

DECENTRALIZATION AND SETTING UP CENTERS OF VOCATIONAL EXCELLENCE AND INNOVATION (CoVEs): THE CASE OF UKRAINE

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Presentation

Executive Summary

1. The ETF working with Ukrainian stakeholders decentralizing VET and setting up CoVEs: Methodological remarks

2. Introduction: VET Decentralization and the reform of institutional networks in Ukraine.

2.1 Key challenges in VET policies and system in the process of devolving powers to Ukrainian regions.

2.2 The main patterns of Ukrainian regions: demography, socio economic profiles and employment situation

2.2.1 Demographic trends and migration.

2.2.2 Economic developments.

2.2.3 Employment and social situation.

2.3 Some chronic issues in Ukrainian VET system: institutional networks and funding

2.3.1 Dynamics of students and VET institutions.

2.3.2 Key dynamics on VET funding

3. Setting up VET Centres of Excellence and innovation in Ukraine: key issues and policy options

3.1 Purposes of establishing CoVEs in Ukraine.

3.2 What are CoVEs? Characteristics, objectives, function and definition

3.3 Governance, financing, management and legal status of CoVEs

3.3.1 The Founders.

3.3.2 The Board

3.3.3 The Executive

3.4 A broad taxonomy to support policy options for setting up CoVEs

3.5 Estimating indicative costings for establishment of CoVEs

3.6 Competition for selecting *excellent* providers in Ukrainian regions: current issues at stake

3.6.1 Example on competitions structure and procedures

3.6.2 Possible selection criteria's for competition

3.7 Some other specific issues and options

4. Key Conclusions and Policy Messages.

5. Annexes

6. Bibliography

PRESENTATION

This publication is another milestone of the ETF project, working in cooperation with the Minister of Education and Science (MoES) of Ukraine, *VET Decentralization in Ukraine: Momentum for action* (launched in 2016). This cooperation identified several priority areas to steer systemic reforms in VET policies on Ukraine ⁽¹⁾. These are:

- Good Multilevel Governance (institutional, communication and financial aspects);
- Optimization and rationalization of VET School networks;
- VET school autonomy and accountability;
- Public Private Partnerships for VET and Skills development.

The issue of exploring possible role and functions of Regional VET councils in Ukraine was a further step to tackling above mentioned issues from the logic of decentralization of VET policies ⁽²⁾. After this exercise, the ETF and MoES agreed on focusing on '*improving the Effectiveness of Regional VET Networks: Working Together to Set up VET Centres of Excellence -and Innovation- in Ukraine*'.

Such action was launched in April 2018 with the main objective of conducting a feasibility analysis (based on collecting primary and secondary information) for proposing key policy options and helping on how to implement the concept of Vocational Education and Training (VET) Centres of Excellence (and innovation) in Ukraine. Overall, the analysis presented in this publication provides a number of policy options whilst identifying some capacity gaps to fill up in the Ukrainian VET community.

The *strategic* goals have been making more aware the policy actors in the country on how should be working effective distribution of roles and functions across vertical –and horizontal- levels with a purpose of improving the overall effectiveness and efficiency of Regional VET Networks in the country. VET image, attractiveness and excellence are key additional issues and concepts to steer the exercise.

In this context, VET Centres of Excellence- and Innovation- are considered as a key driver for tackling all these issues, as well as an option to support new concept, role and vision on VET in the country. The ambition is that VET shall help on socioeconomic and regional development of Ukraine indeed.

The paper is developed as a result of combination of desk research, wide consultation process particularly through meetings and group discussions with the key stakeholders organised in five regions of the country and the city of Kyiv, and mapping of the Ukraine regions. It proposes options for the key aspects of CoEs establishment and operationalisation, as well as possible challenges and measures to overcome them.

Chapter 1 briefs on methodology that supported building this report. Chapter 2 provides a briefing on main socioeconomic national- and regional- indicators for informing on current structural conditions surrounding the reform of VET networks. Chapter 3 introduces main ingredients that should be taken into consideration to set up CoVES including a broad typology of possible forms that CoVES can take in the country (send perhaps in others). The chapter 4 introduces main conclusions and policy messages and annexes present some international practices on CoVES that might be of the best interest for Ukraine.

The ETF is thankful to MoES of Ukraine and all the actors who participated in meetings, focus groups and workshops to validate and share the main contents of this report. The final draft report was presented and validated in international workshop held in in Kiev (6th & 7th March 2019).

Las but not least, the publication also aims to inspire other ETF partner countries that might take the option on setting up CoVES. The ETF is ready and willing to work together to make it possible.

¹ ETF & MoEs of Ukraine (2017).

² ETF Galvin Arribas, Kolinsko and Schustereder (2018)

EXECUTIVE SUMMARY

During the last years, considerable reforms have been carried out in the Vocational Education and Training (VET) sector of Ukraine. The achievements are mainly connected with decentralisation processes, which is stimulating modernisation of legislative and regulatory framework and revision of funding mechanisms, with the aim of improving internal efficiency of the VET system at both national and regional levels.

These are, for instance, pursuing improving teacher performance, standardising the VET content (development of national competence-based VET standards based on occupational standards elaborated by employers) and implementing innovative educational technologies and methods. The increased use of information and communication technologies, enhancing the flexibility of the VET system through the recognition of non-formal learning outcomes (etc.) ⁽³⁾. Further approval of a new VET Law is work in progress.

Nevertheless, the system still suffers from a number of unsolved problems related to different aspects of VET. Analysis of national policy documents, reports produced by the international structures and also at national level, as well as focus groups conducted in this project suggest that the main challenges of the VET system in Ukraine can be formulated as follows:

- Inefficient network of VET institutions accompanied with outdated infrastructure in the majority of the VET institutions (in many schools no improvements have been made for last 30 years);
- Low quality of VET provision, absence of quality assurance system, mismatch with the LM requirements; Overlapping of professions and qualifications; Insufficient provision of training means and materials, lack of practical training;
- Poor VET governance and management at all levels particularly as a result of insufficient understanding of VET system's benefits for the country and for the regions development; Lack of sector coordination; Low level of autonomy for VET institutions;
- Growing lack of quality teaching staff (specifically masters of practical training);
- Insufficient financing of VET, inefficient funding schemes of VET institutions, lack of medium-term budget planning;
- Stable decrease of the students' population (and their enrolment) due to low attractiveness of VET and demographic issues; Ineffective organisation and outdated methods of Vocational Guidance; Lack of sufficiently credible medium-term forecast of the LM needs, at both national and regional levels;
- Fragmentation of the Vocation Education system into "Professional Technical" and "Professional Pre-tertiary".
- Poor motivation of partners to be engaged in any VET processes resulting in weak involvement of the social partners specifically the employers in all components of VET, including development of the contents, provision, evaluation, funding, governance and management;
- Almost complete inaction of the Regional VET Councils.

However, during last year's, many efforts have been made by public education authorities and VET community, working with ETF in Ukrainian regions, to push forward decentralization as a key driver to introduce sound reforms for modernising vocational education and training (VET) in the country.

Among those, decentralisation of the VET system (transferring the VET institutions and their funding from the national to the regional (community) level ⁴. The optimisation of the VET providers' network

³ Torino Process Report Ukraine 2016-17. ETF, 2017.

⁴ Decentralisation of the funding system was effectively launched in 2016.

and rationalisation of the offered qualifications, accompanied with increased relevance of the state and regional orders; strengthening cooperation with the employers and attracting private investments to VET particularly through creation of *'modern educational-practical centres'* and establishment of effective mechanisms for Public-Private Partnership (PPP).

According to key figures presented in this report, VET demography and networks is on continuous declining since more than 20 years ago. This trend seems to be continued, as migration and aging population are major issues, as well employment perspectives for youngest cohorts. All this is calling for smart and urgent restructuring of VET networks whilst profiting decentralization to modernize VET system, in order to contribute on the preparation of a highly competitive workforce that meets the current requirements of the labour market, and ensures equal access to vocational education.

However, in the reform of VET networks it will be extremely important to balance regional and sectoral skill approaches for –national- socioeconomic development and matching of skills in the labour market. The gathered evidence informs on disparities among Ukrainian regions, increased migration, over education phenomena and scarce opportunities for employment growth.

The recently drafted Concept paper “Modern Vocational Education: Conceptual Principles of Reforming Vocational Education in Ukraine”, optimisation of the VET providers’ network foresees creation of *multi-profile, multi-level institutions by establishing new ones and reorganising (merging, transforming) the existing institutions that will provide vocational education services, and forming a model of a multifunctional centre of vocational excellence.*

Some characteristics and functions of those centres are proposed in the Concept but in general, there is still a vision to be better build to implement concept of VET Centres of Excellence in Ukraine. The way CoVEs should be established and organised, what schemes of governance, management and funding are the most suitable for country, what shall be the specific role of CoVEs within the national VET system, their goals, objectives, scope of functions, level of autonomy, (etc).

The notion of Centres of Excellence and , in particular, *VET Centres of Excellence (CoVEs)* is widely used around the world and in many countries there are a number of institutions enjoying this title. However, there is no internationally accepted definition of, or a set of criteria for, homologated vision on CoVEs which could more or less acknowledged.

CoVEs mostly refer to a network organisation, comprised of VET institutions, linked together by a public-private partnership, established in different regions of the country, reflecting national priorities in terms of industrial and economic development, therefore tend to have a strong orientation towards technological and innovative sectoral or multi-sectoral training.

They should meet the skill needs of companies and also individuals; provide high quality qualifications via VET and CVT programmes, and may be connected to tertiary education routes; take a variety of different forms and go by a variety of different names such as *industrial training institutes, industrial training centres, industry skills centres* or *multifunctional centres*. CoVes can become strategic ambassadors for marketing VET policies and systems laid on the pillars of excellence and innovation, and also initiate (although sometimes *vice versa* – require) optimisation of VET providers’ networks .However, require both *high-level human and financial capacities*.

In this context, CoVEs could be briefly defined as *partnership-based vocational education and training network organisations forming ecosystems of excellence and innovation to provide high-level skilled specialists required in national and international labour markets and for contributing on the development of national and regional economies*⁵.

⁵ Galvin Arribas, J M (2020)

Analysis of the existing international practices shows that in many countries, VET Centres of Excellence (or similar structures) not only ensure a high (or at least better than country average) level of performance but also considerably contribute to the improvement of the national VET systems particularly through networking with other VET providers, experience sharing, methodological support and introduction of innovations;

Models of CoVEs may vary from country to country, or even within the country and are usually adapted to the regional or local contexts (e.g. social and economic, industrial, etc.). Multi-level (multi-stakeholder) governance is one of the key features of the CoEs which ensures dialogue between different parties, relevance to the regional and national development needs and priorities, and matching the VET offer with the LM demand.

The report introduce a definition on CoVEs and a taxonomy for facilitating policy thinking, dialogue and further learning on how to set up CoVEs. Five possible policy options could be:

- a) To set them up as an independent training provider;
- b) Independent training institutions created from existing provider, which could deploy extended functions;
- c) CoVEs as a part of other training institution;
- d) CoVEs as network organisations for feeding excellence and innovation in VET communities;
- e) CoVEs as multiprofile/sectoral provider.

This typology introduces broad categories as VET Centres of Excellence and Innovation might not always fall under one single category, form and/or type. The taxonomy builds from increased number of examples worldwide of those selected and presented in this paper. Some countries might have more than one modality of implementation. In any case, the issue of *status vs type* of institution might be as crucial as it is also the challenge to feed excellence and innovation dimensions for steering reform of VET institutional networks.

In general, the following models are possible, when the Centre is:

- R-S** – *regional sectoral*, i.e. specialised in one of the main economic sectors of the region and serves the skill/employment needs of this sector for the region,
- R-MP** – *regional multi-profile*, i.e. specialised in several main economic sectors of the region and serves the skill/employment needs of the region,
- IR-S** – *inter-regional sectoral*, i.e. specialised in one economic sector and serves the skill/employment needs of this sector for several regions or the entire country,
- IR-MP** – *inter-regional multi-profile*, i.e. specialised in more than one economic sectors and serves the skill/employment needs of those sectors for several regions or the entire country.

The recommended options attempt to answer particularly the following questions:

Why should CoEs in Ukraine be established?

- Based on the best international, as well as national experience and practices, to ensure preparation of highly qualified specialists meeting the requirements of the local, regional and national labour markets;
- Promote introduction of innovations and development in VET;
- Found centres of methodological and professional experience exchange, teacher training and accumulation and transfer of wide range of educational resources to other institutions of the VET system;
- Ensure inclusiveness in education particularly for the adult learners;
- Ensure higher efficiency, targetedness, impact and visibility of the VET reforms through centralisation of investments and concentration of results.

What should CoEs be in Ukraine?

A Centre of Excellence and innovation is multifunctional educational institution having a solid material and technological, professional, managerial, teaching and methodological potential for providing high

quality initial and continuing, both formal and non-formal vocational education and training for all age groups as well as contributing to, and disseminating, the reforms in the field of VET, thus playing a significant role in satisfying the skill needs of the Labour market and also in harmonious social and economic development of the region(s) and the country, in general.

What are the key characteristics of the CoEs in Ukraine?

- The CoEs are institutions with very high quality physical conditions (well refurbished buildings and other facilities), provided with a modern training equipment and furniture, thus ensuring not only high level of teaching/learning environment but also attractiveness for the learners and partners including those representing the business sector;
- They ensure advanced education content and for this purpose are equipped also with modern curricula and programmes fully meeting the requirements of the labour market and the training needs of the partner companies' employees (e.g. for qualification upgrade or re-qualification), with teaching/learning technologies, methodologies, techniques and didactic resources;
- The teaching staff has high proficiency and capacities to ensure effective teaching and learning process according to the requirements of the standards and with purposeful use of the available training equipment and other means; the administrative staff is capable to carry out modern ways of effective and collaborative management;
- The CoEs have internal quality assurance mechanisms (and units) and are subject to systematic external quality evaluation;
- They have capacities (dormitories and/or transportation means) for hosting students from other municipalities and regions as well as invited teachers and other specialists;
- Financial means (from public and private sources) are available for continuous development of the Centres, for the staff (both administration and teachers) training and exchange, for communication means, purchase of new resources, implementation of other necessary activities, e.g. organisation of events, promotion and awareness raising campaigns, provision of surveys, etc.;
- At the same time, the CoEs are legally allowed and fully capable to generate additional income *via* provision of different types of services and activities;
- The CoEs are closely liaised with other VET providers of the region (different forms and mechanisms of liaison are possible) and to each other (preferably also with similar centres in other countries) and compose a platform for information sharing, experience exchange and peer learning.

What should be legal status of CoE? What can be the CoE management scheme?

For Ukraine, two options are possible: i) an ***independent type*** of institution; ii) a ***status*** awarded to institution(s). For the first option, the CoEs can be established via:

- a) Reorganisation (transformation) of an existing VET institution into a CoE, ***or***
- b) Merger of two or more organisations including at least one VET institution, ***or***
- c) Acquisition of one or more organisations to, or by a VET institution, ***or***
- d) Foundation of a new organisation as a CoE.

For the ***second option***, the scenarios can be:

- a) Awarding CoE status to an existing VET institution, ***or***
- b) Awarding CoE status to a group of institutions (including at least one VET institution), clustered (networked) in the framework of an agreement or another type of association, ***or***
- c) Foundation of a new institution with CoE status.

A multi-level and multi-stakeholder management is proposed for CoEs in Ukraine. The following managing bodies can be foreseen: the Founder(s), the Governance Board and the Executive Manager (Director, Principal, Head, etc.). Except the State (represented e.g. by the Ministry of Education and Science or by the Government), any natural and/or legal person(s) can also be the founder(s) of the Centre.

The Board of the Centre will be its collegial governance body and will include representatives of different stakeholders, i.e.: Founders; Social partners, nominated by employers and/or their unions and associations, and trade unions; Regional and/or Community authorities; Territorial Employment Service; the Centre's Pedagogical workers; the Centre Students and/or learners, etc.

How to select the regions where CoEs shall be established, and the institutions which should be reorganised into CoEs? What shall be the selection criteria?

It is proposed that institutions apply for obtaining the status of CoE or being reorganised into CoE. In this context, establishment (regardless of the formal procedure) of every Centre will be considered as an independent project and every application – as a project proposal. Therefore, selection of the best applicant institutions will be organised on the base of competition, while evaluation of the bids – according with the selection criteria established in advance. This paper recommends 15 selection criteria grouped under the three main clusters: I) Socio-economic profile of the region and selection of the sector(s) of specialisation; II) Institutional characteristics; III) Location, territorial coverage and cooperation. In total, around 90 indicators equipped with sources of verification and weights are proposed for those criteria.

Due to the proposed transition from *centralised* to *networking governance*, different stakeholders will have new roles (e.g. the governmental and regional bodies – in the processes of establishing and management of CoVEs. The private sector representatives – in participating in taking policy decisions and sharing social responsibility; administrators of the CoEs – in business planning, project design and project management, marketing, etc.

These new roles will require specific abilities of the stakeholders and for many of them capacity development and policy learning will be necessary. For this, a training needs assessment against the scope of required competences shall be done, however, such topics as Social partnership in education; Communication, Team work and Negotiations; Policy and Strategy development, implementation, monitoring and evaluation; Inter-sectoral cooperation, etc. should be addressed.

Last but not least, the paper also proposes an overview for understanding major regional patterns and key trends shaping VET sector in the country during last years. Developing analytical approaches is a must for further advisory and/or decision making on how to set up VET Centres of Excellence and Innovation in the country.

In summary, the analytical framework of this report addresses a set of necessary indicators to understand better how to set up CoVEs in the country in 24 Ukrainian regions and supporting policy dialogue. Such dialogue might be implemented working together national, regional, sectoral and provider governance levels, whilst applying effective cooperation with EU and other international stakeholders (donors community) looking at the future.

1. The ETF working with Ukrainian stakeholders for decentralizing VET and setting up CoVEs: Methodological remarks

This paper is the result of analytical and research process. First, a *desk research* was implemented during the inception phase. This was based on ETF sources, international and national documents and other analytical papers (see bibliography). An *Inception Report* was the first outcome to help moving forward research and analytical schedules.

Further, the ETF in cooperation with MoES of Ukraine, implemented *regional discussion groups*. They carried out in the second half of 2018 in six regions, namely Lviv, Rivne, Zaporizhzhya, Dnepropetrovsk, and Kyiv Oblasts plus in the City of Kyiv⁶.

⁶ VET profiles (statistical fiches) of these regions are presented in annex 2.

Table 1. Regional Group Discussions on CoVES

Nº	Region	Location	Venue
1	Rivne Oblast	Kvasyliv	Kvasyliv Professional Lyceum
2	Lviv Oblast	Lviv	Education and Science Department of Lviv Oblast State Administration
3	City of Kyiv	Kyiv	Kyiv Professional College with Advanced Military and Physical Training
4	Kyiv Oblast	Vasylkiv	Vasylkiv Professional Lyceum
5	Zaporyzhzhya Oblast	Zaporyzhzhya	Zaporyzhzhya Oblast VET Scientific-methodological Centre
6	Dnipropetrovsk Oblast	Dnipropetrovsk	Dnipropetrovsk Oblast State Administration

The main objective of this qualitative exercise was to ensure a common understanding on the concept of VET Centres of Excellence. This helped to further discussing key *options of reforming VET regional networks through introduction of VET Centres of Excellence*. As a result, shared vision of how to implement national concept of VET Centres of Excellence in Ukraine; and define the challenges, risks and opportunities for establishing the CoEs in Ukraine. The distribution of stakeholders who participated in the regional discussion groups are presented in below:

Table 2. Structure of the Regional Group Discussions participants

Type of stakeholder	Number of representatives						Total
	Rivne Oblast	Lviv Oblast	City of Kyiv	Kyiv Oblast	Zaporyzhzhya Oblast	Dnipropetrovsk Oblast	
Ministry of Education and Science	-	-	1	1	-	1	3
Department of Education and Science of Oblast (Kyiv city) State Administration	2	4	2	2	1	3	14
Economy or Finance Department of Oblast State Administration	2	1	-	-	-	-	3
VET Scientific and Methodical Centre	1	2	-	-	4	2	9
Oblast Employment Centre	1	2	-	-	1	1	5
VET institution	5	8	9	4	3	3	32
Employer	3	3	7	3	2	2	20
NGO and others	1	-	-	-	-	-	1
Total	15	20	19	10	11	12	87

The group discussions were carried out using a mixture of different methods (i.e. presentation which included general concept of the CoEs, some country cases, and the experts' findings and vision on establishment of CoVES in Ukraine; group discussions of the main topics with participants; and a practical work). MoES found it more appropriate that decisions on the target sectors are taken by the regional authorities

For the **mapping exercise**, a list of dimensions was elaborated by ETF and agreed with Ukrainian MoES. The purpose of this framework is to bring key evidence for supporting decision making on how to select potential VET providers which could become CoVES. They were grouped around seven main clusters. The proposed analytical framework is presented below.

BOX 1 . FRAMEWORK OF INDICATORS TO SUPPORT ASSESSMENTS ON STRUCTURAL CONDITIONS FOR SETTING UP CoVES

1. Short description of the region

- 1.1. History
- 1.2. Geography: territory, nature
- 1.3. Resources
- 1.4. Specificities: advantages, disadvantages

2. Demography of the region

- 2.1. Population and its dynamics by:
 - age groups
 - gender
 - urbanisation

- 2.2. Migration dynamics
- 3. Social situation in the region**
 - 3.1. Economic activity
 - 3.2. Employment rate and structure by educational attainment levels and age groups
 - 3.3. Unemployment rate and structure by educational attainment levels and age groups
 - 3.4. Economic non-activity rate and structure by educational attainment levels and age groups
 - 3.5. Long-term unemployment rate (registered unemployed with job searching duration over 6 and/or 12 months)
 - 3.6. Share of those employed in non-formal economy
 - 3.7. Interregional employment mobility (share of those employed in others regions)
 - 3.8. Number and structure of vacancies by occupations (10 most demanded occupations by regions), dynamics for last 3 years; share of low-wage vacancies
 - 3.9. Number and structure of unemployed by occupations (10 most widespread occupations by regions), dynamics for last 3 years
 - 3.10. Wages:
 - Average wages,
 - The share of employees whose wages are credited above the minimum wage
 - Wage arrears (the share of unpaid wages in the wage fund)
 - 3.11. Poverty
- 4. Economic situation in the region**
 - 4.1. Share of regional GDP vs national
 - 4.2. Gross Regional Product per capita (factual prices)
 - 4.3. Gross Value Added in constant prices
 - 4.4. Business activity (number of active legal entities (enterprises) by sectors, out of which the share of profitable enterprises)
 - 4.5. Production rates (volume of realised industrial production and agricultural production rates)
 - 4.6. Export-import flows, and export volume per capita
 - 4.7. Capital Investments
 - Capital investments rates,
 - Capital investments volume per capita (accumulated from beginning of year)
 - Direct foreign investment volume per capita (accumulated from beginning of year)
 - 4.8. Innovations (share of industrial enterprises which introduced innovation in the total number of enterprises))
 - 4.9. Financial capacity of region:
 - Revenues of local (oblast) budgets (without transfers), per capita
 - Growth rate of local budget revenues (without transfers), as % to the previous year
 - 4.10. Transport infrastructure (length of hard-surfaced automobile roads)
- 5. Main economic clusters (sectors) of the region**
 - 5.1. Share of the sector in the region GDP
 - 5.2. Industry production rates
 - 5.3. Share in the total number of industrial enterprises which introduced innovations
 - 5.4. List of the main enterprises as by:
- 6. Regional development plan**
 - 6.1. When was adopted
 - 6.2. Reference to the main sector(s) of economy
 - 6.3. Reference to the VET system
- 7. Regional VET system**
 - 7.1. Offered professions/ qualifications
 - 7.2. Number of applicants by qualifications.
 - 7.3. Number of students by qualifications.
 - 7.4. Number of graduates by qualifications.
 - 7.5. Graduation and dropout rates.
 - 7.6. Graduates' job placement rates.
 - 7.7. Number of employees, including teachers and trainers.
 - 7.8. Facilities and their conditions in VET establishments.
 - 7.9. Regional VET Council set-ups.

