



Dual Vocational Education and Training in Serbia

Feasibility Study - EXECUTIVE SUMMARY

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 CHAMBER OF
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SUMMARY

The ambition	5
Dual system – dual principle	6
Approach of investigation	7
Exemplary illustration of the investigation	8
Roadmap	9
Role of the Chamber of Commerce	12
Finishing but not ending	13

THE AMBITION

Supplying the economy with qualified labor is one of the key challenges in Serbia (and beyond). The system of vocational education and training (VET) is expected to play a major part in contributing to economic development and prosperity. However, VET is not only a functional measure for the promotion of economic goals, it also has the potential to improve the transition from school to working life and to offer young people a perspective for planning their career and thus finding their role in society.

Therefore, innovations and investment in VET are crucial prerequisites for preparing societies for the future. Serbia embarked on reform of the VET system as a part of the country's overall political and economic transition. One ambition addresses the transformation from a school-based to a *dual VET* system. Such an ambition is both demanding and promising. It is demanding because there is no blueprint on how to design the change and it is promising because there is much potential for the advancement of the current VET system. An accelerated reform of the VET system would help improve effectiveness and compliance with societal and economic needs.

This study investigates the conditions and ways to make the ambition feasible. It aims to provide relevant evidence, concepts, ideas, options, and arguments to support a rational discussion on the feasibility and modalities of a reform of the current VET system in Serbia.

DUAL SYSTEM – DUAL PRINCIPLE

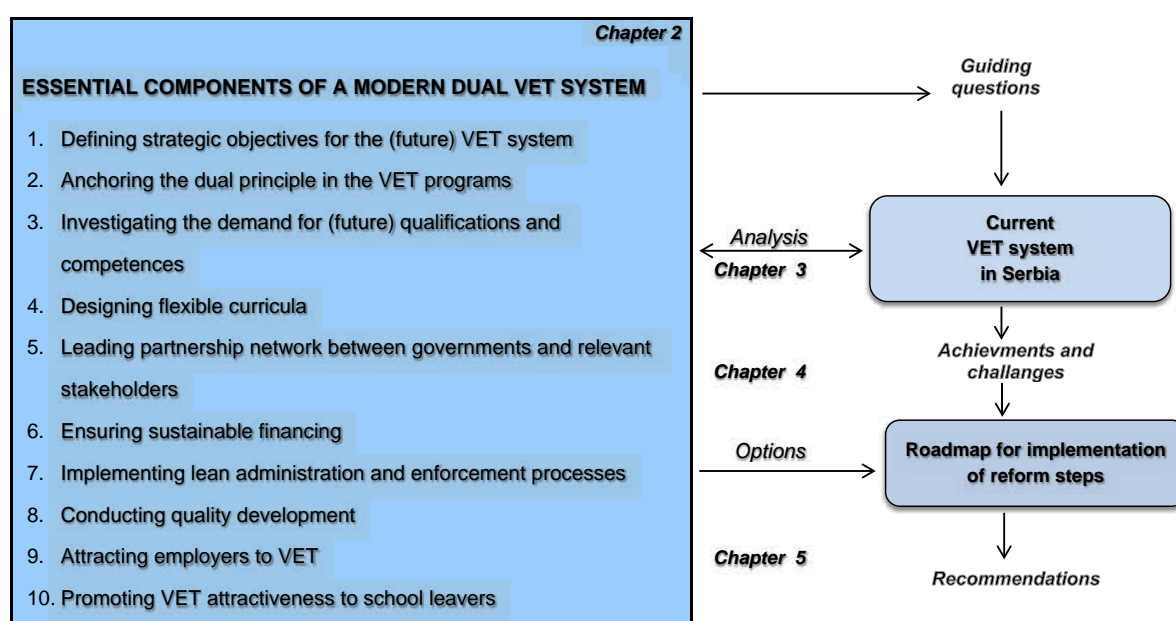
The term 'dual system' can lead to misunderstandings, at least when communicating in a cross-cultural setting. Duality can relate to learning sites, for instance, but also to interwoven pedagogical processes. In the first case, 'duality' relates to the alternation between learning in a company and at school. In the second case, the 'dual principle' refers to the combination of theory and practice.

While the adoption of a 'dual system' along the lines of the Austrian, German or Swiss VET system depends on the existence of a whole set of cultural, political and economic conditions, the implementation of the 'dual principle' is crucial for changing the Serbian VET system.

