Renold, Ursula et al.

Research Report

Implementation of the Serbian law on dual education: First report on drivers and barriers in the pre-implementation phase

KOF Studien, No. 129

Provided in Cooperation with:
KOF Swiss Economic Institute, ETH Zurich

Suggested Citation: Renold, Ursula et al. (2019) : Implementation of the Serbian law on dual education: First report on drivers and barriers in the pre-implementation phase, KOF Studien, No. 129, ETH Zurich, KOF Swiss Economic Institute, Zurich, https://doi.org/10.3929/ethz-b-000337794

This Version is available at:
https://hdl.handle.net/10419/207589

Report

Implementation of the Serbian Law on Dual Education First Report on Drivers and Barriers in the Pre-Implementation Phase

Author(s):
Renold, Ursula; Caves, Katherine M.; Maldonado-Mariscal, Karina; Oswald-Egg, Maria Esther; Markovic, Jasminka; Veselinovic, Zaklina; Stankovic, Dejan; Ceneric, Ivana; Todorovic, Milica

Publication Date:
2019-04

Permanent Link:
https://doi.org/10.3929/ethz-b-000337794 →

ETH zürich

KOF Swiss Economic Institute

Implementation of the Serbian Law on Dual Education

First Report on Drivers and Barriers in the Pre-Implementation Phase

Ursula Renold, Katherine Caves, Karina Maldonado-Mariscal, Maria Esther Oswald-Egg, Jasminka Markovic, Zaklina Veselinovic, Dejan Stankovic, Ivana Ceneric and Milica Todorovic

KOF Studies, No. 129, April 2019

KOF

Imprint

Editor

KOF Swiss Economic Institute, ETH Zurich

Authors

Ursula Renold, Katherine Caves, Karina Maldonado-Mariscal, Maria Esther Oswald-Egg, Jasminka Markovic, Zaklina Veselinovic, Dejan Stankovic, Ivana Ceneric and Milica Todorovic

KOF

ETH Zurich
KOF Swiss Economic Institute
LEE G 116
Leonhardstrasse 21
8092 Zurich, Switzerland

Phone +41 44 632 42 39
Fax +41 44 632 12 18
www.kof.ethz.ch
kof@kof.ethz.ch

Implementation of the Serbian Law on Dual Education

First Report on Drivers and Barriers in the Pre-Implementation Phase

Authors

Ursula Renold
Katherine Caves
Karina Maldonado-Mariscal
Maria Esther Oswald-Egg
Jasminka Markovic
Zaklina Veselinovic
Dejan Stankovic
Ivana Ceneric
Milica Todorovic

Report prepared in collaboration between the KOF Swiss Economic Institute at ETH Zurich in Zurich, Switzerland (http://www.cemets.ethz.ch/) and the Centre for Education Policy in Belgrade, Serbia (http://www.cep.edu.rs/eng)

Acknowledgements

We wish to thank the Swiss Development Cooperation in Serbia for its support, both financially and in its actions. The authors are grateful to the Ministry of Education, Science, and Technology and the Chamber of Commerce and Industry, Serbia for their cooperation with this project. We are extremely grateful to all of the interview participants who contributed their time and expertise.

Contents

List of Tables

List of Figures

List of Abbreviations

CCIS	Chamber of Commerce and Industry Serbia
CEDEFOP	The European Union's European Centre for the Development of Vocational Training
CEP	Centre for Education Policy (Belgrade, Serbia)
Commission Article 40	Commission for Development and Implementation of Dual Education, Government of Serbia
IIE	Institute for the Improvement of Education
KOF	KOF Swiss Economic Institute (ETH Zurich, Switzerland)
LDE	Law on Dual Education
MoESTD	Ministry of Education, Science, and Technological Development (Serbia)
OECD	Organization for Economic Cooperation and Development
S&W Serbia	Šumadija and Western Serbia
SCTM	Standing Conference of Towns and Municipalities
SDC	Swiss Development Cooperation
SME	Small and Medium Enterprise
UNESCO	United Nations Educational, Scientific and Cultural Organization
VET	Vocational Education and Training
WBL	Work-based learning

Introduction

Serbia's law on dual education (LDE), slated for implementation in the 2019/2020 school year, transitions part of the country's vocational education and training (VET) system to more intensive and more regulated model of work-based learning (WBL). Although many schools already cooperate with companies, WBL was not previously regulated.

Research shows that dual education has better overall outcomes than school-based VET does on the youth labor market (i.e. Bolli, Egg, & Rageth, 2017). Dual education, apprenticeship, and WBL are key to the VET-related policy recommendations of the OECD (OECD, 2015) and UNESCO (UNESCO, 2015). The European Union's European Centre for the Development of Vocational Training (CEDEFOP) also cites "increased WBL in all VET programs" as a main trend for the future of VET (CEDEFOP, 2018).

Although dual education is a worthwhile cause, it can be challenging to implement (OECD, 2009). Unlike school-based VET programs, dual education requires actors and institutions from the employment system to engage, participate, and even take on leadership roles and costs (Bolli, Caves, Renold, & Buergi, 2018). Managing so many institutions, actors, and diverse system logics is challenging, and existing research on implementing VET reforms offers limited guidance (Caves & Baumann, 2018).

To support the implementation process, this report is the first in a series of studies that look for drivers and barriers to the law. We intend it to be useful for the Ministry of Education, Science, and Technological Development (MoEST), the Chamber of Commerce and Industry of Serbia (CCIS), and the LDE's implementation oversight body - Commission for Development and Implementation of Dual Education (Commission Article 40). We also hope that it is useful for other national bodies, regional leadership, and the local schools, companies, and communities that will both implement and participate in dual education.

Purpose and Goals

This research project is a three-year investigation of Serbia's LDE content and implementation. It combines longitudinal and cross-sectional observation of the implementation process and the specific success factors and barriers that affect the Serbian LDE. The first main research question is "What enables and/or prevents implementation of the Serbian LDE?" For example, Caves and Renold (2016a) find that employer engagement improves implementation and this will likely apply to the Serbian case.

The second main question is "What changes to the law on dual education will facilitate implementation?" This question will strongly inform potential revisions of the LDE after its initial trial phase. We identified key moments in the implementation process (i.e. pre-implementation, program start, first year, etc.) using the LDE, drafts of the new Master Plan that outlines stakeholders' roles and the reform timeline, and an existing SWOT analysis (Renold and Oswald-Egg, 2017). In this study, we interviewed selected stakeholders about specific opportunities and problems, as well as solutions and potential issues in the future. We plan to carry out surveys and more interviews as the implementation process progresses. We will use this information to make recommendations for the LDE update.

Method

Research Plan

This study is the first installment of a three-year research plan covering the implementation period of the LDE in Serbia. The goal of these interviews is to establish a baseline for actors' awareness, willingness, and ability to implement the new law. It is also to map out potential challenges, conflicts, and opportunities in the changing landscape of VET. The interviews focus on stakeholders who are deeply involved in implementing and establishing the LDE. The subject group for the surveys will be broader and larger to map the experiences of as many actors as possible. Table 1 summarizes the plan.

Table 1: Overall implementation research plan

Study	Implementation timeline	Report date
Interview 1 (this study)	Pre-Implementation	Spring 2019
Survey 1	Start of implementation	Fall 2019
Survey 2	Middle of first year	Spring 2020
Survey 3	End of first year	Fall 2020
Interview 2	Reflection on first year	Spring 2021

This first round of interviews occurred before widespread LDE implementation. It explores expectations, the existing landscape, and existing experiences with dual education. It can also generate initial information on where problems are visible with a view to the start of the program in the 2019/2020 school year, allowing for pre-emptive solutions when possible. We designed the interviews based on the VET reform implementation framework developed by Caves and Baumann (2018), other frameworks (Nilsen, 2015), the authors' experiences with VET reform implementation, and context-specific issues.

Sample

We interviewed 206 respondents from November 2018 to February 2019. Most interviews were in person or over the phone, with a few by e-mail, all in Serbian by the CEP team based on a form created by both teams. The CEP team translated responses into English and sent them to the KOF team. The quantitative data is in the form of yes/no questions, five-point Likert scales, or multiple-choice questions. The qualitative data is participants' responses to open questions, follow-up questions, and comments. The KOF team analyzed the quantitative data statistically and used content analysis for the qualitative data. Both teams collaborated extensively on interpretation of the results.

In order to represent the full landscape of dual education in Serbia, we interviewed a wide variety of actors representing every actor group engaged in dual VET and the reform. The main actor groups are the government and related national bodies, the CCIS, trade unions, regional units of both MoESTD and CCIS, schools, companies, students, parents, donor partners, and international community actors. For schools, companies, students, and parents, we spoke with those already involved in dual education programs and those not involved in dual education. For each group of respondents, we targeted specific actors that are closely involved in dual education. Table 2 summarizes the interviews by group, actor, selection strategy, and sample interviewed.

Table 2: Sample			
Actor Group	**Actor Summary**	**Person**	**Sample**
Government and governmental bodies	MoESTD	Assistant minister for dual education	3
		Assistant minister for secondary education	
		Head of VET dept.	
	VET and Adult Education Council	President	1
	Prime Minister's Office	Person in charge of dual education, Commission Article 40 member	1
	Standing Conference of Towns and Municipalities (SCTM)	Person in charge of dual education, Commission Article 40 member	1
	Institute for the improvement of education (IIE)	Director	1
Chamber of Commerce and Industry of Serbia	CCIS	President of CCIS	1
	Centre for Education, Dual Education and Education Policies	Head of Centre	1
	Sector for strategic analysis, analytics, services, services and product packages	Head of Department	1
	Regional CCIS Units	Directors	15
Trade unions (labor)	Branch union	Representative	1
	Trade union focused on education issues	Representative	1
	Trade union focused on labor issues	President	1
Regional School Administrations	Regional school administrations	Heads of school administrations	14
VET Schools	Schools engaged in dual education starting 2013/14, when the first dual education pilot profiles were introduced	School principals	3
		WBL Coordinators	3
	Schools engaged in dual education starting 2017/18, when official implementation of dual education started	School principals	9
		WBL Coordinators	9
	VET schools not engaged in dual education	School principals	19
Students	Students enrolled in dual education	Students	30
	Students enrolled in other VET profiles	Students	30
Parents	Parents of students in dual education	Parents	15
	Parents of students in other VET profiles	Parents	15
Companies	Companies cooperating with schools within dual education	Managers/HR directors	18
	Companies not participating in dual education	Managers/HR directors	8
International Community & Donors	Major donor-partner organizations in dual education	SDC, GIZ, ADA	3
	Main international organizations operating in education	EUD, ETF	2

Schools' participation status comes from the MoESTD database. Two groups of schools are already involved in dual education: the internationally, by GIZ, initiated pilots from 2013/14 and dual profiles implemented from the 2017/18 school year. There are five schools involved in the pilots from 2013/14, of which we sample three (60%). Among the 84 schools involved in later implementation of dual profiles, we sample 9 that have clear-cut example cases (11%). Schools with dual education profiles have work-based (WBL) coordinators, and we interview these as well as the school directors because of their different perspectives, roles, and responsibilities. Total 228 schools are not involved in dual education, and we sample 19 of these (8%).

Among schools involved in dual education, 27% have been participating for five years, 14% for four, 18% for three, 36% for two, and only 5% in their first year of implementation. Participating schools represent 1,932 students participating in dual education. All of those schools have already implemented some form of career guidance, all but one have a dedicated WBL coordinator, and all of them monitor and evaluate WBL to ensure it is up to the standards they expect.

The **students and parents** involved in dual education, as well as those not involved in dual education, are drawn from the selected schools. For both groups we interview 30 of students and 15 of their parents. Parents typically have VET as their highest level of education in both groups, with no major difference between those whose children are in dual VET and those in traditional VET profiles.

For **companies**, we worked with information from CCIS. According to that information, 600 companies cooperated with schools for dual education in the 2018/19 school year. We interviewed 26 companies (5%), with the majority SMEs to reflect Serbia's participating industrial landscape. The group of 18 participating companies includes both those that started with the 2013/14 international pilot and the 2017/18 early implementation period. The 8 dual education non-participating companies are also mostly SMEs to match the companies in Serbia. We intended to interview more non-participating companies, but these were difficult to identify and contact using the information available.

The full sample of interviewees is more female than male (62%). The most common educational backgrounds are academic higher education (70%) and vocational secondary education (21%), with very few having applied higher education (7%), compulsory education or less, only academic secondary education, or no value (2%). There is no significant difference between dual and non-dual school leaders, parents, or companies in terms of their education backgrounds—each group has its own profile, but interviewees from companies participating in dual education, for example, are similar to those from companies that do not participate.

Interview Content

Every interview addresses a foundation of core questions, with additional questions specific to each actor group. Table 3 summarizes the core questions, which address actors' awareness of the upcoming LDE implementation, how they believe it fits with the context, how much of a change the actor and/or their institution will have to make, willingness to participate, and ability to participate. The core questions also address actors' perceptions of cooperation and coordination among actors at present and as required for implementation, and the overall political will toward the LDE's implementation.

Table 3: Core interview topics and questions
Awareness
How aware are you of vocational and dual education in Serbia generally?
How well informed are you about the LDE in Serbia?
Where do you get information about dual education and VET?
Context fit
Do you think the dual education fits with the needs of Serbian students and companies? Please provide an explanation of your answer.
Do you think the LDE addresses all the important aspects of dual education?
Do you think the LDE is clear and understandable for all of the actors who need to be involved?
Change magnitude
How much will your organization have to change to implement the new dual education program?
What kind of changes do you think your organization will have to make?
What are the biggest or most fundamental changes?
What concerns or expectations do you have for the changes?
Willingness
Is your organization motivated to participate in implementation of dual education profiles?
What are the biggest challenges you foresee for implementing dual education profiles?
What are the biggest opportunities you foresee for implementing dual education profiles?
Ability
Does your organization have enough resources to implement dual education profiles? Dimensions include personnel/human resources, time, know-how/expertise, information/materials, and financial resources.
Cooperation
Is your organization prepared to cooperate with other actors on implementing dual education?
Do you see any drivers or obstacles for cooperation with any stakeholders?
With whom do you think cooperation will be most important?
For what purpose will cooperation be most important?
Coordination
Right now, are all of the relevant actors and institutions coordinated to implement dual education?
Do you think all of the relevant actors and institutions will be coordinated by the next school year when the LDE is going to be fully implemented?
What do you think are the biggest obstacles or potential barriers to coordination?
Political will
How willing do you think each actor is to implement dual education? [list of actors]

Based on different actors' roles, specific interview questions for each actor vary slightly. Table 4 summarizes the question groups and topics that each respondent group answered. Full interviews for each group are available in Appendix 2.

Table 4: Question groups by actor type

Government	CCIS	Trade Unions	Schools	Companies	Students & Parents	International Actors	Question group/Topic
X	X	X	X	X	X	X	General background
X	X	X	X	X		X	Core questions (see Table 1)
			X	X	X	X	Additional actor-specific background
X	X		X	X		X	MoESTD and CCIS bylaws and acts that regulate specific aspects of dual education in more detail
			X	X	X		Dual education and/or training experience

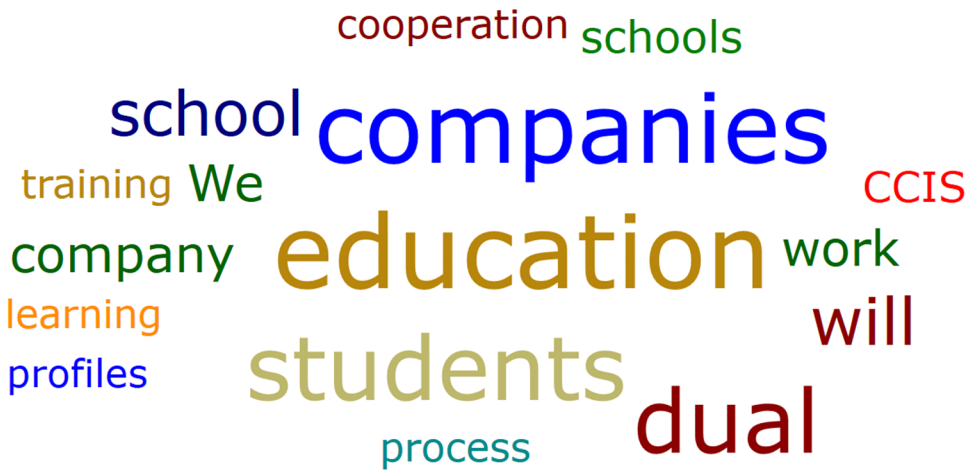
Results

We find that actors are almost universally aware of the upcoming change and motivated to participate in implementing dual education. Interviewees from all actor groups are willing to make changes and coordinate with other actors. Companies, schools, and parents that are already involved in dual education initiatives are excited about their experiences and eager to expand the model. Top-level leaders and organizers are invested in implementing the law, and there is an optimistic mood in general.

