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# DOMINO Final review

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On behalf of:

**Swiss Agency for Development  
and Cooperation and DOMINO pro-  
ject**

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Special thanks are due to the PMU team for their prudent support and for the fact that the agreed programme could be implemented without any significant adjustments.

## Summary

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### The DOMINO project

The project “Swiss Support for the introduction of the Dual-track principles in Bulgarian Vocational Education system” (also referred to as the “Domino Project”) has been developed in the framework of the Swiss-Bulgarian Cooperation Program. It started in February 2015 and lasts until November 2019.

### The aim of the final review

1. Stock-taking as regards results achieved with a special focus on the level of institutionalisation.
2. Support the sustainability of the project achievements with recommendations, lessons learnt and the identification of good practice.

### Methodology of the review

The FR opted for a participatory approach and attached value to process quality. The methods applied include desk review, interviews with all relevant stakeholders – Bulgarian and Swiss – project visits and a validation workshop

### Findings on results

The DOMINO project has *overachieved* its objectives and already today reached *impact at scale*. The project has created a good, *sustainable and replicable model* for DVET in Bulgaria, and it has created capacities at disposal for continued implementation of DVET in Bulgaria. The DVET model has been replicated beyond the project supported structures, and a new model for steering and developing DVET has been successfully institutionalised (Council for DVET).

### Findings on institutionalisation and sustainability

The introduction of DVET in Bulgaria is a major and complex change project that is designed to last. The project has got off to a good start and important foundations for sustainable change have been laid by DOMINO. However, *great challenges remain* on the way to full institutionalization,

and the reluctant forces should not be underestimated. The report points out most-important supporting and hindering factors.

### Lessons learned and good practices

The report identifies *nine learnings* from DOMINO that can inform future project planning and design both in Bulgaria and beyond. The learnings cover both technical VET issues as well as issues of project setup and design.

### Conclusions and recommendations

While DOMINO has overachieved, DVET development in Bulgaria is not yet done. For this major economic and educational reform project to be successfully and sustainably taken up by the education system and the economic and social actors in the country, *there is still a long way to go*. The recommendations aim to keeping the momentum high, further developing and innovating the system, and, at the same time, normalising the still quite new processes and approaches to DVET.

#### **Recommendation to the PMU and the Swiss partners**

**1:** Look into ways to install a technical **post-project support**. Check with the Bulgarian partners about setup, needs and funding options.

**2:** Develop **guidelines/a handbook on the curriculum development approach**, as well as on teachers and instructors training.

#### **Recommendations for Bulgarian public actors**

**3:** **Create the necessary capacities** for DVET implementation and further development on central and regional level within the Ministry of Education.

**4:** Continue to conceptualize DVET as a **public-private partnership** with shared responsibilities in steering, financing and delivery.

**5:** Consider DVET development as a ***national priority reform project*** for economic and education system development, and develop a separate ***national DVET strategy*** including a vision, objectives and key measures for the coming years together with the economic and social partners.

**6:** Develop ***institutional capacities*** for curricular reforms and development, teacher training and in-company mentors training (professional pedagogy and didactics).

**7:** Define ***quality assurance*** for DVET and develop respective capacities.

**8:** Invest in ***information and promotional campaigns*** for DVET with MoE, MES, MoL and together with the private sector.

**9:** Develop dVET ***research capacities*** and generate solid knowledge on dVET implementation quality and outcomes (dVET observatory).

#### ***Recommendations for the Bulgarian private actors***

**10:** Jointly develop a ***strategic vision*** for the further development of dual VET and work together for implementing it.

**11:** Invest into ***information and promotional campaigns*** with Ministry of Education (MES) and Ministry of Economy (MoE) and Ministry of Labor and Social Policy (MLSP)

**12:** Create a ***motor/competence centre for dual VET*** including responsibilities for local or regional level DVET promotion and capacity development.

# 1 Aim and understanding of the final review

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The project “Swiss Support for the introduction of the Dual-track principles in Bulgarian Vocational Education system” (also referred to as the “Domino Project”) has been developed in the framework of the Swiss-Bulgarian Cooperation Program. This project financed through the Swiss Contribution to the enlarged European Union, started in February 2015 and lasts until November 2019.

The final review (FR) comes at the very end of the project duration. We understand that the DOMINO project was set-up with high ambitions and that it lived up to these ambitions, obviously over-achieving the results in terms of outreach and, maybe – and to be discussed and understood by the evaluation and the involved actors, also as regards institutionalisation. While the change DOMINO introduced seems to be very successful, this substantial change is most likely not fully finalised and not sustainably introduced given the short time frame of the project. Important processes could be set-up and tested only once or a few times during the project duration. However, such changes to be sustainably realised need clear, tested and trained roles and responsibilities, the necessary resources (human, institutional, financial), and a stable and conducive framework. This is not yet fully achieved. Therefore, while the change is probably not yet fully done as the project comes to an end, the FR shall support the project and, especially, the responsible Bulgarian actors, in finding a good way forward for sustained change towards dVET in Bulgaria.

Based on that, the ToR identifies several specific objectives including specific questions for the review team.

The first set of questions is about stock-taking as regards results achieved with a special focus on the level of institutionalisation and appropriateness of roles and responsibilities in view of quality apprenticeships.

The second set of questions is forward looking and expects the FR to support the sustainability of the project results with adequate recommendations (to different actors), to formulate lessons learnt in order to make sure the good practice and the learnings from DOMINO are formulated and shared among the actors involved.

## 2 Method

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The FR opted for a participatory approach and attached value to process quality. The methods applied include:

- Desk review
- Interviews with SFIVET (coordination/management team and experts) in Switzerland and with Head of SCO via a phone conference. For thematic questions regarding SDC’s views on the second Swiss Contribution, an interview with the Programme Manager within NMS-SDC responsible for VSD was held.
- Visit of the project according to the programme suggested by the PMU
- Meeting with project partners, stakeholders, and the local backstopper involved in the project
- ½ day validation workshop with main stakeholders at the end of the mission in BG for validation of the main results of the FR.