<i>Dual system</i>	<i>Dual principle</i>
<ul style="list-style-type: none"> • <i>Different learning venues</i> • <i>Most time spent in company</i> • <i>Stakeholders from economy drive the system</i> • <i>Delegation of authority from state to corporative actors</i> 	<ul style="list-style-type: none"> • <i>Alternation of theory and practice, reflection and action</i> • <i>Flexible implementation according to existing conditions in branches</i> • <i>WBL phases in companies essential</i>
<i>Potential approaches to take</i>	
<i>Copying a 'dual system' à la Austria, Germany, Switzerland</i>	<i>Stepwise improvement of existing VET system by introducing components of dual system / principle</i>

APPROACH OF INVESTIGATION

At times it is suggested that established dual VET systems in countries such as Germany, Austria or Switzerland should be exported to other countries, such as Serbia. It is evident both in research and in practice that there is no quick and easy way to transfer a VET system to other countries. Transferring a VET system from one country to another is not merely a matter of copying the original system, but much more a process of selection and adaptation by the potential recipient country. This leads to the following approach:



Starting off with a model of an advanced dual VET system (chapter 2), the study contrasts the ideal with the existing reality (chapter 3) and identifies the achievements and challenges (chapter 4). Subsequently, discussions on the challenges result in options and recommendations for change (chapter 5). These recommendations cannot be regarded as a substitution for the missing blueprint but as food for thought for necessary discussions among the major stakeholders in the Serbian VET system. As such, they do not offer ultimate solutions but key questions and options for answering them.

EXEMPLARY ILLUSTRATION OF THE INVESTIGATION

Two essential components of a modern VET system are “anchoring the dual principle in the VET program” (2) and “attracting employers” (9). In chapter 2, these components are explained, illustrated with examples from different countries and ultimately translated into guiding questions. The investigation results in questions such as:

- How is the concerted alternation of theory and practice organized in the VET program(s)?
- How can the practical part of the VET program provide learning experiences which are genuine, authentic and conducive to learning?

for the anchorage of the dual principle (extract, full scope see chapter 2.2). With regard to “attracting employers”, questions such as the following are introduced (chapter 2.9):

- How can companies (especially SMEs) be attracted to support actively the advancement of the VET system?
- What motives and what arguments may convincingly address the willingness of companies to engage in dual VET programs?
- How can ‘poaching’ be prevented?
- What role can companies take in the development and operation of VET programs?

In chapter 3, the guiding questions are taken up and linked with available data on the Serbian VET system. The analysis results in a description of how the existing system performs with regard to these essential components of a modern dual VET system. Furthermore, achievements and major challenges are identified as a basis for subsequent recommendations.

With regard to the anchorage of the dual principle, the following achievements and challenges are highlighted (chapter 3.3): Achievements – (1) Dual principle is anchored in the Law on Secondary Education in general terms. (2) VET curricula assign lessons to practical teaching and professional practice. Challenges – (1) It remains open to what extent and quality practical instruction is implemented in the VET programs. (2) Company-based practice is limited in most VET programs. (3) A shared understanding of the quality of practical instruction as part of the VET programs is missing.

As regards “attracting employers”, the analysis results in the following summary (chapter 3.10): Achievements – Some good practices of employers’ involvement in VET programs. Challenges – (1) Attracting employers and companies for the promotion of VET on a larger scale. (2) Identifying first movers and an early majority of companies committed to providing opportunities for work-based learning and access to modern technological equipment. (3) Getting companies and employers systematically involved in processes of curriculum development. (4) Introducing a formal mechanism to safeguard the quality of practical training.

A full description of the achievements and challenges of the Serbian VET system with regard to all components of a modern dual VET system is provided in chapter 4.

ROADMAP

One of the lessons learnt from the analysis of the current VET system in Serbia is that existing flaws are less due to a lack of strategic insights but more to a lack of efficient implementation. Therefore, a major next step is the development of an implementation strategy. How can the specific challenges analyzed in the previous chapters be tackled? Which options are available, which are desirable and which are feasible?

For each of the components of a modern dual VET system, the gap between an ideal arrangement and the current state of the VET system in Serbia is analyzed, options for taking action are identified and recommendations making up a roadmap for the implementation of reform steps are put forward. Finally, the areas for adjusting legislation are highlighted. The following table summarizes the recommendations:

<i>Architecture of the VET system</i>
<p>Three-year VET programs:</p> <ul style="list-style-type: none"> • Key message: Three-year programs create opportunities for employment with a strong element of company-based dual VET. • Strengthen the importance and relevance of work-based learning by involving employers in the design and operation of the programs. • Ensure standardized, work-based learning processes in companies as a key component of the dual VET program. • Implement reform towards dual VET profiles step-by-step. • Consider a flexible duration for this type of VET program. <p>Four-year VET programs:</p> <ul style="list-style-type: none"> • Key message: Four-year programs are a pathway to employment in qualified professions in knowledge-intensive occupations as well as to entry into academic studies. • Consider different models providing flexible ways to serve the main purposes expressed in the key message: “Training by stages”; “vocational gymnasium”; “fork model”.
<i>Defining strategic objectives for the (future) VET system</i>
<ul style="list-style-type: none"> • Confirm the strategic foundation of the VET system with its comprehensive coverage of economic, societal and individual objectives. • Launch a process aimed at defining priorities in terms of economic sectors/occupations to be transformed into dual VET programs. • Anticipate resistances to change and design counteractive measures. <p>Agree on a definition of which characteristics make a VET program ‘relevant’.</p>
<i>Leading partnership network between government and stakeholders</i>
<ul style="list-style-type: none"> • Support vocational schools to actively shape their role as part of a VET network in their region. • Adjust legislation to incorporate the rights and duties of companies in a dual VET system. • Define the facilitating role of the Chamber of Commerce to take major responsibilities with regard to the company part of the dual VET system. • Revise the role of the Council for Vocational Education and Adult Education (CVEAE) to serve as a coordinating and decision-making body in charge of all VET affairs. • Introduce research capacities backing the development of the VET system.