The mapping exercise is an essential step for assessing how decisions on CoVEs should be carefully informed. The analysis of these set of indicators have a purpose to help MoES and the other stakeholders in making justified decisions while selecting the regions where the CoVEs can be established, and/or the institutions, which can be transformed into CoVEs.

The main source of information was official statistics published by the State Statistics Service of Ukraine and the Ptoukha Institute for Demography and Social Studies. However, considerable information was collected also from MoES and directly from the regions.

2. Introduction: VET Decentralization and the reform of institutional networks in Ukraine.

Since 2014, Ukraine has been conducting a political decentralization process that seeks to fundamentally restructure centre–periphery relations. This reform of local governance implies a devolution and delegation of power from the national to the municipal level (and, to a lesser degree, to the regional and upper sub-regional levels).

Decentralization is being effected not through federalization, but through an amalgamation of small municipalities and a reallocation of political, administrative and financial competencies to these merged and enlarged local communities (*gromada*). An essential feature of decentralization in Ukraine to date is that it has taken place on a voluntary basis – thus contributing to the development of local democracy. Decentralization’s main achievement so far has been to start a territorial consolidation of municipalities and an accompanying empowerment of local self-government.

In late 2014 and early 2015, fiscal decentralization was introduced and the fusion of small local municipalities into bigger and more self-sustaining ‘amalgamated territorial communities’ (ATCs) began. These new entities have gained considerable tax-raising powers and now benefit from direct transfers from the central state budget (Romanova and Umland, 2019).

Table 4. Structure of Local Public Administrations in Ukraine

TIER	ADMINISTRATIVE UNITS		
Third	Cities of Republican significance	Oblasts, AR Crimea	
Second		Cities of Oblast significance	Rayon’s
First			Gromadas

Source: ETF 2016 from OECD 2014 (with adjustments)

In this context, the first major decentralisation initiative by the government of Ukraine focuses on the Vocational Education and Training (VET) system. This has wider significance for Ukraine than the pilot decentralisation of public administration. In this case decentralisation is also the enabler of more general and far reaching reform of the VET system in line with the needs of the economy and in synergy with many other initiatives involving the labour force, small and medium-sized enterprises (SMEs) and regional development (ETF Galvin et al 2017).

On December 28, 2014, as a part of decentralization reform, the Ukrainian Parliament adopted the Law on Changes to the Budget Code (№ 79-VIII). This law created a new system of local public finance that has radically altered the financing of *oblasts* (regions), cities, rayon’s and the newly formed amalgamated Gromadas.

Because of these changes the system for recurrent financing of VET schools for the fiscal years 2016 and 2017, has resulted in the division of VET into two distinct subsystems, one financed from city

budgets and one financed from regional budgets. It will be extremely difficult to implement rational policies for professional technical education if this fragmentation persists.

Several national policy documents such as Strategy for Sustainable Development “Ukraine-2020 (2015); National Education Development Strategy 2012-2021 (2013); Medium-Term Plan of the Government Priority Actions for the period till 2020 (2017), suggest extensive number of measures for improving the situation in VET.

VET Decentralisation, including the system governance and VET institutions’ management, optimisation and modernisation of the VET institutions network, implementation of PPP in education with investments from employers and from the state budget, are also the main suggestions of key policy papers (ETF, Green Paper on Decentralising VET in Ukraine (2017), PRIME Report (2016), and Torino Process Report Ukraine 2016-17 (2017).

Those documents propose establishment of Centres of Excellence and formation of regional VET school networks around those centres as a one of the practical solutions of the above-mentioned key issues. This would lead to improvement of the image of the VET system, particularly through establishing a multi-stakeholder partnership.

The optimisation of the VET system and its decentralisation, which can initiate also inter-regional cooperation on the development of specific sectors of the economy; expansion of the scope of the VET institutions’ activities resulting in additional income generation; higher levels of performance; and collaboration between schools, enterprise and social partners based on Public Private Partnerships (PPPs).

In December 2018, MoES delivered a draft paper so-called *Reform Concept for the Vocational Education in Ukraine* which among other issues, establishes as objective number 1 the decentralization of governance and funding following below principles:

- Effective management model for the vocational education implying the transfer of real powers to regions and employers as well as providing autonomy to vocational education institutions.
- New structure and optimal network of vocational education institutions, which can react rapidly to the needs of the labour market, takes into account individual needs and provides life-long learning and professional qualification.
- Multi-channel funding for vocational education institutions according to appropriately determined scope, fields and levels of professional qualification, implementation of investment projects for the modernisation of the vocational education.

BOX 2. NEW MODEL FOR THE DISTRIBUTION OF POWERS IN UKRANIAN VET SYSTEM

STATE level

- Policy making in the vocational education
- Development and adoption of education standards
- Build-up of a quality control system for the vocational education
- Ensuring vocational training in areas of national significance
- Calculation of funding norms for the vocational education
- Education of persons with special educational needs

OBLAST level

- Analysis of the labour market – determining the demand for qualified professionals and placing the order of the respective region for the training of specialists
- Management and funding of the operation and development of the vocational education system
- Organisation of the activities of regional vocational education councils and supervisory boards of vocational education institutions
- Build-up of a network of vocational education institutions

- Licensing of vocational education institutions
- Development of social partnership
- Advanced training for teachers in the vocational education sector

VET INSTITUTIONS level

- Preparation of a development strategy
- Organisation and steps to ensure the tuition process
- Preparation of education programs
- Operation of the internal quality control system
- Establishing effective cooperation with social partners
- Motivation for the professional development of teachers
- Creation of an inclusive learning environment
- Reporting to the supervisory board

Source: MoES of Ukraine

In this paper, it is also underlined a key role for regional approach in VET. In this respect, the regions will have to deal with build-up of personnel capacities and ensure compatibility of the available vocational education options with the real needs of the economy. Regions will have to mobilise the intellectual and material resources of the respective region as well as stimulate the diagnostics of the condition and development prospects of the economy taking into account the education capacities of the respective region.

Further, there is foreseeing that Ukraine will have a new structure and optimal network of educational institutions. The vision in Ukraine is that optimisation of the network of vocational education institutions will requires the creation of universal, multi-level institutions by establishing new and re-organising (merger, incorporation, conversion) of existing ones. The most innovative concept is the creation of model of new institutions so-called *multi-functional professional excellence centres*.

Regional governments and Education Departments and Regional councils should play a key role in such process in cooperation with the social partners.

2.1 Challenges in VET policies and system in the process of devolving powers to Ukrainian regions.

During the last years, considerable reforms have been carried out in the Vocational Education and Training sector of Ukraine. The achievements are mainly connected with decentralisation processes which stimulated modernisation of legislative and regulatory framework and revision of funding mechanisms, with the improvements in the internal efficiency of the VET system at both national and regional levels.

Improving teacher performance, standardising the VET content (development of national competence-based VET standards based on occupational standards elaborated by employers), implementing innovative educational technologies and methods, increased use of information and communication technologies, enhancing the flexibility of the VET system through the recognition of non-formal learning outcomes are other core issues in the VET policy agenda⁷. Development of a new VET Law has also been initiated.

Nevertheless, the system still suffers from a number of unsolved problems related to different aspects of VET. These are followings⁸:

(⁷) Torino Process Report Ukraine 2016-17. ETF, 2017.

(⁸) Such list of issues was worked in cooperation with participants in the regional discussion groups.

- a) Inefficient network of VET institutions accompanied with outdated infrastructure in the majority of the VET institutions (in many schools no improvements have been made for last 30 years);
- b) Low quality of VET provision, absence of quality assurance system, mismatch with the LM requirements; Overlapping of professions and qualifications; Insufficient provision of training means and materials, lack of practical training;
- c) Poor VET governance and management at all levels particularly as a result of insufficient understanding of VET system's benefits for the country and for the regions development; Lack of sector coordination; Low level of autonomy for VET institutions;
- d) Growing lack of quality teaching staff (specifically masters of practical training);
- e) Insufficient financing of VET, inefficient funding schemes of VET institutions, lack of medium-term budget planning;
- f) Stable decrease of the students' population (and their enrolment) due to low attractiveness of VET and demographic issues; Ineffective organisation and outdated methods of Vocational Guidance; Lack of sufficiently credible medium-term forecast of the LM needs, at both national and regional levels;
- g) Fragmentation of the Vocation Education system into "Professional Technical" and "Professional Pre-tertiary".
- h) Poor motivation of partners to be engaged in any VET processes resulting in weak involvement of the social partners specifically the employers in all components of VET, including development of the contents, provision, evaluation, funding, governance and management;
- i) Almost complete inaction of the Regional VET Councils.

2.2 The main patterns of Ukrainian regions: demography, socio economic profiles and employment situation⁹

In the next sections, a short analysis is introduced addressing some demographic and socioeconomic patterns, trends and dynamics of Ukrainian regions. The purpose is to have indications and evidence to support policy discussions and further decisions on how to set up CoVES in the country.

2.2.1 Demographic Trends and Migration

Socio-economic development in Ukraine is characterised by significant regional disparities as a result of different demographic, economic, educational and social potentials of regions. In the demographic situation, negative tendencies are prevailing. The reduced number of population (from 51.6 million, as of 1st January 1990, to 42.4 million, as of 1st January 2017) is due to annexation of Autonomous Republic of Crimea and anti-terrorist operation in Donbass region.

Ageing of population (the share of 0-17 age group in the total number of population, has reduced by 43.8% between 1989 and 2016), low fertility rates, as well as low life expectancy and poor health infrastructure, negatively affected the socio-economic development of regions.

The number of population, which for the period of 2014-2018 shows positive dynamics only for Rivne oblast (0.16%), Zakarpattia oblast (0.10%), Kyiv oblast (1.67%) and the city of Kyiv (2.29%), while for the period of 2015-2018 the dynamics remains positive only for Kyiv (1.61%) and Kyiv oblast (1.45%)¹⁰ (see table 5).

(⁹) Some figures elaborated and presented in this report might vary when the publication will see light.

(¹⁰) In this and following tables of this report, data marked with(*) does not include the temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopol and part of the anti-terrorist operation zone.

Table 5. Population in Ukraine by gender and age groups 1990-2018
(as of 1st January; 1,000 persons)

	1990	2014	2015*	2016*	2017*	2018*	Increase in 2014-2018*	Increase in 2015-2018*
Total	51,556.5	45,245.9	42,759.7	42,590.9	42,414.9	42,216.8	-6.69%	-1.27%
<i>male</i>	23,826.2	20,918.3	19,787.8	19,717.9	19,644.6	19,558.2	-6.50%	-1.16%
<i>female</i>	27,730.3	24,327.6	22,971.9	22,873.0	22,770.3	22,658.6	-6.86%	-1.36%
0-14 years	11,084.2	6,710.7	6,449.2	6,494.3	6,535.5	6,530.5	-2.69%	1.26%
0-15 years	11,814.3	7,120.1	6,816.0	6,856.3	6,887.0	6,895.7	-3.15%	1.17%
0-17 years	13,305.0	8,009.9	7,614.7	7,614.0	7,615.6	7,609.3	-5.00%	-0.07%
16-59 years	30,291.4	28,372.5	26,613.3	26,317.4	25,982.0	25,641.3	-9.63%	-3.65%
15-64 years	34,297.7	31,606.4	29,634.7	29,327.7	29,011.9	28,719.0	-9.14%	-3.09%
18 and +	38,251.5	37,236.0	35,145.0	34,976.9	34,799.3	34,607.5	-7.06%	-1.53%
60 and +	9,450.8	9,753.3	9,330.4	9,417.2	9,545.9	9,679.7	-0.75%	3.74%
65 and +	6,174.6	6,928.8	6,675.8	6,768.9	6,867.5	6,967.3	0.56%	4.37%

Source: Ptoukha Institute for Demography and Social Studies (own elaboration).

Mobility of population in Ukraine is characterised by significant interregional migration flows stipulated by increasing the number of internally displaced people (Table 6). Such regions as Kyiv, Dnipropetrovsk (neighbouring the temporarily occupied territories), Kharkiv, Odesa, Lviv oblasts and the city of Kyiv continuously demonstrate attractiveness for the internal migrants, while in 2017, 15 other oblasts had negative balance of migration. Except Donetsk and Luhansk oblasts, the largest emigration was recorded from the Vinnitsa, Khmelnytsky, Kherson and Zaporizhzhya oblasts. Data for January-May 2018 show similar trends¹¹.

Table 6. Migration in Ukraine (2000-2018)

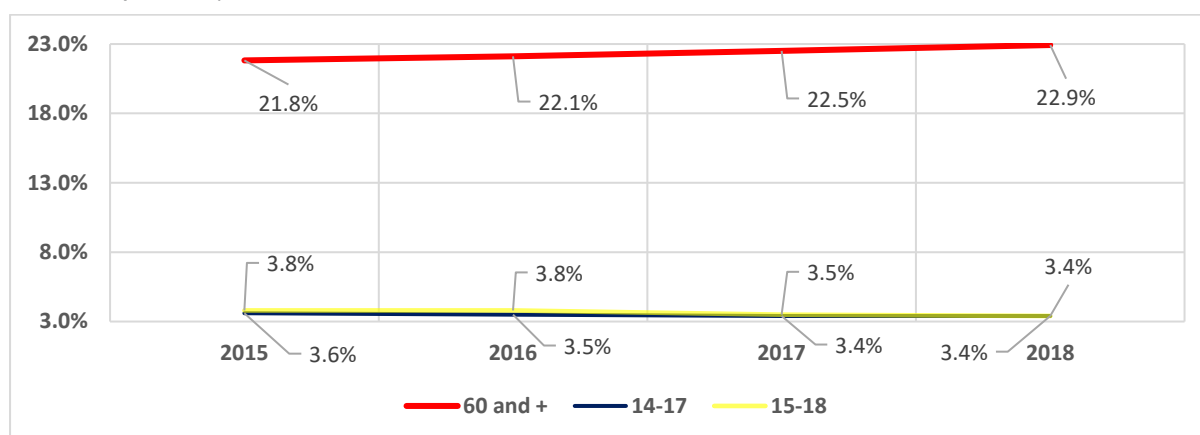
Regions	2000	2014	2015*	2016*	2017*	2018 (Jan-May)
Ukraine	x	22,592	14,233	10,620	11,997	9,616
Kyiv	726	11,120	11,225	11,402	30,677	9,011
Dnipropetrovsk	-2,248	431	-1,351	-2346	24,131	1,795
Kharkiv	2,672	8,261	4,981	797	12,069	1,038
Odesa	2,653	4,639	986	3,380	4,725	2,655
City of Kyiv	21,345	14,443	13,462	13,288	4,211	2,301
Chernihiv	-800	-381	155	-834	-2,051	-81
Zaporizhzhya	-961	-847	-797	-1689	-2,714	-463
Kherson	-2767	-858	-301	-1034	-2,747	-584
Khmelnytsky	-995	27	-174	-1906	-2,782	-34
Vinnitsya	-2,309	331	686	-2505	-4,625	-991

Source: Ptoukha Institute for Demography and Social Studies (own elaboration).

At the same time, in the period of 2015-2017, the share of 14-17 and 15-18 age groups (typical age for enrolling VET) also had negative dynamics (dropping from 3.6% in 2015 to 3.4 in 2018 and from 3.8 in 2015 to 3.1 in 2018, respectively), decreasing by 0.0 to 0.7 percent points for different region. This was accompanied with increase of the 60+ age group by 2.3%.

¹¹ The data for the entire country, related to the indicators presented in this sub-section, can be found in the [Annex 2](#).

Chart 1. *The share of 14-17, 15-18 and 60+ age group population (as of 1st January; 1,000 persons)*

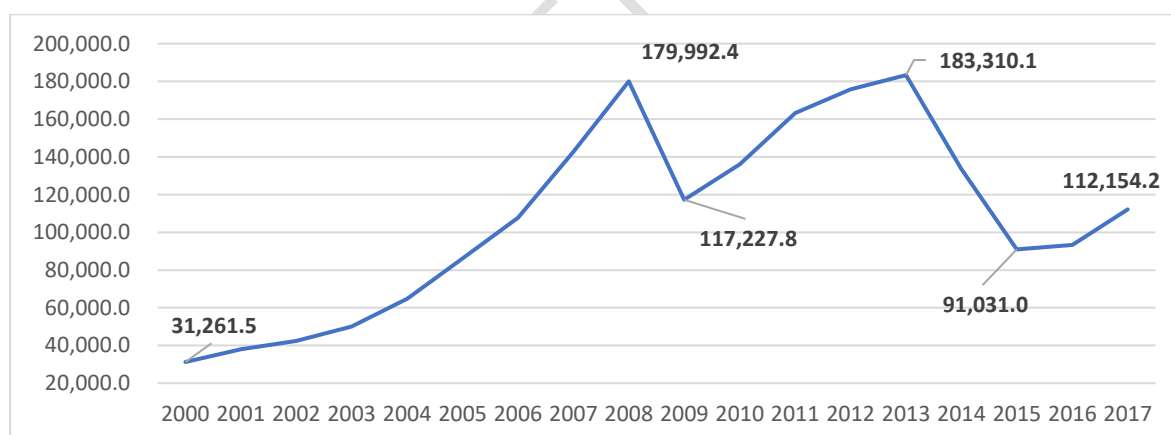


Source: Ptoukha Institute for Demography and Social Studies (own elaboration).

2.2.2 Economic Developments

According to the World Bank data, GDP of Ukraine was steadily increasing from 2000 till 2008, and peaked at ~180 billion USD, after which declined by around 35% in 2009 (Chart 7). This was followed by the next phase of increase up to 183.3 billion USD in 2013 and then sharply dropped by more than 50% during the next two years (91.0 billion USD in 2015). In 2017, GDP reached 112.2 billion USD, thus demonstrating 20.25% increase compared with the previous year (93.3 billion USD in 2016).

Chart 2. *GDP 2010-2017, million USD¹²*



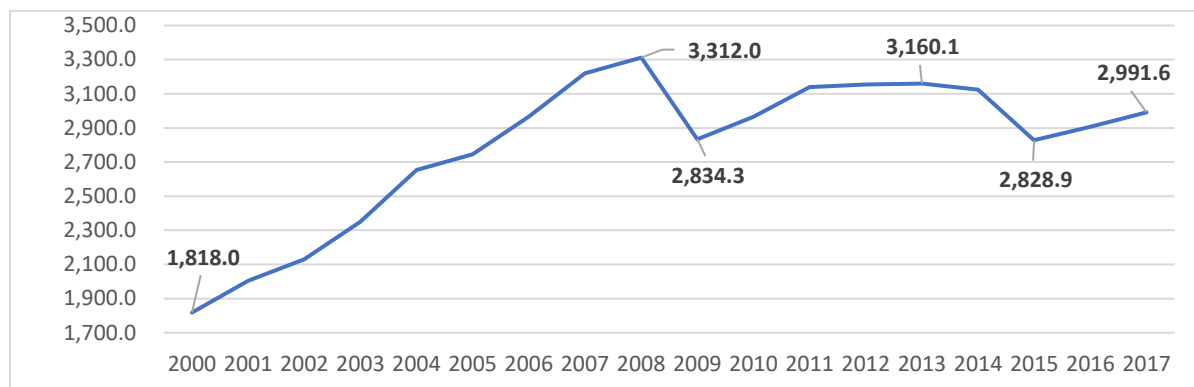
Source: Worldbank (own elaboration)

The curve of GDP *per capita* demonstrates a similar but a slightly “smoother” behaviour, specifically between 2009-2015, most likely due to the demographic reasons (Chart 8). It is remarkable that in UAH, both GDF and GDP per capita are characterised by continuous growth (except 2009) since early 1990s¹³.

¹² <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=UA>

¹³ <https://data.worldbank.org/indicator/NY.GDP.PCAP.CN?locations=UA>

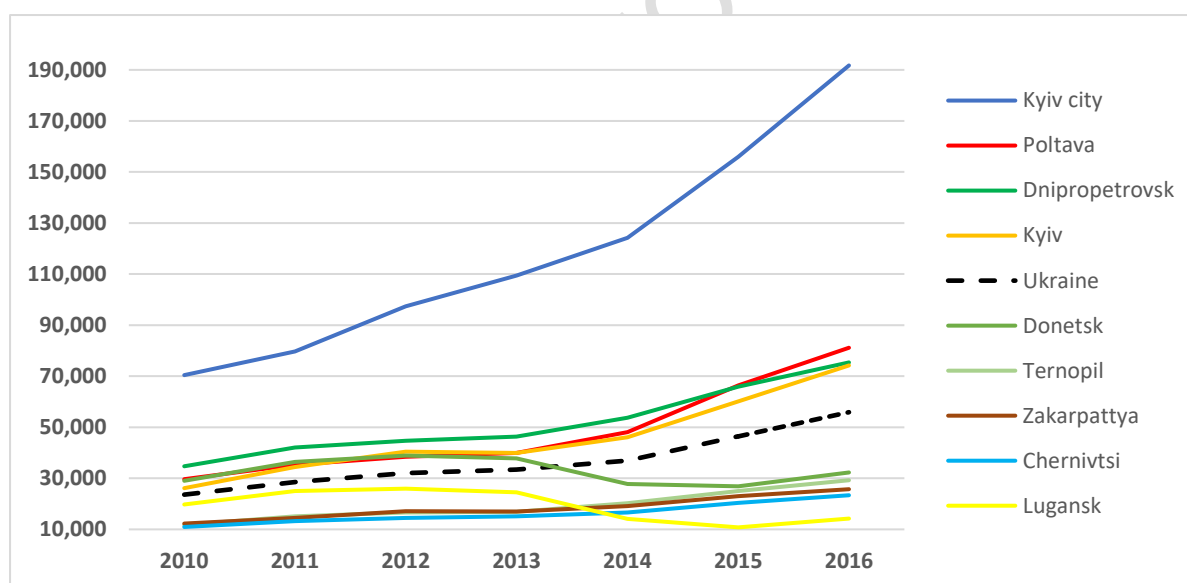
Chart 3. GDP per capita 2010-2017, USD¹⁴



Source: WorldBank (own elaboration)

Analysis of the dynamic of Gross Regional Product per capita testified substantial differentiation of regions by economic potential (Chart 9). Thus, Kyiv as industrial, financial, scientific and urban centre, has a serious potential: more than 191.74 thousand UAH (data for 2016), while for a number of regions this indicator was up to 13 times lower.