The FR team was able to cover the important actors and perspectives involved and a fair selection of project partners (representativeness). However, given the very limited timeframe, we could not cover all activities and aspects of the project in detail. The process allowed for a fair coverage of the project activities and scope; we are therefore able to formulate well-founded conclusions and recommendations.

## 3 Findings

This chapter covers the findings of the review in a nutshell. As agreed, the chapter is kept very short and focuses only a) an assessment of the achievement of results as defined at the beginning of the project, and b) on the institutionalisation and sustainability of the results in view of a longer-term development of DVET in Bulgaria.

### 3.1 Assessment of project results: impact at scale

The DOMINO project has overachieved its objectives. The project has created a good, sustainable and replicable model for DVET in Bulgaria, and it has created capacities at disposal for continued implementation of DVET in Bulgaria. The results achieved by the project are not only the numbers but also the general knowledge about DVET.

The project results by objectives are presented below:

Objectives as given in the project description <sup>1</sup>	Our appreciation
(1) Pilot new approach for curriculum development	Achieved
(2) Testing the new approach in different schools, companies, professions, in a full cycle	Achieved
(3) Bulgarian capacities for DVET development and dissemination	Achieved
(4) Conducive legislative framework	Achieved
(5) Positive image of DVET	Achieved

We found out that all five objectives were fulfilled, according to the indicators as formulated in the project description, and – even more importantly – as perceived and assessed by all Bulgarian actors unanimously.

To achieve these results, the project started in February 2015 with a six-month inception phase that lasted until 31.07.2015, followed by an implementing phase that would be closed by

<sup>1</sup> For the detailed formulations of the objectives and the indicators set please consult to the framework agreement and the project description (see annex, documentation).

30.11.2029. In 2015, DVET was introduced in two cities – Sofia and Kazanluk. In the following years 17 new cities joined the project, totalling 19 cities. Even though the project description specified that only three schools would join the project each year, now at the end of the project, 32 schools offer dual education with the project support. In the period 2015 – 2019 the project developed and provided trainings for 112 teaches, 255 in-company mentors and 25 dual VET experts (DTEs), unfortunately only 6 of them are seriously engaged in the implementation of the last phase of the project and all of them are not associated to any institutional partner of DOMINO. Well-known Bulgarian and international companies joined the project and nowadays a total of 170 companies are partnering with DOMINO schools. According to the project annual reports, the project achieved its goals and even outreached them. The official results reported by the project in September 2019 are presented below:

Progress in numbers	Overall progress Sep-tember 2019	Overall objectives till No- vember 2019
Professions	12	10
Schools involved	32	15
Students involved	1600	1200
Cities	19	n/a
Partner companies involved	170	n/a
VET Teachers trained	112	100
Instructors trained	255	240
DVET Experts trained	25	30
New curricula developed	12	10

Beyond these numbers and defined project results, the DOMINO project has achieved a major success in that it created a totally new way of steering DVET. The project, with strong support from the BSCC, has introduced a Forum that has turned into the high-level Consultative Council for DVET which is chaired by the Minister of Education and joined by all important actors. This council acts as a platform for dialogue and decision making reflecting the partnership nature of DVET. The Council is supported by a Resource Working Group that includes the technical level partners. The Resource Group supports the decision making and further development of DVET with technical expertise and preparing work.

As the project reports indicate and all actors, especially also the MoE confirm, the model has grown already massively beyond the project boundaries. The DOMINO model of dual VET has been replicated – and even further developed – by many VET providers and companies in the country, outnumbering the project coverage as given above. We therefore find that there has been adaption, adoption, expansion and response by the Bulgarian VET and economic actors and system, and therefore DOMINO can be considered as a project that achieves today already

impact at scale. This is to be considered as a proof of the model and an outstanding success, even more so if we bear in mind the relative smallness of the project.

### 3.2 Assessment of the level of institutionalisation and sustainability

As already mentioned above, the introduction of DVET in Bulgaria is a major and complex change project that is designed to last. The project has got off to a good start and important foundations for sustainable change have been laid. However, great challenges remain on the way to full institutionalization, and the reluctant forces should not be underestimated. The following is a summary of the promoting and hindering factors with regard to the sustainability of the change towards DVET.

On the level of institutionalisation, we find many **supporting factors** that indicated institutionalisation and promote sustainability:

- **From pilot to policy:** We found that for many experts and VET systems actors, DVET has become a real part of the VET system in Bulgaria during the last four years – and the role of DOMINO for achieving this result is undoubtable. The DOMINO project is considered as a timely and decisive move and force, that created the change as the central actor in that process. According to the Deputy Minister, Mrs. Tanya Mihaylova, DVET has become not only a practice but a policy (Interview held on 9.9.2019).
- **Economic demand:** the change towards DVET benefits from a serious lack of qualified workforce and therefore great support from the economic actors in the country as one of their major strategic pillars for dealing with that challenge.
- **Interest of VET schools:** DVET has become an important strategy for VET schools to increase their relevance and attractiveness which led to increasing student numbers for participating schools. As VET schools have been under pressure in the recent years in Bulgaria, this new and positive development pushed by DVET is highly welcome by the participating schools.
- **Legislation:** The legislation regulating DVET is in place thanks to the project support. The Parliament adopted the changes in the VET Act and Labour Code in autumn 2018. All actors involved and interviewed consider the legislative basis as conducive and sufficient.
- **Cooperation platform:** The above-mentioned Consultative Council (high level) and Resource Working Group (technical level) are serving as platforms for strategic dialogue and technical development of DVET in Bulgaria on the national level.
- **VET strategy includes elements for DVET:** The Bulgarian VET Strategy for the period 2015-2020 will be updated to answer the current VET developments, including dual education. We found that the strategy will also partly cover DVET in the following few directions without more details available so far (end of September 2019):
  - o Creating regulatory and organizational-administrative prerequisites for the transition of DVET from a pilot project to policy;
  - o Creating a database of companies involved in DVET;
  - o Capacity building for organizational development and supporting local and national employer-school partnerships;
  - o Provision of financial resources for the extension of DVET through national funding and co-financing through the European Structural Funds, including increasing publicity and awareness of the actions taken;
  - o Implementation of European instruments and participation in international cooperation formats: quality framework, cooperation platforms, etc.