Interviewees also flag potential challenges. The law is not completely clear and aligned to the Serbian context, partially because its process-detailing bylaws and acts are still new and not well known (see the chapter on *Bylaws and Act on Specific Processes*). As questions get more specific, interviewees are able to identify more potential sticking points like lack of staff, expertise, and funding for intermediary and facilitating roles. There are a few concerns that come up repeatedly, especially students' salaries, companies' willingness to participate, need for more information especially for mid- and operations-level actors, and need for more action from facilitating intermediaries like CCIS and regional CCIS branches.

Figure 1, a word cloud, shows the words most commonly used by interviewees. Dual education is the topic around which the whole interview is structured, with students and companies are the next-most-often-mentioned words. Actors frequently express concerns for the interests of students, companies, or both. Schools and CCIS also come up frequently, since their roles may change or be in greater demand under a dual system. Many respondents also focus on the upcoming implementation effort, discussing the process and cooperation while using words like "we" and "will." Of course, the content of the reform comes up frequently in terms of learning, work, profiles, and training. Interestingly, topics like employment and skills come up infrequently.

Figure 1: Most common words in interview responses



Reading guide: Larger words are more frequently used by respondents. All used at least 122 times.

Results are organized by the major categories in the interview's core questions, with a special section on the process-oriented bylaws at the end. Overall, excitement and interest are high. That is a strong start, but does not guarantee smooth implementation, especially as the realities of hard work and new institutional arrangements become apparent.

Awareness

Actors have to be aware of the upcoming change before they can participate in its implementation. Overall, awareness of dual education in general is very high, and actors report feeling very well informed about the LDE. Respondents are aware of vocational education in Serbia (4.3 out of 5 on average), and are similarly well informed of the LDE, at 4.2 out of 5.

The major exception to the general level of awareness and information is companies not already involved in dual education. These are generally unaware of Serbian dual education and uninformed about the LDE. While this makes sense because these companies do not have experience with dual education, it is also an important challenge to the law's implementation because the law demands as much as possible companies' participation in training. There is a lot of space for implementers to engage with new companies.

The companies that are already in dual education state that they mainly get dual education-related information from the CCIS and the schools they cooperate with. For these companies, the media and the Official gazette of the Republic of Serbia also play important roles as information sources. When non-training companies got information, it came through the national CCIS and the Internet. These can be good starting points for engaging with new companies and increasing their awareness and information.

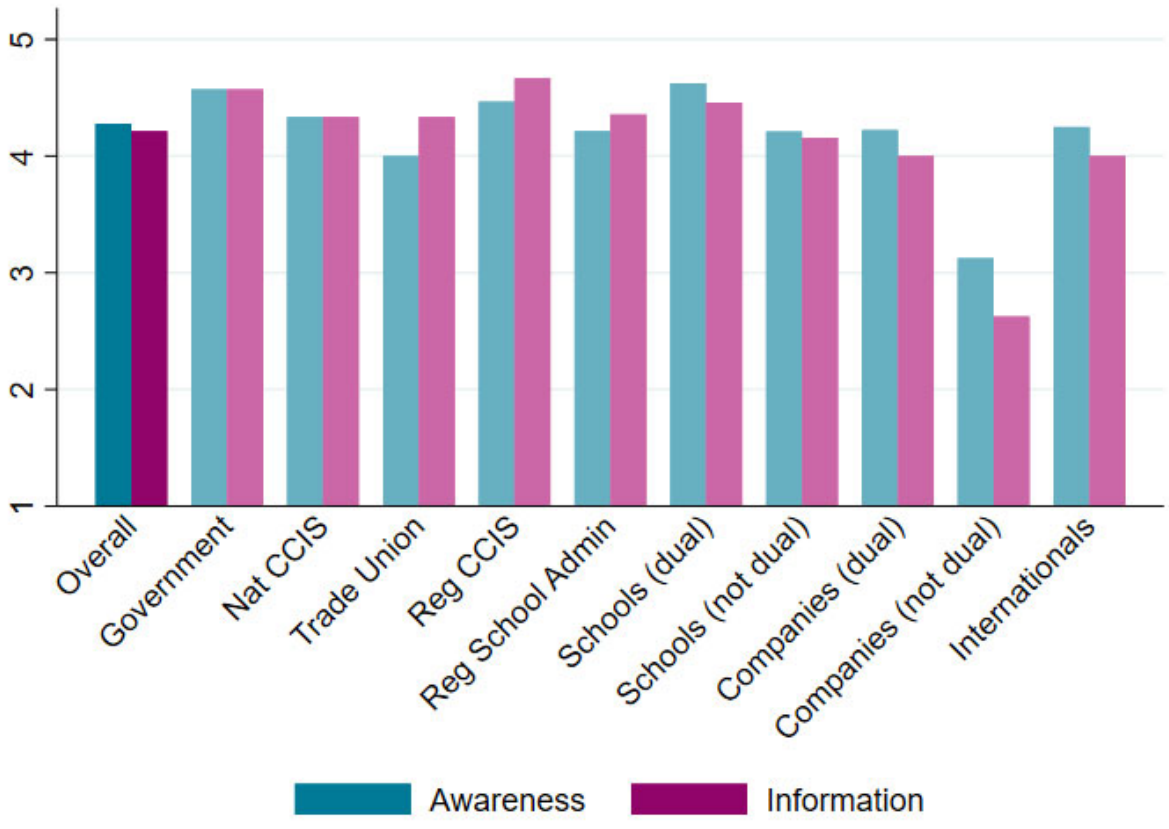
Schools' main source of information is the MoESTD via its official communications and website. Schools not in dual education also mentioned their regional CCIS offices as secondary sources of information, and a few report getting information from the law itself. In contrast, the schools already in dual education cited international donors as their second source of information, probably because donors initiated many of the initial dual VET pilot programs.

Students, both in dual and traditional VET profiles, are very aware of dual education profiles, with 89.8% reporting they know about dual profiles, 3.4% unaware, and 6.8% unsure. Both groups of

students rely on their schools, peers, and the internet for information. Parents, both with and without a child enrolled in dual education, rely on schools or the media.

Trade Unions get information from CCIS and the Institute for the Improvement of Education. However, the exchange of information seems to only flow one way, "*CCIS avoided including unions in the public debate about dual education, even though we had various comments and critiques about dual education and the law. We are informed through documents we receive to our more specific unions…but we are not heard*" (trade union). This sense of being ignored indicates a major communication problem.

Figure 2: How aware are you of vocational and dual education in Serbia generally? How well informed are you about the new dual education law in Serbia?



Reading guide: Responses range from not at all (1) to very much (5) on the vertical axis. Teal bars represent awareness, and pink bars information. The first, darker bars show the overall average response, and the lighter bars to the right show each actor group's average responses.

Context Fit

One of the central topics of our investigation is the understanding and effectiveness of the law. We asked all interviewees except students and parents how well the law fits Serbia's context, how well it addresses the important aspects of dual education, and how clear the law is. Most interviewees agree that the law meets all of those criteria, but a significant minority does not. Their reasons can help identify pre-implementation challenges that can be addressed before they turn into major issues during the law's rollout.

Although parents did not respond to these specific questions about the details of the law, they did indicate whether they would recommend dual education profiles to other parents and 86% said they would. Their main reasons are the practical experience that students get in dual education, as well as the better chances to get a job after graduation. One parent explained the experience with two children: "*Theoretical subjects and practice for the dual profile are better than for non-dual profiles. I have two sons – one is in dual and another in non-dual profile, so I can compare*" (parent).

Parents with children in dual and traditional VET profiles would recommend dual education to other parents, mainly for its mixture of practical and theoretical knowledge. Some non-dual parents felt they did not have enough information. This anecdotal evidence suggests that dual education profiles can work in Serbia and fit its needs.

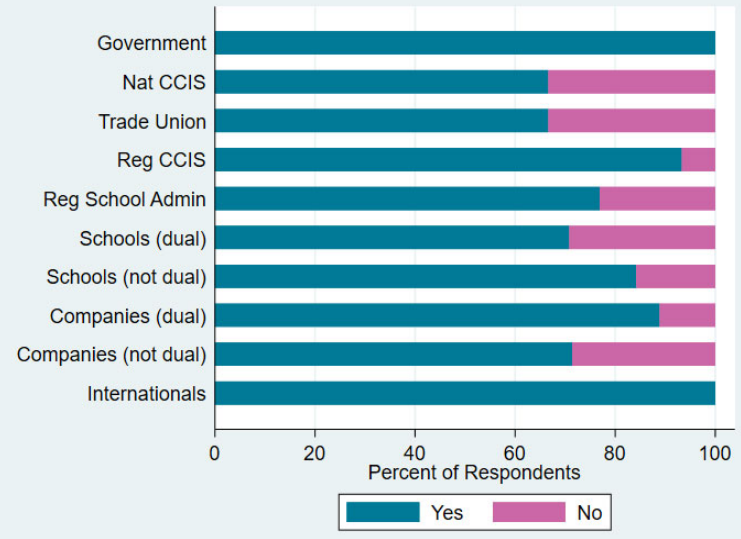
Fitting Serbia's Needs

For most interviewees (82.5%), the law fits the needs of Serbia's students and companies. Some respondents feel that the law fits one group's needs, but not another's. A government interviewee stated, "*It totally fits with the needs of students, but companies aren't satisfied, sometimes they don't see the benefits from dual education*." In contrast, a CCIS respondent argued that "*The initiative for the adoption of the Law on dual education came from companies*" and the law fits Serbia's context. Another CCIS representative disagrees, saying that the law does not fit because it is mostly school based, while there should be *"more lessons in the companies".*

Trade unions are generally conflicted. In general, these actors believe the law will fit if it is implemented well, based on evidence, and in such a way that students' rights are protected. One interviewee takes a wait-and-see approach because employers are "*inclined…to obstruct the law, in the way that they do not respect the rights of the students the way law proposed it*" (trade union). Another trade-union respondent objects strongly to subsidies for training companies, saying, "*It is not appropriate that state from the common funds subsidies the big companies in dual education for their short-term particular interests*" (trade union).

Regional school administrations vary widely. Some are fully satisfied, saying that the law "*clearly defines goals and principles of dual education…fits the needs of students and companies*" (regional school administration). While others say it does not fit specific groups like small companies or industry in general. When it comes to the specific contributions expected of companies, there are doubts, "*SMEs expect some benefits like tax reductions. Moreover, companies are not interested in training and licensing instructors, and there are examples of employers who do not support the right of students to have financial compensation for WBL, refund of travel costs and meals*" (regional school administration).

Figure 3: Do you think the dual education fits with the needs of Serbian students and companies?



Reading guide: "Yes" responses are in teal, and "No" responses in pink. Each actor group is shown on its own line.

Schools already in dual education echo the sentiments of regional school administrations. Some have experienced great success with dual education profiles, like this experience, "*The feedback we are receiving from companies is great, they are reporting that students are very diligent and eager to learn, and companies will offer the contracts to many of the students. The companies are motivated to participate actively in nurturing the future workers and in shaping the workforce they need. The students like the practical part, especially in companies, since students are valued there, students receive financial reimbursement*" (dual VET school leader).

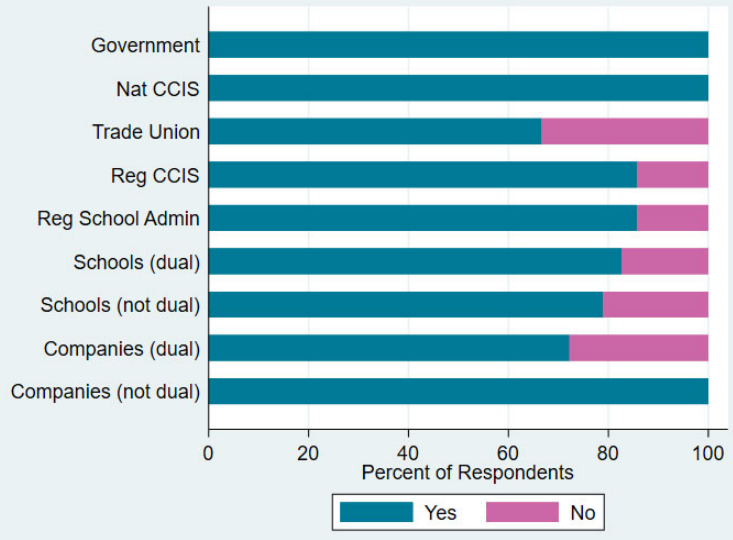
In contrast, other schools in dual education worry about expanding to small companies and the challenges of companies' expectations compared to the realities of the law. For example, one states, "*the companies are not satisfied with envisioned procedures as well as with financial requirements, and especially smaller companies are affected by the law on dual education*" (school in dual education). Overall, the tension between excitement—what dual education can potentially accomplish—and nerves—whether companies will find what they need—is strong.

Companies already in dual education agree that the law fits their needs generally, though some complain that, under the law, "*Companies are taking all the risks and all the costs*" (company in dual VET). Companies not already in dual education are less sure, "*especially related to fulfilling all requirements, such are the number of instructors and the manner and time of training for instructors*" (company not in dual VET).

Addressing the Important Aspects of Dual Education

In addition to fitting Serbia's needs, the law needs to set out a strong dual education system. Again, actors are generally convinced that the law achieves this goal (83.3% agree). Some actors point out specific items that are particularly important from their point of view—student-company matching and students' payment, for example. Trade unions are the least likely to agree that the law covers all key aspects of dual education, and regional bodies, schools, and already-participating companies also have some respondents who disagree.

Figure 4: Do you think the dual education law addresses all the important aspects of dual education?

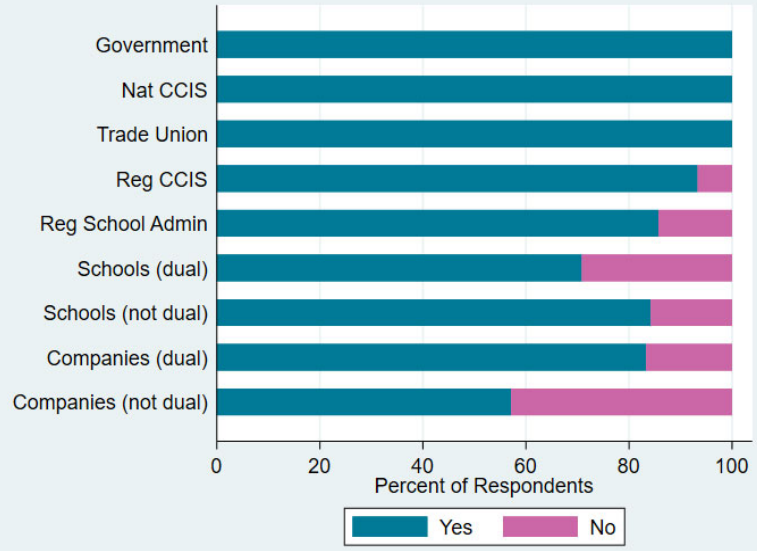


Reading guide: "Yes" responses are in teal, and "No" responses in pink. Each actor group is shown on its own line.

Clarity and Understandability

The law is the primary document laying out the processes, roles, and responsibilities of dual education. It needs to be clear so that all actors know what is expected of them and what they can expect from their counterparts. Only 82.7% of interviewees reported that the law is clear and understandable. National-level actors are generally comfortable with the law, but local and regional actors have questions.

Figure 5: Do you think the dual education law is clear and understandable for all of the actors who need to be involved?



Reading guide: "Yes" responses are in teal, and "No" responses in pink. Each actor group is shown on its own line.

Interviewees from schools already involved in dual education report "*There are lot of things companies and schools are not clear about*." Areas of uncertainty include students' payment and how much existing dual models will need to change in order to meet the law's requirements. Non-dual schools are similar in opinion, saying, "*Teachers are still confused about the distribution of responsibilities, while companies are confused about students' payments*." There are also questions about curricula.

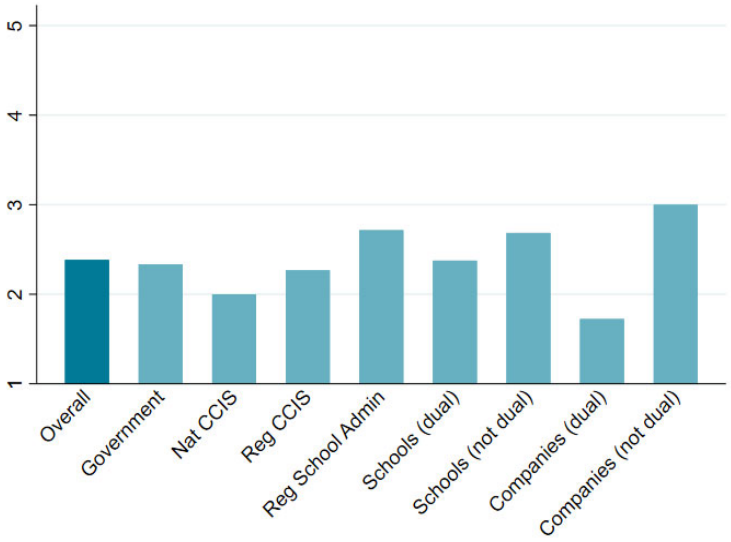
Some misunderstandings are serious enough to disrupt implementation. One school reports a company that dropped out because "*companies are not fully aware of their obligations to pay students. We had one big company, started cooperation and we got the profile…and now this company wants to exit the whole arrangement since they have no money to finance it*." This kind of challenge can dominate the narrative about the law, so this kind of misunderstanding is crucially important. The higher-level actors who do understand the law must transmit that information to implementing actors so they can move forward.