Chart 4. Gross Regional Product per capita, UAH



Source: UKSTAT (own elaboration)

The most significant reduction of Gross Value Added was observed in 2014-2015 as a result of misbalance between the regions due to crisis phenomenon (chart 3). Then, in 2016, the situation improved substantially, specifically in such oblast as Luhansk (due to extreme drop during the previous 2 years), Volyn, Kirovograd, and Vinnytsya (6% and more) but in eight oblasts the indicator was still decreasing, and in Dnipropetrovsk remained unchanged.

Analysis in terms of oblasts' specialisation based on the percentage of the enterprises by sectors, seems also interesting. The results of our calculations are presented in the Table 3 which shows in which 2-3 sectors the largest shares of companies are concentrated¹⁵.

¹⁴ <https://data.worldbank.org/indicator/NY.GDP.PCAP.KD?locations=UA>

¹⁵ The following sectors were not taken into consideration: N – Administrative and support service activities, O – Public administration and defence; compulsory social security, P – Education, Q – Human health and social work activities, and S – Other services activities. The reason is that in those sectors the percentage of organisations is rather high in all regions but they do not represent any *economic* specialisation.

Table 3. Percentage of oblasts' organisations as by economy sectors

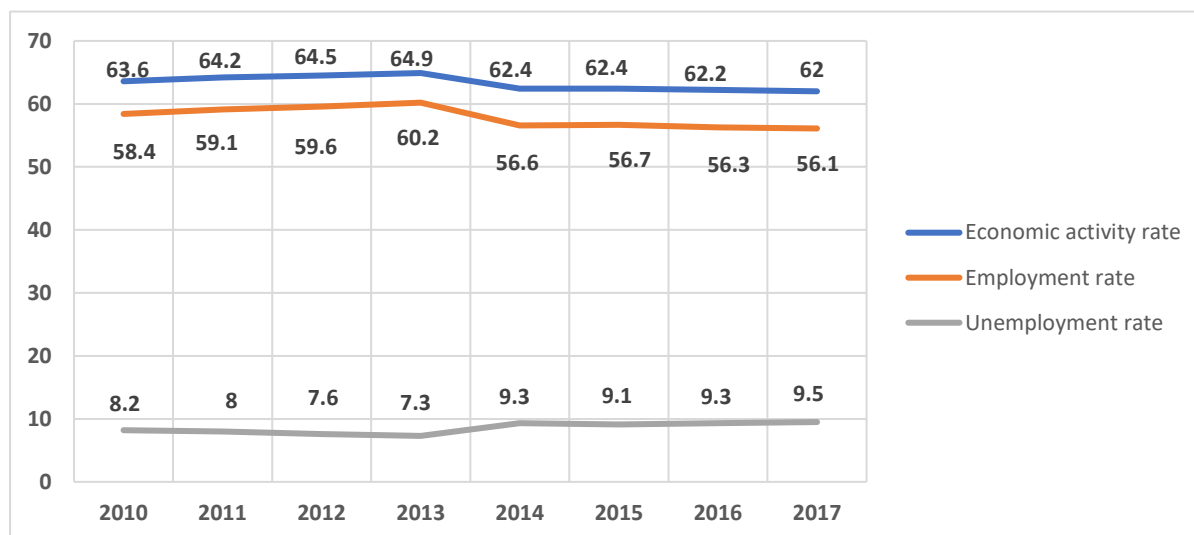
REGION	SECTORS				NACE
Kirovograd	A (23.1%)	G (10.5%)			A – Agriculture, forestry and fishing B – Mining and quarrying C – Manufacturing D – Electricity, gas, steam and air conditioning supply E – Water supply; sewerage, waste management and remediation activities F – Construction G – Wholesale and retail trade; repair of motor vehicles and motorcycles L – Real estate activities M – Professional, scientific and technical activities
Mykolaiv	A (20.3%)	G (10.8%)			
Kherson	A (16.9%)	G (10.8%)			
Vinnytsya	A (13.4%)	G (10.5%)			
Odesa	A (12.7%)	G (12.2%)			
Poltava	A (12.5%)	G (11.5%)			
Cherkasy	A (11.9%)	G (10.8%)			
Khmelnysky	A (9.7%)	G (8.8%)			
Lugansk	A (7.7%)	G (5.1%)			
Ternopil	A (8.4%)	G (6.5%)	B, C, D, E (5.9%)		
Chernivtsi	A (8.4%)	G (8.2%)			
Kyiv city	G (23.6%)	M (12.6)	L (7.4%)		
Dnipropetrovsk	G (18.6%)	A (8.9%)	B, C, D, E (7.5%)		
Kharkiv	G (17.1%)	B, C, D, E (9.5%)	C (8.5%)		
Kyiv	G (15.4%)	B, C, D, E (8.5%)			
Zaporizhzhya	G (15.1%)	A (10.9%)			
Lviv	G (12.7%)	B, C, D, E (6.9%)			
Volyn	G (11.1%)	A (7.0%)			
Chernihiv	G (11.0%)	A (9.9%)			
Sumy	G (10.9%)	A (9.1%)			
Ivano-Frankivsk	G (10.6%)	F (5.6%)			
Donetsk	G (10.0%)	B, C, D, E (5.0%)	A (4.7%)		
Rivne	G (9.6%)	A (5.7%)			
Zhytomyr	G (8.7%)	B, C, D, E (8.6%)			
Zakarpattya	G (8.5%)	A (7.7%)			

Source: UKSTAT (own elaboration)

2.2.3 Employment and Social Situation

In the country, both economic activity rate and employment rate (15-70 year-olds) were increasing from 2010 until 2013, peaking at 64.9% and 60.2%, respectively, and then dropped to 62.0% and 56.1% in 2017. The unemployment rate (ILO methodology) demonstrated a similar behaviour, dropping to 7.3% in 2013 and then reaching 9.5% in 2017 (Chart 5).

Chart 5. *Basic Labour Market Indicators*



Source: ILO and UKSTAT (own elaboration)

Significant regional disparities have also been observed: Donetsk and Luhansk oblasts lost a great number of jobs which in turn led to reducing of the scale of employment. The data on unemployment in the regions are presented in the Table 18 (absolute numbers) and on the Chart 12 (unemployment rate without Donetsk and Luhansk, where from 2010 till 2017 this indicator increased around two times: from 8.4% to 14.6% and from 7.2% to 16.6%, respectively).

Table 6 Number of Unemployed People by Regions¹⁶ (as of 31st December)¹⁷

	Number of unemployed, 1000 people				
	2010	2014	2015*	2016*	2017*
Kharkiv	97.9	103.5	93.4	84.6	80.4
Kyiv	59.7	62.6	50.7	53.5	51.9
Kyiv city	85.9	98.7	102.6	97.3	101.1
Odesa	68.0	72.5	70.1	72.5	77.2
Lviv	93.3	97.2	92.7	87.9	85.8
Chernivtsi	35.6	36.8	37.7	35.7	34.8
Dnipropetrovsk	117.7	128.9	115.3	121.7	129.2
Ivano-Frankivsk	47.5	48.1	51.2	53.5	51.9
Khmelnitsky	54.9	54.0	56.6	53.0	50.2
Sumy	59.2	50.6	52.8	48.8	48.0
Ukraine	1,713.9	1,847.6	1,654.7	1,678.2	1,698.0
Cherkasy	62.4	59.8	56.7	59.8	59.2
Mykolaiv	49.4	50.1	49.5	53.3	56.3

	Number of unemployed, 1000 people				
	2010	2014	2015*	2016*	2017*
Zakarpattia	50.4	53.1	52.5	56.3	58.2
Vinnitsya	76.9	77.6	66.3	71.0	76.5
Zaporizhzhya	66.9	71.3	80.4	81.4	86.2
Zhytomyr	60.8	66.6	64.6	63.7	62.0
Kherson	46.1	49.6	50.8	55.9	55.0
Chernihiv	56.1	55.3	51.6	53.9	53.5
Rivne	60.8	56.7	53.7	56.3	60.1
Ternopil	50.8	53.1	54.1	52.8	53.9
Poltava	69.2	78.3	80.7	82.6	78.3
Kirovograd	42.3	49.2	49.8	53.1	52.6
Volyn	40.5	44.9	43.1	49.7	52.1
Donetsk*	182.9	216.4	121.4	122.9	125.3
Lugansk*	78.7	112.7	56.4	57.0	58.3

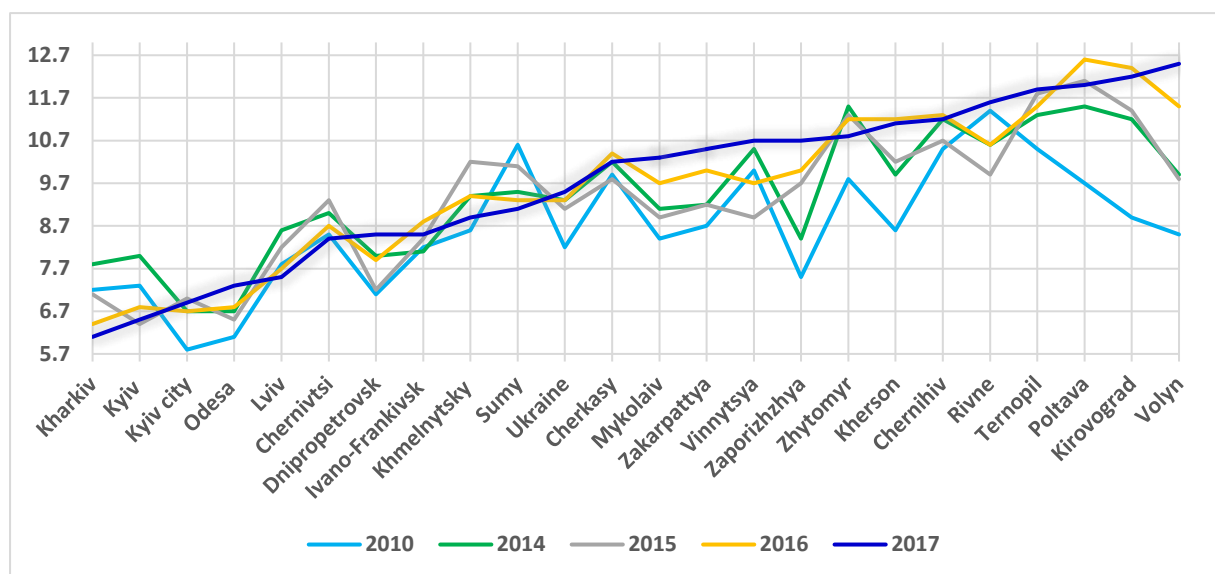
Source: UKSTAT (Own elaboration).

¹⁶ Sorted by ascending unemployment rates for 2017.

¹⁷ http://www.ukrstat.gov.ua/druk/publicat/kat_u/2018/zb/07/zb_EAN_2017w.rar.

Unemployment rate of women is lower than the country average and in 2017 was equal to 7.7% demonstrating 4 percent points improvement compared with 2015. The highest rate of women unemployment was registered in Lugansk (14.0%), Volyn (12.3%), Vinnytsya and Zhytomyr (both 11.0%) oblasts, closely followed by Zaporizhzhya, Ternopil, Kirovograd and Mykolaiv oblasts (10% and over). In Kharkiv, Odessa, Kyiv, Lviv oblasts and the city of Kyiv women's unemployment was comparatively low fluctuating from 4.5% to 5.5%.

Chart 6. Unemployment Rate by Regions, % (as of 31st December)¹⁸



Source: UKSTAT (Own elaboration).

One of the biggest challenges inherent within employment in Ukraine is the phenomenon of “over-education” for the performed jobs, due to mismatch of skills supply and demand. The period of unemployment duration also had a significant influence on the labour market development. In 2017, the long-term (more than one year) unemployment rate demonstrated slight increase compared with 2016 (2.7% against 2.6% of total number of unemployed) but is considerably lower than in 2010 (6.4%). In 2016, the highest long-term unemployment rates were registered in Zhytomyr, Sumy, Chernihiv, Lugansk, Rivne, Chernivtsi (between 4.1% and 5.0%) and in Kirovograd (7.6%) oblasts, while in 11 other oblasts they were below 2.0% (Table 19).

The number of employed and the employment rates are presented in the Table 7. It is important to mention that out of the five most populated regions¹⁹, i.e. Donetsk oblast (4.2 mln), Dnipropetrovsk oblast (3.2 mln), Kyiv city (2.8 mln), Kharkiv oblast (2.7 mln) and Lviv oblast (2.5 mln), only three are at the top of the table. They do not appear in the order related to their population (Donetsk is expectedly at the bottom of the list).

Table 7 Number of Employed People and Employment Rate by regions²⁰ (as of 31st December)²¹

	Number of employed, 1000 people					Employment rate, %				
	2010	2014	2015*	2016*	2017*	2010	2014	2015*	2016*	2017*
City of Kyiv	1,387.8	1,368.1	1,357.8	1,364.3	1,356.8	63.6	62.6	62.0	62.3	61.8
Kharkiv	1,267.3	1,225.3	1,230.8	1,236.6	1,247.1	59.3	59.0	59.3	59.7	60.6
Dnipropetrovsk	1,541.9	1,472.8	1,479.6	1,425.4	1,390.9	60.3	60.2	60.9	59.1	58.0
Kyiv	757.9	724.3	739.9	736.3	741.1	58.6	56.9	58.1	57.8	58.0

¹⁸ http://www.ukrstat.gov.ua/druk/publicat/kat_u/2018/zb/07/zb_EAN_2017w.rar

¹⁹ As of June 2018. http://www.ukrstat.gov.ua/operativ/operativ2018/ds/kn/xls/kn0518_u.xls

²⁰ Sorted by descending number of employed people for 2017.

²¹ http://www.ukrstat.gov.ua/druk/publicat/kat_u/2018/zb/07/zb_EAN_2017w.rar

	Number of employed, 1000 people					Employment rate, %				
	2010	2014	2015*	2016*	2017*	2010	2014	2015*	2016*	2017*
Sumy	497.0	481.4	470.5	478.5	481.4	56.0	56.6	55.6	56.8	57.4
Mykolaiv	536.7	501.5	508.7	498.1	489.7	59.1	57.3	58.4	57.5	56.8
Cherkasy	564.9	524.5	523.5	517.5	518.4	58.4	56.3	56.5	56.2	56.7
Chernivtsi	382.4	370.6	367.2	376.1	379.3	57.4	55.5	54.9	56.2	56.6
Zhytomyr	560.3	514.8	506.6	507.6	510.6	59.5	56.1	55.5	55.9	56.4
Lviv	1,096.7	1,038.2	1,042.0	1,047.0	1,050.8	58.0	55.3	55.5	55.9	56.2
Kherson	488.8	450.2	445.8	441.0	442.2	58.9	56.4	56.1	55.8	56.2
Ukraine	19,180.2	18,073.3	16,443.2	16,276.9	16,156.4	58.4	56.6	56.7	56.3	56.1
Odesa	1,044.5	1,009.4	1,016.2	1,000.6	986.6	57.5	56.7	57.3	56.7	56.1
Chernihiv	480.1	439.5	432.3	424.8	426.1	59.2	56.8	56.2	55.6	56.1
Vinnitsya	694.3	661.6	674.9	658.8	640.9	57.5	56.3	57.7	56.6	55.3
Zaporizhzhya	825.7	773.5	745.1	734.9	719.7	59.5	58.2	56.4	56.0	55.2
Rivne	471.2	476.0	487.7	474.2	460.2	56.7	57.2	58.5	56.9	55.1
Ivano-Frankivsk	530.3	547.8	558.3	556.9	559.0	52.3	53.9	54.8	54.7	55.0
Khmelnysky	580.6	521.9	500.5	510.1	516.0	59.1	54.7	52.6	53.9	54.7
Luhansk	1,015.4	877.6	306.3	298.5	292.1	57.1	52.0	54.6	55.6	54.7
Poltava	644.8	602.9	583.6	570.4	575.0	57.3	55.7	54.2	53.3	54.0
Zakarpattia	531.8	521.4	519.3	505.5	496.3	57.7	56.4	56.2	54.8	53.8
Kirovograd	431.2	391.1	386.8	375.7	376.8	56.9	54.2	54.0	52.9	53.3
Ternopil	431.3	416.0	406.2	407.6	399.1	54.2	52.9	51.6	52.0	51.0
Donetsk	1,983.7	1,752.4	756.3	748.4	734.3	58.3	54.2	50.3	50.0	49.4
Volyn	433.6	410.5	397.3	382.1	366.0	58.2	54.9	53.1	51.0	48.8

Source: UKSTAT (Own elaboration).

The Table 8 suggests that only individuals with *Complete higher education* have higher employment rates (70.5% to 73.8% for 2010-2017) than those with *VET* (61.6% to 63.3% for 2014-2017²²), although for both categories the situation is worsening.

Opportunities for employment growth in Ukraine are quite limited due to the lack of effective economic reforms, slow pace of restructuring process, deterioration of economic situation particularly due to annexation of the territory of the Autonomous Republic of Crimea, the city of Sevastopol and part of the anti-terrorist operation zone.

Table 8. Employment rate as by education attainment level, %

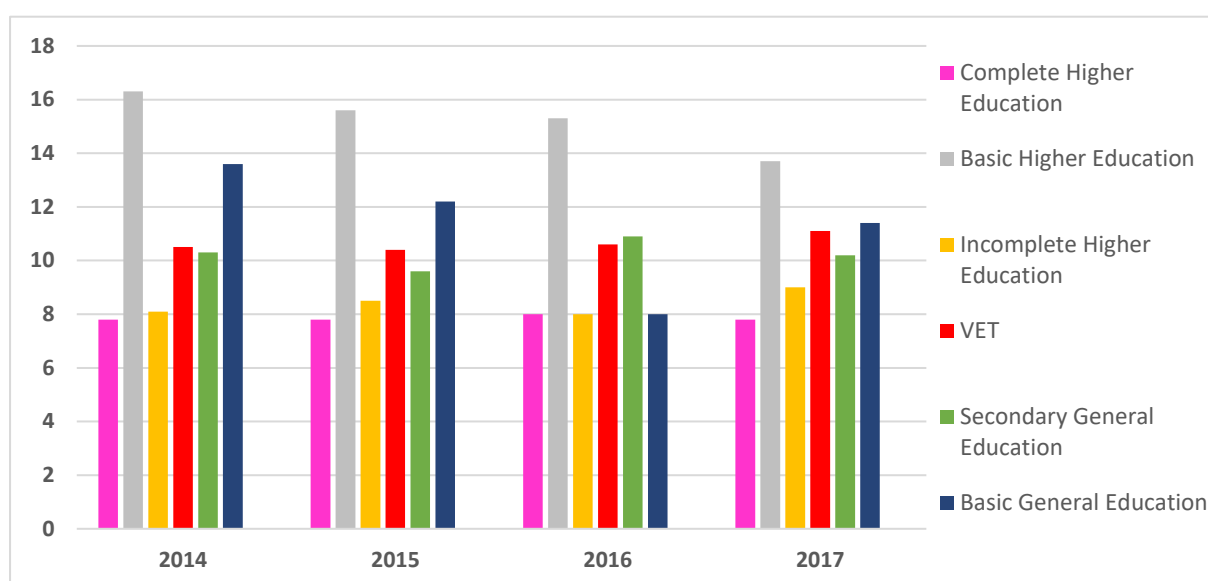
	Total	Complete Higher Education	Basic Higher Education	Incomplete Higher Education	VET	Secondary General Education	Basic General Education	Elementary General or without Education
2010	58.4	73.8	47.2	66.5	n.a.	56.0	36.0	16.4
2014	56.6	72.1	43.8	62.4	63.3	42.6	18.3	6.1
2015	56.7	71.9	49.3	62.6	63.3	42.7	18.1	6.0
2016	56.3	70.8	46.2	62.2	62.9	42.1	18.3	4.9
2017	56.1	70.5	45.7	61.2	61.6	42.6	18.0	5.4

Source: MoES of Ukraine

However, it is also possible to observe that in the period 2014-17 the unemployment rates of VET graduates are higher than also of those with *Incomplete higher education* and with *Secondary general education* (Chart 7).

²² Data for 2010 are not available.

Chart 7. Unemployment rate as by education attainment level, %



Source: UKSTAT (Own elaboration).

2.3 Some chronic issues in Ukrainian VET system: institutional networks and funding

The option of setting up CoVEs in Ukraine is the result of several issues that affect governance and funding of VET network from some years ago. Lack of funding for those specialties that are in demand in the labour market, underinvestment's in the infrastructure of VET institutions resulting in obsolete facilities and/or lack of involvement of the private sector are just some factors explaining declining of access to VET. As a result, many institutions closed or just merged with others. Such issues are further explained below.

2.3.1 Dynamics of students and VET institutions

The Ukrainian VET system includes an extensive number of VET providing institutions having different status and belonging to different organisational types²³. The most up-to-date data provided by MoES, suggest 774 VET institutions as of 1st January 2018 (reduced by 4.3% compared with the same period of 2017), with 268.3 thousand students²⁴. There are also 4 institutions under other bodies, i.e. Ministry of Social Policy, Ministry of Energy and Coal Industry, and Kyiv Regional Council, among which 1 High VET School, 2 VET schools, and 1 Vocational Lyceum with 1,060 students.

A stable decrease of the students' population (and yearly enrolment) due to low attractiveness of VET and demographic issues, was registered during the last years. The Table 1 presents the dynamics in the number of VET students, yearly enrolees and graduates, in comparison with the other levels of education.

²³ These are: High VET Schools (163), VET Centres (85), Vocational Lyceums (338), VET schools (76), Colleges (3), VET institutions that are divisions of Higher Educational Institutions (21), training centres within penitentiary institutions, vocational schools for social rehabilitation and VET schools within penal colonies (69) and some others (22).