- **Functioning model:** The model for DVET designed by DOMINO is functioning, it has been tested in an important number of schools, companies, professions, and the new approach for curriculum development has been piloted and repeated.
- Numbers: a **relevant number of actors have been involved**, exposed to and trained in DVET. As the project grew far beyond initially planned numbers and as the model has already been replicated beyond the project scope, there is a certain mass of actors pushing the agenda for DVET forward. The claimed effects beyond the project reach, namely the companies and schools that reportedly apply the model introduced by DOMINO, could be a strong sign for the system taking up the model – and even further developing – beyond and without project support.
- **Well-documented approach:** To facilitate the horizontal replication, the PMU elaborated practical guidelines based on the Swiss-funded approaches and methodologies (e.g. developing curricula with involvement of the business, establishing partnerships between vocational schools and enterprises, etc.). These guidelines are widely disseminated and are available for downloading from the VET section of the MoE website.
- **EU funds for DVET:** The MoE has reportedly important EU funds available for continued promotion of DVET and currently is in the finishing stages of preparing a project to support DVET development beyond the DOMINO project. Details are, however, not known so far (status as of 13.9.2019).

All these factors support the continued and successful transfer from DVET in its infancy and pilot stage towards a system to last. However, there remain some major **challenges and hindering factors** on this pathway to lasting success for DVET:

- **No strategic vision, objectives and planning from public and private actors:** The introduction of DVET in Bulgaria is a major economic and educational reform project. However, we could not identify a clear idea on how this reform should be continued and brought forward. The involved actors do not seem to have a vision, not to speak of a common vision, yet, no set objectives and no concrete plan. Rather, the further development of DVET is depending on the availability of EU and other funds and somewhat unguided activities on local and regional level.
- **Cooperative culture in danger:** Systems have a natural tendency to fall back into their previous behaviours if they are not consciously controlled differently and the forces of change have a sufficiently long effect on them. The vocational training system in Bulgaria also shows clear tendencies, especially to leave the so important cooperative culture for DVET after the end of the project. The new project to promote dual vocational training with EU funds was developed in such a way that it completely contradicts the new partnership culture developed in the DOMINO project. The rhythm of the meetings and the agenda of the Consultative Council have not been fully clarified and its stability is not per se guaranteed.
- **Cost-benefit challenge for companies:** The DVET model as is has been developed is functioning and, obviously, widely accepted. However, the model had to compromise in many ways, resulting in a setup that rather relies on the dire need and desperation of engaged companies and VET schools and on CSR motivations than on an economically sustainable model. At this stage most of the employers declare that their main incentives are corporate social responsibilities and developing their future employees. In general, they do not fully understand the whole process and underestimate the investments needed. The school-company partnerships are often not strong enough and are mainly driven by the school directors and school methodologists. The employers do agree to have

mentors but do normally not allocate special time for them to work with students, especially true for SMEs. The capacity for supporting employers on a local level through business and other associations is still very low. And employers do not have a clear understanding about the investments and pay back results for their own businesses that are associated with the dual education but sooner or later they should make these activities profitable for them. Overall, the model developed will most likely not pay off for companies during the training duration. The recent sociological study conducted by Gallup hints to the fact that many companies try to bind their trainees with additional contracts beyond the training period. For DVET to grow and prosper on the long-run and beyond pioneer firms, there might be a need to recalibrate the model towards a better cost-benefit ratio during the training period. However, for properly steering, one would need solid data on the level of professional profiles.

- **Core processes are little practiced:** At the end of the project, most actors have little or no practice in important core processes of dual vocational education and training. In many cases, the practical training in companies is only about to start this current school year. Experience has shown that in order to stabilise, clarify roles and handle processes in a qualitative and efficient manner, several rounds of training and appropriate practice are required. Without some kind of development support and quality assurance, very different, disparate developments and, as mentioned above, a relapse into old functional and cooperation patterns threaten the further development of DVET in Bulgaria.
- **No DVET motor after the project end:** The PMU established also a handing over plan to the MoE, but unfortunately the proper procedure for transferring has not been settled yet. The MoE has not yet get organised to take over the responsibilities from DOMINO. There will most likely not be a powerful and well-prepared structure with a clear mandate and competent staff available to continue the further development of DVET in Bulgaria. There is major risk that DVET development loses its motor and guidance, and that the numerous actors that are currently implementing brand-new dual VET programs or plan to venture into DVET will not have a competent partner at hand to properly prepare and develop DVET.
- **Limited DVET resources with persons rather than organisations:** The capacity for DVET development and implementation is low and stays with a quite limited number of people. Most of them are not part of the DVET or the VET system, and the knowledge and knowhow mostly rely on persons rather than organisations. Key resources like the know-how on the new approach to curriculum development fully rely on a few persons only. There are not yet systems actors in terms of organisations that are prepared to fulfil these functions in a systemic perspective. Therefore, the sustainability of these resources is at high risk unless the Bulgarian partners start to institutionalise important supporting functions for VET and DVET, namely profile and curriculum development, teacher training and in-company mentors training, learning material development, and examinations training.
- **No proper risks management and quality assurance:** The issue of oversight and quality assurance for DVET has not yet been properly addressed and solved in Bulgaria. We already touched this issue in the mid-term review and find an unchanged situation on the final review. This situation is a major risk for the sustainability of DVET, as any incident with the young men and women at the workplace – accident, abuse, or any other – might turn out to be lethal for DVET development at these early stages, not to mention the individual dimension of such cases.

## 4 Lessons learned and good practices

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In the following paragraphs, we point to some lessons learned in the sense of good practices that are relevant for the Bulgarian and the Swiss partners involved in DOMINO.