Change Magnitude

Bigger changes are more difficult to implement. We asked how much interviewees' organizations would have to change to accommodate requirements set by the law, and they reported an average change of 2.4 on a scale of 1 (no change) to 5 (major change). This indicates a moderate change, which is still a significant undertaking. The same holds true for each region, with S&W Serbia reporting the biggest change magnitude.

The biggest changes are for companies not in dual education, schools not in dual education, and regional school administrations. This is quite logical, since those already participating in dual

Figure 6: How much will your organization have to change to implement the new dual education program?



Reading guide: Responses range from not at all (1) to very much (5) on the vertical axis. The first, darker bar shows the overall average response, and the lighter bars each group.

education do not have to change much. Regional and national CCIS both report limited change, despite their major role bringing business interests and actors to the table.

At the national level, stakeholders mostly expressed no need for big changes. In contrast, national actors point out the need for local changes. For example, there will be "*Changes in local self-governments' activities for the process of dual education.*" National-level actors also report the need to add more personnel with more expertise.

At the regional level, regional school administrations stated that their main need for change would be to increase staffing, specifically educational advisors. One interviewee explains how this change plus a pivot toward engaging with business, would result in better support to the schools, saying, *"There is a need for more employees in Regional Schools Administration. This would mean that we could devote more time to schools in dual education. We provide them only basic support now because of work overload"* (regional school administration).

At the local level, principals of non-dual education schools expressed the need to cooperate more with companies, change their methods of teaching, and update their teaching materials. Principals of schools in dual education stated they do not need to change much, however, some of them explained that they still need to make some changes to curricula implementation schedule, organization of classes and increased teacher training.

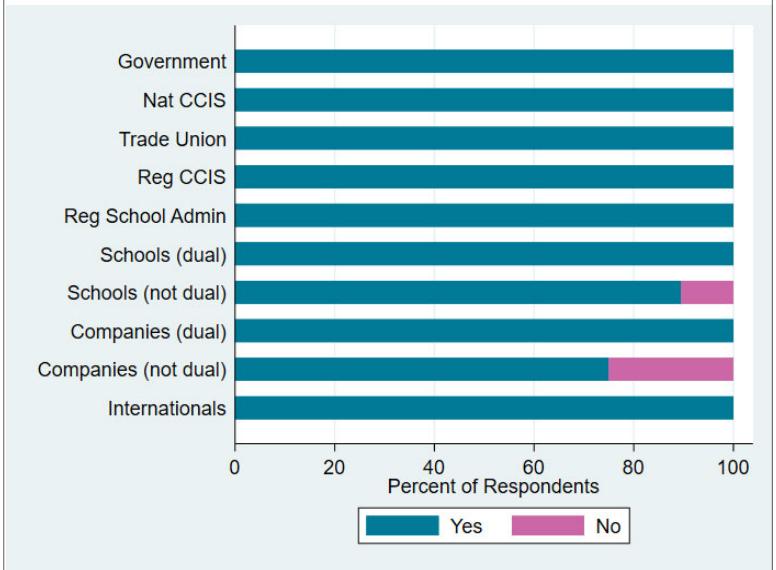
Looking more deeply into dual education schools, there is some difference between the principals' opinions and those of WBL coordinators. While principals typically express little or no need for change, WBL coordinators call for organizational changes, teacher training, and cooperative planning activities with industry.

A representative number of companies engaged in dual education expressed no need for changes, but those who expressed need for change, explain that training instructors and infrastructure to provide workplaces to students represent the main changes they need. Similarly, the companies not yet in dual education mentioned the training of instructors as a need for change, as well as a student mentoring system and the provision of safety conditions according to the law.

Willingness to Implement

Awareness and information do not necessarily mean that actors are willing to participate in implementation. However, actors' motivation and willingness to implement dual education are extraordinarily high in Serbia. 97.3% of interviewees report that they are motivated to participate in implementation. Only companies and schools that do not already participate in dual VET report any lack of motivation, though it is still strong. These are also the least aware and informed actor types, so their lower motivation might be resolved with clear understanding of what they will need to do for dual profiles.

Figure 7: Is your organization motivated to participate in implementing dual education profiles?



Reading guide: "Yes" responses are in teal, and "No" responses in pink. Each actor group is shown on its own line.

Interviewees report that their own institutions are generally quite willing to implement or support implementation of dual education profiles (4.2). Schools and companies that are not involved in dual education are again slightly less willing, but it is encouraging to see that companies already involved in dual profiles are very willing to implement. This indicates that Serbian companies have positive experiences with dual education and find the effort worthwhile.

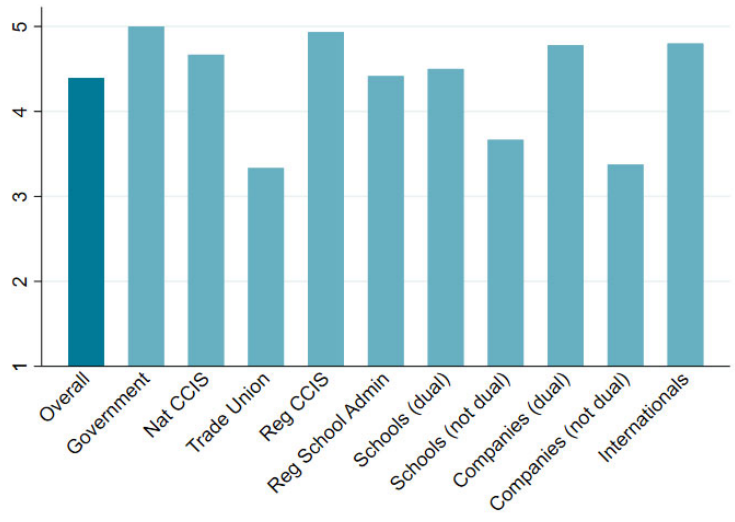
Concerns

Despite high motivation and willingness to implement dual education, interviewees did report concerns for the process. Trade unions, noticeably less willing than other actor groups, registered specific issues. Interviewees from that group report that they do not feel their concerns were heard during the law's development, that they want to ensure the law supports employees' rights in small and large companies, and that they need dual profiles to match labor market demand, prepare young people for work, and avoid trainee exploitation. All of these concerns are a useful part of the national dialogue on dual education profiles and considering them can make the program stronger.

The MoESTD also has concerns, mostly centered around outcomes, perceptions, and other stakeholders' potential resistance. According to interviewees' statements, the MoESTD's biggest concern is that students finishing dual education programs will not employed by their host companies after school. Because of economic uncertainty and because most companies are SMEs, not all trainees can stay on as full-time employees, and this might demotivate students from choosing dual profiles. In addition, national-level actors cite concerns that VET in general and dual VET in particular, have low status in society or is perceived as development of "cheap labor" for companies. Finally, they worry that stakeholders' fear of change might obstruct the law's implementation.

Regional branches of CCIS are motivated and willing to support implementation for a variety of reasons ranging from obligation to belief in the potential of dual education. All CCIS branches point out correctly that they are legally required to participate in implementation. However, they go beyond that and state they are further motivated by the potential of dual education to meet local and regional need for skilled workers, help young people transition from school to work, and stimulate growth in their own regions. They see their role as representing companies, facilitating cooperation, synchronizing training plans and enrollment quotas with employers' real needs, and disseminating information. Regional CCIS interviewees report concerns that many actors are not sufficiently informed about dual education, despite most actors feeling well informed. It is not clear whether this is an issue of overconfidence on others' part or over-cautiousness on the part of the regional CCIS branches, but it does indicate that the strong sense of being informed might be overstated in the results above.

Figure 8: How willing do you think your institution is to implement dual education?



Reading guide: Responses range from not at all (1) to very much (5) on the vertical axis. The first, darker bar shows the overall average response, and the lighter bars show groups.

Nearly every company interviewee reports that developing a skilled workforce to meet employment needs is the main motivation for participating in dual education implementation. Companies already participating in dual VET state that "*we want to be part of the education process of future employees*" and "*we see the company's interest in participation*." Companies that do not participate in dual profiles, however, report feeling unsure and uninformed. Non-participating company interviewees are interested, stating "*we want to support implementation of dual education and to have a positive influence on the competences of our future employees*," but many say they are not sure or "*we still do not have enough information to decide on this*." If it is possible to share participating companies' experiences with their non-participating peers, this would likely be very helpful.

Schools are motivated to participate in dual VET mainly in the interest of their students. They state "*dual profiles are more attractive for students*," and "*dual education students are better trained for the work itself*." Many other schools echo those sentiments that dual education can prepare students for a successful work life. For schools, the biggest concern is establishing cooperation with employers, making sure students are paid, and aligning teachers' work with that of in-company trainers.

Ability to Implement

Implementation requires resources beyond what every actor already needs for daily operations. These include personnel, information and materials, financial resources, time, and expertise. All of these came up in open responses to questions about change and concerns for implementing the LDE.

We asked respondents if they had enough resources to implement the law. A five-point response would mean that actors have enough resources for full implementation, and surprisingly most resources' average scores were near four points—not completely enough, but closer than expected. The exception is financial resources, which scored lowest overall at 3.5.

While most resources scored relatively well overall, none are fully adequate and there are major gaps in actor-specific resource needs. Regional school administrations generally reported less adequate resources than other actors did. Schools already involved in dual VET report the smallest gap. The government, national CCIS, and regional school administrations report the highest need for more personnel, and regional school administrations the highest need for more information. The government and regional school administrations need more time, as do most actors apart from dual VET schools. Regional school administrations report the greatest need for expertise.

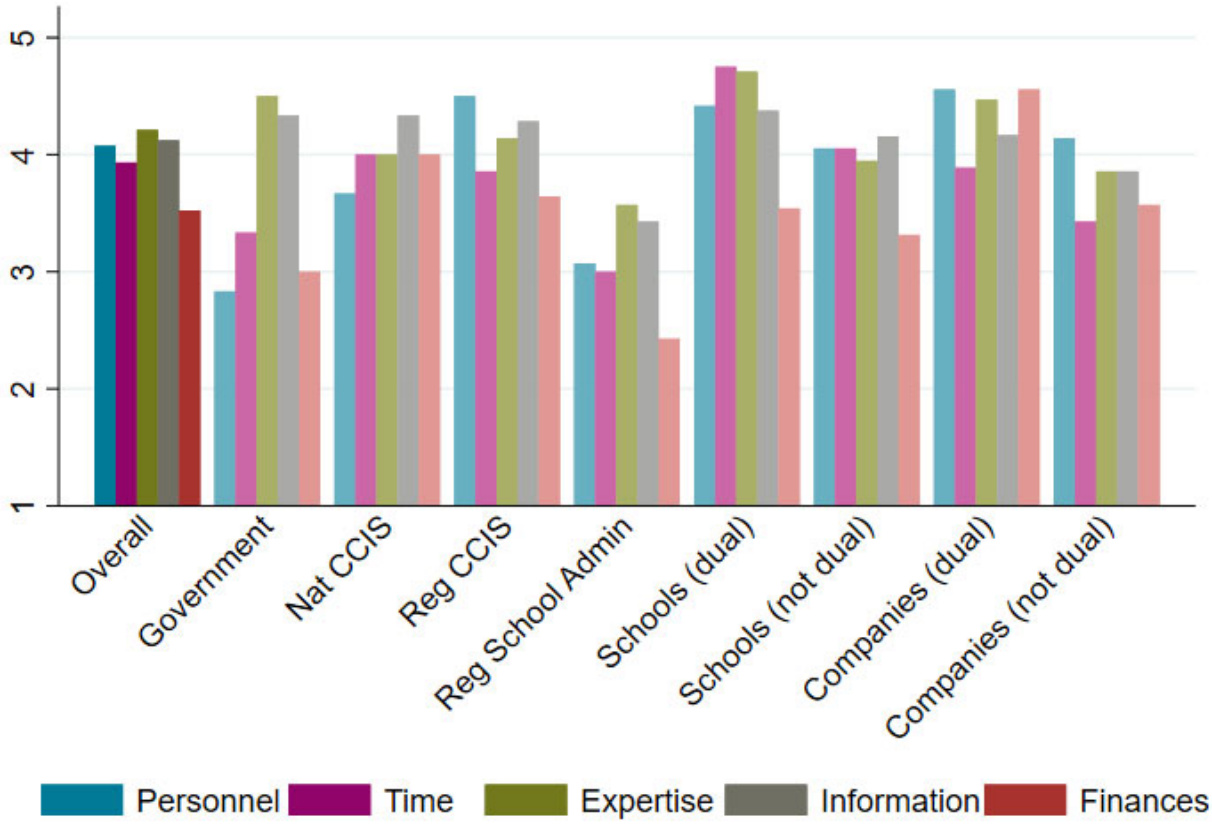
Most actors need more funding, especially the government, regional school administration, schools, and regional CCIS branches. Some regional school administrators expressed that they do not have financial resources for implementing dual VET at all.

Personnel, time, and expertise are all areas for expansion. Although regional CCIS branches stated they have enough personnel, they recognized that not all of them have staff with all proper knowledge for the implementation process: "*WBL is a new area so there is no fully adequate staff with all the answers, in the Ministry of Education, the CCIS, the Institute for the Improvement of Education, Ministry of Economy, Ministry of Finance, vocational schools, but all of them are working hard to regulate and implement the dual education system*" (Regional CCIS). Regional school administrations and government expressed their lack of human capacity directly. The majority of dual VET schools have enough resources, with the exception of one school that pointed out the lack of qualified staff to teach students vocational subjects as well as lack of such experts (e.g. in electrical engineering) to be employed by companies in its region.

Companies are generally very optimistic about resources. Even when there are challenges, they are positive: "*Time is always an issue but we are ready to invest time in training of possible future*

employees." Non-participating companies do comment that they need more information, and some raise specific concerns like not being able to train during certain parts of the year, due to the seasonal nature of work. However, the resource adequacy of non-training companies especially is better than expected and encouraging.

Figure 9: Does your organization have enough resources to implement dual education profiles?



Reading guide: Responses range from not at all (1) to we have enough (5) on the vertical axis. Bars' colors represent the type of resource, while groups of bars represent actors. The first, darker bars show the overall average response and the lighter bars to the right show each group's average.

Time seems to be a critical resource, especially for regional school administrations and the government. Both expressed they do not have enough time for the implementation of dual education since they have other activities and their employees are overloaded in their tasks. Most actors have some expertise, but need more specific training for dual VET.

Adequacy of information and materials is contradictory. Most stakeholders report they have enough information and material to implement the law, but regional school administrations stated that they have information but not enough material. Information and materials seem to be unevenly distributed among regions. Different regional CCIS offices reflect the regional discrepancies in the country. One says, "*Staff provides all necessary information and materials in cooperation with the CCIS Center for Education, Dual Education, and Education Policies*" (regional CCIS), while another contradicts, "*Training through work is a new system so there is not enough distribution of material, but constant work, information exchange, and the promotion of dual education system*" (regional CCIS).

Resources for CCIS

Although CCIS and regional CCIS branches report only slightly inadequate resources when specifically asked, they and other actors reported concern that they do not have the time, personnel, and financial resources they need in open discussion. CCIS is a linchpin of the dual education and its implementation, because it brings companies together and is the main channel through which they engage in the system. CCIS is charged with keeping track of which companies are participating in dual education, what companies exist in a given area, and what industries are important in different regions. CCIS also has participated in curriculum development through different national bodies, instructors' training and certification, and other key system functions. This is a major undertaking.

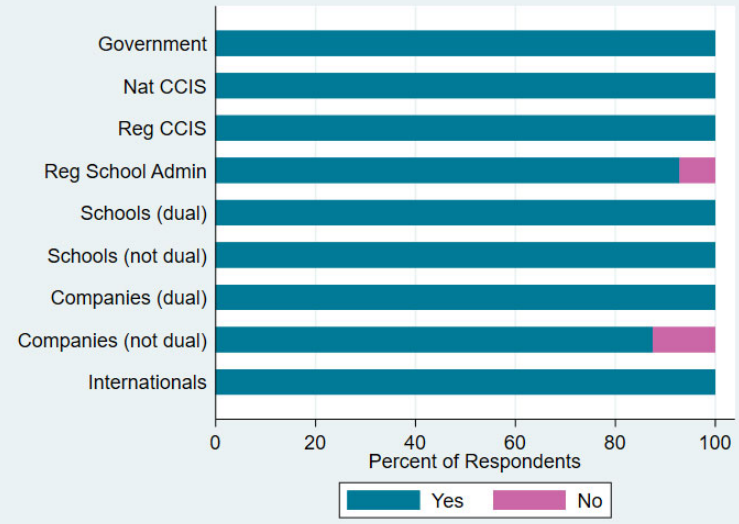
If, as many interviewees report, national and regional CCIS are being asked to take on a great deal more work without additional resources, that is likely to become a problem as implementation progresses. Resource adequacy appears to be a difficult issue.