²⁴ Excluding the temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopol and part of the anti-terrorist operation zone, and including Makeevsky VET school of social rehabilitation (Kirovograd oblast).

Table 8 Number of Students, Yearly Enrolees and Graduates (person) per type of educational institution

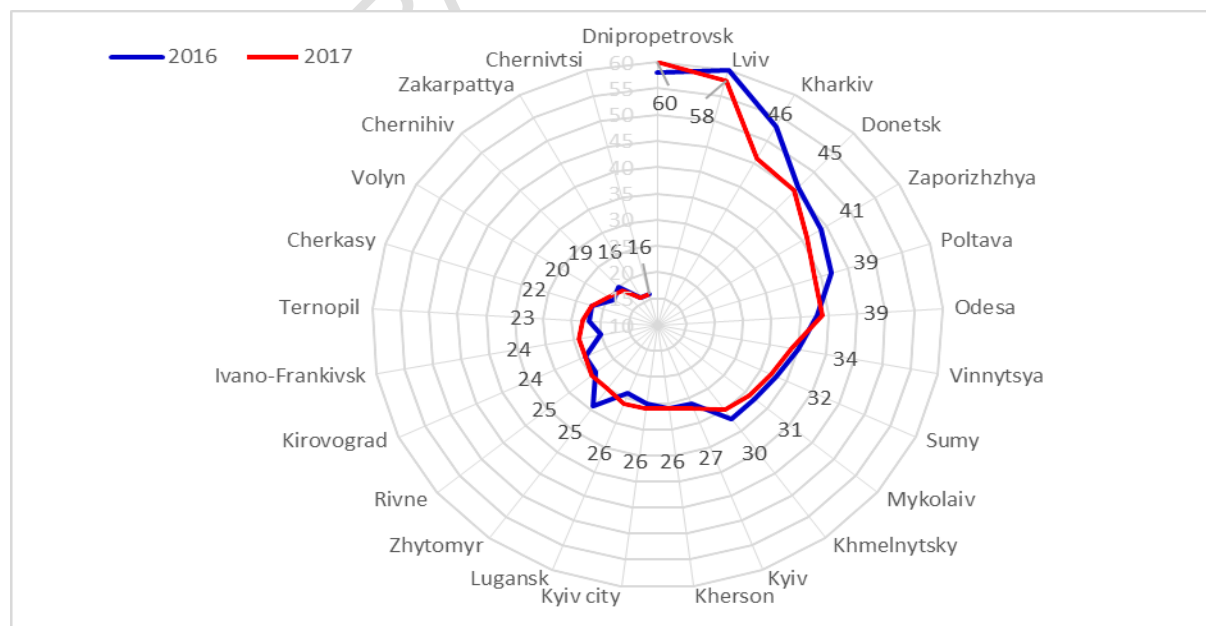
	1990	2014	2015* ²⁵	2016*	2017*	Growth in 1990-2016	Growth in 1990-2017
Number of Students							
Preschool institutions	2,428,000	1,295,000	1,291,000	1,300,000	n.a.	-1,128,000	n.a.
General schools	713,200	4,204,000	3,757,000	3,783,000	3,846,000	3,069,800	3,132,800
VET schools	643,400	315,600	304,100	285,800	268,298	-357,600	-375,102
HEIs 1 st and 2 nd lev.	757,000	329,000	251,300	230,100	217,300	-526,900	-539,700
HEIs 3 rd and 4 th lev.	881,300	1,723,700	143,800	1,375,200	1,369,400	493,900	488,100
Enrolment							
VET schools	380,500	178,000	176,600	157,900	131,012	-222,600	-249,488
HEIs 1 st and 2 nd lev.	241,000	69,500	63,200	60,600	n.a.	-180,400	n.a.
HEIs 3 rd and 4 th lev.	174,500	291,600	259,900	253,200	n.a.	78,700	n.a.
Graduates							
General schools 2 nd lev.	696,000	411,000	339,000	336,000	329,000	-360,000	-367,000
General schools 3 rd lev.	406,000	304,000	247,000	229,000	211,000	-177,000	-195,000
VET schools	376,700	182,000	165,000	152,800	124,787	-223,900	-251,913
HEIs 1 st and 2 nd lev.	228,700	79,100	73,400	68,000	n.a.	-160,700	n.a.
HEIs 3 rd and 4 th lev.	136,900	405,400	374,000	318,700	n.a.	181,800	n.a.

Source: MoEs of Ukraine

Thus, the total number of VET institutions comprised **778** with the students' population equal to around **269.4** thousand people. In addition, 11 State Employment Service Vocational Training Centres (SES VTC) in Dnipropetrovsk, Donetsk, Ivano-Frankivsk, Luhansk, Lviv, Odesa, Poltava, Rivne, Sumy, Kharkiv and Kherson regions, act Under the jurisdiction of the Ministry of Social Policy.

Based on 2017 data, in total 630 trainers employed in those centres, deliver Continuing VET courses related to about 80 different qualifications for around 40,000 people annually. In addition, some 130 thousand people enjoy trainings in 2,000 private VET providers functioning in the country²⁶.

Chart 8 Number of VET institutions by regions (2016-2017)



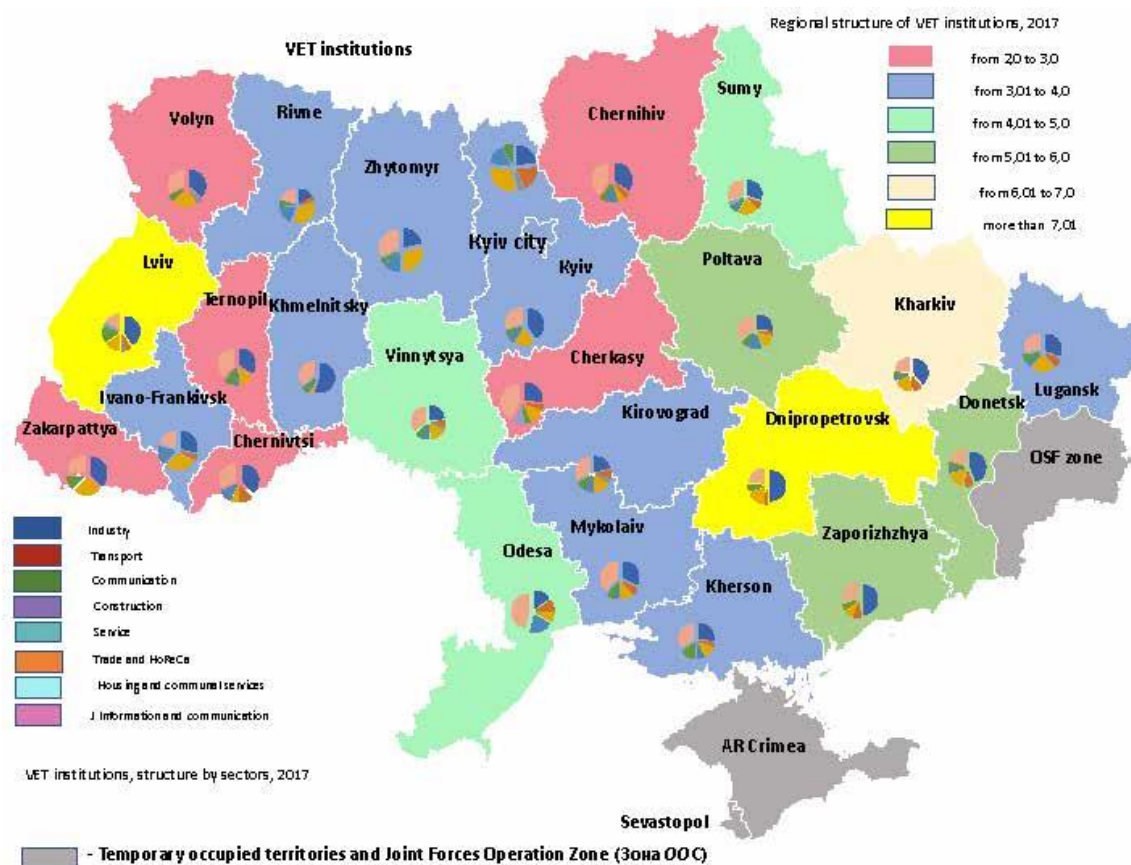
Source: MoES of Ukraine (own elaboration)

²⁵ In this and the following tables, data for the years marked with (*) does not include the temporarily occupied territory of the Autonomous Republic of Crimea, the city of Sevastopol and part of the anti-terrorist operation zone.

²⁶ Torino Process Report Ukraine 2016-17.

Traditionally, VET institutions in Ukraine are concentrated in industrial centres with developed infrastructure such as e.g. Dnipropetrovsk or Lviv oblasts. In 2017, out of total 756 institutions, 58 (7.7%) and 59 (7.8%) were located in these two regions, respectively. Table 2 and Chart 1 show distribution of the VET institutions as by regions and suggest that their numbers in 10 oblasts are larger than the country average (~30), while in Zakarpattia and Chernivtsi almost two times less.

Chart 9. Overview of VET institutional network in Ukraine



The table 9 shows comparative trends from 1990 to 2018 on the steady lost of students and decreased number of VET schools in the country.

Table 9. Evolving number of VET schools and students in Ukraine (1990-2018)

Year	Number of institutions	Number of students	Share related to 1990	Students per institution	Share related to 1990
1990	1246	643,400	100%	516	100%
2000	970	524,600	82%	541	105%
2010	976	433,500	67%	444	86%
2013	968	391,200	61%	404	78%
2017	756	269,400	42%	356	69%
2018	736	255,000	39,6%	347	67%

Source: UKSTAT (Available at: http://www.ukrstat.gov.ua/operativ/operativ2005/osv_rik/osv_u/ptu_u.html)

2.3.2 Key dynamics on VET funding

All these issues can be better contextualized and interpreted looking at the evolution of VET funding policies in Ukraine. In this respect, modern VET funding system has been operating within the framework of overall decentralisation process launched in 2014.

Significant changes in regards to financial decentralisation in VET sector took place in 2016 along with the adoption of amendments to the Budget Code and the Law on the State Budget 2016. As a result, financing of VET institutions was transmitted from central to local levels. Thus, VET schools located in cities of regional significance (including regional centre cities) were assigned to the budgets of those cities, while the others were to be financed from regional (oblast) budgets and Kyiv city budget²⁷.

However, the new mechanisms were not properly developed, which led to a significant underfunding of the sector. In particular, there was a delay in wages and scholarships payments due to the failure or unwillingness of local authorities (primarily, of the cities of regional significance) to perform delegated functions. To some extent it could be explained by the fact, that near 70% of the VET students come from outside the city, and city administrations are reluctant to spend their funds preparing workforce, which will then work in other places²⁸. To solve this problem and close the budget holes, in 2016 the Government allocated stabilisation subsidies (600 million UAH and 1.4 billion UAH) and modified the VET financing system along with the adoption of the State Budget for 2017.

In 2017, budgets of the cities of regional significance were excluded from the funding chain. At the same time, the Government offered a stable and guaranteed sources in the form of subventions, including educational subvention (2.0 billion UAH in 2017 and 2.1 billion UAH planned for 2018) for delivering complete secondary education to students and subvention for VET modernisation (50 million UAH), which envisages opening of 25 VET practical centres every year²⁹. Distribution of the modernisation subventions in 2016-2017 as by regions is shown in the Table 5.

Table 10. Subvention from the state budget to local budgets for modernisation of material and technical base of vocational schools (1,000 UAH)

Region	2016	2017	2016+2017	Region	2016	2017	2016+2017
Ukraine	40,266.0	50,000.0	90,266.0	Volyn	330	599	929.0
Kirovograd	628.5	19,860.00	20,488.5	Zhytomyr	330	599	929.0
Kharkiv	330	19,860.00	20,190.0	Zaporozhye	330	599	929.0
Kherson	17,009.10	330	17,339.1	Khmelnitsky	330	599	929.0
Dnipropetrovsk	13,143.80	330	13,473.8	Chernihiv	330	599	929.0
Zakarpattia	628.5	330	958.5	Rivne	329.9	599	928.9
Ivano-Frankivsk	628.5	330	958.5	Lviv	329.7	599	928.7
Lugansk	628.5	330	958.5	c. Kyiv	328.5	599	927.5
Odessa	628.5	330	958.5	Chernivtsi	327.5	599	926.5
Sumy	628.5	330	958.5	Donetsk	469.5	330	799.5
Ternopil	628.5	330	958.5	Kyiv	330	330	660.0
Cherkassy	628.5	330	958.5	Mykolaiv	330	330	660.0
Vinnitsa	330	599	929.0	Poltava	330	330	660.0

Source: MoEs of Ukraine.

In some limited cases, the Government provides funds for developing VET infrastructure from other sources, e.g. the State Fund for Regional Development (via Ministry of Regional Development, Building and Housing and Communal Services) and the Fund for Regional Economic and Social Development (via Ministry of Finance). However, in practice this multi-source model of VET school funding recommended by the National Education Development Strategy as a mix of grants, loans and contribution of customers to skills development, appeared to be inefficient as it does not guarantee sufficient funds to ensure good quality of education and necessary investments for VET school modernisation.

²⁷ Budget Code of Ukraine, Articles 89 and 90.

²⁸ "Decentralising Vocational Education and Training in Ukraine: Momentum for Action", ETF 2017.

²⁹ In 2016, according to MoES, 63 such centres were open (modernised) in cooperation with businesses.

According to the information from VET institutions in the regions, such sources as regional programmes, special fund of the VET school (own financial resources) remain undeveloped and cover in average from 2 to maximum 12 percent of the total funding. Grants of business, local administrations and other donors are provided rarely and selectively. The largest share comes from public funds (State and local budgets), which are almost entirely spent on current needs. According to the Ministry of Finance, over the last three years (2015-2017) capital expenditures of the VET sector in Ukraine constituted only from 1 to 2 percent of the total public expenditures (Table 6).

Table 11 Share of capital expenditures of consolidated budget on VET (2015-17, in %)

Region	2015	2016	2017	Average
Kirovograd	0.7	3.1	10.4	4.7
Vinnitsya	3.7	6.4	1.0	3.7
Kherson	0.4	9.1	0.1	3.2
Sumy	6.3	0.6	0.8	2.6
Kyiv city	1.5	2.9	3.1	2.5
Donetsk	3.8	2.7	0.7	2.4
Zakarpattia	3.8	1.9	0.6	2.1
Dnipropetrovsk	2.4	3.2	0.4	2.0
Zaporizhzhya	0.9	2.7	1.1	1.6
Lviv	3.9	0.7	0.1	1.6
Ukraine	1.8	2.0	1.0	1.6
Volyn	2.3	0.5	0.6	1.1
Chernivtsi	1.2	1.0	1.0	1.1

Region	2015	2016	2017	Average
Lugansk	1.3	0.7	0.9	1.0
Mykolaiv	0.4	1.3	1.3	1.0
Khmelnytsky	0.9	1.2	0.9	1.0
Cherkasy	1.1	1.2	0.5	1.0
Odesa	0.7	0.8	0.8	0.8
Ternopil	0.9	0.8	0.7	0.8
Kharkiv	0.2	1.6	0.2	0.7
Poltava	0.6	0.5	0.7	0.6
Rivne	0.7	0.9	0.3	0.6
Ivano-Frankivsk	0.8	0.5	0.3	0.5
Kyiv	0.4	0.6	0.5	0.5
Chernihiv	0.3	0.5	0.3	0.4
Zhytomyr	0.3	0.3	0.1	0.2

Source: MoEs of Ukraine.

At the same time, the share of expenditures on VET as percentage of GDP and the total State Budget expenditures was continuously decreasing since 2010 (Chart 8) and as percentage of State Budget expenditures on Education – since 2005 (Chart 9).

Chart 8. Share of expenditures on VET as percentage of GDP and total State Budget expenditures

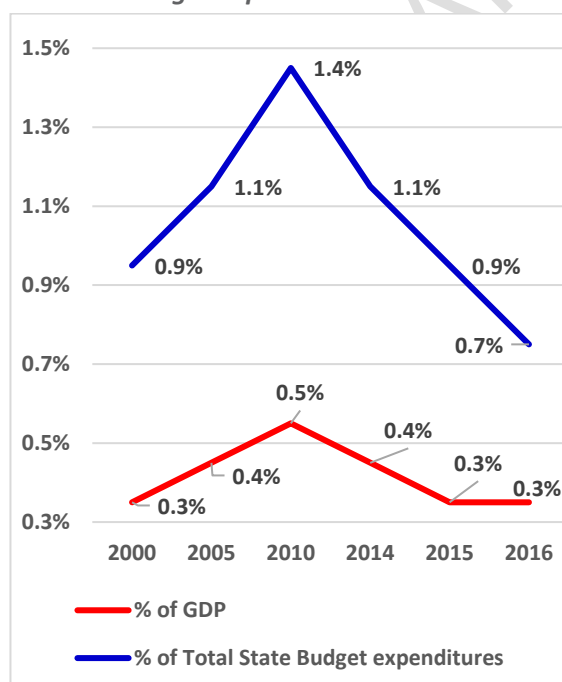
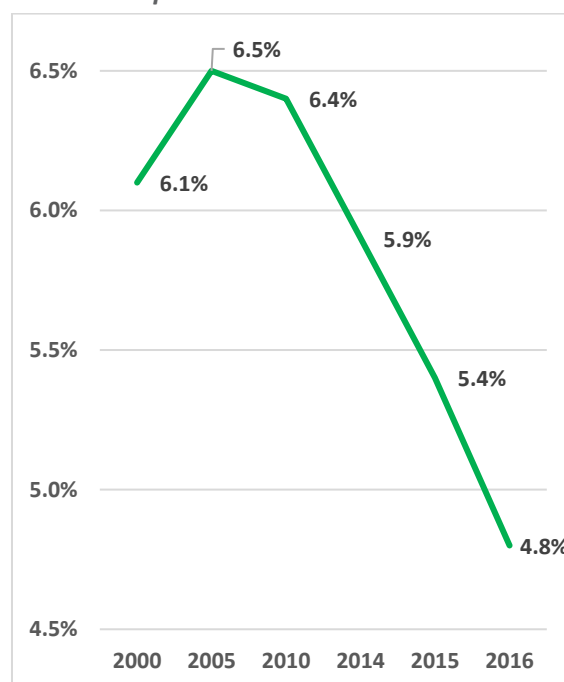


Chart 9. Share of expenditures on VET as percentage of State Budget expenditures on Education



Source: MoEs of Ukraine.

3. Setting up VET Centres of Excellence and innovation in Ukraine: key issues and policy options

The prerogative of choosing the model for VET Centres of Excellence and Innovation in Ukraine, belongs solely to the national authorities, who however, should communicate and negotiate with the partners before taking any decision on the above matter. This is important at least by the following reasons:

- a) Cooperation and partnership with the private sector are crucial issues, including particularly their involvement in the CoVEs governance and attracting their investments for its effective functioning. The conditions of VET public funding in Ukraine calls for this option.
- b) For establishing and operationalising the CoVEs, investments from the development partners are expected, and the donors must ascertain that, as a minimum, the relevance and sustainability are ensured via selection of a proper model for the CoEs.

In this section, options on different aspects of establishing the CoEs are discussed. They relate to the following:

- What will be the CoEs in Ukraine and what is their nature;
- The key Characteristics, Objectives and Functions of the CoEs;
- Legal Status, Governance and Management of the CoEs, including such issues as:
 - *who can/shall be the Founders of the Centre and what should be their roles,*
 - *how the Centre's Management Board should be composed and what are its authorities; what is the scope of the Executive Manager's discretions,*
 - *what is the level of the CoEs autonomy and their relations with the different levels authorities;*
- Selection of the regions and the institutions to be transformed into centres of excellence, particularly:
 - *how to organise and implement the selection (competition) process,*
 - *what procedures and selection criteria should be applied,*
 - *how to evaluate the results;*
- The Stakeholders' capacities necessary for establishing CoEs in Ukraine and their training needs. Accordingly, each of the following sub-sections is led by a set of the corresponding **issues for discussion** related to the above options. They will be presented to the Technical Workshop participants' consideration. However, the options which in the experts' opinion seem the most appropriate for Ukraine, are also recommended.

3.1 Purposes of establishing CoVEs in Ukraine

ISSUES FOR DISCUSSION
<i>What are the <u>Centres of Excellence and Innovation in Ukraine</u>?</i> <i>What are the <u>objectives of establishing CoEs in Ukraine</u>?</i> <i>What <u>amendments to the legislation</u> necessary for effective operationalising the CoEs, are possible at the current stage?</i>

Appreciating the results of the analysis carried out with consideration of: i) international best practices, ii) the challenges of the VET system in Ukraine and iii) the results of the regional discussions provided by the Experts, hereby the following **objectives** of establishing the VET Centres of Excellence in Ukraine are indicatively formulated:

- based on the best international, as well as national experience and practices, ensure preparation of highly qualified specialists meeting the requirements of the local, regional and national labour markets;
- promote introduction of innovations and development in VET;

- found centres of methodological and professional experience exchange, teacher training and accumulation and transfer of wide range of educational resources to other institutions of the VET system;
- ensure inclusiveness in education particularly for the adult learners;
- ensure higher efficiency, targetedness, impact and visibility of the VET reforms through centralisation of investments and concentration of results;
- support building consensus and effectiveness alongside the necessary process of optimisation and rationalisation of regional VET networks in the country.

In this context, the CoVE are seen as:

a multifunctional educational institution having a solid material and technological, professional, managerial, teaching and methodological potential for providing high quality initial and continuing, both formal and non-formal vocational education and training for all age groups, as well as contributing to, and disseminating, the reforms in the field of VET, thus playing a significant role in satisfying the skill needs of the Labour market and also in harmonious social and economic development of the region(s) and the country, in general.

One should clearly realise that CoEs, as new category of institution in Ukraine, cannot be effectively operationalised within the existing legal framework. Particularly, the functions recommended to be attached to these institutions, have a wider scope that the Law on Education, draft Law on VET or Regulation of the VET Institution presently stipulate.

The group discussions with the regional stakeholders also suggested that in order to introduce the CoEs in the above-proposed form, revision of national legislation will be necessary. Therefore, all the characteristics, goals, objectives and functions of the CoEs as well as procedures of their establishment should not be seen in the light of the existing regulatory framework but rather advise certain amendments to it.

Nevertheless, it is evident that not all amendments to the legislation which could seem necessary, might be swiftly done. Moreover, not only the formal procedures, which often are lengthy and complicated, but also different parties' perceptions of the policy changes, should be appreciated.