### **Importance of staffing: you need highly networked and credible change makers**

The project had a perfect blend of profiles in terms of competencies, experiences, personalities and network relations, to accomplish the challenging task of developing a ground-breaking educational *and* economic reform project. With the team leader being very familiar with the Ministry of Education as a former deputy minister, but also very open-minded and experienced in economic relations, the project had a strong motor driving the project forward. The PR and business relations profile were equally important as the technical expertise and the personalities and age mix in the team. In retrospective, the only missing part was the internal financial and accounts manager. The lack of this competence within the PMU meant that the project was always only aware of the financial situation with a relative delay and was, therefore, sometimes too slow in its actions.

### **Importance of the ability to act: a PMU is a good solution but implies some flexibility and risk-taking from the donor**

A project management unit integrated into the power centre of VET, the Ministry of Education, was an important strategic choice and proved very successful, certainly also in combination with the good staff selection. The physical integration of the PMU into the ministry was also particularly important because the project was also about creating new legal foundations and bringing the key players in the ministry for dual vocational training on board. At the same time, the PMU's relative independence from the ministry's activities allowed it to work more independently, more flexibly and more reactively, which corresponds much more closely to a change project than a full integration into the existing hierarchical structures of a ministry.

The setup with a PMU and staff hired by the Swiss donor proved very successful in this case, also because the Swiss donor (Embassy) was ready to act flexibly in reaction to specific challenges and demands from the PMU and the Ministry, bear respective risks and invest own resources (partly admin, but also relations and technical) for supporting the PMU and the project in its endeavour. Such an approach proved to be effective for a project that also strongly builds on Swiss expertise and reputation in DVET. The challenge is, obviously, the transfer into the country system, as this report points out.

### **Importance of developing dual VET from the centre: right pilot profiles and actor's choice**

The project was consciously and consistently developed in response to and around the economic need for skilled labour. The profile selection of the pilot started with industries which signalled a proven need for better, more relevant training. This allowed for a certain continued guarantee as regards quantity structure, as a continuous demand could be accepted. This also led to a continued interest and commitment of the involved economic actors (companies, chambers). The project's target group, profile and partner selection were not superimposed or supplemented by other interests of development work or broadly understood social policy - e.g. inclusion of social needs groups, work integration of the unemployed, or others. This clear focus is of central importance for DVET system development. It is essential that a dual vocational training system stands on stable feet and serves economic development first. In this sense, dual vocational training in Bulgaria was developed in a strategically meaningful way from the core and not from the (social) peripheries, as is often the case in development work due to divergent and diverse interest logics.

### **Importance of understanding dual VET as a public-private partnership with shared responsibilities and corresponding decision making-processes**

The most integral element of dual VET is the partnership between the state and the private sector (see [www.dcdualvet.org](http://www.dcdualvet.org) => basic principles of dual VET). In this sense, dual vocational training also implies a division of power and a shift in roles that can only succeed if the private sector wants and demands to assume this role, and if the state structures are ready to share responsibility and power and respond positively to the change dual VET implies for them. For this to succeed, a highly competent mediation was and is still necessary, which in this case the PMU and the BSCC have provided, but also leadership and willingness to compromise on the political and economic side, in order to approach each other and cooperate.

It was a wise move and a great strength of the project that it has succeeded in implementing this cooperative understanding in many respects. Particularly important are three elements to mention here: joint project development, the new ways of decision making, and a new approach to profile and curriculum development. First, the joint project development has laid a solid, participatory foundation for the realisation of the project. From the beginning on, all important actors were on board and involved. Second, the discussion and decision-making format developed within the framework of the project, the Forum that later became the Consultative Council. The role that the BSCC as an economic actor with high credibility has played and continues to play here cannot be overestimated; it is central to the success of the dual vocational training project in Bulgaria. And third, the new approach to curriculum development that builds on a cooperative culture and exchange between education system and economic actors, with the economic actors having a strong-hold on the key elements of the profiles.

### **Importance of the Swiss quality label**

The project was characterized by a skilful combination of Bulgarian leadership and Swiss expertise. The reference to the highly regarded Swiss success model of dual vocational education and training enabled a credible reform of vocational education and training in Bulgaria that was perceived as high quality. The good introduction of the PMU members to the principles of dual vocational training was just as important as the participation of the Bulgarian-Swiss Chamber of Commerce (BSCC) as a credible broker with a Swiss touch, and the role of the SFIVET as a Swiss competence centre for dual vocational training. All Bulgarian actors agreed that such an external example and continued involvement was key for the quality of the change processes and products, as well as for the sustained push and progress.

In this regard, it proved very important for the success of the project, that all relevant actors have been involved from the very beginning. The Bulgarian and the Swiss partners, namely also the SFIVET, have been involved in the elaboration of the project document with the definition of the scope, objectives and methodology of the project. This resulted in a technically and strategically well-designed project approach and setup.

### **Importance of the successful transfer, adaptation and development**

While the Swiss touch was highly important for the success of DOMINO, the transfer, adaptation and development of the approach in the Bulgarian context was an evenly important success factor. The PMU and all involved actors managed to make compromises and build on the existing structures, creating a unique model of Bulgarian DVET that allows, at least, initial DVET development. This transfer and contextualisation of the approach will need to be further developed, according to initial results from the ongoing testing and growth of the system. Also, the model primarily developed within the industrial sector might need adaptation in other sectors such as agriculture, social and health professions, and services. Continued flexibility and open-minded actors will again be important success factors for growing DVET into these fields too.

### **Importance of scale and outreach**

The original strategy of the project was a rather small but fine pilot project in a setup that was largely under control: few schools, few learners, few companies, limited geographical space. During the implementation phase, the project consciously and purposefully "swam with the wave" and achieved a much greater outreach than planned. This strategy was daring and involved many risks and compromises from a quality point of view. But it was essential to achieve the actual goal and to generate enough strength to drive the dual reform project forward with the strength and power of 170 large and medium-sized enterprises, 32 schools and 1600 learners. It was also thanks to this strategy that the pressure could be built up to push ahead with the necessary legislation and further reforms. Today, the project has reached a size that does not allow a backward view to appear as an option from the point of view of all partners.