Cooperation

Steering the dual education will demand greater cooperation and coordination than school-based VET, and implementing it requires even more. Nearly all actors report being prepared to cooperate (98.2%).

Looking at cooperation willingness by actor, nearly all actors are fully willing and prepared to cooperate. This comment, from regional CCIS, exemplifies the tone of interviewees' responses, "*We are ready to cooperate on the implementation of dual education with all other actors*" (regional CCIS). When regional school administrations expressed doubt, it was about preparedness, not willingness. They stated the problem as a "*Lack of competencies to support dual education [and] financial resources*". For non-dual companies, the issue was simply that one company did not plan to participate in dual education.

Figure 10: Is your organization prepared to cooperate with other actors on implementing dual education?



Reading guide: "Yes" responses are in teal, and "No" responses in pink. Each actor group is shown on its own line.

According to interviewees, the **drivers of cooperation** are mainly schools and companies. One school director stated, "*My experience is that schools are doing the most important part in terms of establishing and maintaining cooperation with companies, and CCIS is not active as it should be in this area*" (dual VET school).

Regional CCIS branch, for example, recognized the important role of all stakeholders as cooperation drivers, saying, "*All actors: institutions, companies, schools, students who actively*

participate in the realization of education through work are the drivers of dual education." (Regional CCIS).

The issues that stakeholders cited as **obstacles** to cooperation were lack of interest from some institutions and actors, lack of willingness from companies to pay students, low capacity of small companies, implementation of the law without flexibility, and lack of human resources in CCIS.

At the national level, actors stated as obstacles the lack of information (e.g. on dual education and about the benefits of training for companies), lack of human resources in CCIS, and lack of time. At the regional level, CCIS branches stated the lack of information and low capacity of small companies as the main obstacles, whereas the regional school administration recognized the lack of interest from employers and some schools.

Schools expressed different opinions. Schools not in dual education are frustrated by companies' lack of motivation to participate and their low willingness to pay students. Schools already engaged in dual education see the low number of companies and their low capacity to receive and pay students as obstacles. Some of the schools noted the lack of flexibility by the implementation of the law, which may demotivate companies unused to contractual obligations with schools. For example, "*Obstacles: some small companies which cancel their cooperation because of material compensation to students; insufficient cooperation with CCIS.*" (Director, School in Dual education).

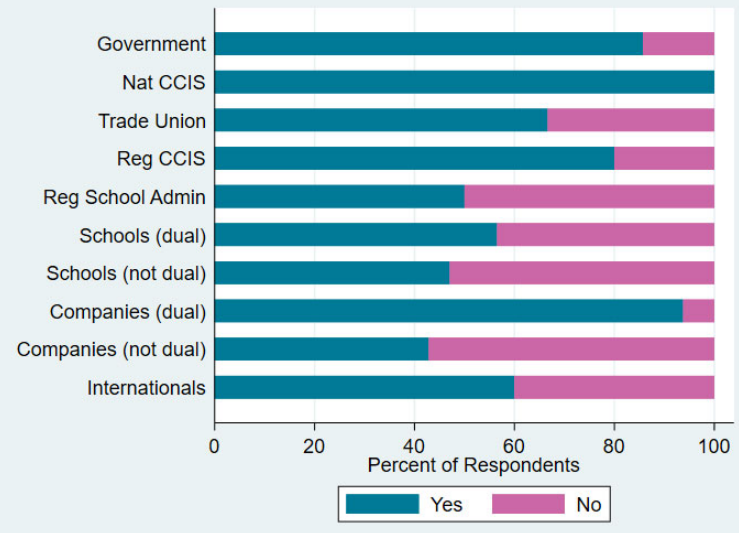
A school director engaged in dual education expressed their experience with contacting companies, and the potential of CCIS support their efforts: "*CCIS should have a more active role, since we as the school maintain good relationships with companies. CCIS is not present enough in the field and it does not have reputation among companies, since CCIS is not in real contact with the companies. Me, as the director, and the coordinator of WBL, we go and talk in person with the companies, we are present and this is why companies are responding to our requests and e-mails, and companies are also asking us for assistance. For example, how to fulfil the form related to expression of interest etc. I think the reason for this situation is that CCIS does not have sufficient human resources on the regional level*." (Director, School in Dual education)

Coordination

It is encouraging that so many actors are motivated to implement and ready to cooperate. However, actors' current and projected cooperation level are major challenges. A number of interviewees report that actors are not sufficiently coordinated (34.5% say they are not). Among those who say coordination is insufficient, the majority (55.9%) doubt that everyone will be coordinated by the start of the next school year when implementation begins (55.9%).

If actors are not sufficiently coordinated, parts of the program will not be possible, for example finding training places for

Figure 11: Right now, are all of the relevant actors and institutions coordinated to implement dual education?



Reading guide: "Yes" responses are in teal, and "No" responses in pink. Each actor group is shown on its own line.

students and allocating students among occupations and companies. In this pre-implementation moment, actors are not generally coordinated with all of the other groups they would like to align with. The biggest concerns about coordination come from non-dual companies and non-dual schools, as well as regional school administrations. Dual companies are extremely confident about coordination, as is the national CCIS.

Many responses echoed this interviewee from the Council for Vocational and Adult Education who said, "*There is always space for improvement*." Many other comments referred to things working well at one level, in one region, or in one local area but possibly not in others. It is clear from interviewees' comments that there have been ongoing efforts to coordinate more for dual VET, and this law will represent an extension of that effort. Another common theme, especially among schools with dual profiles, is the difference between involvement and coordination. It appears that actor groups are generally involved in dual education-related issues, but not fully coordinated.

Local actors especially seem to feel that there is not enough vertical coordination. One school leader spoke on behalf of schools and companies, saying "*There is insufficient support from the CCIS and cooperation with MoESTD is too formal and generalized. There is no understanding of the real challenges schools and companies are facing as well as challenges of every individual region of Serbia*" (dual VET school director). The need for increased horizontal coordination between the education and employment systems is obvious in building dual education, but vertical coordination is also a key issue.

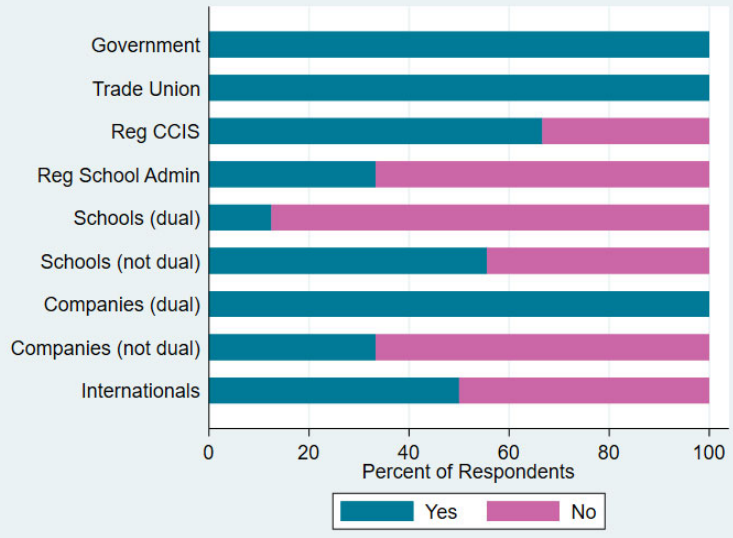
Improving Coordination

Among actors who do not think the current level of coordination is sufficient, most (55.9%) do not believe coordination will be sufficient by the time the new law takes effect. Every local actor except for companies in dual education does not believe that coordination will be sufficient when implementation begins, and regional school administrations are also skeptical. However, when the government, trade unions, dual companies, and regional CCIS see coordination as insufficient, they mostly believe it will be solved by the time the new law is implemented.

One school leader highlights vertical communication, stating that the biggest obstacle to coordination is "*Transferring information about challenges and problems in the dual education implementation from practice to decision makers*" (dual VET school director). Other communication-related barriers include misaligned expectations among actor groups, and poor social image of dual education or VET in general. Nearly every school cites lack of information.

Administrative issues may also be important, ranging from bureaucracy to simple resistance to change. For bureaucracy, a regional CCIS representative

Figure 12: Do you think all of the relevant actors and institutions will be coordinated by the next school year when the dual education law is going to be fully implemented?



Reading guide: "Yes" responses are in teal, and "No" responses in pink. Each actor group is shown on its own line.

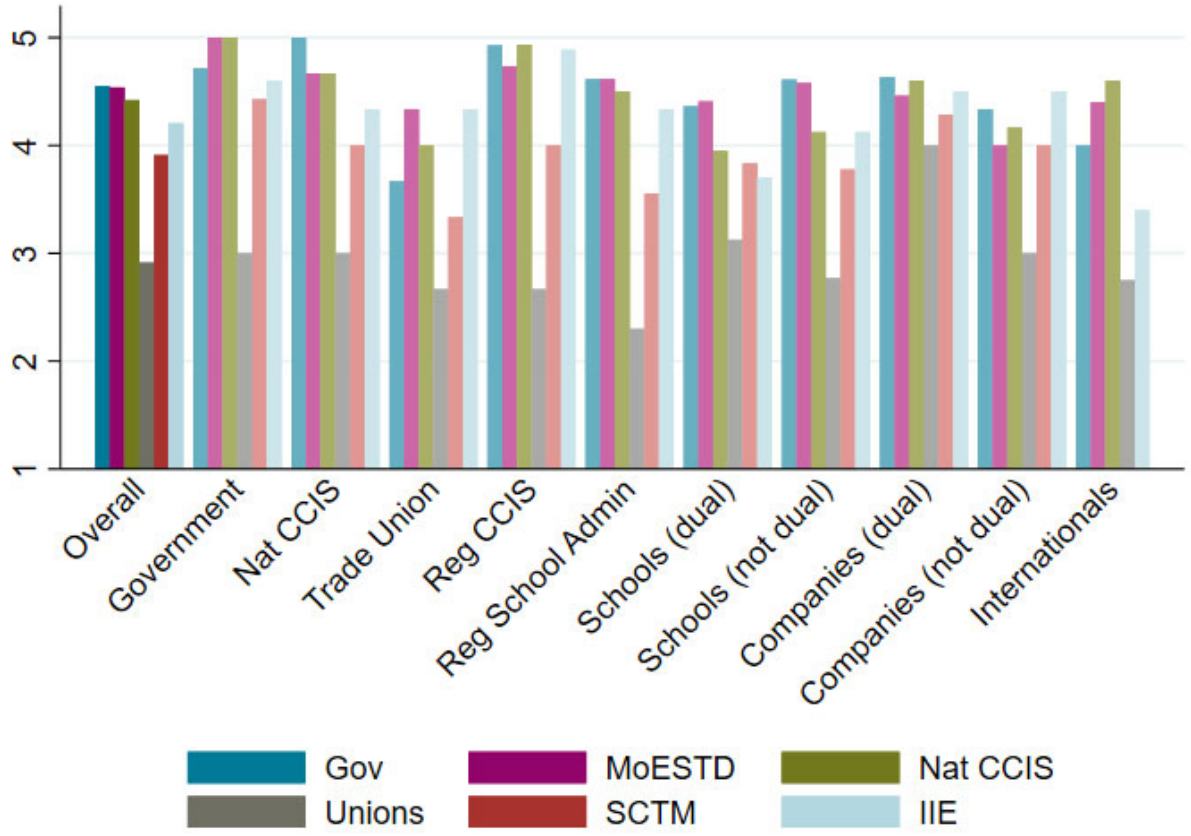
summarizes a general concern as "*Administrative procedures for companies*" (regional CCIS), or that the weight new procedures will be too much. Another regional CCIS leader sums up potential resistance issues as companies' unwillingness to pay, schools' unwillingness to update, students' lack of interest, parents' lack of information, and too-great demands that companies synchronize training with classroom learning.

Nearly every actor states that they are willing to cooperate, and many specify willingness to coordinate despite dissatisfaction with the current situation and low faith in its improvement. More importantly, every actor seems to understand that coordination is very important and can perceive the gaps that exist. Information and communication are keys to improving coordination, as is a focus on not only horizontal coordination across actor types but also on vertical coordination between levels of operation.

Political Will

Some of the concerns listed above have to do with whether other actor groups will be willing to implement dual education profiles. We asked interviewees how willing they believe other actors are to implement the law. Those responses show the perception of willingness actors have for other national, regional, and local actors. Generally, all actors believe the others are also willing to implement, with some variation.

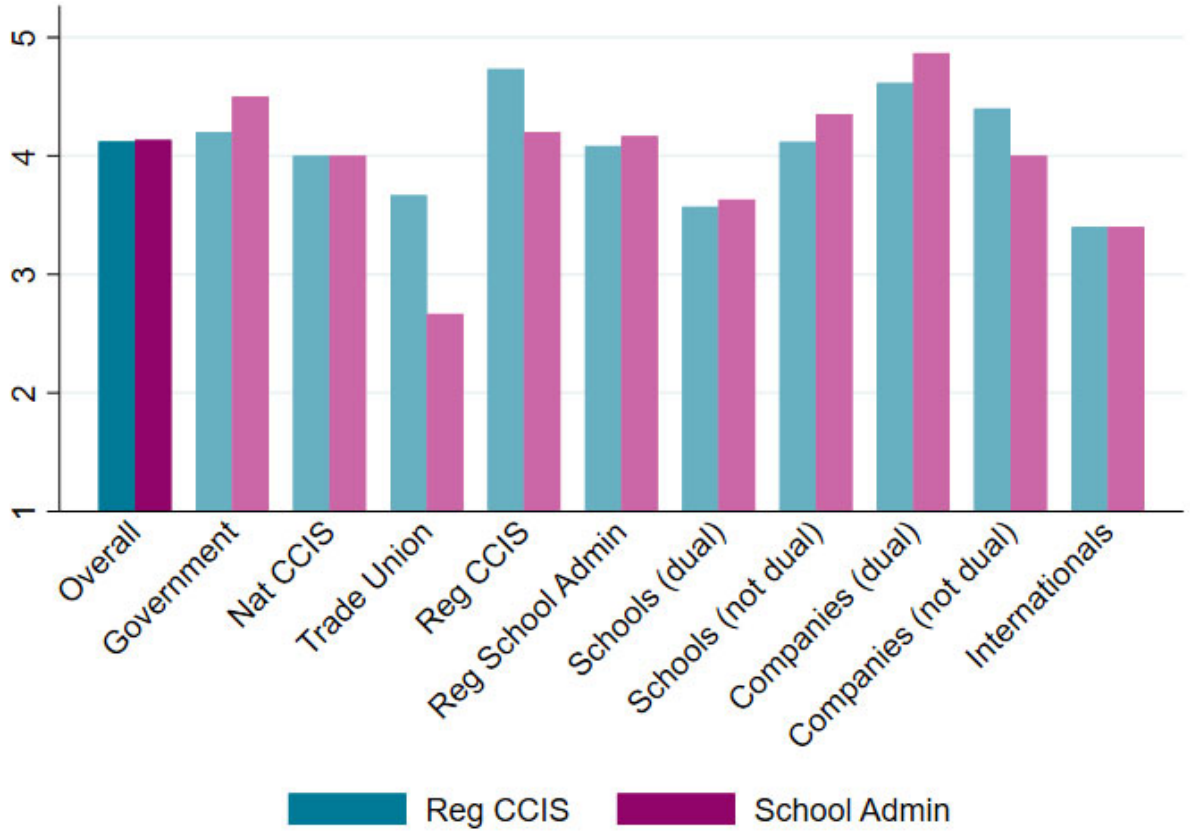
Figure 13: How willing do you think national-level actors are to implement dual education?



Reading guide: Responses range from not at all (1) to very much (5) on the vertical axis. Bars' colors represent the type of resource, while groups of bars represent actors. The first, darker bars show the overall average response and the lighter bars to the right show each group's average.

National-level actors are perceived as willing to implement the LDE. All earn high scores, including the government (4.6), the MoESTD (4.5), CCIS (4.4), the Standing Conference of Towns and Municipalities (SCTM, 3.9), and the Institute for the Improvement of Education (IIE, 4.2). This is slightly less true for trade unions (2.9), in line with unions' stated reservations. Reform leadership will need to work with unions to identify and ameliorate their concerns through open dialogue.

Figure 14: How willing do you think regional-level actors are to implement dual education?