Therefore, selection of the CoE model might depend also on the scope of those revisions of the legislations, which are realistic or at least possible within a reasonably short period of time. This is a matter of policy dialogue and negotiation between the national executive and legislative authorities, in which however, all the key stakeholders should be involved.

3.2 What are CoVES? Characteristics, Objectives and Functions

ISSUES FOR DISCUSSION
<p><i>What are the <u>key characteristics</u> of the CoEs in Ukraine?</i></p> <p><i>What should be the coverage of the CoEs in Ukraine: regional/inter-regional – sectoral/multi-profile?</i></p> <p><i>What are the <u>goal</u> and <u>objectives</u> of the CoEs?</i></p> <p><i>What can be the scope of the CoEs' <u>functions</u>?</i></p>

The VET Centres of Excellence are not "isolated" or "self-sufficient" structures but either networks or at least hubs of VET providers' networks with high level of performance as its key feature. The main **characteristics** of the Centres of Excellence listed below should actually be ensured for any model of the CoEs:

- the CoEs are institutions with very high quality physical conditions (well refurbished buildings and other facilities), provided with a modern training equipment and furniture, thus ensuring not only

- high level of teaching/learning environment but also attractiveness for the learners and partners including those representing business sector;
- they ensure advanced education content and for this purpose are equipped also with modern curricula and programmes fully meeting the requirements of the labour market and the training needs of the partner companies' employees (e.g. for qualification upgrade or re-qualification), with teaching/learning technologies, methodologies, techniques and didactic resources;
- the teaching staff has high proficiency and capacities to ensure effective teaching and learning process according to the requirements of the standards and with purposeful use of the available training equipment and other means;
- the administrative staff is capable to carry out modern ways of effective and collaborative management;
- the CoEs have internal quality assurance mechanisms (and units) and are subject to systematic external quality evaluation;
- they have capacities (dormitories and/or transportation means) for hosting students from other municipalities and regions as well as invited teachers and other specialists;
- financial means (from public and private sources) are available for continuous development of the Centres, for the staff (both administration and teachers) training and exchange, for communication means, purchase of new resources, implementation of other necessary activities, e.g. organisation of events, promotion and awareness raising campaigns, provision of surveys, etc.;
- at the same time, the CoEs are legally allowed and fully capable to generate additional income *via* provision of different types of services and activities;
- the CoEs are closely liaised with other VET providers of the region (different forms and mechanisms of liaison are possible) and to each other (preferably also with similar centres in other countries) and compose a platform for information sharing, experience exchange and peer learning.

Depending on the *priorities, needs* and also on the *capacities* of the CoEs, they may have different spheres and scopes of specialisation which will lead to slightly different nature, structures and characteristics of the CoEs. These aspects are discussed below. Nevertheless, the **main goal** of the Centre of Excellence in Ukraine is proposed to be formulated as follows:

*via providing education and training focused on the learner and based on the modern training programmes, to **equip youth and adults with knowledge, skills and competences** in accordance with the **needs of the democratic society** and the **Labour market**, and with the new challenges in the **global scientific-technological environment***

Before defining the CoEs' objectives and the list of the functions to be attached to those Centres, it is worth to discuss here their possible nature in terms of coverage. This is about the choice between, or combination of, the regional and sectoral approaches. In general, the following models are possible, when the Centre is:

- R-S** – *regional sectoral*, i.e. specialised in one of the main economic sectors of the region and serves the skill/employment needs of this sector for the region,
- R-MP** – *regional multi-profile*, i.e. specialised in several main economic sectors of the region and serves the skill/employment needs of the region,
- IR-S** – *inter-regional sectoral*, i.e. specialised in one economic sector and serves the skill/employment needs of this sector for several regions or the entire country,
- IR-MP** – *inter-regional multi-profile*, i.e. specialised in more than one economic sectors and serves the skill/employment needs of those sectors for several regions or the entire country.

That is to say that variations and different models in terms of combination of territorial, sectoral and/or functional coverage on one hand, and the level of autonomy and the legal status on the other, are possible. Usually, these are not alternatives or limitations but rather opportunities provided by the flexibility of the models. For Ukraine, with its huge territory, large population and extensive number of regions with diverse economic sectors of specialisation, all proposed options (R-S, R-MP, IR-S or IR-

MP) could be appropriate.

Moreover, we would recommend the national legislation to foresee they all and for every single case, feasibility of a certain model be considered³⁰. This will allow the regions and the sectors to identify the options which better correspond to their needs, are more relevant to the organisational models, those acceptable for the key stakeholders and ensuring better incentives for the private sector representatives.

Here a reference to the concept of "*smart specialisations*" is worth to be done. In Europe, Smart specialisation is an innovative approach that aims to boost growth and jobs in Europe, by *enabling each region to identify and develop its own competitive advantages*. Through partnership and bottom-up approach, smart specialisation brings together local authorities, academia, business spheres and the civil society, working for the implementation of long-term growth strategies supported by EU funds³¹. This principle seems absolutely relevant also for the case of Ukraine, and is completely in line with the idea of targeting specific sectors of economy by the CoEs in different regions.

The concept of Smart specialisation is implemented via: *identification of the region's own strengths and comparative assets* (SMART); *prioritising research and innovation investment in competitive area* (SPECIALISED); and *defining a shared vision for regional innovation* (STRATEGIC). Until present, over 120 smart specialisation strategies have been developed in the EU countries.

Nevertheless, appreciating the innovativeness of the CoE concept in Ukraine, at the initial stage, the first centres could be established under Regional- Sectoral model (R-S) model. This option would allow duly piloting the CoEs in the country, better adapting the concept to the national (in some case also to regional and local) context and then properly assessing the result and making any necessary adjustments. Thereafter, there will be no formal obstacles for applying also the other options.

Another principal issue to be discussed here is the specific features which make the CoEs outstanding institutions, distinct from the other ("regular") VET providers. They relate to such tasks as, e.g.:

- wider scope of provided educational services and activities including extra-curricular and non-educational activities,
- contribution to the development of the VET system within a specific sector or in general,
- provision of different types of support (e.g. in development of curricular, didactic and methodological documents, training of staffs, provision of technical (professional) aid, sharing premises, equipment, and also staff) to the other VET providers with which they are networked,
- multi-stakeholder management and governance based on the principles of social dialogue and implemented via public-private partnership,
- academic, managerial and financial autonomy which the CoEs enjoy.

Thus, all the above-mentioned can now translated into the following set of objectives:

OBJECTIVES

- 1. provision of initial and continuing vocational education and training** (both formal and non-formal) based on the best international, as well as national experience, practices and approaches with a purpose to ensure preparation of highly qualified specialists at the corresponding levels of NQF, meeting the requirements of the local, regional and national labour markets;

³⁰ At the Technical Workshop held on the 7th November 2018, some local stakeholders expressed opinion that the most effective option for Ukraine would be when the CoE has relatively narrow sector specialisation but inter-regional coverage (IR-S model). Others' preference was the regional multi-profile (R-MP) model. Thus, this topic still has to be discussed at the national level.

³¹ Detailed information in Smart specialisations can be found at: <http://s3platform.jrc.ec.europa.eu/what-is-smart-specialisation->.

2. [developing **key competences** (*basic skills, new basic skills, green skills*)³² of all learners, in order to develop them into critical thinkers, active and relevant participants in social life];
3. satisfaction of **individual's** professional, cultural, moral, physical and other **development needs** during the study;
4. continuously **increasing the quality of provided education and training** particularly through improvement of own infrastructure (including building facilities, equipment and teaching and supportive technologies) and capacities of human resources (including managers, teaching and support staffs) for ensuring appropriate learning environment as well as for inclusion of persons with special education needs;
5. ensuring the **relevance of provided education and training** to the regional and national [Ukrainian] [society] development priorities and the needs of the labour markets, guided towards the expected learning outcomes and acceptance of multiculturalism, respect for diversity and democratic values, and active citizenship;
6. provision of **vocational guidance and career counselling** [to the community members];
7. introduction, development, dissemination and promotion of **innovations** as well as adapted **international best practices** in VET;
8. serving as a regional and/or sectoral and/or inter-regional [VET information and communication space and] **Resource Centre** [or **Опорний центр** in Ukrainian] accumulating and **sharing professional and methodological expertise** and exchanging experience, contributing to development of professional, managerial, educational-methodological, scientific-pedagogical, cultural, material and technical potential of the networked VET providers;
9. ensuring **inclusiveness** in VET for both young and adult learners;
10. contributing to promotion and further development and strengthening of **social dialogue in VET** [, forming a mutual trust between customers, beneficiaries and providers of educational services];
11. contributing to increase of the **VET system's efficiency**, taking over the role of the leader and disseminator of **VET reforms**;
12. integration to **global education systems**.

The scope of the Centre's functions will again depend on its type. However, according with the above goal and objectives, we can recommend here a number of functions which were discussed and mainly agreed with the regional stakeholders during the group discussions and are in line with those proposed by the draft Concept "Modern Vocational Education: Conceptual Principles of Reforming Vocational Education in Ukraine". Those functions are:

FUNCTIONS

- 1) defines rules and selection criteria for admission of students and learners, organises and independently carries out their **enrolment**, formative and summative **assessment**, other types of **attestation, certification and qualification**;
- 2) **provides** formal [(offering vocational qualifications at the level of NQF defined by the law)] and non-formal continuing **vocational education and training courses** for all categories of individuals, such as youth and adults, employed and unemployed people, throughout their life, in order to satisfy the labour force demand in the (corresponding) region(s), to promote self-employment as well as to contribute to civic, cultural, physical, moral and other aspects of individuals' development;
- 3) creates appropriate learning environment in the Centre, freely selecting the proper **forms, types, methods, tools and schedules of teaching and learning**, in order to ensure reaching the learning outcomes effectively;
- 4) based on approved educational, occupational and other standards, independently develops the Centre's **training plans (curricula), subject and modular programmes**, other

³² To be understood in accord with the CEDEFOP terminology definitions.

- teaching, learning and assessment materials and documents, didactic resources such as methodological guides, handbooks, manuals, etc.;
- 5) participates in the revision (development) of **occupational/professional and educational standards**³³, framework (exemplary) curricula, training programmes and other similar documents related to the sector(s) of its specialisation;
 - 6) in order to ensure relevance of the offered courses, continuously carries out **monitoring of the labour market**³⁴ (independently and/or in collaboration with specialised expert centres) to identify the skills required by the employers in the sector(s) of its specialisation as well as demand of various types of educational services to be provided to the different groups of population;
 - 7) runs its own internal **quality assurance system**, and **external quality assurance** for other VET providers in the region and/or those related to the sector(s) of its specialisation;
 - 8) implements **VNFIL** mechanisms and awards full and partial vocational qualifications;
 - 9) accumulates and **exchanges methodological and professional expertise**, pedagogic (andragogic), didactic and other types of resources with the networked institution and other VET providers; identifies, adapts, pilots and disseminates corresponding **best international VET practices** with a purpose to contribute to increasing the quality and relevance of VET system in the region and in the country;
 - 10) develops and implements **innovative educational** and other programmes for contributing to improvement of socio-economic situation of the region, as agent of change and driver of development;
 - 11) defines the requirements, job descriptions and selection criteria for the Centre's staffs, organises selection and, on the competitive basis, recruits the Centre's employees, establishes its own system and internal regulations for the **staff members' appraisal** and mechanisms of their possible replacements and reward including for financial incentives;
 - 12) carries out activities targeted at professional **advancement** of its own and the networked VET providers' administrative and pedagogical **staffs**, as well as partner companies' instructors and mentors, and carrying out their assessment (attestation) and certification according with the approved regulations;
 - 13) in the Centre, establishes Career units and provides **vocational orientation and career guidance** and **career development**³⁵ services to the pupils, students, graduates and members of the community in general;
 - 14) carries out graduates' **tracer studies**, independently and/or in collaboration with specialised expert centres, employers, etc.;
 - 15) implements a **credit accumulation and transfer** system³⁶;
 - 16) develops, proposes and, when appropriate, implements projects and programmes that promote **development of vocational education and training**; provides recommendations, consolidated opinions on, and participants in development of, strategic and programming documents targeted to, the **reforms of VET and ALE sectors**;
 - 17) takes measures **promoting education and learning**, contributing to increase of **VET attractiveness** ("marketing" of VET), to development of multiculturalism, respect for diversity and democratic values, and ensuring inclusiveness;

³³ During the regional discussions, there was a slight resistance to this function argued by the fact that the VET SMCs develop standards and curricula. Here, however, we are talking about **participation** of the CoEs in this process but not about taking full responsibility. In addition, if CoE is a "centre of expertise" in a certain sector of economy, moreover, if it is an advanced training institution, it should have even better potential (capabilities, resources) for designing standards and curricula for the given sector rather than the SMCs.

³⁴ Originally, this point was formulated by the Experts as "*Carrying out labour market analysis to identify the skills required by the employers...*" and initiated considerable debates during the regional discussions. Some of the Technical Workshop participants also disputed this function. The main argument was that the labour market analysis is a duty of the MoSP (and its regional employment centres) and the Ministry of Economy. At the same time, everyone accepted that the above structures do not implement this function properly and the LM demand is never clearly formulated in the country. Therefore, we still think it is appropriate to attach this function to CoEs as at least LM monitoring (*vs* analysis).

³⁵ This includes support to *job placement* which was mentioned during the regional discussions. Strictly speaking, "*career development*" includes many aspects, particularly also vocational orientation and career guidance but here the latter are mentioned intentionally for better understanding of the wider audience.

³⁶ When introduced in the country.

- 18) implements activities targeted at strengthening **social partnership** of the Centre and supporting the networked institutions to establish and expand cooperation with relevant social partners;
- 19) takes measures for **self-development** of the Centre students, learners and the staff members, wellness and preventive measures for protecting their health and ensuring sanitary and hygienic norms and for their catering;
- 20) supports the Centre **students' participation in the management** of the Centre;
- 21) issues **documents** of its own design, on non-formal vocational education and training;
- 22) defines its own **organisational structure**, approves regulation of the structural units and divisions;
- 23) provides **different types of services** including studies, surveys, researches, counselling and coaching, organisation of conferences, discussions, debates, contests, other types of events and campaigns;
- 24) independently **manages its own assets** and implements financial and economic activities in accordance with the Law and the Statute of the Centre;
- 25) independently takes any **managerial decisions** in accordance with the authorities attached by the Regulation and the Centre's Statute to its management bodies;
- 26) implements **other activities** defined by the legislation

For many of the above activities, cooperation with the private sector, particularly with the representatives of the corresponding companies will be necessary. Thus, the latter should be involved not only in the training content development and training provision processes, but also in the assessment of students (trainees, learners) and graduates. In addition, the companies will be expected to provide their facilities for organising the students' practical training, within different possible concepts to be applied in the CoEs (e.g. work-based learning, dual education or apprenticeship).

3.3 Legal Status, Governance and Management of CoVEs

ISSUES FOR DISCUSSION

What should be legal status of CoE, e.g. state, private or corporate?
What can be the CoE establishment procedure: Reorganisation, Merger, Acquisition or Foundation?
Who can be the founders of CoE and what should be their responsibilities?
Who are the CoE Board members and what are authorities of the Board?
What is the level of the CoE autonomy and the relations with the authorities?
Who selects/appoints the Executive Managers and what is the scope of their discretions?

The CoEs are expected to be non-for-profit organisations but established on the principles of public-private partnership, within the revised national legal framework. Nevertheless, even under the existing legislation, different forms³⁷ of educational institutions, depending on their founders, are possible: *state, communal, private or corporate*³⁸.

Different options of the CoEs' legal status and different models of their management can be applied. However, the ETF Concept paper³⁹ suggests that good **multilevel-governance** and **effective public-private partnerships** are one of the appropriate means for introducing and increasing quality and innovation cultures and capacities in VET systems to which the concept of VET excellence strongly refers. In addition, the multi-level governance architecture is seen as a key pre-condition for starting-up facilitation of policy thinking and dialogue.

ETF informs also that in many partner countries, a special need on working together for setting up frameworks and cultures of quality assurance and management, as key policy functions for *good multilevel governance in VET*, is strongly appreciated. Besides, it is stated that '*multilevel governance*

³⁷ Do not confuse with the *types* of institutions.

³⁸ Law on Education, Article 22, Clause 3.

³⁹ Concept Paper "Setting up centres of excellence in Vocational Education and Training (VET): thinking policies and learning practices", ETF 2018.

*approach could be very effective way to address interactions among VET public and private community to shape quality policy issues at both system and provider levels. In fact, centres of VET excellence might be a unique learning platform for developing relevant quality assurance encompassing quality management, measurement and assessment for continuous quality improvement*⁴⁰.

For Ukraine two principal alternative options are possible, when the Centre of Excellence is:

- an **independent type** of institution;
- a **status** awarded to institution(s).

If the first option is selected, the CoEs will be established according with one of the following scenarios:

- | |
|---|
| • Reorganisation (transformation – <i>перетворення</i>) of an existing VET institution into a CoE |
| <i>or</i> |
| • Merger (<i>злиття</i>) of two or more organisations including at least one VET institution |
| <i>or</i> |
| • Acquisition of one or more organisations to (<i>приєднання</i>), or by (<i>поглинання</i>), a VET institution |
| <i>or</i> |
| • Foundation of a new organisation as a CoE. |

1. For the second option, different scenarios are possible, too:

- | |
|--|
| • Awarding CoE status to an existing VET institution |
| <i>or</i> |
| • Awarding CoE status to a group of institutions (including at least one VET institution), clustered (networked) in the framework of an agreement or another type of association |
| <i>or</i> |
| • Foundation of a new institution with CoE status ⁴¹ . |

Again, taking the fact, that the concept of CoEs is rather new for Ukraine, a “softer” way of introducing those Centres in the country, i.e. the second (“*status*”) option presented above, is recommended. Thus, the “Centre of Excellence” should be considered as a status awarded to an institution or a group of institutions, if they meet a set of criteria established in advance for those Centres, e.g. by MoES or by the Government (for the proposed set of selection criteria, see Section 3.4.2 of this Paper)⁴². The procedure of assessing the correspondence of the organisation to the above criteria, should also be approved preferably by the Government. At the same time, due to quality assurance reasons, the CoE status cannot be awarded for an unlimited period of time, and any Centre shall be re-assessed for the correspondence to those criteria every three or maximum five years.

The Centres will have networked (*related, attached, adjacent*⁴³) VET providers and other institutions, i.e. those *acting in the region and/or related to the sector(s) of the Centre’s specialisation*, depending on the nature of the Centre discussed in the Section 3.2 above (paragraphs 80 and 81). The Centres will be the hubs of those networks, the rules of establishing thereof and the relations of the network members are to be defined again by the Ministry or by the Government⁴⁴.

An important practical issue related to the establishment of the CoEs should also be discussed here. If the “status option” is chosen, this status should not be awarded to an institution by the initiative of a superior body but the *institution* itself should apply for obtaining it and has to prove its correspondence to the criteria established for the CoEs. For this, specific procedures should be defined and a competition can be organised.

Moreover, before applying for the CoE status, the institution may be reorganised in order to better meet the requirements, specifically those related to the management structure. In this case, any of the first three scenarios assumed for the “type option”, are possible.

⁴⁰ Ibid.

⁴¹ Foundation of a new institutions was the last popular option for the Technical Workshop participants.

⁴² This position was fully supported by the participants of the Technical Workshop (07 November 2018). At the same time, they gave preference to the case of a single institution rather than a groups of institutions. Nevertheless, the Experts are convinced that the second option is also completely relevant to the country and should not be neglected.

⁴³ Selection of this term will depend on the appropriateness in Ukrainian language.

⁴⁴ Regulating these relations by Law does not seem appropriate as for this topic a certain flexibility will be necessary.

The Centre shall also enjoy academic, managerial and financial autonomy the level of which will be stipulated by the legislation. This autonomy will be executed through the functions attached to the institution by the Regulation on the CoEs or by the Individual Statutes of each CoE.

As it was mentioned above, the CoEs are based on the principle of equal partnership with the appropriate stakeholders (companies, employers' unions⁴⁵, professional associations, NGOs, etc. – variations in the forms and levels of representation are possible, depending on the selected model) and with consideration of mutual benefit of the involved parties. This principle is usually realised through co-founding (when institution has more than one founder) and/or establishment of a collegial management bodies, e.g. Management/Governance Boards with due involvement (membership) of the partners. These boards have two-fold purpose: to ensure the partners' full-fledged participation in the management and governance of the CoEs (this can be formalised through e.g. a Memorandum on Cooperation or a Partnership Agreement in order to guarantee the parties' responsibilities and the rights), and to balance the sole management of the institution by the executive manager (e.g. Director).

According with this approach, a new type of managerial structures of the Centres of Excellence will be necessary and the following managing bodies of the Centre are proposed:

- the Founder(s) of the Centre (hereinafter – Founders),
- the Centre's Governance Board (hereinafter – Board),
- the Centre's Executive Manager (Director, Principal, Head, etc.) (hereinafter – Executive), and their possible responsibilities are presented below.

3.3.1 The Founders

Except the State (represented e.g. by the Ministry of Education and Science or by the Government), bodies of local self-government as well as any natural and/or legal person(s) can also be the founder(s) of the Centres.

The proposed scope of the Founders' responsibilities is presented in the table below. Many of them are in line with the existing legislation of Ukraine (see e.g. Law on Education), others shall be foreseen through amendments to it. The founders, particularly:

- 1) based on the Centres' regulation, define(s) the **objectives** of the Centre, as well as the types of its activities;
- 2) approve(s) the Centre's **Statute** and the amendments thereof;
- 3) **establish(es)**, **reorganise(s)** or **liquidate(s)** the Centre;
- 4) define the **property rights** that belong to the ownership or use of the Centre;
- 5) approve(s) the **regulation on the competition** for selection of the Executive;
- 6) appoint(s) the **Executive** according with the results of selection procedure implemented by the Board;
- 7) ensure(s) Centre's **funding** according with the approved budget estimate, and supervise(s) the use of provided funds.

3.3.2 The Board

The Board of the Centre will be its collegial governance body and will include representatives of different stakeholders, i.e.:

- Founders;
- Social partners, nominated by employers and/or their unions and associations, and trade unions;
- Local authorities of the state executive power;
- Local authorities of local self-government;

⁴⁵ In certain cases, when the CoEs cooperate with more than one enterprise of the given sector, it can be more purposeful that not individual companies but a corresponding sectoral union of employers (or an association) is represented in the management structure of the CoE. This can provide an additional opportunity for engaging more partners from the sector and/or wider dissemination of the piloting results, in the future.

- Territorial Employment Service;
- Centre's Pedagogical workers nominated by the Centre's Pedagogical Board or another body authorised by the Centre's pedagogical workers;
- Centre students and/or learners, nominated by the Centre's Students Council or another body authorised by the Centre students (learners);
- Representatives of different public organisations of the corresponding profile, professional unions and associations.