### **Importance of leaving traces: competent people, documented approach, and new rules**

The project developed people within the system – from the VET department, NAVET, the VET schools and employers' associations – and outside the VET system – independent experts. Next to the PMU staff, these people have become real dual VET experts and can be considered an important resource for the further development of the dual VET system in Bulgaria. As the project has reached out far beyond the initially planned numbers, many more people have become exposed and acquainted with the approach, including many more private sector representatives. All together, they constitute a strong resource for the further development of DVET. The project also well documented its approach and the key instruments along the DVET value chain, in order to support the further development for those taking over after the project ends.

### **Importance of exposure to credible and high-quality Swiss dual VET expertise**

The confrontation with real Swiss vocational education and training in the form of study trips and the use of credible Swiss experts and, with SFIVET, an organisation at the heart of Swiss vocational education and training system, contributed significantly to the credibility and promotional power of the Swiss example for the development of the Bulgarian dual vocational education and training system.

## **5 Conclusions and recommendations**

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The DOMINO project has overachieved its objectives as set in the framework agreement between Switzerland and Bulgaria. A model for DVET has been created that has already become a DVET policy, and a new approach to cooperative DVET development has successfully been introduced in Bulgaria. Even though the project as such has reached its objectives, DVET development in Bulgaria is not yet done. For this major economic and educational reform project to be successfully and sustainably taken up by the education system and the economic and social actors in the country, there is still a long way to go. Therefore, our recommendations focus on public and private actors that will now have the demanding task to continue the highly successful pathway together, keeping the momentum high, further developing and innovating the system, and, at the same time, normalising the still quite new processes and approaches to dual VET in the country, making it a standard that feels normal and comfortable to all involved parties.

## 5.1 For the PMU and the Swiss partners (SDC, SFIVET)

**Recommendation 1:** Look into ways to install a technical post-project support. Check with the Bulgarian partners about setup, needs and funding options.

DOMINO is to be considered as one of the most successful DVET reform projects Switzerland has ever supported with a highly interesting cost-benefit ratio on project level. Given that DVET development is a foreign development priority for Switzerland and given that the Bulgarian partners request for and would appreciate continued support – which seems highly justified – we strongly recommend to the Swiss partners to reconsider their dis-engagement after the formal project just because of the formal ending of the Swiss Contribution. The Swiss pull-out risks to jeopardize the lasting success of this great project. Some small post-project support should therefore be installed, that could also be financed by the Bulgarian partners. It will most likely not take more than a small technical support with tentatively two missions a year covering strategic planning, quality monitoring and control, and some technical coaching over distance during the year.

If some funding – Bulgarian or Swiss or mixed – could be organized, the SFIVET as the established partner should be considered for covering this technical support.

If Bulgarian or Swiss public funding cannot be granted and therefore SFIVET services cannot be financed by a third party, we recommend to look into two options: a) the SFIVET should clarify if they would be willing to invest own resources into such a post-project support; and b) there might be other resources available in Switzerland that could be interested in engaging in some sort of support, namely research and international policy development partners that could cover the Bulgarian post-project and integrate it into their research and/or advisory activities in existing frameworks.

Finally, any such a setup would allow Switzerland to continuously learn, to gather some ex-post intervention development data (impact on the long run), and to transfer the Bulgarian experiences to other contexts in the region and beyond.

**Recommendation 2:** Develop guidelines/a handbook on the curriculum development approach, as well as on teachers and instructors training.

During the last two years following the recommendations of the mid-term report the PMU has documented the model and has prepared a set of practical guidelines in order to guarantee the sustainability of the model and the expansion of new professions and partnerships. There is still a need for a guidelines/a handbook on the curriculum development approach and teachers and instructors' trainings. Those are activities performed by DTEs and they can easily document them during the next two months, as the methodology for curriculum development has been recognised as one of the most valuable assets from the project work. In addition, the new project that is planned to start with EU financing is expected to support the new curriculum development, so such guidelines will be useful for the future activities of MES, schools and companies together with the support of the DTEs who are trained to facilitate such processes that are still new for VET schools and employers.

## 5.2 For Bulgarian public actors

Recommendation 3: Create the necessary capacities for DVET implementation and further development on central and regional level within the Ministry of Education.

The review has found that first steps for creating much needed additional resources for DVET with the MoE have been planned for (budget) but not yet realized. We therefore recommend to the MoE to create these needed resources and structures with high priority. We recommend to the MoE to consider the following:

- **Structure and resources for DVET within the MoE:**

Either create a separate DVET unit within the VET department of the MoE or create a special DVET development unit directly attached to the Minister or Council of Ministers for the next few years until it can be integrated into the VET department. The advantage of the solution with the special department or unit is that it gives strategic weight and visibility to the issue of DVET and gives direct access and reporting channel to the decision makers in the ministry. It also provides more room for maneuver and more flexibility as the special unit would not be fully integrated into the standard administrative apparatus. The advantage of a solution within the VET department is that the issue of DVET is fully integrated within the structures and that these structures can benefit from each other. We clearly recommend the special department solution for the cause of strategic DVET development in Bulgaria.

In either solution, the unit shall take over the functions, roles and responsibilities of the current PMU for DVET development in the country. To guarantee that the unit is well-staffed to accomplish its role as a motor and guarantor for the further quality development of DVET in the country, we recommend to the MoE to exclusively task the staff of this unit with strategic and operational DVET development, and not to burden them with any other tasks of the VET department or the MoE. We further recommend guaranteeing that the staff is qualified to fulfil its role, and to invest into the staff's competencies in DVET.

- **Consultative Council for DVET:**

We recommend convening regularly and not just on demand, with between 4 and 6 annual meetings. The agenda setting should be a transparent and participatory process open to all members.

- **Secretariat of the Consultative Council for DVET:**

The unit within the MoE shall act as a permanent secretariat of the Consultative Council for dVET and its Resource Working Group. We recommend to rely on a continued support from the BSCC for a period of transition until the unit is installed and up to the task, most likely for around two years and around 10 Council meetings.