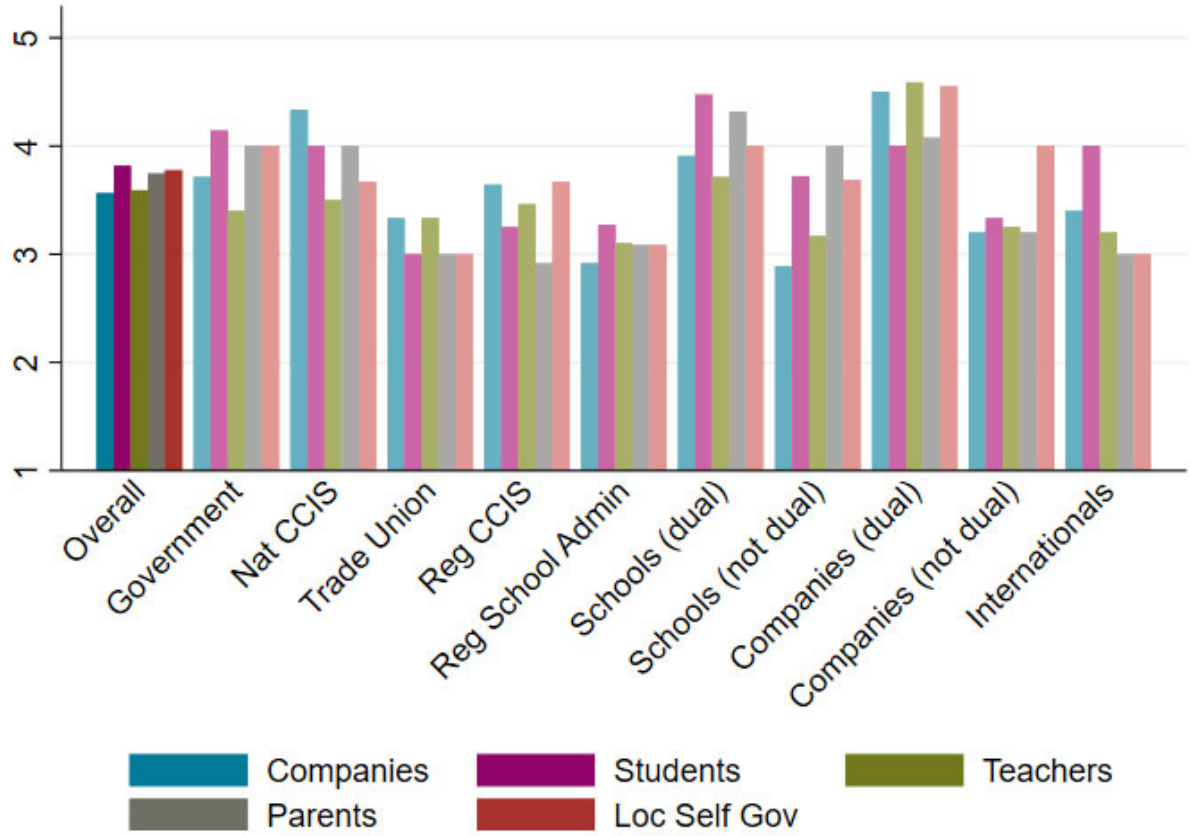
Reading guide: Responses range from not at all (1) to very much (5) on the vertical axis. Bars' colors represent the type of resource, while groups of bars represent actors. The first, darker bars show the overall average response and the lighter bars to the right show each group's average.

Regarding CCIS, some actors are convinced that the body is willing but concerned about whether its willingness translates into action. One interviewee stated, *"It would be good if CCIS takes more active role…when we make agreements and contracts with the companies, so the schools are more disburdened in this area. In addition, CCIS should somehow react to increase the motivation of companies to be involved, since companies do not see interest for them and they are reluctant to join dual education"* (dual VET school). CCIS is one of the two heads of this reform effort along with the MoESTD. While their intention to act is not questioned, some actors do not see them taking on their newly expanded role.

Regional actors include regional CCIS branches and regional school administrations. Regional CCIS (4.1) and regional school administrations (4.1) are considered generally willing, though trade unions, schools participating in dual education, and international supporters appear to have doubts. Regional CCIS and regional school administrations score high in self-reported willingness, so the gaps may be a matter of communication or some specific friction. One indication is this comment, indicating that the quality of action matters as well as its quantity, "*Regional level CCIS is not active enough, they just communicate through phone—they should be more in the field. School*

administration is little bit slow; they are responsible for many local self-governments and cannot follow our progress" (dual VET school).

Figure 15: How willing do you think local-level actors are to implement dual education?



Reading guide: Responses range from not at all (1) to very much (5) on the vertical axis. Bars' colors represent the type of resource, while groups of bars represent actors. The first, darker bars show the overall average response and the lighter bars to the right show each group's average.

Local actors, including local self-governments, companies, parents, students, and teachers, are generally perceived by interviewees as only marginally willing to participate. Students are seen as the most willing in this group (3.8), followed by local self-governments (3.8) and parents (3.7). However, companies (3.6) and teachers (3.6) are seen as almost neutral and even occasionally unwilling from the point of view of trade unions, regional CCIS branches, regional school administrations, and non-dual schools. However, participating companies and dual schools—who have experience in dual education—are the most confident in local actors' willingness. This may reflect the success these interviewees have had so far, which is also the result of good coordination with local-self-government and other local actors. The schools especially find students and parents willing to participate in dual education, and the companies think companies, teachers, and local self-governments are particularly willing.

Everyone we have interviewed reported high motivation and willingness to participate in dual education implementation, and interviewees' impressions of other actors' willingness are still positive. As we move from leading national-level actors to participating local-level actors, doubts increase and confidence wanes.

Bylaws and Acts on Specific Processes

Six acts outline specific process requirements for dual education. They define processes for career guidance and counseling, training in-company trainers, matching students with companies, implementation of training and licensing for in-company trainers, allocation of trainer-training costs, and checking the fulfillment of requirements for the performance of WBL in companies. All of these bylaws describe different dual education-related processes in detail, and should add clarity to the law. All of them describe processes that need to start as soon as possible, since there is a significant need to set up and precisely regulate all aspects before full implementation of the law begins. This section deals with those specific issues to provide insight and help those processes start up.

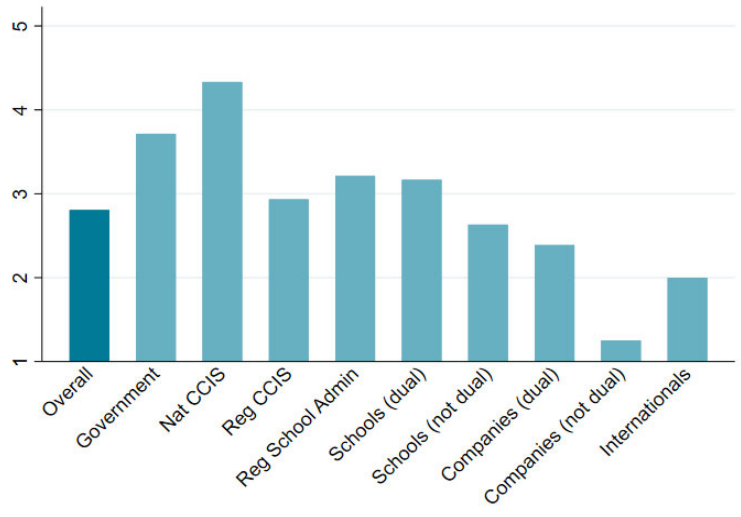
Career Guidance and Counseling

Career guidance and counseling helps students choose the pathway, occupation and company. Students need to make these choices at a relatively young age and without any experience on the labor market. Without good career guidance and counseling, students are less likely to make the right choice, raising the risk of switching, drop-out, and failing to transition from lower- to upper-secondary programs. All of these can make the program look like a failure, create unnecessary costs for companies, and cause delays for students.

Beginning with evidence from existing dual education programs, we find that guidance and counseling are indeed very important. Among students not enrolled in dual education profiles, 43% would be interested in a dual education profile, 36% would not be, and 21% are not. Among those enrolled in dual education, 80% report that their current program is their first choice. The relatively high number of students who do not know which program type they would prefer if they had the choice, combined with the students who are not in their first-choice profile, underscores the importance of career guidance and counseling before students have to make major VET-related decisions.

Parents have a strong impact on their children's educational choices. However, to support their children effectively, they need to understand the options. Out of all interviewed parents, 7% report that they are not at all informed about the LDE, 27% are slightly informed, 37% are moderately informed, and 30% are relatively well informed. No parent feels fully informed. Parents need as much information as possible, and career guidance and counseling has to fill the gaps.

Figure 16: How well informed are you of the career guidance and counseling plans for the new dual education program?



Reading guide: Responses range from not at all (1) to very much (5) on the vertical axis. The first, darker bar shows the overall average response, and the lighter bars show groups.

Career guidance and counseling is one of the earliest implementation stages because it ideally prepares students years in advance of the decision to pursue dual education. It is also a local

and regional issue more than a national one, because it needs to reach every student at every school and company participating in dual education.

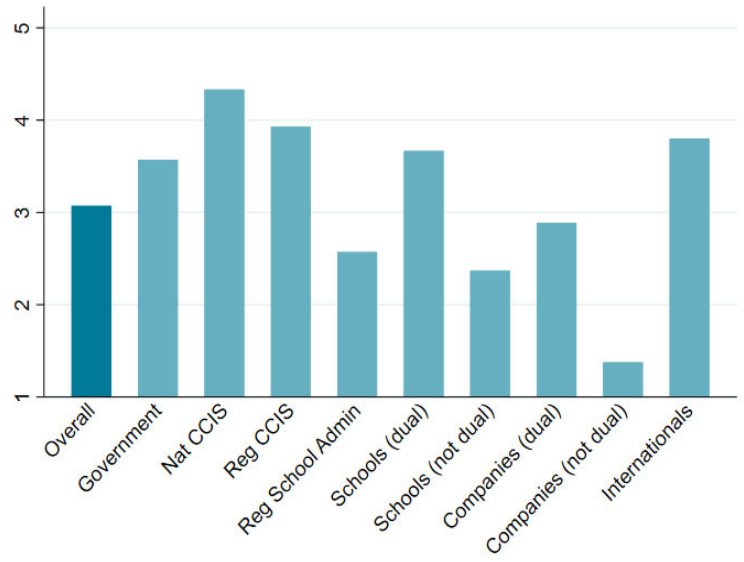
Actors are aware of how important this issue is. One, from the MoESTD, states, "*Career guidance and counseling is very important for VET education. The biggest value is that now we have bylaw that prescribes the objectives, tasks, obligations of team for career guidance and counseling. It will bring benefits for all stakeholders in the education system*" (MoESTD).

Another commenter, from CCIS, notes that existing career guidance and counseling is oriented toward academic and higher education, while the LDE requires a more professional orientation, stating, "*Career guidance and counseling is very important for VET schools implementing dual education. In general, it is good to have this bylaw*" (CCIS). The issue is whether it will be implemented in time: another interviewee worries "*that teams for career guidance will not be well prepared and informed to do their job*" (CCIS).

"We find that awareness and understanding of the career guidance and counseling bylaw is only moderate (2.8). The national CCIS is most aware, but is not heavily involved in implementing career guidance and counseling. Awareness is lowest among more local-level actors like companies and non-dual schools. These are precisely the actors that need to implemented career guidance and counseling, so this is a problem. One interviewee predicts this, saying their worry is the "*Involvement of employers in such teams since I am not sure they will have enough time to be fully dedicated to career guidance and counseling activities*" (dual VET school leader).

Making sure that every student eligible for a dual education profile in the 2019/2020 school year has access to quality career guidance and counseling before making their decision needs to be a priority for time, energy, and resources.

Figure 17: How aware are you of the planned processes for choosing and training in-company instructors?



Reading guide: Responses range from not at all (1) to very much (5) on the vertical axis. The first, darker bar shows the overall average response, and the lighter bars show groups.

Training In-Company Trainers

Approximately 600 companies already participate in dual education according to CCIS's available data. When the LDE is implemented, it will require many companies engaged in training. These companies each need to have trainers with both occupational and pedagogical skills. Train-the-trainer programs are crucial for program quality.

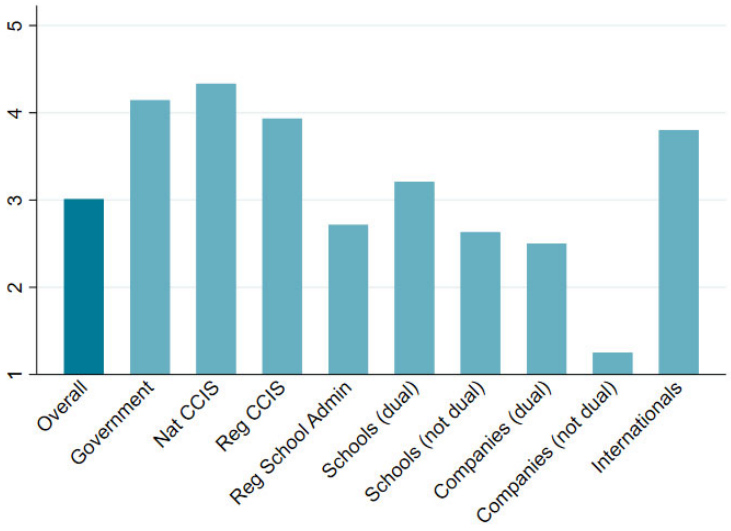
Actors are somewhat aware of trainer training (3.1). However, regional school administrations and non-dual education schools are unaware, and non-dual companies are completely unaware. This is a challenge since the schools especially will be working directly with companies, and need to understand what that commitment involves. Companies, too, need to know what they are signing up for to avoid miscommunications. Regional school administrations are involved in trainer licensing committees, so their lack of knowledge is a risk for successful implementation.

Those who are aware of the trainer training plan have concerns about its feasibility. There are various concerns about the selection of trainers, trainers' fitness for the job, and small companies' incentives to invest in training trainers. However, the key issue is summed up, "*Thousands of instructors have to be trained in very little time*" (international partner). Companies agree that the process is very demanding, stating, "*It takes too long (40 hours) and it is hard to have people out of work for that many hours*" and, "*The process requires a long absence of staff from their jobs. The optimal process of work is jeopardized*."

Student Placement

In dual education in Serbia, school have to ensure that each student finds a place at a company where they can learn the practical skills associated with their occupation. This matching process has to be efficient, otherwise students, schools, and companies waste time and energy and might lose interest in participating. The current plan for a matching process proposes that every company working with a given school should interview every prospective dual education student at that school, and then both sides submit prioritized wish lists, which school officials manually match.

Figure 18: How well informed are you about the planned processes for matching students and companies?



Reading guide: Responses range from not at all (1) to very much (5) on the vertical axis. The first, darker bar shows the overall average response, and the lighter bars each groups.

Schools support students in finding and getting their desired positions in companies, but parents also play a role. Schools lead the matching process, with career guidance teams responsible for preparing students for interviews. Parents are their children's legal representatives, and must sign the training contract on behalf of their children, so part of the plan relies on parents accompanying their children to job interviews. If parents cannot accompany students to interviews, the bylaw states that a school psychologist or pedagogue will do so. Although parents are not expected to prepare their children for interviews (this is the responsibility of school career guidance team), parents were asked if they would be able to help their children with job applications and interviews. Out of 30 parents, 30% of them reported that they would not be able to help. Most of the parents who could not attend interviews (6 of the 9) have students already in dual profiles, so it appears that students can participate regardless. This means that schools should be prepared to assist students whose parents are not able to help.

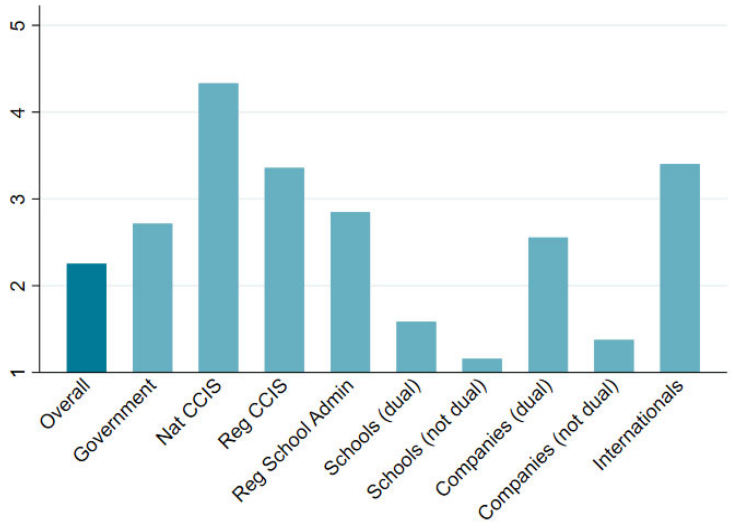
The student-company matching process described in the new bylaw is complex. It was successfully tested in a group of pilot schools, but widespread application of the matching process will require resources and close monitoring. Actors are somewhat aware of the planned process (3.0), but awareness was mostly high among government, CCIS, and international supporters while being lower among local and regional actors like schools, companies and regional school administrations. This is a risk because the higher-level actors will not be carrying out the matching process, and those that will are not clear on its details. Therefore, substantial effort should be put in place to properly inform all relevant actors on the new bylaws and prepare them for the new processes.