The Board may consist of 11 to 21⁴⁶ members, who are approved by the Founder(s) on the basis of the nominations made by the corresponding stakeholders. The Board's term of office can be 3 to 5 years. The Board, particularly:

- 1) discusses and submits draft **Statute** of the Centre and amendments thereof to the Founder(s) approval;
- 2) adopts its **own Charter (Regulation)**, work procedures, from among its members elects the Board **Chair** (hereinafter – Chair), Deputy Chair(s), and the Secretary of the Board. Chair of the Board cannot be a Centre student or learners, or a Centre employee;
- 3) prepares and submits recommendations to the founder(s) on **rewarding or fine** of the Executive of the CoE, and initiates recommendations on the early termination of his/her duties⁴⁷;
- 4) submits proposals about the volume of the **Centre financing** to the Founder(s) approval;
- 5) defines the **fees** for different paid courses and other services,
- 6) defines **bonuses and other means of remunerations** of the staff members including the Executive and the teachers/trainers;
- 7) **identifies new partners**, liaise and establishes cooperation with them, expands the Centre's network and scope of the beneficiaries and clients;
- 8) supports attraction of new sources of funding (**fundraising**);
- 9) approves:
 - a) the Centre's **Strategic development programmes** (plan) and Action plans,
 - b) annual **budget estimates, financial reports and balance**,
 - c) **curricula and educational programmes**,
 - d) reports of the Executive,
 - e) regulations on the Centre's **structural units**,
 - f) regulations on provision of different **types of activities** (e.g. services) by the Centre.⁴⁸

ETF suggests⁴⁹ also that the Boards of CoEs may coordinate with sector skill councils or committees (SSC) the provision of work-based learning, continuing training, setting up career guidance services, development of standards and curricula or carrying out sectoral skill needs analysis. Nevertheless, the relations between the CoE Boards and the SSCs is a matter of more in-depth study which shall be done at the next stages.

3.3.3 The Executive

The Executive manages the current activities of the Centre within the scope of his/her authority, according with the law, Founder's and the Board's decisions and the Centre's Statute. The Executive, in concrete:

⁴⁶ A smaller number of members might not allow to involve representatives of all key stakeholders, while a larger number might make the Board hardly manageable and ineffective.

⁴⁷ The original proposal of the Experts was that the Board organises and conducts competition for selecting the Executive and submits the winning candidature to the Founder(s) approval and formal appointment. However, the during the Technical workshop, the national stakeholders proposed to withdrawal this authority of the Board.

⁴⁸ The Experts' original proposals on the Board's authorities foresaw also: taking decision on the Centre's profit management directions and ways; agreeing on large bargains on disposal and purchase of assets; supervision of the Executive's operations; setting up the requirements, job descriptions and selection criteria for the Centre's staffs, approval results of the selection; defining (or organising assessment of) the Centre's staffs and its own members training needs; defining the amounts of the stipends, scholarships and other allowances for the students and learners.

⁴⁹ Concept Paper "Setting up centres of excellence in Vocational Education and Training (VET): thinking policies and learning practices", ETF 2018.

- 1) without a power of attorney, **acts on behalf of the Centre**, represents the Centre's interests and concludes bargains;
- 2) ensures the development and implementation of the Centre's **Strategic development programmes** and Business (Action) plans;
- 3) manages the **Centre's property**, including financial resources, according with the law, Founder's and the Board's decisions and the Centre's Statute;
- 4) **appoints and dismisses the staff** members of the Centre, managers of its representations and branches, applies them reward measures and imposes disciplinary sanctions;
- 5) issues **power of attorney** on behalf of the Centre, including power of attorney with the right of re-authorisation;
- 6) opens **bank accounts**;
- 7) performs **distribution of labour** among his/her Deputies;
- 8) sets out the forms and frequency of the **students' and learners' formative and summative assessments**;
- 9) submits proposals on the rates of **wages, bonuses and other remunerations** of the staff members, as well as on **stipends, scholarships** and other allowances for the students and learners, to the Board's approval;
- 10) establishes the necessary conditions for the Centre's **staff professional advancement**;
- 11) supervises the **education content** in the Centre, the quality of mastering the learning outcomes by the students and learners, their behaviour, and the organisation of other training activities;
- 12) ensures establishment and effective functioning of the internal **quality assurance** system in the Centre;
- 13) initiates **external monitoring** of the quality of education and/or educational activities of the Centre, institutional **audit** and/or public **accreditation** of the Centre;
- 14) ensures that internal **labour discipline** rules, sanitary norms, occupational safety and security techniques are met;
- 15) promotes, and creates conditions for, the activities of **self-governing** bodies of the Centre;
- 16) **reports** to the Founder(s) and the Board;
- 17) within the limits of his/her authority issues **orders, directives and instruction** mandatory for the Centre and its subdivisions, and supervises their implementation;
- 18) exercises **other powers** reserved for the Centre's jurisdiction by the legislation, which are not reserved to the Founder(s), the Board or other bodies of the Centre.

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* *

Founding of CoEs should be preceded by approval (by Government or MoES) of a Concept paper and/or an exemplary regulation on the CoE establishment and functioning. It is of paramount importance that these documents are developed with due participation of, and are accepted by, all key stakeholders which may become partners or collaborators of CoEs or direct participants of the multi-level governance of these institutions.

3.4 A broad taxonomy to support policy options for setting up CoVES in Ukraine

Once a definition of CoVEs has been formulated, classifying them should be a relatively short exercise. However, it is, in fact, a complex task. Research and practice are not always aligned when policy-makers need to start policy dialogue and advisory processes to consider models of CoVE for implementation. In this respect, for the purposes of discussing policy options for activating intuitional set-ups and operationalizing CoVEs based on modalities observed worldwide, it should be possible to formulate a broad taxonomy based on how institutional and logistical settings are constructed.

The experience shows that selecting key operational aspects to target key characteristics and institutional scopes is –strategically– useful as an accompaniment to policy dialogue and reform

processes for CoVEs.

These aspects are the ones that might better help to identify, to a greater or lesser extent, the different types of CoVEs that are running worldwide and how these models can be used to discuss policy options for decision-making processes regarding CoVE institutional set-ups. These are as follows:

- ★ overall approach, at policy and system levels, to effective VET and skills multilevel governance (including evaluation and monitoring practices), financing and funding, including budgeting and VET costing practices;
- ★ VET quality assurance;
- ★ nature and type of PPPs;
- ★ innovation and networking functions embedded into the excellence factor;
- ★ balance between regional approaches and sectoral versus multisectoral remits of CoVEs;
- ★ conditions of VET school networks aligned to the vision and plans of national (and regional/local) governments for optimising/rationalising vocational education institutions;
- ★ role of international donors in the strategic design and funding allocations for investment in VET centres or networks of excellence.

These issues should be carefully considered as key policy areas when setting up different types of CoVEs, which might have as a common features, from an organic and managerial perspective, their multifunctionality.

Other important aspects for understanding the dynamics of CoVEs – such as teaching training and learning, types and forms of curricula and qualifications, guidance, VNFIL practices, and the capacity for developing skills anticipation strategies – will inform the institutional scope. Hence, these could all serve as specific thematic areas to help in the classification of CoVE types.

CoVE typology is vital for visualizing and for understanding the importance of selecting an appropriate model (or models) for any country. The classification presented below is not intended to fully cover or precisely distinguish all possible variations of the models, but it does clearly explain the key features and characteristics of different CoVE categories and also the roles they play within national VET systems.

Further, the typology introduces broad categories of CoVEs, which might not always fall under one single form or type. The taxonomy builds on an increasing number of examples worldwide (EU, ETF partner countries and international cases) of some of those selected and presented in this paper. Some countries might have more than one modality of implementation, as indicated in the table.

In any case, the five policy options presented below are all possible to be discussed for implementation regarding the VET network conditions in Ukraine. Some of the intrantional examples presented below are further reported in **ANNEX 1**

TABLE XXX. TAXONOMY FOR SETTING UP VET CENTERS OF EXCELLENCE & INNOVATION

IMPLEMENTATION MODALITIES	KEY FEATURES & CHARACTERISTICS	INSTITUTIONAL SCOPE	INTERNATIONAL CASE STUDIES	OTHER REMARKS (*)
<i>Partnership-based organizations and/or networks forming ecosystems of excellence and innovation for providing high level skilled specialists required in national and international labour markets and for contributing on the development of national and regional economies</i>				
<u>A</u> VET Centres of Excellence created as a new and independent training provider.	<ul style="list-style-type: none"> These centres might be set up from the scratch in a new urban or even rural area isolated and/or just not connected to other existing institutions. This can be done in new buildings or existing ones by profiting suitable land spaces for refurbishing renewed establishments, which might be also geographically connected to an industrial area. Involving industry to finance or co-finance from the beginning should be the way for setting up these centres. Thus, intensive resources allocation are needed for kick-starting. However, this is also strong asset for this option as early and quick involvement from industrial actors brings benefits on effective public-private governance as new centre is aligned to both employers and government policy goals. 	Type of institution which might be linked to industrial/sectoral body or cluster. Sectoral-based organisations remit.	<p>Morocco Industrial Centres in Automotive and Aeronautic sectors.</p> <p>Bangladesh has set up centres of excellence in different sectors (e.g. leather industry).</p> <p>Singapore: Centre on Innovative materials used in construction sector.</p>	<ul style="list-style-type: none"> Land properties of some VET schools closer to industrial clusters might be suitable ground for launching this type of projects. Foundation of new type of institutions might be granted for having CoVEs status. International partnerships, approaches and/or standards for accreditation of training/skills might be strong assets.
<u>B</u> VET Centres of Excellence as	<ul style="list-style-type: none"> These centres are not set up from the scratch. They are existing institutions that become centres of excellence indeed. This option should be seen as a natural way to set up centres profiting resources within network of 	These type or status institutions/ organisations might become recipients	Moldova regulated and legislated VET Centres of Excellence merging institutions targeting 11	<ul style="list-style-type: none"> Strategic component can be balanced with regulatory or legal frameworks for redefining the role of VET in the country.

<p>independent training institutions created from existing provider which might deploy extended functions.</p>	<p>existing institutions, including suitable land spaces for having renewed establishments which might be also geographically connected to an industrial area.</p> <ul style="list-style-type: none"> At the same time, this type of VET Centres can become hubs of a kind of conditional networks. This means that such institutions are drivers of excellence and innovation for VET networks by contributing on methodological developments, research and/or capacity building of other institutions and/or overall VET community at national and/or (cross) regional levels. 	<p>for pooling regional resources in VET and sectoral/multi-sectoral skill priorities.</p>	<p>sectors. Type of institutions feeding VET colleges acting in the same sector. Armenia regulated status of regional state VET institutions in one of each 10 regions and 2 in Yerevan capital reorganised into Regional State Colleges. They are networked with VET colleges act in the same region (1).</p>	<ul style="list-style-type: none"> Combination of both <i>soft</i> (memorandums of understanding) and <i>hard</i> tools (<i>framework regulations</i>) might bring benefits on effective dialogue for enhancing social partnerships function to implement such modalities.
<p><u>C</u></p> <p>VET Centres of Excellence as a part of other Training Institutions.</p>	<ul style="list-style-type: none"> This option might be another natural form of establishing centres as facilities of providers should be already profited for being improved. This can be done on Tertiary institutions or VET provider which are high level performers. The <i>new</i> VET Centre of Excellence becomes a reference and/or good practice on excellence/innovation, based on its high level practice/performance as it is profiting social and educational reputation held by previous institution (<i>cost-effectiveness</i>). 	<p>Type of institutions which can be granted to have such status after accreditation, assessment and/or quality assurance processes. Mostly sectoral remits.</p>	<p>Belarus <i>International Innovation Environment Park</i> on renewable energy. Netherlands: Regional Education & Training Centers (ROC). Canada (Oil& Gas Centre). Vietnam (technology and machinery colleges). Asia Pacific School of Logistics at the Inha University in the Republic of South Korea.</p>	<ul style="list-style-type: none"> Reputed Colleges on which might cohabiting VET & Higher Education educational pathways might be good grounds for testing this option. Industrial Employer Centres or others owned by other Ministers (e.g. Social/Labour Policies) might be also good grounds for implementing this option. Enhancing and integrating functions of innovation, research and/or excellence would be needed alongside Quality

				Assurance processes to reach such status.
<p>D</p> <p>VET Centres of Excellence as Network Organisations for feeding Excellence & Innovation values into VET Community.</p>	<ul style="list-style-type: none"> ▪ Leading institutions, organizations, institutes, agencies (etc.) which coordinate network of high quality training providers to support them operating in cooperation for forging links with industry. ▪ Such institutions might be both providers and reference leaders on methodological developments, innovative learning practices and/or introduction of new equipment/technologies (etc.). ▪ Networking provides the opportunity to improve sharing experience and performance based on building partnerships with industrial actors for excellence and innovation. ▪ Networks of excellent might be highly valuable for aligning quick identification of needs of the industry on innovative solutions linked to national and/or regional governments' priorities. They can have international dimension. 	<p>This <i>status-based or just</i> type of institutions have leading role on creating a culture of excellence and innovation in the country/regions/schools. They can offer platform for sectoral or multisector training and/or teaching and other innovative learning solutions, qualifications (etc.).</p>	<p>Netherlands: <i>Katapult Network.</i> STC group (Shipping, logistics, transport & process industries) Spain- Country Basque-TKNika & Aragón- (Centre for Innovation in VET) Ukraine i-HUB network of innovation and entrepreneurship. France <i>Campus the metiers et qualifications</i> gathering VET & H.E institutions. UK- National Skills Academy for Nuclear (NSAN) New Zealand: <i>Vi Virtual Centre</i> led by Education Council.</p>	<ul style="list-style-type: none"> ▪ Selection procedures and technical specifications should be carefully considered for selecting leading institutions. ▪ Networks might bring useful solutions when skills needs in sectors or related sub- sectors are different. ▪ Communication and vision-building capacities are key for implementation and success on networking to link industry and public stakeholder views.
<p>E</p> <p>VET Centres of Excellence as a Multi-profile/ Sectoral Provider institutions.</p>	<ul style="list-style-type: none"> ▪ Multisector education providers might offer high-level qualifications, at least, in occupations related to two or more major/priority economic sectors acting as regional development <i>hub</i> centres. ▪ These type of VET providers should contribute <i>inter alia</i>, to diversifying VET offer whilst avoiding overlapping 	<p>This type of institutions ensures a wide scope of institutional services not only regarding both youngest and adult learners but on</p>	<p>OMNIA in Finland is multisector provider offering innovative learning environments and beneficial partnerships both in national and</p>	<ul style="list-style-type: none"> ▪ This option might be very suitable as previous step for rationalising larges and costly-effective/efficient VET public networks. ▪ Sectoral social partners & employers might be easily

	<p>provision of same specialties/profiles in different institutions which can create inefficient competition on VET offer between VET establishments.</p>	<p>access to difficult geographical areas.</p>	<p>international education development projects. Multifunctional VET Centres/Colleges in Albania set up in flexible way across regions.</p>	<p>attracted by this way of reorganising network based on the added value of inter-sectoral participation and cooperation logics.</p>
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Author: Galvin Arribas, J. Manuel (2020).

Sources: Author's elaboration based on ETF experience of setting up CoVEs in Galvin Arribas et al. (2019, in press) and Galvin Arribas (2018, unpublished). Also based on: Veal, K. and Todd, R. Development Asia ADB (2018), EC DG Employment policy paper on platforms of VET excellence (September 2018), and findings of six discussions groups held in the course of ETF project in six Ukrainian regions plus other references (see bibliography).

NOTES: The typology introduces broad categories, as CoVEs might not always fall into one single category, form or type. The taxonomy builds on an increasing number of examples worldwide of those selected and presented in this article. Some countries might have more than one modality of implementation. In any case, the issue of status versus type of institution might be as crucial as it is also the challenge to feed excellence and innovation dimensions for steering the reform of VET institutional networks. The most obvious way of clarifying the status versus type is when this is directly mentioned in national or regional legislation. However, in many of the cases presented in this taxonomy, this is not explicitly defined. Therefore, for some countries, it might not be technically correct to state that CoVEs are conceived as a particular status or type. Specifications and other specificities informing the processes of implementing international donor projects worldwide should also help to clarify such dilemmas.

Some CoVEs assigned under type B above, such as those in Armenia (and even Moldova), could also be categorised as type E.

*Further remarks are provided which might be of particular interest, though in some cases they are relevant only to specific country policy contexts.

3.5 Estimating indicative costs for establishment of CoVEs

The necessary investments for establishing CoVES will strongly depend on the situation with every single VET institution to be reorganised into CoVEs. This refers to the number and capacities of the buildings and their physical conditions, on the attached land area, number of students and staff, needs in equipment and furniture, location and the approach road, etc. The profile of the institution will also strongly affect the general cost due to differences between the “more and less costly” professions (qualifications), e.g. accountancy vs welding.

It is important to bear in mind that requirements of *energy efficiency*, as well as *accessibility for people with disabilities* should be strongly considered (according to the national standards) while designing the renovation/refurbishment works and making appropriate installations. As for the training equipment, the list of necessary items to be purchased shall be composed after the development of professional and educational standards for the chosen occupations (qualifications). The issue of rural areas is also key for

As mentioned above, estimation of necessary investments shall be done by the applicant institution (see indicator 6.10 of the selection criteria in annex). This should be submitted with the project proposal package. The cost will relate to the following main areas:

- Improvement of facilities – renovation (construction) of buildings, improvement of the surround land area, and instalment of equipment;
- Human resource development – capacity building for administrative and teaching staffs of the CoEs, as well as for the Board members;
- Development and purchase of didactic resources – curricula (modules, programmes), methodological documents, teaching and learning materials, text-books as well as modern teaching technologies including software for using IT in the learning processes;
- Other expenditures for effective operationalisation of the CoE – e.g. establishment of QA system, organisation of events, promotion campaigns, staff's missions, study visits for identifying and learning international practices.

Below we present our own estimation of necessary investments for an indicative case of a hypothetical VET institution, having e.g. four different workshops, a total surface area of 8,000 m² and 1,000-1,200 students. For these calculations, some data provided by MoES and Department for Education and Science of the Vinnytsia Regional Administration, were used.

TABLE 12 EXAMPLE OF COSTS ESTIMATIONS TO SET UP CoVES					
No	Item	Unit	Qty	Rate	Total, €
I. Improvement of facilities					
	Major refurbishments of premises and training workshops, energy saving works (works & materials), incl.: <ul style="list-style-type: none"> • major refurbishment of the facade • major refurbishment and insulation of walls and roofs • installation of floor covering • replacement of window units for energy saving • replacement of doors • repair of heating, water supply, sewage systems • installation of air conditioning system 	sq. m.	8,000	30	240,000
	Workshop 1. Manufacturing industry: Machine operator, Electrician on repair and maintenance of electric equipment, Locksmith on repair of cars	piece	1	70,000	70,000
	Workshop 2. Construction: Mason, plasterer, tile clerk, electro-gas welder	piece	1	50,000	50,000
	Workshop 3. Dairy production industry: Producer of meat semi-finished products, Baker, Syrup, Cheese maker, Confectioner	piece	1	60,000	60,000
	Workshop 4. Light industry: Seamstress, tailor, cutter	piece	1	15,000	15,000
	Computers and other training equipment: 2 computer classes with 25 computers each (with licensed MO). According to the	piece	50	600	30,000

TABLE 12 EXAMPLE OF COSTS ESTIMATIONS TO SET UP CoVES					
No	Item	Unit	Qty	Rate	Total, €
	National technical requirements VET institution should provide at least 5 computes for each 100 students.				
	Equipment for people with disabilities: special exterior and interior lifts, toilets, wheelchair lifts, portable rails and other facilities				35,000
	Furniture & decoration				50,000
	Preparation of project documentation <ul style="list-style-type: none"> • technical inspection and certification of buildings; • diagnostics of the equipment and the design of engineering solutions based on the technical specification; • development of Design and Estimate Documentation 	% of the project value	1	10	51,000
	Installation of High-speed internet				5,000
II. HR development					
	Training of the CoE teaching staff	group	5	5,000	25,000
	Training of the CoE administrative staff	group	1	5,000	5,000
	Training of the CoE boards members	group	1	5,000	5,000
III. Didactic materials					
	Development of curricula, modules, programmes, teaching, learning and assessment materials, etc.	package	5	5,000	25,000
	Purchase of methodical and professional literature				20,000
	Development of soft for using IT in instruction and management processes				30,000
III. Other expenses					
	Establishing internal quality assurance mechanism	piece	1	20,000	20,000
	Study tours for the CoE staff	person/mission	10	2,000	20,000
	Organising events (conferences, discussions, debates, workshops), campaigns, promotional and other similar activities by the CoEs	event	10	5,000	50,000

Thus, around 800 thousand Euro will be necessary to invest for establishing a Centre of Excellence in an existing building initially having relatively acceptable physical conditions. This, however, does not include a running cost of the institutions which is estimated around 300-400 thousand Euro per year⁵⁰.

In addition, if the CoVEs is authorised to implement a VNFIL mechanism, extra cost will be necessary for Training of assessors (~10,000 Euro per group of assessors for a certain qualification), Development of assessment methodologies and instruments (15-20 thousand Euro per qualification), and Assessment of applicants (3,000 Euro per applicant, on average).

There are at least two more issues which will require considerable financial resources, i.e. establishment of an effectively acting *external* QA mechanism and monitoring the CoEs piloting, followed by the evaluation of the results. This, however, shall be done at the "central level" by e.g. MoES.

In the case of new building construction, around 500-600 euro per square meter⁵¹ should be considered as the construction cost. Thus, the expenditures necessary for establishment of a CoE in a completely new building with approximately the same parameters as presented in the above case, will require some 4-4.5 million Euro as additional cost, resulting in total of over 5 million Euro.

Nevertheless, it should be taken into account, that in the case of constructing new buildings, the latter can be designed and organised in a more effective way compared with the existing old type soviet-era buildings (with huge lobbies, corridors, and too high ceilings) and can host the same number of students having much lesser total surface and volume⁵². This may allow decreasing the cost of one building construction by 30-40% or even more.

⁵⁰ If institution has e.g. 50 administrative and pedagogical staffs, the budget for salaries will comprise around 240,000 Euro, if average salary is assumed 400 Euro (compare with the actual salaries, presented in the paragraph 23 of this Report). Additional expenditures, such as students' stipends, utilities, etc., will be necessary.

⁵¹ Including all cost necessary for ensuring energy-efficiency, conditions for the people with disabilities and other requirements.

⁵² The norms of surface per student defined by the national legislation, should be appreciated.

The table below proposes an algorithm for rough calculations of required costs and can be used for different cases: complete renovation of existing building, construction of a new building or partial renovation of a building if a CoE is established as a part of an existing institution.