- **Decentralised structures and resources:**

We recommend to the MoE to develop their capacities and resources on the regional level to further and sustainably develop DVET, as partly foreseen in the new national VET strategy. For rolling-out and scaling-up DVET, there needs to be a major investment into the regional offices for education to make sure they can fulfil their tasks (i.e. personnel training / capacity building, make them acquainted with the basis ideas of DVET, its instruments and processes, continued information sharing and learning, and namely also monitoring/quality assurance and oversight role). As already pointed out in the mid-term review, the oversight and quality assurance role of DVET is not yet solved. We clearly recommend

that this role should be assumed by a public actor and that the regional offices for education are best-suited to take over this role.

**Recommendation 4:** Continue to conceptualize DVET as a public-private partnership with shared responsibilities in steering, financing and delivery.

The cooperative culture of DVET is at the heart of this specific approach to VET. This requires a conscious change in behaviour on the part of all those involved, but first and foremost of the public administration as they are in specific a position of power. We therefore call on the public actors to continue to see dual vocational training as a public-private partnership and to continue to cultivate the corresponding culture of cooperation consciously and with vigour. We call on the administrative and political leaders involved in this process to provide clear leadership into this direction. We also call on the administrative staff and the public school management to and all other public actors involved to accept and really value the fact that companies are also financially investing into the professional development of youth, and help to create this new approach of a 'learning and training society' with all expertise and experience in training available within the public system, and do not fight it, but promote it as a unique chance for the youth of the country.

On very concrete terms, we recommend the public actors to

- **install a permanent inter-ministerial working group on dVET development** that promotes information flow and allows for solving common challenges at the administrative interfaces. This shall be an inter-governmental structure, not covering private partners.
- continue to run the an invest into the **Consultative Council for DVET** and support **information and PR campaigns** for DVET together with the private partners.
- **organise and finance experience exchange and technical support offers** for the VET schools, regional and local administrative structures (regional education offices, regional labour offices, and other) and other partners involved in further developing DVET in Bulgaria.

**Recommendation 5:** Consider DVET development as a national priority reform project for economic *and* education system development, and develop a separate national DVET strategy including a vision, objectives and key measures for the coming years together with the economic and social partners.

The development of a DVET subsystem in the educational offer is to be consider a major national economic and education reform project. This reform is designed to last for the medium to long term and it will be difficult to reap its full benefits in the long term before a development period of 10-15 years has elapsed, just as if one would plant a tree.

In order for such a long-term project to be successful, it needs a clear vision and a clear commitment from the actors involved on the long run. We therefore recommend formulating a separate national development strategy for dual VET with clear objectives and prioritized and time-bound

measures. That strategy should be formulated, steered, pushed and monitored by the Consultative Council for DVET in an inclusive and participatory way reflecting the public-private partnership principles for DVET.

We also call the MoE to continue to incentivize DVET development as it already does, namely by approving smaller classes, by opting for sectorally/profile mixed classes, and by adhering to the other recommendations.

**Recommendation 6: Develop institutional capacities for curricular reforms and development, teacher training and in-company mentors training (professional pedagogy and didactics).**

As already pointed out in the mid-term review, important functions are not performed in the Bulgarian system today. This strongly challenges the sustainability and quality of DVET development, but also of VET in general. We therefore recall our recommendation of the mid-term review to invest into systemic resources to cater for profile development and curricular reforms and development, for teacher training and in-company mentors training, for learning material and didactics development, and for examination.

We recommend pursuing one of the following two strategies:

- either the creation of one or several central, capable competence centres that would cover these functions;
- or to rely on private resources to cover these functions and to systematically and sustainably build cooperation with these structures – e.g. with framework contracts with a longer duration – to allow them to develop their services;

Both options allow for a quality development and for assuring a certain minimum level of quality services offered to the system. We explicitly recommend that the MoE refrains from pursuing a total free market policy in these sensitive areas and give educational actors complete freedom to decide from whom they should obtain services in these central functions as mentioned above, as such a strategy, as we partly have it today, risks compromising quality of services and promotes favoritism and therefore also corrupt practices.

**Recommendation 7: Define quality assurance for DVET and develop respective capacities.**

We would like to recall our recommendation from the mid-term evaluation and recommend the Ministry of Education to entrust the regional education authorities with the supervisory function for dual vocational training. We recommend taking respective legal action and to prepare and support the regional education offices in successfully assuming this important role.

**Recommendation 8: Invest in information and promotional campaigns for DVET with MoE, MES, MoL and together with the private sector.**

For successfully growing the system from a pilot to a relevant VET system element, the approach needs promotion from the top economic, administrative and political leaders as well as from those who realise DVET in practice. The recent Gallup sociological study on DVET has clearly shown

that the state of knowledge is still very limited in the country and even among the key actors in economy and society. Promotional and information campaigns should therefore target all groups involved, including internal communication (within public structures).

**Recommendation 9:** Develop dVET research capacities and generate solid knowledge on dVET implementation quality and outcomes (dVET observatory).

So far, little is known on the real effects of DVET as it has been conceptualised within the DOMINO project. The current model is most likely to be further developed and optimised, as well as it might need adaptation for implementing it in specific other economic sectors such as health, social professions or agriculture. For properly steering the further development of DVET in Bulgaria, one will need data on the costs of the system and on the outcomes for the system, the companies and the graduates. We therefore recommend to create an VET observatory (maybe through a national research promotion programme or a centre of excellence in VET research) that accompanies DVET and VET development in general with reliable and independent data and analysis.

### 5.3 For Bulgarian private actors

**Recommendation 10:** Jointly develop a strategic vision for the further development of dual VET and work together for implementing it.

The strategic and operational involvement of the private sector in all key processes of DVET is essential to ensure positive outcomes the system can offer in terms of properly qualified workforce that meets the demand of the economy. However, as described above, the private sector is still only involved in some processes and is also partially reluctant to reclaim the role he should fill-in. Most processes, platforms and instruments are still new, and the actors involved are not yet used to apply and properly follow them. The DVET system is by and large still too much dependent on the state actors, and no vision for the strategic long-term development is formulated. There is a clear risk that the system tends to fall back into the “old” functioning logic once the project intervention ends. We therefore recommend the business partners and their organisations to jointly develop a strategic vision and formulate clear priorities for the further development of DVET in Bulgaria. We recommend that they push the political and technical agenda based on this common understanding towards an even stronger role of the business sector in DVET, and that they insist on their involvement in all strategic development and implementation processes at eye-level, namely also in registration/recruitment of trainees/VET students, in profile definition, in implementation, in the development of support functions (teacher training, in-company trainers, etc.), and in assessment and certification.