Interviewees' specific concerns are that it is a "lengthy process" (regional CCIS), it might create mismatch, and there might be equity issues for students in disadvantaged groups. A regional CCIS respondent summarizes the risk of rushing, saying, "*There is a risk that career guidance and counseling teams won't have sufficient information to make good distribution of student in the first year.*" However, one WBL coordinator from a dual VET school finds that the proposed process "*Seems complicated but logical. It is necessary to seriously approach the process*."

Trainer Licensing

Trainers' skills need to be confirmed before they start training. A trainer licensing process including exams will ensure that trainers fulfill the requirements of their position. Like training the trainers, this process needs to be prepared and deployed before students can apply for positions, let alone begin training in the company.

Figure 19: How well informed are you about costs of training and exams for instructors?



Reading guide: Responses range from not at all (1) to very much (5) on the vertical axis. The first, darker bar shows the overall average response, and the lighter bars show groups.

However, despite the time pressure associated with this process, awareness of the bylaw is low (2.6). National CCIS is quite reasonably the most aware of this act, as is regional CCIS. Implementers, however—schools, school administrations, and companies—and the government do not know much about the process. This relates directly to the complaint that CCIS has information but does not have the time or resources to disseminate that information in a way that schools can understand. Hence, CCIS needs more resources and support to share its knowledge.

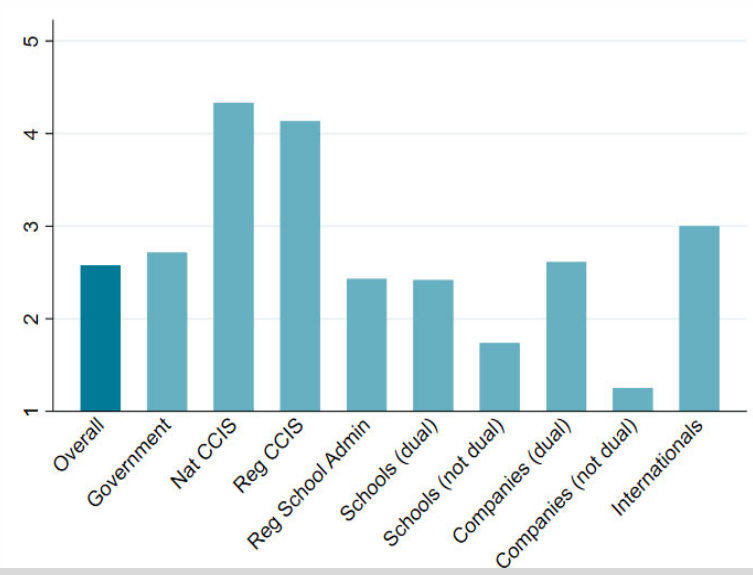
Those who are aware of the plan are confident that it will help ensure the quality of WBL and give instructors the knowledge they need. However, as one regional CCIS interviewee astutely points out, "*There isn't enough time for all candidates for instructors to go through training for instructors*."

Costs of Trainer Training and Licensing

The last act on the topic of trainer training is one that details how the costs of such training and licensing will be distributed. CCIS will provide training at employers' expense. The pattern for awareness of this bylaw is similar to the one before, with CCIS aware of it and other actors not. Overall, awareness is a low 2.3, indicating that there is a severe gap in communication.

An interviewee from the MoESTD reports of the act that it is "*a good way to ensure quality. The instructor is the key actor in the realization of WBL*." Another, from CCIS, points out that CCIS is well suited to providing this kind of training, since "*CCIS is the biggest provider of trainings for business sector. It has direct contact with companies and can accommodate instructor's training to*

Figure 20: How well informed are you about the planned processes for training for instructors, exams for obtaining licenses and the license registry?



Reading guide: Responses range from not at all (1) to very much (5) on the vertical axis. The first, darker bar shows the overall average response, and the lighter bars show groups.

the needs of companies." However, regional CCIS worry that "*Training costs may be a problem for involving employers in dual education."*

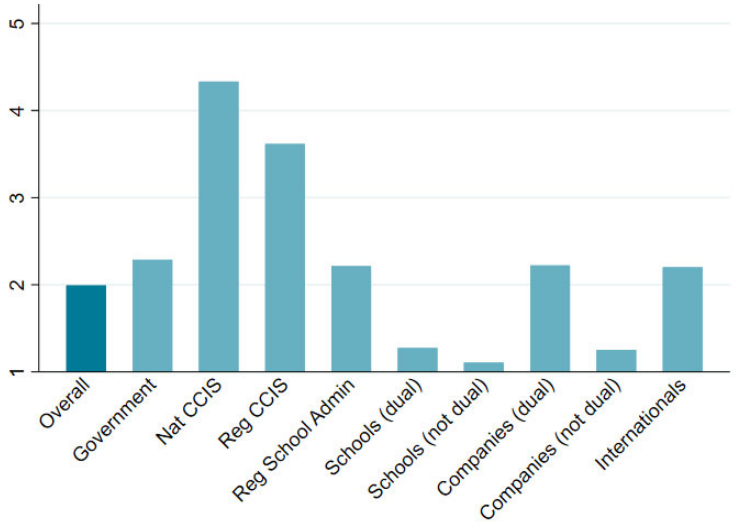
Employers need to have qualified trainers so that they can provide high-quality training to students and so that students become productive as quickly as possible. CCIS is the expert at relating to the business sector, so it makes sense that they are at the helm of trainer training. A combination of communication, resources, and cooperation will be necessary to make this plan work in time for the first cohort of dual education students.

Checking the Fulfillment of WBL Performance Requirements in Companies

Quality assurance of workplace training is a requirement for high quality dual education. It ensures that students learn what they are supposed to learn while in the workplace, and without it, the program can never have high status or strong outcomes for graduates. This process has not been clearly communicated, with CCIS still the most knowledgeable but very low scores from schools, companies, and regional school administrations as well as the government. The average is extremely low at 2.0.

One interviewee stated that the act is still in process, while a CCIS actor said that the process is complete. Regional CCIS seem to understand the act very well, clearly articulating who is involved in inspections and how they work. Regional school administrations agree with the concept of inspections, stating that they were some of the biggest issues in past in company-WBL based programs. Overall, however, most interviewees are unaware of the plan for quality assurance inspections.

Figure 21: How well informed are you about the planned processes for checking performance requirement fulfillment for WBL in companies?



Reading guide: Responses range from not at all (1) to very much (5) on the vertical axis. The first, darker bar shows the overall average response, and the lighter bars show groups.

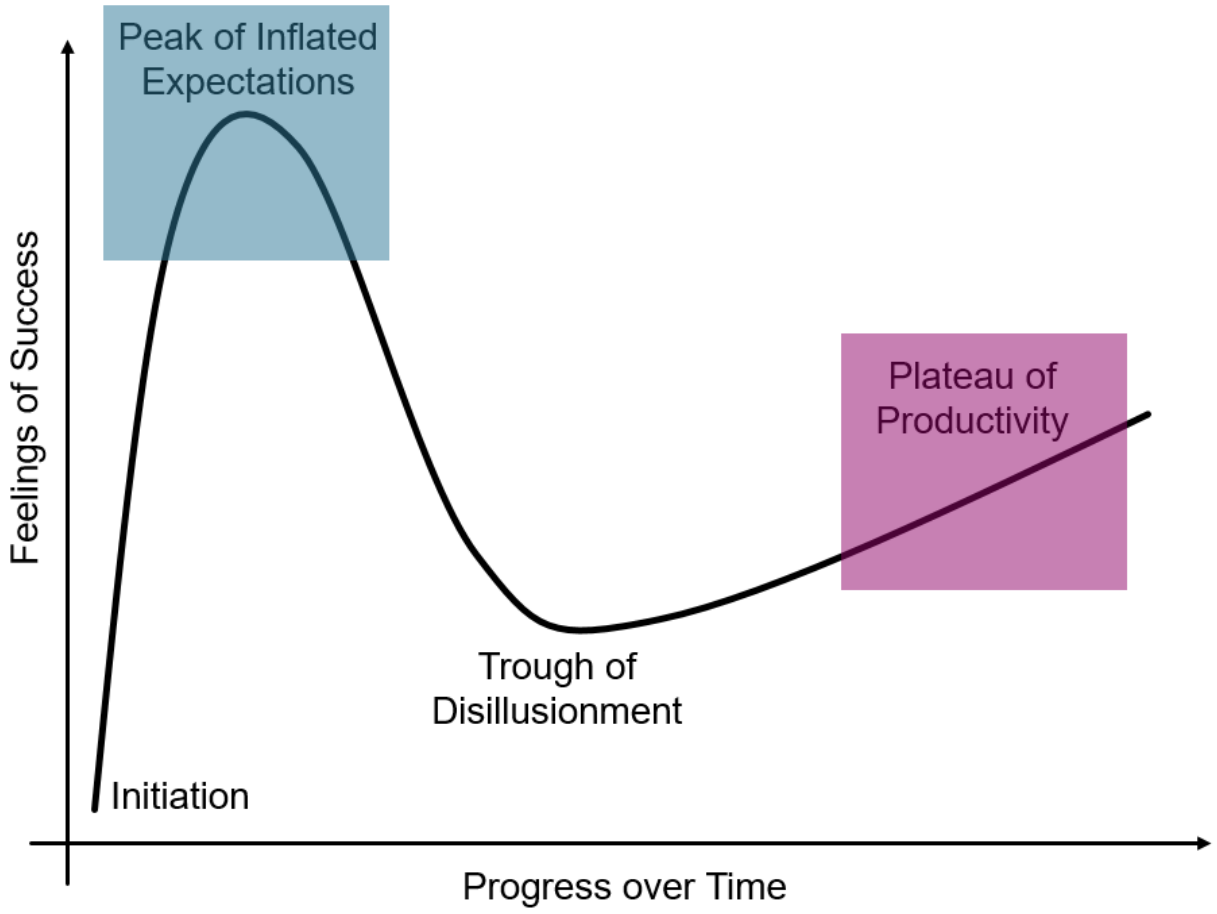
Conclusions and Recommendations

The overall picture of stakeholders' awareness, willingness, and motivation to implement the dual VET law is very positive. Although there are reasons to take this optimism with a grain of salt, it is an accomplishment on the part of this initiative's leadership and is a major advantage in the upcoming effort of implementation. Two key points may help prepare the initiative for the future: preparing for deflation, and dedicating resources to system building.

Preparing for Deflation

The high rates of motivation, willingness, and even available resources indicate that there may be some degree of inflated expectations at play. A model of positive feelings over time in an innovation process, called a "hype curve" (O'Leary, 2008) shows the common cycle of initiation, massive excitement leading to the peak of inflated expectations, then sudden downturn until the trough of disillusionment before reaching the plateau of productivity.

Figure 22: Simplified model of innovators' feelings of success over time



Reading guide: When the line is higher, implementers feel more successful. The teal box highlights the "peak of inflated expectations," where this initiative is now. The pink box highlights the "plateau of productivity," where companies and schools that participate in dual education have already arrived.
Source: Adapted from O'Leary (2008)

In this case, it appears that most pre-implementation stakeholders are at the peak of inflated expectations, highlighted by a teal box. However, the schools and companies that already participate in dual education can be a source of hope because they—highlighted with the pink box—are already closer to the plateau of productivity. It is clear from the data that experienced stakeholders are happier and more confident with dual education profiles.

At the peak of inflated expectations, we can expect a great deal of optimism and we do see that in the data. However, we also see that more granular issues—for example the bylaws—start to show some evidence of difficulty. This is likely to increase as stakeholders realize how much the implementation process will demand from them, both in terms of resources and in changes and adaptations. One symptom of the initial fall towards the trough of disillusionment is bad press (O'Leary, 2008), and this might be part of the challenges to come.

Starting the reform process on a high is a good thing and helps bring in diverse stakeholders from different levels and types of actor groups. However, it does not guarantee that there will be smooth sailing until the new law is fully in place. We recommend cautious optimism, with community building to support engaged actors and public dialogue to address and recruit dissenting opinions.

Resources for System-Building

There is an interesting pattern in the results that interviewees' overall resource needs do not match the details of specific statements. As we move both from general to specific questions and from high-level to operational level actors, more gaps appear. The first major misalignment deals with companies' costs, and the second with facilitation. Both of these can be solved by investing resources in system-building areas like intermediaries, information, and communication.

Companies—especially those already in dual education—state that they have everything they need to start participating in dual education. In contrast, however, multiple other actors report that companies will need either more resources or simply incentives to participate. Companies report quantitatively sufficient resources, and also make statements like "*We have everything we need*" (company). However, the government, regional CCIS, trade unions, and even some schools report that companies do not have what they need.

Many of the concerned respondents raise the issue of subsidizing company participation in training. One calls for "*Specific changes in the domain of tax rights and obligations for employees who engaged students*" (MoESTD), while another more vaguely states that the government will need "*To provide benefits for companies that are in dual education*" (MoESTD). The most specific plan is "*Providing financial resources for companies from the budget by Ministry of finance*" (MoESTD).

CCIS is even more specific, raising the issue of company subsidies specifically. One interviewee states, "*Companies bear all burdens and responsibilities of dual education. Given that and the early phase of implementation of dual education, benefits (e.g. through financial subsidies) should be given to companies that have decided to participate in dual education*" (Regional CCIS). Another joins in, "*If companies had some financial incentives (e.g. subsidies), it is expected that companies will actually have the announced benefits of dual education such as saving money on training new employees, higher employee productivity, and saving money and time*" (Regional CCIS). That last statement is particularly interesting because it calls for subsidies while highlighting the benefits companies already reap by participating in training.

The lone dissenting voice, aside from the companies themselves, comes from trade unions arguing that public funds should not go to private companies, especially to subsidize training that is already at least somewhat profitable. We agree strongly with this sentiment. Companies themselves do not ask for training subsidies, companies will reap benefits from training as stated by CCIS, and there is no evidence that such subsidies are necessary for the success of the system. Furthermore, they

are not called for in the LDE. At this point, subsidies for training companies would be an investment in an unproven concept outside the bounds of the law being implemented.

However, there is a need for more resources and there is a way for them to be invested so that it reduces companies'—and other stakeholders'—costs of participation in dual education without simply gifting them money. Investing in system building to reduce frictions, improve communication, support start-up costs, and resolve trouble spots is the right way to add badly needed resources to the implementation process.

CCIS, both regionally and nationally, is one of central players in dual education. Multiple interviewees pointed out the importance of CCIS and the need for its presence—not just remotely but also in person—in processes from career guidance to trainer training and company recruitment. An investment in additional temporary staff for CCIS would facilitate implementation and lower startup costs for every stakeholder group.

Information is another issue that came up frequently from respondents, and a dedicated information source, troubleshooting hotline, and campaign to disseminate information to parents and students would be useful. Lower-level actors are concerned that they do not know everything they should, that information is slow in getting to them, and that they are not accurately carrying out the requirements of the law. These measures would help that. Schools and companies also report that parents and students are not fully aware of the new option, so a certain degree of marketing would support their efforts to recruit participants.

In this pre-implementation phase, expectations and eagerness are both running high. There will be challenges ahead, but the degree of stakeholder excitement and willingness are good signs. The start of implementation will probably bring some deflation as expectations readjust and work begins, and building a strong support system for participating stakeholders can help reduce the challenge. Instead of investing only in company subsidies to solve a problem that does not exist yet, invest in system-building measures like CCIS staffing, information campaigns, and a troubleshooting hotline to improve communication and support operational implementers.

Appendix 1: References

Bolli, T., Caves, K. M., Renold, U., & Buergi, J. (2018). Beyond employer engagement: measuring education-employment linkage in vocational education and training programmes. *Journal of Vocational Education & Training*, 1-40.

Bolli, T., Egg, M. E., & Rageth, L. (2017). *Meet the need: The role of vocational education and training for the youth labour market* (No. 429). KOF Working Papers.

Caves, K., & Baumann, S. (2018). Getting there from here: A literature review of VET reform implementation. *KOF Working Papers*, *441*.

Cedefop (2018). *What future for vocational education and training in Europe?* Cedefop. http://www.cedefop.europa.eu/files/9133_en.pdf

Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. *Implementation Science*, 10(1), 53-65.

OECD (2009). *Working Out Change: Systemic Innovation in Vocational Education and Training*. Paris, France: Organization for Economic Cooperation and Development (OECD), Centre for Educational Research and Innovation (CERI).