Ensuring sustainable financing

- Use resources saved from the demographic decline and the reduction of lessons in the dual VET system for the implementation of the reform.
- Start incrementally introducing a co-funding model involving companies and students for ensuring sustainable financing as soon as dual VET programs have been consolidated.
- Introduce a remuneration scheme for apprentices who spend most of their time in a VET program in a company.

Attracting employers to VET

- Collect a portfolio of convincing arguments for attracting employers to participate in a dual VET program.
- Distinguish useful areas for participation.
- Collect showcases and good practices of economic sectors or companies benefitting from their participation in a dual VET program.

Identify trustworthy institutions and experts to persuade companies to join dual VET programs.

Promoting VET attractiveness to school leavers

- Campaign for a specific VET program by addressing the key motives of young people when deciding on their career choices.
- Start introducing career options in VET as early as in primary school.
- Introduce showcases and good practices for raising awareness of and interest in a specific VET program.

Make sure that a specific VET program can deliver what is promised (in terms of quality and employment prospects).

Anchoring the dual principle in VET programs

- Ensure that the share of practical learning in a VET program is predominantly offered in companies.
- Stipulate minimum quality standards for company-based learning in the law (in general terms) and the curriculum.
- Organize support and incentives for companies for implementing high quality practical learning.

Implement monitoring and sanctioning processes to counteract companies not willing to live up to their responsibility within a VET program.

Investigating the demand for (future) qualifications and competences

- Make research capacities available to collect data on future qualification requirements
- Assemble expertise from the educational and the economic sector for identifying and agreeing on competences required to deal with future challenges.
- Mandate the Ministry of Education, Science and Technological Development (MoESTD) for the school part and the Chamber of Commerce for the company part to facilitate the development and specification of future-oriented VET curricula in their area.

Ensure that drafted curricula are state-of-the-art.

Designing flexible curricula

- Divide curricula into modules.
- Avoid modules being too fine-grained.

Consider connecting modules with integrative units in order to enable learners to gain a comprehensive understanding of the processes.

Implementing lean administration and enforcement processes

- Design administrative and enforcement processes to be as lean as possible.
- Substitute the current (supply-driven) enrollment system with a demand-driven admissions system.
- Stipulate appropriate contractual arrangements on the rights and duties of the parties with regard to apprenticeships and traineeships.
- Organize exam committees (involving representatives from the different learning venues) on the local/regional level and define responsibilities and processes for holding exams and awarding degrees.

Introduce criteria stipulated in the law for approving the suitability of companies to participate in a VET program.

Conducting quality development

- Consolidate existing approaches introduced for the school part of the VET system and transfer them into a unified, quality framework addressing the key questions of quality development.
- Introduce minimum quality standards for licensing companies to participate in VET programs.

Conceptualize key quality factors for analyzing and developing the quality of work-based learning.

ROLE OF THE CHAMBER OF COMMERCE

For implementing the dual principle in a modernized dual VET system in Serbia, it will be crucial to attract employers and companies and introduce support mechanisms to assure the quality of the learning processes in both learning venues. It is thought that the Chamber of Commerce will become a major driver of the reform of the system, especially the company part. Among others, the Chamber of Commerce is supposed to take on the following tasks:

- Promote the processes of change towards the dual VET system, especially among economic stakeholders.
- Identify economic sectors and occupations suitable for transformation into dual VET programs in the launching phase of the new VET system.
- Identify occupations in urgent need for qualified employees and/or modernized curricula.
- Convince employers and companies to participate in dual VET programs.
- Support the administration and enforcement processes (e.g. take stock of the apprenticeship contracts, monitor compliance with legislative regulations; promote the acceptance and quality of dual VET offerings especially with regard to in-company training; organize exams; approve companies to train apprentices)
- Facilitate networks and communities for sharing good practices among companies.
- Organize a portfolio of offerings for companies (e.g. counselling, training) to support the transformation process towards the implementation of dual VET programs.
- Implement a quality development system for the company part of the system.
- Participate in processes of qualification analysis and the transfer into curriculum development.
- Participate in the (new) Council for Vocational Education and Adult Education (CVEAE).
- Introduce a levy-system in specific economic sectors based on the approval of companies.

Currently, the Chamber of Commerce does not have the capacity to carry out tasks like these efficiently. For this reason, there needs to be discussion of how respective responsibilities can be incorporated into the existing or new organizational structure of the Chamber.

FINISHING BUT NOT ENDING ...

There is one limitation which is mentioned several times in this study. The VET system is part of the overall economic, social and cultural system in Serbia, and, in particular, the economic situation is of key importance when assessing the role VET can play in the advancement of Serbian society. Given the fragile structure of the current Serbian economy, the starting basis for reform of VET does not seem to be very favorable. However, change theories contend that in times of strain and pressure, changes are much easier to launch than in times of prosperity and success.



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