**Recommendation 11:** Invest into information and promotional campaigns with Ministry of Education (MES) and Ministry of Economy (MoE) and Ministry of Labor and Social Policy (MLSP)

Even though DOMINO outperformed and, to a certain extent, reached impact at scale beyond its own boundaries, DVET today only covers a part of the VET schools, only a limited number of companies, and only some few thousand students. In order to grow DVET in Bulgaria, it now takes PR measures and a lot of information sharing on local and regional level, as also shown by

the recent sociological study on behalf of DOMINO. The same study and our findings reveal that there are enough good examples in the project to promote DVET. As we found during our interviews that all important public institutions such as MES, MoE and MLSP would like to promote dual education and have plans to do so, we recommend to jointly develop and implement these PR and information campaign measures.

**Recommendation 12: Create a motor/competence centre for dual VET including responsibilities for local or regional level DVET promotion and capacity development.**

One of the objectives of the DOMINO project was to create capacities and resources for the further development of DVET in Bulgaria. Capacities have been developed within the public and the private actors. The PMU was a motor of the DVET development and supported employers, especially also at a local level, to fulfil the legislative requirements and venture into DVET. With the end of the project, this service will not be longer available longer. Therefore, we recommend to the employers organizations to find an appropriate mechanism for continued support of their members in becoming firms offering apprenticeships. This solution should also play an important role in guaranteeing the quality of DVET and contribute to the further development of the DVET model (see also other recommendations). We found that certain initial ideas in this regard were discussed by the Consultative Council and the Resource working group and encourage the actors to join forces and work towards some sort of competence centre for DVET.

## Annexes

### Review programme on spot

The FR could be realised as planned. The table below is a summary of the evaluation procedure as agreed.

	<b>Franz Kehl</b>	<b>Gergana Andreeva</b>
<b>Before the mission</b>	<b>Interviews with:</b> <ul style="list-style-type: none"> <li>- Roland Python, SDC</li> <li>- Susanne Zumstein, SDC HQ</li> <li>- SFIVET Team (Erik Swars, Martin Holder, Thomas Meier)</li> </ul>	
<b>Sep 9, 2019</b>	<b>9:30h – PMU</b> Petya Evtimova, Team Leader Polina Zlatarska, Business Relations Expert Nikolay Georgiev, VET Expert Venue: MES, 7 Floor, Room 1. <b>11:00h – Tania Mihailova – Deputy Minister of Education</b> Experts from the VET Directorate of the Ministry will take part in the meeting. Venue: MES Room 503. <b>12:30-15:00h Visit to DOMINO Instructors training at Henry Ford VET school</b> Discussions with: <ul style="list-style-type: none"> <li>- Instructors from companies</li> <li>- VET school management</li> </ul> <b>15:30h Meeting with Swiss Ambassador Mrs. Muriel Berset-Kohen</b> Venue: Swiss Embassy, 6 Shipka street <b>16:30h - Day wrap-up with Gergana Andreeva</b>	
<b>Sep 10</b>	Meetings with representatives of state institutions <ul style="list-style-type: none"> <li>- Meeting with Stefka Limanska – Director of Professional qualification directorate, Ministry of Labor and Social Policy</li> <li>- Meeting with Zecho Zechev – Director of Economic Policy for Stimulating entities, Ministry of Economy</li> <li>- Meeting with Rositza Stelianova, representing the Association of Industrial Capital in Bulgaria</li> <li>- Lunch</li> </ul>	Meetings with members of the Consultative Council for VET: <ul style="list-style-type: none"> <li>- Meeting with Sofia Damianova – representative of Advantage Austria, Austrian DVET project in BG</li> <li>- Meeting with Rossen Simeonov – Director, Employment Agency Directorate</li> <li>- Meeting with Krasimira Brozig, Chief Secretary of National VET Agency</li> <li>- Meeting with Ognian Trayanov, Chairman of the Board of the Bulgarian IT Association</li> </ul>

	<ul style="list-style-type: none"> <li>- Meeting with a branch association active in DVET (Furniture industry)</li> <li>- Day wrap-up with Gergana</li> </ul>	
<b>Sep 11</b>	<p>“Hristo Botev” Vocational school of interior architecture and woodworking. Address: № 70 “Gladston” st. , Plovdiv</p> <p>Principal of DOMINO VET school for Furniture Production, Eng. Konstantin Kostadinov, and teacher-methodologist;</p> <p>Meeting with partner companies from the furniture industry</p> <ul style="list-style-type: none"> <li>• REDO</li> <li>• Dialog</li> <li>• Gyul MM</li> <li>• TED Mattresses</li> <li>• Shopo Valchanov</li> </ul>	
<b>Sep 12</b>	<p><b>9:30h</b> - Meeting with Vassil Radoynovski, Bulgarian-Swiss Chamber of Commerce Head of Secretariat</p> <p><b>10:30h</b> - Meeting with Dotcho Mihailov, DOMINO backstopper</p> <p><b>11:30h</b> - Meeting with DOMINO-trained DTEs experienced in DO</p> <p><b>14:00-16:00h</b> – Work together with the PMU on Lessons Learnt and Scenarios</p> <p>Venue for the afternoon: MES, 7 Floor, Room 4.</p>	
<b>Sep 13</b>	<p><b>10:00h</b> Conclusions and Recommendations session together with PMU</p> <p><b>11:30h Presenting and Discussion of the Preliminary Conclusions of the Final Review</b> to the SCO, National Coordination Unit (NCU), MES, PMU</p> <p>Venue: MES, Floor 7, Hall 2</p>	
<b>Sep 14ff</b>		<p>After the mission:</p> <p>Interview with Daniela Dimitrova, Swiss Contribution Office</p>