OECD (2015). *OECD Reviews of Vocational Education and Training: Key Messages and Country Summaries*. OECD Publishing, Paris. http://www.oecd.org/education/skills-beyond-school/OECD_VET_Key_Messages_and_Country_Summaries_2015.pdf

O'Leary, D.E. (2008) Gartner's hype cycle and information system research issues, *International Journal of Accounting Information Systems*, 9(4), 240-252. https://doi.org/10.1016/j.accinf.2008.09.001

UNESCO (2015). *Recommendation concerning technical and vocational education and training (TVET)*. UNESCO, Paris. http://portal.unesco.org/en/ev.php-URL_ID=49355&URL_DO=DO_TOPIC&URL_SECTION=201.html

Appendix 2: Interview Protocols

Interview protocols in following order:

1. Government, CCIS, Regional CCIS, Regional School Administrations
2. School Directors and WBL Coordinators, Dual and Non-Dual VET Schools
3. Dual and Non-Dual Companies
4. Dual and Non-Dual Students and Parents
5. Trade Unions
6. International Actors, including Donor Partners and International Institutions

Long Interview - First Round – Government, National and Regional CCIS, Regional School Administrations

Background Information	
Institution: **Position:** **Gender:** ○ Male ○ Female **Interviewer Name:**	Education Background: ○ Compulsory education or less ○ Vocational secondary education ○ General secondary education ○ Applied higher education ○ Academic higher education **Age:** ○ -24 ○ 25-34 ○ 35-44 ○ 45-54 ○ 55-64 ○ 65+

Interview

1.1 Awareness

1.1.1 How aware are you of vocational and dual education in Serbia generally?
On a scale from 1 to 5, where 1 means not at all and 5 means very much

1	2	3	4	5
○	○	○	○	○

1.1.2 How well informed are you about the new dual education law in Serbia?
On a scale from 1 to 5, where 1 means not at all and 5 means very well

1	2	3	4	5
○	○	○	○	○

1.1.3 Where do you get information about dual education and VET? What are your main sources or channels?

1.2 Context Fit

1.2.1 Do you think the dual education fits with the needs of Serbian students and companies? Please provide an explanation of your answer.

○ Yes ○ No

1.2.2 Do you think the dual education law addresses all the important aspects of dual education?

○ Yes ○ No

1.2.3 Do you think the dual education law is clear and understandable for all of the actors who need to be involved?

○ Yes ○ No

1.3 Changes

1.3.1 How much will your organization have to change to implement the new dual education program? *On a scale from 1 to 5, where 1 means no change at all and 5 means very large*

1	2	3	4	5
○	○	○	○	○

1.3.2 What kind of changes do you think your organization will have to make?

1.3.3 What are the biggest or most fundamental changes?

1.3.4 What concerns or expectations do you have for the changes?

1.4 Willingness

1.4.1 Is your organization motivated to participate in implementation of dual education profiles?

○ Yes ○ No

1.4.2 Why?

1.4.3 What are the biggest challenges you foresee for implementing dual education profiles?

1.4.4. What are the biggest opportunities you foresee for implementing dual education profiles?

1.5 Ability

1.5.1 Does your organization have enough resources to implement dual education profiles?
Answer for each item on a scale from 1 to 5, where 1 means not at all and 5 means we have enough.

	1	2	3	4	5
Personnel (e.g. human resources)	○	○	○	○	○
Time	○	○	○	○	○
Know-how (e.g. expertise)	○	○	○	○	○
Information and material	○	○	○	○	○
Financial resources	○	○	○	○	○

1.6 Cooperation

1.6.1 Is your organization prepared to cooperate with other actors on implementing dual education?

○ Yes ○ No

1.6.2 Do you see any drivers or obstacles for cooperation with any stakeholders?

○ Yes ○ No

1.6.3 With whom do you think cooperation will be most important?

1.6.4 For what purpose will cooperation be most important?

1.7 Coordination

1.7.1 Right now, are all of the relevant actors and institutions coordinated to implement dual education?

○ Yes ○ No

Comment:

IF NO

1.7.2 Do you think all of the relevant actors and institutions will be coordinated by the next school year when the dual education law is going to be fully implemented?

○ Yes ○ No

Comment:

1.7.3 What do you think are the biggest obstacles or potential barriers to coordination?

1.8 Political Will

1.8.1 How willing do you think the following actors are to implement dual education?
On a scale from 1 to 5, where 1 means not at all and 5 means very much

	1	2	3	4	5	Unknown
Government overall	○	○	○	○	○	○
MoESTD	○	○	○	○	○	○
National CCIS	○	○	○	○	○	○
Regional CCIS	○	○	○	○	○	○
School Administration/Leaders	○	○	○	○	○	○
Teachers (and Teacher Unions)	○	○	○	○	○	○
Companies	○	○	○	○	○	○
Trade Unions	○	○	○	○	○	○
Parents	○	○	○	○	○	○
Students	○	○	○	○	○	○
Inst. for the Improvement of Education	○	○	○	○	○	○
Standing Conf. of Towns & Muni.s	○	○	○	○	○	○
Local Self-Government	○	○	○	○	○	○
Your institution	○	○	○	○	○	○

1.9 Career Guidance & Counseling

1.9.1 How well informed are you of the career guidance and counseling plans for the new dual education program?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

1.9.2 Where do you see the biggest value of the career guidance and counseling plans? Please explain.

1.9.3 Do you have any concerns about the career guidance and counseling plans? Please explain.

1.10 Training the instructors

1.10.1 How aware are you of the planned processes for choosing and training in-company instructors?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

1.10.2 Where do you see the biggest value in the planned processes for choosing and training in-company instructors? Please explain.

1.10.3 Do you have any concerns regarding the planned processes for choosing and training in-company instructors? Please explain.

1.11 Matching Students & Companies

1.11.1 How well informed are you about the planned processes for matching students and companies?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

1.11.2 Where do you see the biggest value in the planned processes for matching students and companies? Please explain.

1.11.3 Do you have any concerns regarding the planned processes for matching students and companies? Please explain.

1.12 CCIS act on the implementation of training for instructors, the composition of the commission on the exam for obtaining the instructor license, the issuance of the license and the registry of the licenses issued

1.12.1 How well informed are you about the planned processes for training for instructors, commission on the exam for obtaining the instructor license and the registry of the licenses issued?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

1.12.2 Where do you see the biggest value in the planned processes for training for instructors, commission on the exam for obtaining the instructor license and the registry of the licenses issued? Please explain.

1.12.3 Do you have any concerns regarding the planned for training for instructors, commission on the exam for obtaining the instructor license and the registry of the licenses issued? Please explain.

1.13 CCIS act on the costs of training and exams for instructors

1.13.1 How well informed are you about costs of training and exams for instructors?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

1.13.2 Where do you see the biggest value in the costs of training and exams for instructors Please explain?

1.13.3 Do you have any concerns regarding the costs of training and exams for instructors? Please explain.

1.14 CCIS act on the Commission for checking the fulfillment of requirements for the performance of WBL in company;

1.14.1 How well informed are you about the planned processes for checking the fulfillment of requirements for the performance of WBL in company?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

1.14.2 Where do you see the biggest value in the planned processes for checking the fulfillment of requirements for the performance of WBL in company Please explain.

1.14.3 Do you have any concerns regarding the planned processes for checking the fulfillment of requirements for the performance of WBL in company? Please explain.

Long Interview - First Round-
School Principals, Coordinators of Student Professional Practice

Background Information	
Institution: **Position:** **Gender:** ○ Male ○ Female **Interviewer Name:**	**Education Type:** ○ Compulsory education or less ○ Vocational secondary education ○ General secondary education ○ Applied higher education ○ Academic higher education **Age:** ○ -24 ○ 25-34 ○ 35-44 ○ 45-54 ○ 55-64 ○ 65+

Interview

0.1 **Background Information**

0.1.1 How large is your school (approximate number students)?

0.1.2 Does your school have any history or current participation in dual education programs? If so, which ones and for how many students?

1.1 Awareness

1.1.1 How aware are you of vocational and dual education in Serbia generally?
On a scale from 1 to 5, where 1 means not at all and 5 means very much

1	2	3	4	5
○	○	○	○	○

1.1.2 How well informed are you about the new dual education law in Serbia?
On a scale from 1 to 5, where 1 means not at all and 5 means very well

1	2	3	4	5
○	○	○	○	○

1.1.3 Where do you get information about dual education and VET? What are your main sources or channels?

1.2 Context Fit

1.2.1 Do you think the dual education fits with the needs of Serbian students and companies? Please provide an explanation of your answer.

○ Yes ○ No

1.2.2 Do you think the dual education law addresses all the important aspects of dual education?

○ Yes ○ No

1.2.3 Do you think the dual education law is clear and understandable for all of the actors who need to be involved?

○ Yes ○ No

1.3 Changes

1.3.1 How much will your organization have to change to implement the new dual education program? *On a scale from 1 to 5, where 1 means no change at all and 5 means very large*

1	2	3	4	5
○	○	○	○	○

1.3.2 What kind of changes do you think your organization will have to make?

1.3.3 What are the biggest or most fundamental changes?

1.3.4 What concerns or expectations do you have for the changes?

1.4 Willingness

1.4.1 Is your organization motivated to participate in implementation of dual education profiles?

○ Yes ○ No

1.4.2 Why?

1.4.3 What are the biggest challenges you foresee for implementing dual education profiles?

1.4.4. What are the biggest opportunities you foresee for implementing dual education profiles?

1.5 Ability

1.5.1 Does your organization have enough resources to implement dual education profiles?
Answer for each item on a scale from 1 to 5, where 1 means not at all and 5 means we have enough.

	1	2	3	4	5
Personnel (e.g. human resources)	○	○	○	○	○
Time	○	○	○	○	○
Know-how (e.g. expertise)	○	○	○	○	○
Information and material	○	○	○	○	○
Financial resources	○	○	○	○	○

1.6 Cooperation

1.6.1 Is your organization prepared to cooperate with other actors on implementing dual education?

○ Yes ○ No

1.6.2 Do you see any drivers or obstacles for cooperation with any stakeholders?

○ Yes ○ No

1.6.3 With whom do you think cooperation will be most important?

1.6.4 For what purpose will cooperation be most important?

1.7 Coordination

1.7.1 Right now, are all of the relevant actors and institutions coordinated to implement dual education?

○ Yes ○ No

Comment:

IF NO

1.7.2 Do you think all of the relevant actors and institutions will be coordinated by the next school year when the dual education law is going to be fully implemented?

○ Yes ○ No

Comment:

1.7.3 What do you think are the biggest obstacles or potential barriers to coordination?

1.8 Political Will

1.8.1 How willing do you think the following actors are to implement dual education?
On a scale from 1 to 5, where 1 means not at all and 5 means very much

	1	2	3	4	5	Unknown
Government overall	○	○	○	○	○	○
MoESTD	○	○	○	○	○	○
National CCIS	○	○	○	○	○	○
Regional CCIS	○	○	○	○	○	○
School Administration/Leaders	○	○	○	○	○	○
Teachers (and Teacher Unions)	○	○	○	○	○	○
Companies	○	○	○	○	○	○
Trade Unions	○	○	○	○	○	○
Parents	○	○	○	○	○	○
Students	○	○	○	○	○	○
Inst. for the Improvement of Education	○	○	○	○	○	○
Standing Conf. of Towns & Muni.s	○	○	○	○	○	○
Local Self-Government	○	○	○	○	○	○
Your institution	○	○	○	○	○	○

Section for schools that are already implementing dual education profiles

FOR NON-PARTICIPATING SCHOOLS, SKIP TO SECTION 3

2 Current training

2.1 Training experience

2.1.1 How long has your school been training through dual education profiles? (In years)

2.1.2 How many students are currently training through dual education profiles?

2.1.3 Does your school carry out any career guidance and counseling activities for trainees? If so, what is that like?

2.1.4 Does your school have a dedicated coordinator for work-based learning?

2.1.5 Does your school monitor and/or evaluate students' workplace learning?

2.2 Placement of students for work-based learning

2.2.1 Please describe the process of pairing students to the firms *(How much do students know before the pairing process? How do they choose companies? How do companies choose students? How is the final decision made?)*

2.2.2 How well do you think the company-student pairing process working on the following criteria? O*n a scale from 1 to 5, where 1 means very poorly and 5 means very well*

	1	2	3	4	5	Unknown
Students/parents satisfied	○	○	○	○	○	○
Companies satisfied	○	○	○	○	○	○
Process efficient	○	○	○	○	○	○

2.2.3 What is going well in the pairing process?

2.2.4 What is going poorly in the pairing process?

2.2.5 About how much time did your school spend on the matching process per student (e.g. recruiting, interviewing, and placing)?

2.2.6 What happens if multiple students want to start in the same company?

2.2.7 Do you think parents understand the dual profile and all of its conditions?

Again for all Schools

ASK THESE QUESTIONS FOR ALL SCHOOLS

3 Future dual education profiles

3.1 Career Guidance & Counseling

3.1.1 How well informed are you of the career guidance and counseling plans for the new dual education program?
On a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

3.1.2 Where do you see the biggest value of the career guidance and counseling plans? Please explain.

3.1.3 Do you have any concerns about the career guidance and counseling plans? Please explain.

3.2 Training the trainers

3.2.1 How aware are you of the planned processes for choosing and training in-company trainers?

O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

3.2.2 Where do you see the biggest value in the planned processes for choosing and training in-company trainers? Please explain.

3.2.3 Do you have any concerns regarding the planned processes for choosing and training in-company trainers? Please explain.

3.3 Matching Students & Companies

3.3.1 How well informed are you about the planned processes for matching students and companies?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

3.3.2 Where do you see the biggest value in the planned processes for matching students and companies? Please explain.

3.3.3 Do you have any concerns regarding the planned processes for matching students and companies? Please explain.

3.4 CCIS act on the Commission for checking the fulfillment of requirements for the performance of WBL in company

3.4.1 How well informed are you about the planned processes for checking the fulfillment of requirements for the performance of WBL in company?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

3.4.2 Where do you see the biggest value in the planned processes for checking the fulfillment of requirements for the performance of WBL in company Please explain.

3.4.3 Do you have any concerns regarding the planned processes for checking the fulfillment of requirements for the performance of WBL in company? Please explain.

3.5 CCIS act on the implementation of training for instructors, the composition of the commission on the exam for obtaining the instructor license, the issuance of the license and the registry of the licenses issued

3.5.1 How well informed are you about the planned processes for training for instructors, commission on the exam for obtaining the instructor license and the registry of the licenses issued?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

3.5.2 Where do you see the biggest value in the planned processes for training for instructors, commission on the exam for obtaining the instructor license and the registry of the licenses issued? Please explain.

3.5.3 Do you have any concerns regarding the planned for training for instructors, commission on the exam for obtaining the instructor license and the registry of the licenses issued? Please explain.

3.6 CCIS act on the costs of training and exams for instructors

3.6.1 How well informed are you about costs of training and exams for instructors?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

3.6.2 Where do you see the biggest value in the costs of training and exams for instructors Please explain?

3.6.3 Do you have any concerns regarding the costs of training and exams for instructors? Please explain.

Long Interview - First Round - Companies

Background Information	
Institution: **Position:** **Gender:** ○ Male ○ Female **Interviewer Name:**	**Education Type:** ○ Compulsory education or less ○ Vocational secondary education ○ General secondary education ○ Applied higher education ○ Academic higher education **Age:** ○ -24 ○ 25-34 ○ 35-44 ○ 45-54 ○ 55-64 ○ 65+

Interview

0.1 **Background Information**

0.1.1 How large is your company (approximate number of full-time-equivalent employees)?

0.1.2 In which sector is your company?

0.1.3 Is your company in one location, spread throughout Serbia, or multinational? What are its key locations?

1.1 Awareness

1.1.1 How aware are you of vocational and dual education in Serbia generally?
On a scale from 1 to 5, where 1 means not at all and 5 means very much

1	2	3	4	5
○	○	○	○	○

1.1.2 How well informed are you about the new dual education law in Serbia?
On a scale from 1 to 5, where 1 means not at all and 5 means very well

1	2	3	4	5
○	○	○	○	○

1.1.3 Where do you get information about dual education and VET? What are your main sources or channels?

1.2 Context Fit

1.2.1 Do you think the dual education fits with the needs of Serbian students and companies? Please provide an explanation of your answer.

○ Yes ○ No

1.2.2 Do you think the dual education law addresses all the important aspects of dual education?

○ Yes ○ No

1.2.3 Do you think the dual education law is clear and understandable for all of the actors who need to be involved?

○ Yes ○ No

1.3 Changes

1.3.1 How much will your organization have to change to implement the new dual education profiles? *On a scale from 1 to 5, where 1 means no change at all and 5 means very large*

1	2	3	4	5
○	○	○	○	○

1.3.2 What kind of changes do you think your organization will have to make?

1.3.3 What are the biggest or most fundamental changes?

1.3.4 What concerns or expectations do you have for the changes?

1.4 Willingness

1.4.1 Is your organization motivated to participate in implementation of dual education profiles?

○ Yes ○ No

1.4.2 Why?

1.4.3 What are the biggest challenges you foresee for implementing dual education profiles?

1.4.4. What are the biggest opportunities you foresee for implementing dual education profiles?

1.5 Ability

1.5.1 Does your organization have enough resources to implement dual education profiles?
Answer for each item on a scale from 1 to 5, where 1 means not at all and 5 means we have enough.

