of this category in Dnipropetrovsk, communication was integrated into all action steps in Vinnitsa.

ABBREVIATIONS

CBI	Cost-benefit index
CMCA	Consultative multi-criteria analysis
CVET	Continuing vocational education and training
ECTS	European Credit Accumulation and Transfer System
EHEA	European Higher Education Area
EKKA	Estonian Higher Education Quality Agency
EQF	European Qualifications Framework for Lifelong Learning
ETF	European Training Foundation
EU	European Union
IT	Information technology
IVET	Initial vocational education and training
MoES	Ministry of Education and Science
NGO	Non-governmental organisation
NQF	National qualifications framework
PRIME	Projecting Reform Impact in VET
PTU	Professional technical uchilisha
SSC	Synthesis scenario
UAH	Ukrainian hryvnia (unit of currency)
VET	Vocational education and training
VIAW	Vinnitsa impact assessment workshop

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