TABLE 13. EXAMPLE OF INVESTMENTS TO REFURBISH EXISTING VET PROVIDERS TO BECOME COVEs			
Nº	Item	Unit	Average unit cost, Euro
1	Construction	m ²	500-600
2	Renovation	m ²	30
3	Renovation of approach road	1 km	350,000
4	Other constriction works, e.g. improvement of land area, installation of fence	100 m ²	10,000
5	Establishment of workshops	piece	20,000-70,000
6	Furniture & decoration	1,000 m ²	10,000
7	Communication means (internet, phone, etc.)	one-off action	5,000
8	HR development	group of 5-7 people	5,000
9	Development of curricula, modules, programmes, teaching, learning and assessment materials, etc.	package per qualification	5,000
10	Purchase of methodical and professional literature, development of IT software	one-off action	50,000
11	Establishing internal quality assurance mechanism	one-off action	20,000
12	Other expenses (missions and study tours for the staff, organisation of event, (utilities, building service, etc.)	year	100,000
13	Preparation of project documentation	% of the project total cost	10

3.6 The issue of competitions among providers to become excellent

3.6.1 Competition Structure and Procedures

As introduced before, the institutions should apply for obtaining the status of CoE. In general, every such application should be considered and assessed as a separate case. However, at this initial stage, a certain amount of financial resources is foreseen to be allocated for establishing the first group of CoEs, and the MoES intends to announce an “open call for applications”. Due to this, the number of applications can be larger than can be funded. Therefore, selection from among those applicant institutions will most likely be necessary to be organised on the base of competition.

In this context, establishment (regardless of the formal procedure) of every Centre should be considered as an independent project and every application – as a project proposal. The total number of projects to be funded, should be defined beforehand, and the maximum dispersion should not exceed one (e.g. 11 or 12 projects).

For carrying out the above competition, a tender dossier will be developed and an open tender announced by the Government (or by Authorised body, e.g. MoES). Then, a tender (evaluation, selection) Committee should be established. It is recommended that along with the representatives of the Government (e.g. MoES, MoSP, MoF, MoRDBHCS), social partners (employers’ unions, trade unions) and the development partners are involved as well. Independent experts can also be invited to participate in the evaluation of the bids.

Evaluation of the bids should be done according with the selection criteria established in advance and agreed with all parties involved in the selection process (for a set of proposed selection criteria, see the next sub-section). In the project proposals, complete information related to all selection criteria should be presented by the bidders. Below, the minimum information (and analysis) to be provided within the project proposals, is presented:

BOX 3 PROJECT PROPOSAL STRUCTURE

- Title of the proposed Centre of Excellence (hereinafter – Centre).
- The type of the Centre: Regional sectoral, Regional multi-profile, Inter-regional sectoral, Inter-regional multi-profile.
- Institution(s) on the base of which the Centre is proposed to be organised.
- The Sector(s) of specialisation.
- Professions/qualifications to be offered.
- The region(s) to be covered.
- Institutions to be networked.
- Other partner organisations and the key stakeholders.
- Justification of the project (*ex-ante* evaluation):
 - a) **Relevance:** e.g. selection of the Centre type, the sector(s) and the qualifications to be offered, region(s) to be covered, networking institutions, partners, beneficiaries, clients, etc.
 - b) **Efficiency:** e.g. any possible cost-benefit analysis, investments as per graduate for the coming 3-5 years, diversified services, projected profit, taxable capacity; comparison with regular VET providers;
 - c) **Effectiveness:** e.g. estimated number of yearly enrolees as by different types of courses and learners (formal and non-formal, initial and continuing VET, youth and adults) as a percentage of the total population of the relevant age groups, estimated job placement rate, etc.; comparison with regular VET providers;
 - d) **Impact:** e.g. intended impact on the socio-economic situation in the region(s) and in the country, reduction of unemployment and poverty rates, migration, economic productivity, etc.; comparison with regular VET providers;
 - e) **Sustainability:** e.g. potential for development, possible future sources and volumes of funding, income generation, continuous attractiveness of the Centre (for both learners and employees).
- Detailed costed Action Plan for establishment of the Centre.
- Risk analysis.
- A package of required data and documents (according with the requirements of the ToR or the Tender dossier).

3.6.2 Selection criteria

As mentioned above, a set of criteria to be met by institution(s) for obtaining the status of CoEs, will be established. The same should be used as selection criteria while implementing the competition for identifying the CoEs establishment projects.

Those criteria will relate to the following main aspects:

- I. Socio-economic profile of the region and selection of the sector(s) of specialisation;
- II. Institutional characteristics;
- III. Location, territorial coverage and cooperation⁵³.

For every criterion, its weight and a set of measurable indicators should be defined. Below an indicative list of criteria with sources of verification and proposed weights is presented:

⁵³ Participants of the Technical Workshop prioritised these aspects and the specific criteria (see below), differently. Therefore, they should be considered merely as options wherefrom the most appropriate and relevant ones for the country can be selected.

TABLE 14 EXAMPLE OF CRITERIA FOR EVALUATING CoVEs PROJECTS		
Criteria / Indicators	Source of verification	Weight
I. Socio-economic profile of the region and selection of the sector(s) of specialisation		20
1. If the region has positive <i>demographic trends</i>, particularly in terms of VET-aged population as potential VET students (<i>indicators for the last 5 years</i>)?		5
1.1. Population dynamics by age groups	<ul style="list-style-type: none"> • Official statistics with reference to publication • Any survey, research, other reports 	40%
1.2. Migration dynamics and structure by age groups	"	40%
1.3. Urbanisation (share of urban and rural population)	"	20%
2. If the region demonstrates positive <i>economic trends</i>? (<i>indicators for the last 5 years</i>)		5
2.1. Share of regional GDP vs national	"	12%
2.2. Gross Regional Product per capita (factual prices)	"	13%
2.3. Gross Value Added in constant prices	"	10%
2.4. Business activity (number of active legal entities (enterprises) by sectors, out of which the share of profitable enterprises)	"	10%
2.5. Production rates (volume of realised industrial production and agricultural production rates)	"	10%
2.6. Export-import flows, and export volume per capita	"	10%
2.7. Capital Investments: <ul style="list-style-type: none"> - Capital investments rates, - Direct foreign investment (joint-stock capital) rates - Capital investments volume per capita (accumulated from beginning of year) - Direct foreign investment volume per capita (accumulated from beginning of year) 	"	10%
2.8. Innovations (share of industrial enterprises which introduced innovation in the total number of enterprises)	"	10%
2.9. Financial capacity of region: <ul style="list-style-type: none"> - Revenues of local (oblast) budgets (without transfers), per capita - Growth rate of local budget revenues (without transfers), as % to the previous year 	"	10%
2.10. Transport infrastructure (length of automobile roads with asphalt coat)	"	5%
3. If the region demonstrates positive <i>employment trends</i>? (<i>indicators for the last 5 years</i>)		5
3.1. Economic activity rate and structure by educational attainment levels and age groups	"	15%
3.2. Employment rate and structure by educational attainment levels and age groups	"	15%
3.3. Unemployment rate and structure by educational attainment levels and age groups	"	15%
3.4. Economic non-activity rate and structure by educational attainment levels and age groups	"	10%
3.5. Share of those employed in non-formal economy	"	5%
3.6. Long-term unemployment (registered unemployed with job searching duration over 6 and/or 12 months) rate	"	5%
3.7. Interregional employment mobility (share of those employed in others regions)	"	5%

3.8. Partial employment (share of those employed in involuntary part-time employment in the total number of full-time employees)	"	5%
3.9. Number of vacancies, including for those with VET, proposed average wages	"	15%
3.10. Wages: <ul style="list-style-type: none"> - Average wages, including of those with VET - The share of employees whose wages are credited above the minimum wage - Wage arrears (the share of unpaid wages in the wage fund) 	"	10%
4. If the <i>selected target sector(s)</i> of economy (for the Centre's specialisation) is (are) relevant? (<i>indicators for the last 5 years, for every selected sector</i>)		5
4.1. Share of the sector in the region GDP	"	10%
4.2. Production rates	"	10%
4.3. Share in total capital investments in the region (structure of direct foreign investment; structure of capital investments)	"	10%
4.4. Number of employed in the sector and their share as % of total employed in the region, incl. those with VET ⁵⁴	"	10%
4.5. Unemployment rate among those related to the target sector(s)	"	10%
4.6. Long-term unemployment among those related to the target sector(s)	"	5%
4.7. Share of unemployed related to the target sector(s) as % of total unemployed	"	10%
4.8. Number of vacancies and their share in the total number of vacancies in the region, incl. for those with VET	"	10%
4.9. Average wages, including for those with VET	"	10%
4.10. Existence of Regional development plan (RDP) and reference to the target sector(s)	• Relevant official document of the RDP approval with attached RDP	10%
4.11. Rate of RDP implementation in general and for the sector(s) in particular, for the last period available	• Official Report on the RDP implementation	5%
II. Institutional characteristics		65
5. If the <i>profile of the institution</i> is relevant to the target sector(s)?		10
5.1. Professions (qualifications) for provision of which the institution has (had) licence	• Official documents on licensing	30%
5.2. Professions (qualifications) being taught in the institution presently	• Relevant official documents on introducing the professions	70%
6. If the institution has <i>proper facilities</i>?		15
6.1. Land and its use	• Institution's report with attached documents, i.e. plan, design, maps, etc., according to the attached template	5%
6.2. Training buildings (number, surfaces, how rational are organised) and their use (how effectively and efficiently are used)	"	10%
6.3. Effectiveness of the building(s) – useful area, running cost (utilities)?	• Institution's report with attached	10%

⁵⁴ Here and below: if available.

	documents, i.e. plan, design, financial documents, etc. ✧ ⁵⁵	
6.4. Auxiliary facilities, e.g. canteen, sports ground (field), sports hall, garage, medical station, etc.	• Institution's report with attached documents, i.e. plan, design, maps, etc. ✧	10%
6.5. Existence of dormitory, guest house, other similar facilities	"	10%
6.6. Physical conditions of the buildings	• Institution's report with attached documents, i.e. acts, evaluation, certificates, etc. ✧	10%
6.7. Situation with the training workshops, laboratories, equipment related to the sector	• Lists of institution's equipment, certificates, acts, etc.	5%
6.8. Situation with the IT and their use in the management and training process (e-library, e-learning, etc.)	• Institution's report with attached relevant documents	5%
6.9. Availability of quality internet in the institution. If not, availability of quality internet in the locality	• Institution's report with attached relevant documents	5%
6.10. Estimation of investments to be necessary	• Budget estimate carried out by a certified company or own calculations with supporting documents	30%
7. If <i>management</i> of institution is effective?		10
7.1. Existence and functioning of Supervisory Board	• Decision on the Board establishment • Minutes of the Board meetings	10%
7.2. Existence of Strategic development (business) plan (SDP)	• Officially approved SDP with costed Action Plan	30%
7.3. Rate of the SPD implementation	• Reports on SPD implementation	20%
7.4. Capacities of the managers	• Evidence of managers' participation in relevant trainings • Certificates and other documents proving the managers' capacities	20%
7.5. Economic (financial) efficiency of the institution	• Institution's financial-economic reports for the last 5 years	20%
8. If the institution has necessary <i>pedagogic staff</i> (teachers and master-trainers), specifically those related to the sector (quantity and quality)?		5
8.1. Composition of the pedagogic staff and its relevance to the qualifications to be taught	• List of teaching staff ✧	20%
8.2. Competences of the pedagogic staff: - years of experience - participation in trainings, specifically in enterprises;	• Evidence of teachers (trainers) participation in relevant trainings	50%

⁵⁵ Sources of verification marked by "✧" are to be presented according with the template proposed above, in the Section 3.4.1.

<ul style="list-style-type: none"> - attestation passed - ICT skills, etc. 	<ul style="list-style-type: none"> • Certificates and other documents proving the teachers (trainers) competences (attestation) 	
8.3. Existence and effectively functioning of the (pedagogic) staff appraisal system (SAS)	<ul style="list-style-type: none"> • Decision (order) on SAS establishment • Records on appraisal, reports, etc. 	30%
9. If the institution demonstrates positive dynamics (or at least stable number) of <i>applicants, students, graduates</i> and their job placement and if provides <i>career development</i> services?		10
9.1. Dynamics of applicants and students	<ul style="list-style-type: none"> • Institution's reports 	10%
9.2. Drop-out and graduation rates	"	10%
9.3. Job placement rates of the graduates, specifically those related to the target sector(s)	"	30%
9.4. Existence of graduates tracing mechanism	"	25%
9.5. Existence and effective functioning of the students and graduates career development service	<ul style="list-style-type: none"> • Order on establishment • Regulation on the unit • Methodology • Trained specialists • Working means and materials • Record, reports, other documents 	25%
10. If the institution is equipped with necessary <i>methodological and didactic materials</i>?		2⁵⁶
10.1. Existence of modern curricula and programmes (modules) developed with participation of employers	<ul style="list-style-type: none"> • Curricula validated by the employers 	50%
10.2. Existence of necessary methodological and didactic materials	<ul style="list-style-type: none"> • List of methodological and didactic documents 	50%
11. If a <i>quality assurance system</i> is applied to the institution		8
11.1. Existence and effective functioning of internal quality assurance system	<ul style="list-style-type: none"> • Relevant official document on establishment internal QA system • Procedures and methodologies for the internal QA system functioning • Relevant reports 	80%
11.2. Results of the institution external quality assessment (attestation)	<ul style="list-style-type: none"> • Relevant reports 	20%
12. What is the institution's <i>funding</i> history		5
12.1. Dynamics of funding during the last 5 years (state budget, regional budget, city budget)	<ul style="list-style-type: none"> • Financial reports from the Institution and the MoES 	30%
12.2. Own income generation – mechanisms, sources and amounts	<ul style="list-style-type: none"> • Institution's financial and other reports 	70%
III. Location, territorial coverage and cooperation		15

⁵⁶ This criterion is not given a large weight as the newly established CoE will need to develop new curricula and other materials, anyway.

13. What is the <i>role and place of the institution</i> in the regional and national VET system		2
13.1. Cooperation (links) of the institution with other VET providers in the region (with whom and how) ⁵⁷	• Institution's report, Agreements, Memoranda, etc.	20%
13.2. Cooperation (links) of the institution with other regions' VET providers having similar profile (with whom and how)	"	30%
13.3. Physical availability of the institution for the possible partner VET providers' staffs and students (distance, quality of roads and/or means of transportation)	• Institution's report	50%
14. How the institution does <i>cooperate with the sector(s)</i>?		3
14.1. Cooperation (links) of the institution with the companies of the sector, in the region and beyond it (with whom and how)	• Institution's report, Agreements, Memoranda, etc.	40%
14.2. Participation of the sector(s) companies in defining the "(regional) order" and in different aspects of the institution's educational activities, such as designing the education content, teaching process, formative and summative assessment of the students and graduates, teachers training	• Institution's report	20%
14.3. Effectiveness of the institution's students practical training in the companies	• Institution's analytical report	30%
14.4. Physical availability of the possible partner companies for the institution's staffs and students (distance, quality of roads and/or means of transportation)	• Institution's report	20%
15. Who are the <i>stakeholders</i> who could cooperate with the institution?		10
15.1. Main regional / sectoral stakeholders, including those who expressed willingness to cooperate and the possible forms of cooperation	• Institution's report with confirmation letters and/or other documents from the stakeholders	10%
15.2. Out of them, the companies which clearly expressed their demand in the specialists prepared by the institution	"	15%
15.3. Motivation and capability of the above companies to invest in the development of the institution	• Institution's analytical report	15%
15.4. Effectiveness of the Regional VET Council (RVETC)	• Minutes of the RVETC meetings; • Institution's analytical report • Other analytical reports	10%
15.5. Effectiveness of the VET Scientific-methodological Centre of the region	• Institution's analytical report • MoES assessment	15%
15.6. Readiness of the regional (VET) administration to share the institution's management authorities with the social partners	• Confirmation letters from the regional (VET) administration	15%
15.7. Institution's relations with regional VET Councils	• Institution's analytical report • Letters from the RVETC Chair	5%

⁵⁷ Information related to this and the next indicator should include also data on the number of VET institutions (providers) in the Oblast, and depending on the nature of the proposed CoE, also the number of those VET providers all over the country (in the neighbouring regions) specialised in the target sector(s).

15.8.Cooperation (links) with other (non-VET) educational institutions, NGOs, non-commercial, international, cultural, scientific and other organisations of the region	• Institution's report, Agreements, Memoranda, etc.	10%
15.9.International links and cooperation	"	5%

The general image of the institution can also be taken as selection criteria. This may include its former achievements, reputation among region (locality) population (particularly youth), among partners (specifically employers of the region and/or the locality). Different awards, certificates of appreciation, as well as feedback from the population and the partners/employers in terms of satisfaction by the institution (can be obtained *via* independent surveys) will be the sources of verification.

Not only the formal existence of the required data and accompanying documents in the project proposal package but also the quality of the presented materials, carried out analysis and reports, shall be strongly appreciated due to the following fact: if established, the CoEs will need to organise a fundraising, e.g. apply for different types of grants, therefore project proposal designing abilities will become vital.

All the information related to the selection criteria proposed above, shall be presented by the applicant institution as a part of the project proposal package (see point 12 of the Project Proposal Structure above). Nevertheless, in the Section 4 below, results of a Mapping exercise implemented by the Experts are presented. The purpose is to equip those who will implement the selection, with necessary statistical data analysed in a way to be useful for making informed and evidence-based decisions. Moreover, an example of six regions is also provided as an illustration of such analysis methodology.

3.7 Some other issues and options to set up CoVEs in Ukraine

The establishment and operationalisation of the CoEs foresees a number of different types of measures, those from policy dialogue and development and approval of a concept paper on and/or regulation on CoEs, to procuring construction works, equipment supply and services for ensuring proper physical conditions, human resources and methodological base for those Centres. In general, almost all the activities related to those measures may be associated with less or more considerable challenges.

At the initial stage of the project, the experts had constructed a hypothesis on those challenges which were verified during the group discussions. Almost all supposed challenges and risks were confirmed by the regional stakeholders. The list below, which is presented according with the main areas of activities and with proposals on how to overcome, relates to the streamlined *general* key challenges which are possible *regardless of the selected model or any other option*.

- ***Partnership and cooperation.*** Identification and involvement of private (and other) partners in cooperation, which seems the most challenging issue, will require not only considerable efforts for organising different meetings, discussions, negotiations as well as awareness raising and promotional activities, but first of all creation of necessary level of *trust*. This, however, is also a matter of time.

➤ ***Options:*** At the initial stage, before the CoEs become fully able to demonstrate high level performance, some "guarantees" for the potential partners should be provided. This can be done through e.g.:

- adopting a meaningful concept on CoEs with clearly formulated advantages and explicitly defined (possible) benefits for the partners,
- legislatively and/or regulatory-based defined roles of the partners and their rights in the decision making processes, e.g. *via* approval of regulation of CoEs,
- political messages of the high officials (e.g. of the Government, ministries, regional authorities) that appeal specifically to the private sector,
- manifestations of international (donor) organisations' cooperation will, which may motivate also the national players.

The scope and the quality of communications will remain crucial for achieving tangible results in establishing effective cooperation with a wide range of partners.

In this respect, Inter-Ministerial cooperation should be a key pre-condition for moving forward

agendas. This should be also done at regional level among regional departments in charge of different public policies (educations, social, financing etc.). Regional VET Councils might deploy an effective role for supporting on overcoming such partnership challenges.

These stakeholders also might bring added value for involving employers and other sectoral and private actors which could be represented within operational Regional VET Councils. Federation of Employers, Chambers, Sectoral organisations and other private employers participating in the system are crucial actors to engage from the beginning. A kind of *Employers Conference for Dialogue* on Skills Development in the country (national, regional and sectoral remits) might be an example for supporting on how to drive such crucial processes feeding into institutional development of centres.

- **Funding.** It seems unlikely that at the initial stage, the state budget will be able to allocate funds necessary for ensuring the required level of improvements (physical, human, methodology, etc.), and extra financial resources will be needed. Thus, additional sources of funding (co-funding) should be identified and attracted. It is probable also that for the private partners, a certain period of time will be necessary before they make a decision on, or find money for, making considerable investments in the CoEs (small investments may be available even instantly).

- **Options:** Bi-lateral and mulita-lateral donors should mainly be considered as the primary investors. Moreover, taking into account their own planning procedures (which sometimes are rather time consuming), efforts on identifying and inviting the donors to collaboration should be made as soon as possible but not just after establishing the CoE's.

For instance, dialogue on VET financing between Oblast and Rayon levels might bring positive solutions as both governance levels might benefit from socioeconomic outcomes of established centres. This type of dialogue for identifying different use of taxes among local players might open room for targeting the most suitable multichannel financing solutions fit to context.

Fiscal incentives for pooling *alliances of skill investors* in the country which might be better coordinated at regional and local levels, could be potentially the funders of the new VET Centres. This type of solutions should be still high in the VET policy agendas for discussion among public stakeholders (e.g. Ministry of Education and Science, Ministry of Finance and Ministry of Regional Development, Building and Housing and Communal Services). Indeed, this mix of synergies could open room to make becoming Centres as ecosystems or innovation clusters that might be better shaped following principles of smart specialisation strategies.

- **Management and governance.** Effective (multi-level and multi-stakeholder) management and governance based on the principles of (social) partnership and implemented *via* dialogue, is seen as one the main preconditions for development of CoEs worthy of the name. Therefore, not only a properly designed and organised management structure but also *competences* of those who will be responsible for decision making, are crucial.

- **Options:** The capacity building for the individuals involved in the management and governance bodies, e.g. CoEs' executives (Director, Deputies, Heads of internal units/departments), members of the CoEs Boards and also relevant representatives of central and regional authorities, will be required at the very initial stage (or even before) operationalisation of the CoEs (see the Section 3.5 above).

Evidently, selection (election/appointment) of those administrators and board members should also be done extremely carefully, in a completely transparent way and according with the procedures established beforehand. The latter should foresee clear mechanisms for nomination, selection criteria, and transparent and accountable decision making processes.

The private investors on skills for the centres and/or social partners to be represented in the boards should be also part of the selection procedure, and most in concrete, shapers of mission and vision of the centres. This is of course linked to different implementation modalities (types of Centres) proposed in this report.

Selection of VET institutions in regions with high reputation might make thinking on strategic

actions for transferring Director's and other high level staff experience to other actors. Identifying success factors of good practices in the country that can be learned by governing boards of centres is an asset. Learning capacities related to principles of autonomy and accountability of VET institutions will be also crucial from early stage for strategic operational implementation of VET Centres of Excellence.