	1	2	3	4	5
Personnel (e.g. human resources)	○	○	○	○	○
Time	○	○	○	○	○
Know-how (e.g. expertise)	○	○	○	○	○
Information and material	○	○	○	○	○
Financial resources	○	○	○	○	○

1.6 Cooperation

1.6.1 Is your organization prepared to cooperate with other actors on implementing dual education?

○ Yes ○ No

1.6.2 Do you see any drivers or obstacles for cooperation with any stakeholders?

○ Yes ○ No

1.6.3 With whom do you think cooperation will be most important?

1.6.4 For what purpose will cooperation be most important?

1.7 Coordination

1.7.1 Right now, are all of the relevant actors and institutions coordinated to implement dual education?

○ Yes ○ No

Comment:

IF NO

1.7.2 Do you think all of the relevant actors and institutions will be coordinated by the next school year when the dual education law is going to be fully implemented?

○ Yes ○ No

Comment:

1.7.3 What do you think are the biggest obstacles or potential barriers to coordination?

1.8 Political Will

1.8.1 How willing do you think the following actors are to implement dual education?
On a scale from 1 to 5, where 1 means not at all and 5 means very much

	1	2	3	4	5	Unknown
Government overall	○	○	○	○	○	○
MoESTD	○	○	○	○	○	○

National CCIS	○	○	○	○	○	○
Regional CCIS	○	○	○	○	○	○
School Administration/Leaders	○	○	○	○	○	○
Teachers (and Teacher Unions)	○	○	○	○	○	○
Companies	○	○	○	○	○	○
Trade Unions	○	○	○	○	○	○
Parents	○	○	○	○	○	○
Students	○	○	○	○	○	○
Inst. for the Improvement of Education	○	○	○	○	○	○
Standing Conf. of Towns & Muni.s	○	○	○	○	○	○
Local Self-Government	○	○	○	○	○	○
Your institution	○	○	○	○	○	○

Section for Companies that are already implementing dual education profiles

FOR NON-TRAINING COMPANIES, SKIP TO SECTION 3

2 Current training

2.1 Training experience

2.1.1 How long has your company been training through dual education profiles? (In years)

2.1.2 How many students are currently training in your company through dual education profiles?

2.1.3 Are students/trainees paid? If so, how much? (Either monthly or as percent of skilled workers)

2.1.4 Does your company carry out any career guidance and counseling activities for trainees? If so, what is that like?

2.1.5 Does your company have formal contracts with students/trainees?

2.1.6 Does your company have any outside support? If so, from whom?

2.2 Current Training

2.2.1 If you could select your students, what method would your company use to select students?

Check all that apply

School placements/recommendations	○
Personal Interviews	○
Online interview	○
HR tools such as “Refline”	○
Other_____	

2.2.2 How important are the following aspects for students’ success in your company?
On a scale from 1 to 5, where 1 means not important at all and 5 means very important

	1	2	3	4	5
Grades	○	○	○	○	○
Personality	○	○	○	○	○
Motivation/Passion	○	○	○	○	○
Hard Skills (i.e. specific job skills)	○	○	○	○	○
Soft Skills (i.e. responsibility, friendliness)	○	○	○	○	○
Others	○	○	○	○	○

2.2.3 How satisfied are you with the students you get from schools, based on the following criteria?
On a scale from 1 to 5, where 1 means very poorly and 5 means very well

	1	2	3	4	5	Unknown
Students/parents satisfied	○	○	○	○	○	○
Companies satisfied	○	○	○	○	○	○
Process efficient	○	○	○	○	○	○

2.2.4 What is going well in the pairing process?

2.2.5 What is going poorly in the pairing process?

2.2.6 How are in-company instructors prepared for the dual education program?

2.2.7 Who are those instructors?

2.2.8 How were they prepared for their instructor role?

Section for Companies with NO current dual education

FOR TRAINING COMPANIES, SKIP TO SECTION 4

3 Potential training plans in non-training companies

3.1 Placement of students for work-based learning (BYLAW ISSUES: RULEBOOKS)

3.1.1 What methods will your company probably use to select students?
Check all that apply

School placements/recommendations	○
Personal Interviews	○
Online interview	○
HR tools such as “Refline”	○
Other_____	

3.1.2 How important are the following aspects when you select a student?
O*n a scale from 1 to 5, where 1 means not important at all and 5 means very important*

	1	2	3	4	5
Grades	○	○	○	○	○
Personality	○	○	○	○	○
Motivation/Passion	○	○	○	○	○
Hard Skills (i.e. specific job skills)	○	○	○	○	○
Soft Skills (i.e. responsibility, friendliness)	○	○	○	○	○
Others	○	○	○	○	○

3.1.3 How much time do you expect to spend per student on recruiting, interviewing, and hiring students to participate in the new dual education program?

3.1.4 What would you look for when hiring a student?
Check all that apply

Grades	○
Personality	○
Motivation/Passion	○
Hard Skills (i.e. specific job skills)	○
Soft Skills (i.e. responsibility, friendliness)	○
Other _____	

Again for all Companies

ASK THESE QUESTIONS FOR ALL COMPANIES

4 Future dual education profiles

4.1 Career Guidance & Counseling

4.1.1 How well informed are you of the career guidance and counseling plans for the new dual education program?
On a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

4.1.2 Where do you see the biggest value of the career guidance and counseling plans? Please explain.

4.1.3 Do you have any concerns about the career guidance and counseling plans? Please explain.

4.2 Training the trainers

4.2.1 How aware are you of the planned processes for choosing and training in-company trainers?
On a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

4.2.2 Where do you see the biggest value in the planned processes for choosing and training in-company trainers? Please explain.

4.2.3 Do you have any concerns regarding the planned processes for choosing and training in-company trainers? Please explain.

4.3 Matching Students & Companies

4.3.1 How well informed are you about the planned processes for matching students and companies?
On a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

4.3.2 Where do you see the biggest value in the planned processes for matching students and companies? Please explain.

4.3.3 Do you have any concerns regarding the planned processes for matching students and companies? Please explain.

4.4 CCIS act on the implementation of training for instructors, the composition of the commission on the exam for obtaining the instructor license, the issuance of the license and the registry of the licenses issued

4.4.1 How well informed are you about the planned processes for training for instructors, commission on the exam for obtaining the instructor license and the registry of the licenses issued?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

4.4.2 Where do you see the biggest value in the planned processes for training for instructors, commission on the exam for obtaining the instructor license and the registry of the licenses issued? Please explain.

4.4.3 Do you have any concerns regarding the planned for training for instructors, commission on the exam for obtaining the instructor license and the registry of the licenses issued? Please explain.

4.5 CCIS act on the costs of training and exams for instructors

4.5.1 How well informed are you about costs of training and exams for instructors?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

4.5.2 Where do you see the biggest value in the costs of training and exams for instructors Please explain?

4.5.3 Do you have any concerns regarding the costs of training and exams for instructors? Please explain.

4.6 CCIS act on the Commission for checking the fulfillment of requirements for the performance of WBL in company

4.6.1 How well informed are you about the planned processes for checking the fulfillment of requirements for the performance of WBL in company?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

4.6.2 Where do you see the biggest value in the planned processes for checking the fulfillment of requirements for the performance of WBL in company Please explain.

4.6.3 Do you have any concerns regarding the planned processes for checking the fulfillment of requirements for the performance of WBL in company? Please explain.

Short Interview - First Round for Students and Parents

Background Information	
Role (Student/Parent): **School:** **Gender:** ○ Male ○ Female **Interviewer Name:**	**FOR PARENTS ONLY** **Education Type:** ○ Compulsory education or less ○ Vocational secondary education ○ General secondary education ○ Applied higher education ○ Academic higher education

Interview

1 Students

PARENTS SKIP TO SECTION 2

1.1 Do you know about dual education options and programs?

○ Yes ○ No ○ Unsure

1.2 Are you already enrolled in a dual education profile?

○ Yes ○ No ○ Unsure

IF ALREADY ENROLLED IN DUAL EDUCATION, SKIP TO 1.9

1.3 Where do you get information about dual education and VET? What are your main sources or channels?

1.4 Are you interested in participating in dual education profiles?

○ Yes ○ No ○ Unsure

1.5 What is your main motivation for participating in a dual education profile?

1.6 What is the main reason you might avoid a dual education profile?

1.7 If you decided to pursue a dual education profile, how would you start? Who would you ask for advice or guidance?

1.8 What are you planning to do after secondary school?

FOR STUDENTS ALREADY IN DUAL EDUCATION PROFILES

1.9 Is your current education program your first choice?

○ Yes ○ No ○ Unsure

1.10 Why did you choose a dual education profile?

1.11 How did you get into your current education program? Who did you go to for advice?

1.12 What are you planning to do after secondary school?

2 Parents

2.1 How well informed are you about the new dual education law in Serbia?
On a scale from 1 to 5, where 1 means not at all and 5 means very well.

1	2	3	4	5
○	○	○	○	○

2.2 Where do you get information about dual education and VET? What are your main sources or channels?

2.3 Would you recommend dual education profiles to other parents?

○ Yes ○ No

2.4 Why or why not?

2.5 Would you be able to help your child with job interviews and applications?

○ Yes ○ No

IF NOT

2.6 Why not? (i.e. too much time, not enough information, etc.)

2.7 Who would you ask for help?

Long Interview - First Round-Trade Unions

Institution and position: ○ Male ○ Female **Interviewer Name:**	Education Background: ○ compulsory education or less (elementary) ○ vocational secondary education ○ general secondary education ○ applied higher education ○ academic higher education Age: ○ -24 ○ 25-34 ○ 35-44 ○ 45-54 ○ 55-64 ○ 65+

Interview

1.1 Awareness

1.1.1 How aware are you of vocational and dual education in Serbia generally?
On a scale from 1 to 5, where 1 means not at all and 5 means very much

1	2	3	4	5
○	○	○	○	○

1.1.2 How well informed are you about the new dual education law in Serbia?
On a scale from 1 to 5, where 1 means not at all and 5 means very well

1	2	3	4	5
○	○	○	○	○

1.1.3 Where do you get information about dual education and VET? What are your main sources or channels?

1.2 Context Fit

1.2.1 Do you think the dual education fits with the needs of Serbian students and companies? Please provide an explanation of your answer.

○ Yes ○ No

1.2.2 Do you think the dual education law addresses all the important aspects of dual education?

○ Yes ○ No

1.2.3 Do you think the dual education law is clear and understandable for all of the actors who need to be involved?

○ Yes ○ No

1.3 Willingness

1.3.1 Is your organization motivated to participate in implementation of dual education profiles?

○ Yes ○ No

1.3.2 Why?

1.3.3 What are the biggest challenges you foresee for implementing dual education profiles?

1.3.4. What are the biggest opportunities you foresee for implementing dual education profiles?

1.4 Coordination

1.4.1 Right now, are all of the relevant actors and institutions coordinated to implement dual education?

○ Yes ○ No

Comment:

IF NO

1.4.2 Do you think all of the relevant actors and institutions will be coordinated by the next school year when the dual education law is going to be fully implemented?

○ Yes ○ No

Comment:

1.4.3 What do you think are the biggest obstacles or potential barriers to coordination?

1.5 Political Will

1.5.1 How willing do you think the following actors are to implement dual education?
On a scale from 1 to 5, where 1 means not at all and 5 means very much

	1	2	3	4	5	Unknown
Government overall	○	○	○	○	○	○
MoESTD	○	○	○	○	○	○
National CCIS	○	○	○	○	○	○
Regional CCIS	○	○	○	○	○	○
School Administration/Leaders	○	○	○	○	○	○
Teachers (and Teacher Unions)	○	○	○	○	○	○
Companies	○	○	○	○	○	○

Trade Unions	○	○	○	○	○	○
Parents	○	○	○	○	○	○
Students	○	○	○	○	○	○
Inst. for the Improvement of Education	○	○	○	○	○	○
Standing Conf. of Towns & Muni.s	○	○	○	○	○	○
Local Self-Government	○	○	○	○	○	○
Your institution	○	○	○	○	○	○

Long Interview - First Round-International Cooperation

Known information about the Interviewee	**Information to ask the Interviewee**
Institution and position: ○ Male ○ Female **Interviewer Name:**	Education Background: ○ compulsory education or less (elementary) ○ vocational secondary education ○ general secondary education ○ applied higher education x academic higher education Age: ○ -24 ○ 25-34 ○ 35-44 ○ 45-54 ○ 55-64 ○ 65+

Interview

0.1 International Actors Questions

1.1.1 Is your organization interested in dual education or vocational education and training?

○ Yes ○ No

1.1.2 How long has your organization worked on dual education issues in Serbia?

1.1.3 What are your organization's main dual education-related activities in Serbia?

1.1.4 What are your organization's main priorities for dual education in Serbia?

1.1.5 What are your organization's definitions of success for dual education in Serbia?

1.2 Awareness

1.2.1 How well informed are you about the new dual education law in Serbia?
On a scale from 1 to 5, where 1 means not at all and 5 means very well)

1	2	3	4	5
○	○	○	○	○

1.3 Context Fit

1.3.1 Do you think the new dual education law fits with the needs of Serbian students and companies? Please provide an explanation of your answer.

○ Yes ○ No

1.4 Willingness

1.4.1 Are you motivated to participate in implementation of dual education?

○ Yes ○ No

1.4.2 Why?

1.4.3 What are the biggest challenges you foresee for implementing the dual education in Serbia?

1.5 Cooperation

1.5.1 Are you prepared to cooperate with other actors on implementing the new dual education program?

○ Yes ○ No ○ Not applicable

IF YES

1.5.2 With whom?

1.5.3 For what purpose?

1.4.4. How would you describe your role in this cooperation?

1.6 Coordination

1.6.1 In your opinion, right now, are all of the relevant actors and institutions coordinated to implement the dual education?

○ Yes ○ No

Comment:

IF NO

1.6.2 Do you think all of the relevant actors and institutions will be coordinated by the time implementation starts next year?

○ Yes ○ No

Comment:

1.7 Political Will

1.7.1 How willing do you think the following actors are to implement the new dual education program?
On a scale from 1 to 5, where 1 means not at all and 5 means very much

	1	2	3	4	5	Unknown
Government	○	○	○	○	○	○
MoESTD	○	○	○	○	○	○
National CCIS	○	○	○	○	x	○
Regional CCIS	○	○	○	○	○	○
School Administration	○	○	○	○	○	○
Schools	○	○	○	○	○	○
Companies	○	○	○	○	○	○
Trade Unions	○	○	○	○	○	○
Parents	○	○	○	○	○	○
Students	○	○	○	○	○	○
Inst. for the Improvement of Education	○	○	○	○	○	○
Standing Conf. of Towns & Muni.s	○	○	○	○	○	○
Local Self-Government	○	○	○	○	○	○
Your institution	○	○	○	○	○	○

1.8 Career Guidance & Counseling

1.8.1 How well informed are you of the career guidance and counseling plans for the new dual education profiles?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

1.8.2 Where do you see the biggest value of the career guidance and counseling plans? Please explain.

1.8.3 Do you have any concerns about the career guidance and counseling plans? Please explain.

1.9 Training the instructors

1.9.1 How aware are you of the planned processes for choosing and training in-company instructors?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

1.9.2 Where do you see the biggest value in the planned processes for choosing and training in-company instructors? Please explain.

1.9.3 Do you have any concerns regarding the planned processes for choosing and training in-company instructors? Please explain.

1.10 Matching Students & Companies

1.10.1 How well informed are you about the planned processes for matching students and companies?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

1.10.2 Where do you see the biggest value in the planned processes for matching students and companies? Please explain.

1.10.3 Do you have any concerns regarding the planned processes for matching students and companies? Please explain.

1.11 CCIS act on the implementation of training for instructors, the composition of the commission on the exam for obtaining the instructor license, the issuance of the license and the registry of the licenses issued

1.11.1 How well informed are you about the planned processes for training for instructors, commission on the exam for obtaining the instructor license and the registry of the licenses issued?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

1.11.2 Where do you see the biggest value in the planned processes for training for instructors, commission on the exam for obtaining the instructor license and the registry of the licenses issued? Please explain.

1.11.3 Do you have any concerns regarding the planned for training for instructors, commission on the exam for obtaining the instructor license and the registry of the licenses issued? Please explain.

1.12 CCIS act on the costs of training and exams for instructors

1.12.1 How well informed are you about costs of training and exams for instructors?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

1.12.2 Where do you see the biggest value in the costs of training and exams for instructors Please explain?

1.12.3 Do you have any concerns regarding the costs of training and exams for instructors? Please explain.

1.13 CCIS act on the Commission for checking the fulfillment of requirements for the performance of WBL in company

1.13.1 How well informed are you about the planned processes for checking the fulfillment of requirements for the performance of WBL in company?
O*n a scale from 1 to 5, where 1 means not informed at all and 5 means very well informed.*

1	2	3	4	5
○	○	○	○	○

IF 4 OR 5 IS SELECTED CONTINUE THE FOLLOWING QUESTIONS

1.13.2 Where do you see the biggest value in the planned processes for checking the fulfillment of requirements for the performance of WBL in company Please explain.

1.13.3 Do you have any concerns regarding the planned processes for checking the fulfillment of requirements for the performance of WBL in company? Please explain.