## Documentation

The MTR team bases its analysis on the following documents and resources:

### DOMINO documents:

- Framework Agreement Bulgarian-Swiss Cooperation Programme
- Thematic Fund Agreement as of 29 April 2015
- Project description, 29 April 2015
- Annual reports 2015 and 2016 and 2018 incl. Annexes, namely the amended budget as per 30.4.2018
- Endowment Fund Rules, incl. Annexes
- Examples of Curricula and syllabi developed:
  - Syllabus and Curriculum for Machine Technician, CNC Machines and Systems speciality
  - Curriculum cook
  - Qualification profile cook
- Dual VET practical guidelines, developed by DOMINO project, Authors: Petya Evtimova, Nicolay Georgiev, Polina Zlatarska, 2019
- Gallup Survey on Dual VET Perception in Bulgaria, 2019

### Documents of the Government of Bulgaria:

- Regulation № 1 from 8.9.2015 regarding the terms and conditions for delivering work-based learning (dual education)
- Order № RD 09-1269/08.09.2015, on Framework for Syllabi for DVET
- Strategy for development of vocational education and training in the republic of Bulgaria for the Period 2015-2020 (Full document in Bulgarian, short version in English)

### Other relevant documents:

- Education and Training Monitor 2018 Bulgaria. European Commission.
- European Framework for Quality and Effective Apprenticeships. EU Council Recommendation as of 15 March 2018 (2018/C 153/01)
- High-performance apprenticeships & work-based learning: 20 guiding principles. European Commission.
- SWOT Analysis of the WBL system in Bulgaria. New Models in Work-based Learning. Report, 2016.

Diverse material from Gergana Andreeva

## Evaluation instruments: generic interview guide

### Interview Guidelines

The interviews were held semi-structured, based on guiding questions as given below. The evaluation team adapted and added specific questions based on further insights gained on spot and selected the questions relevant for the interview partner.

<b>Interview partner:</b>	[fill in]
<b>Date / place:</b>	[fill in]
<b>Questions</b>	<b>Answers</b>
<b>Opening / Start</b>	
(a) What is <b>your role</b> in the VET system and the DOMINO project?	
(b) <b>What is particular</b> about DOMINO? How does it differ from other projects? What do you tell other people when talking about it? How do you characterize DOMINO?	
<b>Results</b>	
(c) To what extent are the <b>objectives of the project achieved</b> ? What is not yet achieved?	
(d) Please rate the below objectives as given in the project description on a scale from 1-10, 1 not achieved, 10 fully achieved.	Rating
a. New approach for curriculum development	
b. Testing the new approach in different schools, companies, professions	
c. Bulgarian capacities for dVET development and dissemination	
d. Conductive legislative framework for dVET	
e. Positive public image of dVET	
Do you want to make comments on your rating?	
(e) Does the DOMINO-“model” for dVET as it is now developed fit for Bulgaria? Where do you see room or a need for improvement?	
<b>Institutionalization, quality and role clarity / sustainability</b>	
(f) How do you assess the renewed <b>legal and strategic framework</b> on dVET and the labour code? Is it conducive for the further development of dVET? Do you see some obstacles of this level that need to be addressed? (e.g. teacher work contracts and development opportunities, school autonomy, or any other)	
(g) Is the regulation <b>stable enough</b> and widely agreed or rather contested? Are key dVET elements regulated on the level of the law or rather on the level of quickly changeable decrees/directives/byelaws?	

(h) How would you describe the <b>positions of the key actors</b> in the system as regards dVET? Drivers – neutral – restrainers What are their interests?	
(i) How do you assess the <b>embedding</b> of dual vocational education and training in the education and work integration system itself? Are there adequate further training offers for graduates? Do they find attractive jobs?	
(j) How do you assess the <b>resources</b> built for dVET implementation? Are these sufficient and is the quality good? a. Governance capacities/resources b. Profile development / curriculum development c. Teacher and in-company trainers training d. Learning material development e. School management and company support f. Quality control of learning situations / youth and labour protection measures g. Assessment and certification structures and procedures h. Any other	
(k) How are the resources developed (profiles, curricula and materials), DVET experts, expert trainers and teachers and mentors) and processes <b>hooked up</b> in the VET system?	
(l) How do you describe and perceive the <b>cooperation between the different involved actors</b> on the levels of governance (steering) and key operations (e.g. schools – companies – learners)? Are roles and responsibilities clear and widely shared or are there important elements to be clarified?	
(m) How does the model developed secure <b>quality VET delivery</b> at school and at company level? What is good practice and where do you see room for improvement? How could this be improved?	
(n) What <b>risks and potentials do you see regarding the sustainability</b> of the project and how likely is their occurrence? Who could bring about change in these issues, and how?	
<b>Lessons Learnt</b>	
(o) What <b>factors</b> were crucial for the achievement or failure to accomplish the project objectives so far (indicate strengths and weaknesses, supporting and hindering factors)?	
(p) What would you <b>recommend to colleagues</b> somewhere else in the region who want to engage in developing dVET?	
(q) What are major <b>“assets”</b> in the sense of resources, ideas, learnings, persons, approaches... developed within the project that should and will continue to play a positive role for dVET development in Bulgaria?	
(r) <b>What project achievements will remain</b> once the project has come to an end? What effects of DOMINO will be traceable in 15 years from now?	
<b>Options / Scenarios for the future</b>	

(s) What is your strategy to guarantee sustainability and scaling-up?	
(t) What should be done by whom to guarantee sustainability and scaling-up?	
(u) What is really needed to guarantee high-quality dVET implementation and a growing relevance and outreach of dVET in Bulgaria? What is the best way to put the DOMINO agenda forward after the project ends? What does it take to make this happen?	
(v) What scenarios do you see for further developing dVET in Bulgaria?	
(w) What is the best case and what does it take to make it happen? Why?	
(x) What is the worst case – and why - and how can the actors involved make sure this does not happen?	
Final remarks	
(y) Did we forget to ask about something? Do you want to share something else with us or come back to a question we asked earlier?	
<i>Share info on how the FR will continue and when results will be available where.</i>	