- ***Improvement of the CoVEs capacities.*** This relates to a number of aspects: institutions' physical conditions (buildings, equipment), human resources, educational and methodological resources (textbooks, teaching and learning materials, information resources, etc.). Obviously, this is directly conditioned by the availability of necessary funds but should also be properly organised and implemented in order to avoid any misuse or dissipation of resources.

- ***Options:*** Competitions for selecting the new, more qualified staffs (specifically teachers and trainers), and a number of tenders for procuring works (construction, renovation), services (e.g. development of different materials) and supply (equipment, furniture), should be organised. In this context, the quality of different Terms of reference, Tender dossiers, Technical specifications, Job profiles and other similar instruments will be crucial from the resource effective use point of view. Therefore, it is strongly recommended that the mentioned documents are also developed by highly proficient experts, and all competitions and tenders are implemented by, or under control of, multi-stakeholder committees (commissions).

Identification and improvement of CoEs capacities should be also connected with quick involvement of the private sector from the beginning for addressing endogenous and exogenous factors that are relevant for Centres development. Pooling resources, for instance, alongside merging processes among different VET institutions is a clear ground for improving initial conditions.

- ***Strategic planning, monitoring and evaluation.*** This actually should be considered as a part of the management system but due to its importance, is worth to be specifically articulated. Development of ***credible*** strategies and action plans is always a challenge and requires a strong expertise in this field. Poor design of strategic plans or poor implementation of even a well-designed strategy will equally lead to a failure.

- ***Options:*** In Ukraine, a solid expertise in the field of institutional strategic planning is available and should be mobilised when required. Properly established monitoring and evaluation schemes should be in place starting from the very early stage of the CoEs establishment.

Peer learning and sharing experience among network institutions is a practice widely used in other countries for monitoring implementation which might be also better build *learning by doing*.

- ***Quality assurance:*** This is an issue of outstanding importance as the quality will make the Centres of Excellence as such.

- ***Options:*** The recommendation is to introduce the EQAVET⁵⁸ Framework to possible extent, and also to follow the CEDEFOP recommendations on quality assurance in VET⁵⁹. Extensive literature is available for both, nevertheless, considerable external expertise will be required to support establishing and operationalising effective quality assurance frameworks in the CoEs.

This might call for discussing how national and regional levels could be in the position to coordinate reference points for Quality Assurance which might become technical hubs for feeding such principles within VET community in the country.

There is one more issue of a general nature, which will be extremely challenging, and a considerable period of time and efforts will be necessary for addressing it. This is about creating a *new culture of innovation and excellence in education and training* (and provision of other services). Only common efforts of the government, social partners and also the civil society, accompanied by the strong motivation and commitment of the CoEs', supported by environment promoting and acknowledging the excellence, may ensure any tangible and sustainable achievements in this sphere.

Thus, excellence and innovation requires vision building. The regional VET strategies might be good ground to incorporate vision on what and how Centres role will become a catalyst for feeding innovation and excellence in the country and regions.

⁵⁸ <https://www.eqavet.eu>

⁵⁹ <http://www.cedefop.europa.eu/en/events-and-projects/projects/quality-assurance>

There are also *specific challenges* which are possible *depending on the selected options* of the CoE establishment. Below we discuss the most principal and probable ones.

- If CoE is established through **mergers and/or closure** of some institutions. The challenges will relate to the issue of the building as well as to the staff redundancy.

➤ *Options:* The analysis done in the ETF Green Paper (see Section 3.1) suggests that three main options are possible in terms of use of the released buildings: assignment of buildings to other education institutions; assignment of buildings to other state functions; sale of facilities to private companies. All those options can be relevant and effective in different regions, according with the local needs, but will require considerable administrative work and also legal amendments. Therefore, every single case shall be thoroughly studied and justified. Moreover, guarantees shall be provided that the buildings will be properly preserved during the period of transfer to another owner, corruption schemes will be avoided and the funds received from the sales, will serve development of the VET system.

In the case of mergers or closure of institutions, a considerable number of staff can be redundant. This, however, is a possible challenge also in the case of reorganisation (transformation) of a single institution into CoE (without any merger or closure). The reason is that many of the “old” staff members (even after a corresponding capacity building) might not be able to satisfy the high professional requirements which are the key for CoEs. Social guarantees should be provided to those redundant employees. Not only financial benefits or similar passive measures but also support to a new job placement shall be ensured. One of the effective measures widely used in the international practice, are trainings of the redundant employees with a purpose of their re-skilling or provision of entrepreneurial competences for self-employment.

However, from an evidence-based perspective, the option of carrying out a feasibility analysis on the performance and effectiveness of VET providers in each region would be a sound one. This exercise shall provide objective and transparent criteria for supporting decision making on merging and/or closing VET institutions’ whilst addressing optimisation and rationalisation of networks towards setting up VET CoEs in Ukraine.

- If a **corporate form** of CoE is selected. The main challenge related to this option is readiness and willingness of the public bodies (at central, regional and also municipal level) to share authorities with the partners, specifically those representing the private sector.

➤ *Options:* The share of authorities and responsibilities shall be defined by law. If it is a matter of a “good will” only, the cooperation can be endangered, specifically at the stage when no strong traditions of PPP are in place yet. The scope of each party’s authorities and responsibilities shall be discussed and agreed between the partners beforehand, be acceptable for them, in line with their interests and mutually beneficial. In addition to any legal provision, memoranda or agreements with clear division of responsibilities shall be signed between the partner parties.

- If the selected model requires **considerable changes in the legislation**.

➤ *Options:* At present, the draft VET law is under consideration. This is a very favourable moment for amending it with the provisions necessary for CoE establishment and effective operation, before the draft is submitted to the Parliament adoption. Nevertheless, considering the possible complications in the case when too radical changes in the legislation are needed, it is recommended that while selecting the CoE model for Ukraine, to analyse to what extent the changes in the law are realistic at the current stage.

- If the **option of “status”** is selected. As mentioned above (see Section 3.3), the status of CoEs is awarded to the institution for a specific period of time and it shall be confirmed in the result of a periodical evaluation. Nevertheless, if the institution cannot confirm its CoE status and losses it, the effectiveness of the investments done in development of this institution, will be questioned.

➤ *Options:* In theory, there cannot be a guaranty that a CoE will keep constantly performing at the required level and ensure proper quality of activities, if no special measures are taken. For mitigation of this risk, permanent monitoring of the CoE performance should be implemented with a purpose of “early warning” in the case of any underperformance. This will allow to initiate

necessary corrective measure and prevent any irremediable failure. A properly established reporting system based on the performance indicators, is another tool for identifying the possible problems at early stage.

4. Key conclusions and policy messages

Despite the considerable reforms implemented during the last years in the VET sector of Ukraine, including decentralisation and modernisation of the regulatory framework, a number of serious challenges still exist in the system. They relate to different aspects of VET, such as governance and management, funding and infrastructure, social partnership, quality assurance, quantity and qualities of the teachers and master-trainers, attractiveness of VET for youth, career guidance mechanisms, etc. However, optimisation of the VET providers' network and ensuring its correspondence to the regional and national labour market requirements remains one of the most burning issues.

The issue of optimization and rationalization of VET network and shaping vision to set up CoVEs in Ukraine

The demographic and socioeconomic figures presented in the report call for an urgent decision on optimizing and/or rationalizing the network of VET schools. The steady continuous decrease of VET student's population, exacerbated by migration is informing on having a reduced network of VET institutions, which, in turn, is calling for limited number with extended scope and/or functions. Merging, closing and starting up CoVEs might be a clear logic to follow. This can be done in pilot basis selecting regions, which have largest network of VET institutions balancing others with regional developments needs. This might be decided at political level in cooperation and/or agreement with VET community.

However, there are many questions to resolve and the issue of land school property is one of most chronic and challenging problems of VET Ukrainian sector. Legally, the VET school property, that is buildings and land, belong to Ukrainian state. However, VET schools are administered by the regions. This needs to be done urgently as this influence any decision regarding optimization and/or rationalization of Ukrainian VET school networks.

For example, school optimisation/rationalization and/or restructuring at upper secondary- VET- level could be piloted following criteria for doing so. This can be done for all regions or just for some pilot regions or large cities/municipalities. Big education providers might offer both academic and vocational pathways for students (after 9th grade) whilst former independent provided can be merged by a biggest one. Further options, on *what to do* with closed schools might be discussed in the country.

The non-utilized schools, such as, perhaps, vocational lyceums and/or colleges, would be further subject of merging or closing for further decisions on what to do with this properties. However, these criteria might be further elaborated in a common framework on which the *rules of the game* are clearly delineated for all in comprehensive, transparent and accountable manner. Delivering *guidelines for optimizing Ukrainian VET network* should be a prior step to asses and evaluate efficiency, quality and performance of VET networks in the country. This might be a scientific way of doing business.

In this process, the role of CoVEs could be crucial as they might lead a kind of new generation of VET networks in the country. This paper proves that both the Ukrainian authorities and the donor community appreciate the need of optimisation through establishment of this kind of *network institutions*.

Results of the research implemented within this project via policy analysis, consultations with the stakeholders and mapping of the regions, show that present VET policy in Ukraine and the vision of the Ukrainian VET system development lay an appropriate background for establishing CoVEs in Ukraine and is expected to:

- Ensure preparation of highly qualified specialists meeting the requirements of the local, regional and national labour markets, based on the best international, as well as national experience and practices;
- Promote introduction of innovations and development in VET;

- Found centres of methodological and professional experience exchange, teacher training and accumulation and transfer of wide range of educational resources to other institutions of the VET system;
- Ensure inclusiveness in education particularly for the adult learners;
- Ensure higher efficiency, targetedness, impact and visibility of the VET reforms through centralisation of investments and concentration of results;
- Support building consensus and effectiveness alongside the necessary process of optimisation and rationalisation of regional VET networks in the country.

At the same time, analysis of the international practice proves that in many countries VET Centres of Excellence (or similar structures) are established, and not only ensure high (or at least better than country average) level of performance but also considerably contribute to the improvement of the national VET systems.

This is done in particular through networking and cooperation with other VET providers, experience sharing, methodological support and introduction of innovations. Models of CoVEs may vary from country to country, or even within the country and are usually adapted to the regional or local contexts (e.g. social and economic, industrial, etc.).

The taxonomy presented is useful for Ukraine (and perhaps other countries). It identifies five types of CoVEs to activate institutional set-ups based on international examples:

- A) Created as a new and independent training provider (Morocco, Bangladesh, Singapore);
- B) Independent training institution, created from existing provider which might deploy extended functions (Moldova, Armenia);
- C) A part of other Training Institutions (Belarus, Netherlands, Canada, Vietnam, Republic of Korea);
- D) Network Organisations for feeding Excellence & Innovation values into VET Community (Netherlands, Spain – Country Basque and Aragón, Ukraine, France, UK, New Zealand); and
- E) Multi-profile / Sectoral Provider institutions (Finland, Albania).

Nevertheless, this typology introduces broad categories only, as VET Centres of Excellence and Innovation might not always fall under one single category, form and/or type. The issue of balancing regional and sectoral approaches will shape different possible models of CoVEs.

In this respect, for Ukraine too, it is recommended that the CoVEs should not necessarily be uniform throughout the country but the regions and the sectors to identify the options, which had better correspond to their needs, are more relevant to the organisational models, those acceptable for the key stakeholders and ensuring better incentives for the private sector representatives.

Moreover, the CoVEs should contribute to the “*smart specialisation*” of the regions in line with an innovative European approach that aims to boost growth and jobs, by enabling each region to identify and develop its own competitive advantages.

Although the prerogative of choosing the model for VET Centres of Excellence and Innovation in Ukraine belongs solely to the national authorities, this paper recommends a number of options related particularly to the following aspects of establishing CoEs in the country:

- The CoVEs model. The five options introduced in this report are possible for Ukraine. However, in a first stage, it seems more feasible to establish CoVEs on the basis of selected (or merged) educational institutions, which will be modernised and refurbished. Another option is organisation of cluster centres, i.e. grouping of e.g. 3-4 institutions under umbrella of a leading one but without administrative subordination or merger. Those clusters can have even wider coverage (to compose “Regional educational clusters”) and include enterprises, the oblast scientific and methodological centre, different public and private training providers, general and higher educational institutions, etc.). CoVEs can be single-sector-oriented or multi-profile. However, their *multi-functionality* should be key characteristics.

- The scope of the CoVEs functions. In addition to the functions implemented by the “regular” VET institutions, the CoVEs shall be responsible at least for provision of wider scope of educational services and activities (e.g. adult learning, CVT). This includes extra-curricular and non-educational activities; contributing to the development of the VET system within a specific sector or in general; provision of different types of support (e.g. in development of curricular, didactic and methodological documents, training of staffs, provision of technical (professional) aid, sharing premises, equipment, and also staff) to the other VET providers with which they are networked. Depending on the local needs and the CoVEs capacities, additional functions can also be attached.
- The CoVEs legal status and management: The CoVEs are expected to be non-for-profit organisations, but established on the principles of public-private partnerships (PPPs on VET and Skills). In general, a corporate form of CoVEs (foreseen also by the existing legislation) is recommended, when except the State (represented e.g. by the Ministry of Education and Science or by the Government), any natural and/or legal person(s) can also be the founder(s) of the Centres. The multi-stakeholder governance and multi-level management, which will include the Founders, the Centre’s Governance Board, and the Centre’s Executive, seems the most appropriate. The Centre shall also enjoy academic, managerial and financial autonomy the level of which will be stipulated by the legislation. At the same time, the issue of CoVEs being an independent type of institution or an awarded status, is still a matter of final decision.
- Selection of the regions and the institutions. Establishment of every Centre is recommended to be considered as an independent project, and MoES intends to announce an “open call for applications”. Therefore, due to the limited financial resources, which can be allocated for this action, selection from among the applicant institutions should be organised on the base of competition, according with the selection criteria defined beforehand.

Further, for activating institutional set-ups following aspects are key for analysis: I) Socio-economic profile of the region and selection of the sector(s) of specialisation; II) Institutional characteristics; and III) Location, sectoral and territorial coverage and cooperation.

A proper selection implemented by a multi-stakeholder committee in accordance with the above criteria, is expected to guarantee appropriateness of the decisions taken about the regions where the CoEs will be established and the VET institutions to be transformed into CoVEs (unless another procedure of CoEs establishment is selected). At the same time, a solid database will be necessary for assessing compliance with those criteria.

Capacity development to support setting up CoVEs in Ukraine

This is a key finding of this analysis, as this issue is paramount for successfulness of the policy process. At least, following areas should be considered:

- Partnership and cooperation. Identification and involvement of private (and other) partners in cooperation is probably the most challenging issue. This will require not only considerable efforts for organising meetings, discussions, negotiations (see e.g. point 2 of the Roadmap above) as well as awareness raising and promotional activities (see also sub-section 3.3 of this Report) but first of all creation of necessary level of trust. This, however, is also a matter of time. Therefore, at the initial stage, before the CoEs become fully able to demonstrate high level performance, some “guarantees” for the potential partners should be provided. This can be done through e.g.:
 - adopting a meaningful concept on CoEs with clearly formulated advantages and explicitly defined (possible) benefits for the partners,
 - legislatively defined roles of the partners and their rights in the decision making processes,
 - political messages of the high officials (e.g. of the Government, ministries, regional authorities) that appeal specifically to the private sector,
 - manifestations of the cooperation will by the international (donor) organisations which may motivate also the national players.

However, the scope and the quality of communications will remain crucial for achieving tangible results in establishing effective cooperation with a wide range of partners.

- CoVEs funding. It seems unlikely that at the initial stage, the state budget will be able to ensure necessary funding (see sub-section 2.3.4 below) for ensuring required level of improvements (physical, human, methodology, etc.), and extra financial resources will be needed. Thus, additional sources of funding (co-funding) should be identified and attracted. It is probable also that for the private partners, a certain period of time will be necessary before they make a decision on, or find money for, making considerable investments in the CoEs (small investments may be available even instantly). Therefore, bi-lateral and multi-lateral donors should most likely be considered as the primary investors. Moreover, taking into account their own planning procedures (which sometimes are rather time consuming), efforts on identifying and inviting the donors to collaboration should be made as soon as possible but not just after establishing the CoEs.
- Management and governance. Effective (multi-level or multi-stakeholder) management and governance based on the principles of (social) partnership and implemented via dialogue, is seen as one the main preconditions for development of CoEs worthy of the name. Therefore, not only a properly designed and organised management structure but also competences of those who will be responsible for decision making, are crucial.

Thus, the capacity building for the individuals involved in the management and governance bodies, e.g. CoEs' executives (Director, Deputies, Heads of internal units/departments), members of the CoEs Boards and also relevant representatives of central and regional authorities, will be required at the very initial stage (or even before) operationalisation of the CoEs. Evidently, selection (election/appointment) of those administrators and board members should also be done extremely carefully, in a completely transparent way and according with the procedures established beforehand. The latter should foresee clear mechanisms for nomination, selection criteria, and transparent decision making processes.

- Improvement of the overall CoVEs capacities. This relates to a number of aspects: institutions' physical conditions (buildings, equipment), human resources, educational and methodological resources (textbooks, teaching and learning materials, information resources, etc.). Obviously, this is directly conditioned by availability of necessary funds but should also be properly organised and implemented.

Thus, competitions for selecting the new, more qualified staffs (specifically teachers and trainers), and a number of tenders for procuring works (construction, renovation), services (e.g. development of different materials) and supply (equipment, furniture), should be organised. In this context, the quality of different Terms of Reference, Tender dossiers, Specifications, Job profiles and other similar instruments will be crucial from the point of view of resources effective use. Therefore, it is strongly recommended that the mentioned documents are also developed by highly proficient experts.

- Strategic planning, monitoring and evaluation. This actually should be considered as a part of the management system but due to its importance, is worth to be mentioned particularly. Here, however, we do not provide any specific recommendations on this topic as the available expertise in the field of institutional strategic planning, monitoring and evaluation may be applicable and mobilised when required. We solely underline the significance of that issue and advise designing and introducing the corresponding mechanism at the very early stage of the CoEs establishment.
- Quality assurance: This is an issue of outstanding importance as the quality assurance will make the Centres of Excellence as such. The Experts' recommendation is to introduce the EQAVET⁶⁰ Framework to possible extent and also to follow the Cedefop recommendations on quality

⁶⁰ <https://www.eqavet.eu>.

assurance in VET⁶¹. Extensive literature is available for both; nevertheless, considerable external expertise will be required to support establishing and operationalising effective quality assurance frameworks in the CoEs.

There is one more issue, although of a general nature, which will be extremely challenging, and a considerable period of time and efforts will be necessary for addressing it. This is about creating a new culture of innovation and excellence in education and training (and provision of other services).

Only joint efforts of the government, social partners and also the civil society, accompanied by the strong motivation and commitment of the CoVEs', and supported by a general environment promoting and acknowledging the excellence, may ensure any tangible and sustainable achievements in this sphere.

However, these new roles will require specific abilities of the stakeholders and for many of them capacity building will be necessary. For this, a training needs assessment against the scope of required competences shall be done within VET community. Such thematic issues might be around learning practices on Social partnership in education; Communication, Team work and Negotiations; Policy and Strategy development, implementation, monitoring and evaluation; Inter-sectoral cooperation, strategic thinking (etc.)

VET decentralization and governing CoVEs in Ukraine: a way forward to support reforms

Overall, this report underlines, once again, that VET decentralization is a catalyser for reform in Ukraine, spite many challenges are ahead for having an effective and efficient VET system managed by regions in cooperation with VET networks. However, the country is nowadays receiving external support and this is strong opportunity for building system capacities (EU and MSs Donors). Thus, there is a great opportunity to support systemic change and steering the system from a good multilevel governance perspective as key precondition for implementing sound reforms in the years to come.

From this logic, leadership of national level to set legislative and regulatory framework and monitoring and evaluating the system, combined with the ability and readiness of regional powers (Education departments, Regional VET councils) to implement high quality VET matching labour market needs, in close cooperation with VET institutions, should improve –much needed- performance of the whole system.

In this context, VET Centres of Excellence- and Innovation- (CoVEs) in Ukraine should be considered as a key driver for on-going and future VET reforms. A new VET concept, role and vision is foreseeing around such institutional set-ups. This report proves that this option for reforming VET system in the country is mostly acknowledged by VET community as an instrument to help on socioeconomic and regional development of Ukraine.

The ultimate goal following *decentralized logics* is, perhaps, to have more autonomous VET institutions (e.g. from managerial, financial and pedagogic sides) capable to interacting as a network. This should support country ambition on forming *learning ecosystems* working hand in hand- with industrial actors (networking governance facilitating PPPs for skills development) on which CoVEs shall play a key role. CoVEs should play coordinating roles whilst transferring knowledge and good practices to benefit other VET establishments, regions and overall, to contribute on the image, attractiveness and performance of VET policies and system in Ukraine.

For all these reasons, it will be strongly needed planning and supporting sound policy learning to set-up and sustaining CoVEs in order to build and mobilize necessary skills for the best performance of the Ukrainian VET community.

⁶¹ <http://www.cedefop.europa.eu/en/events-and-projects/projects/quality-assurance>.

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FINAL DRAFT FOR EDITING

GLOSSARY OF ACRONYMS

ALE	Adult Learning and Education
AP	Action Plan
COVEs	VET Centres of Excellence
CVT	Continuing Vocational Training
DMI	Delegated Management Institutes
EQAVET	European Quality Assurance in Vocational Education and Training'
ETF	European Training Foundation
EU	European Union
EVTA	European Vocational Training Association
GDP	Gross Domestic Product
ICT	Information and Communication Technologies
IFMIA	Training Institute for the Trades of the Automobile Industry of Casablanca
ILO	International Labour Organization
IMA	Institute of Aeronautic Trades in Morocco
LFS	Labour Force Survey
LM	Labour Market
MFC	Multifunctional VET College
MoES	Ministry of Education and Science
MoSP	Ministry of Social Policy
NGO	Non-governmental Organisation
NPiE	National Pact for Industrial Emergence on Morocco
PPP	Public-Private Partnership
QA	Quality Assurance
ROC	Regional Education and Training Centres in the Netherlands
RSC	Regional State College
RVETC	Regional VET Council
SAS	Staff Appraisal System
SES	State Employment Service
SLI	State Labour Inspection
SMC	Scientific-Methodological Centre
SSC	Sector Skill Council (Committee)
SSES	State Service of Ukraine for Emergency Situations
TA	Technical Assistance
TVET	Technical and Vocational Education and Training
UAH	Ukrainian Hryvna
VET	Vocational Education and Training
VCMI	Vocational College of Machinery and Irrigation in Vietnam
VNFIL	Validation of Non-formal and Informal Learning
VTC	Vocational Training Centre

FINAL DRAFT FOR EDITING