



Business Foundation for Education

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# DOMINO

## Mid-term review

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On behalf of:

**Swiss Agency for Development  
and Cooperation SDC,  
DOMINO project, and  
Swiss Federal Institute for Vocational  
Education and Training  
SFIVET**

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# 1 Aim and objectives of the mid-term review

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As set out in the terms of reference (ToR, see annex), the aim of the mid-term review (MTR) is to internally assess the work accomplished so far, to identify potential development perspectives for the future set-up, and steer the project towards optimal effects and sustainability within the given project duration.

The ToR identify several specific objectives, namely results, sustainability, quality, organisational set-up and process management, and financial management. Given the very limited time and resources available for the MTR, the reviewing team and the client agreed to put the main focus on institutionalisation and scaling-up. Since the project aims to develop a “model” for dual vocational education and training (DVET) in Bulgaria, the guiding questions of the MTR reflection process are two:

- First, is the suggested “model” good and is it (as adapted) good for Bulgaria?
- Second, what is to be done in order to sustainably integrate the dual-track principles developed under DOMINO into the Bulgarian VET system, and how can the project best support it in the two remaining years of the project?

Issues such as organisation, quality control and financial management – which are also specific objectives within the ToR – are from this point of view operational issues that depend on the answer to the strategic questions that guide the MTR. Therefore, they do not represent the main focus of the MTR and will be touched only where deemed necessary and with less intensity.

According to this understanding and the focus of the MTR, we understand the MTR as one step in a strategic reflection process that will finally lead to agreed and concrete activities to be specified by the project and its partners based on the MTR findings and recommendations.

## 2 Method

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

- Desk review of all relevant project documents (see list of sources in the annex)
- Interviews and meetings with project partners and stakeholders in Bulgaria and in Switzerland, with the PMU, the local backstopper, and with SDC both on the spot and in Switzerland (headquarters of SDC);
- Project visit (see programme in the annex);
- Half-day validation workshop with main stakeholders at the end of the project visit in Bulgaria (see participation list in the annex);
- Written reporting including feedback loop.

The MTR 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 in a position to formulate well-founded conclusions and recommendations.

## 3 Findings

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### 3.1 Project results

The main objectives of the DOMINO project are to create a replicable model for dual VET, and to build capacity for implementing dual VET in Bulgaria. The project follows a multi-sectoral approach and is not limited to one or a few professions; thus it answers current labour market needs by supplying many fast-growing economic sectors with a labour force.

The project started in 2015 with two professions in two schools and five partner companies. At the beginning, it involved 81 students in four classes. In 2016 three new professions were selected for the project, and training began in 14 schools. Well-known Bulgarian and international companies such as Nestlé Bulgaria, Festo Production and CEZ Bulgaria strongly recommended selecting these professions. In August 2016, the Bulgarian Minister of Education and Science (MES) approved the curricula developed for the first professions. In the second half of 2016, the project organised workshops to develop qualification profiles and curricula for three new professions – automotive mechatronics, industrial electronics and furniture production. The Bulgarian dual track experts led the workshops for the first time. They were supervised by the experts from the Swiss Federal Institute for Vocational Education and Training (SFIVET) and from the Bulgarian Ministry of Education and Science. The Bulgarian MES then approved the curricula for all eight professions covered by DOMINO. The corresponding standards are now the only valid standards for these eight professions, independently of how the training is organised and delivered.

In 2015, DVET was introduced in two cities – Sofia and Kazanlak. In the following year, nine new cities joined the project. Despite the fact that the Project Description specified that only three schools would join the project each year, 14 new schools started dual education in 2016. Thus, the project has now reached out to cover more than 11 cities, 16 schools and 63 companies, and the overall number of students participating in dual education had already risen to 425 in year two. The training firms offered permanent employment to as many as 90% of the first graduates of the first batch of fast-track offers (starting dual VET in year 11).

Owing to increased demand from employers and the willingness of schools to include more professions, the project selected and is implementing three professions per year instead of the two that were initially planned. This leads to higher outreach than was initially planned. The fact that the project reacted to the opportunities and changed the initial planning (which foresaw a slower build-up) and thus grew much faster with higher outreach, was, in our view, the right approach. At this stage, the project has more ambassadors in more cities, and thus a greater potential to influence changes in the educational system. Moreover, the project has more good practices to share and more knowledge bearers who can share and spread the word and the practice. However, the second half of the project will need to fully document the model. This will support sustainability and will be very useful for new professions and partnerships.

Of course, this rapid growth has had impacts on some of the activities and strategic approaches, and some have had to be postponed until the coming two years. The high outreach and geographical coverage remains a major challenge to the project, since project resources have remained the same as initially planned.

At this stage all the qualification profiles and curricula for the professions included as well as the teachers' and instructors' training courses have been developed with the support of the Swiss Federal Institute for Vocational Education and Training (SFIVET). Solid data on the quality and effects of these training courses are lacking. According to the teachers interviewed, the training

courses were good and highly appreciated, but the topics covered did not fully meet their expectations regarding their role change in DVET, and they did not really build on the capacities these experienced teachers brought with them. Duration and missing follow-up and coaching support also met with criticism among the teachers and instructors we interviewed. The instructor training is organised in one block of five days and does not have any follow-up. The teacher training is organised in two shorter blocks of 2-3 days, with a testing phase in between. The translation that was needed was also a challenge in this training. The PMU and SFIVET agree that the critical capacity of the master trainers for teacher and instructor training is not yet developed. Opinions differ on whether the selected dual track experts (DTEs) who are enabled to conduct standard and curriculum development workshops can also cover teacher and instructor training.

The concern about the missing coaching and follow-up of training inputs raised by teachers and instructors is shared by SFIVET and the DTEs. While the project does not foresee such a system, some sort of peer support and coaching on the ground needs to be established in order to guarantee the quality of the training and the implementation of the DVET model (see also below).

A very positive sign of the sustainability and attractiveness of the DVET model that has been introduced is the fact that some schools we visited reported that they had started developing new DVET offers based on the model and their experience with it, using their own resources. The project supported these schools by giving them the documentation developed and provided ongoing consultation to them.

The interviewees also found good public awareness, especially at the local level but also at the national level, regarding increasing the attractiveness of VET in Bulgaria as such. All the schools taking part in the project have declared that the fact that they offer dual classes, which pupils and their parents would like to be accepted for, also attracts pupils to other classes. In other words, the schools in effect use DVET for marketing purposes.

### **3.2 Sustainability or systems integration of the DVET model developed**

The project approach is to set up a *'model'* for replication and scaling-up. It applies a mixed approach with bottom-up changes, aiming to test the case on the ground, and top-down elements using a high-level steering group and forums including decision-makers in order to create a receptive environment for dual VET.

The project description makes a number of statements on sustainability, as regards both measures taken and strategic considerations. All these considerations are fair and valid. Most importantly, the project document states: "The sustainability of the project stems from its very objective to support the implementation of a dual-track educational policy, initiated by the government of Bulgaria itself. Therefore at objective level the sustainability of the project will depend on the commitment of current and future Bulgarian governments to sustain and scale up the introduction of the DVET system in the country."

The new Bulgarian government put education and DVET high on the agenda in its new four-year programme. Based on our interviews, we can also confirm that DVET is strongly supported by private sector and educational actors. All decision-makers and high-level officials interviewed in the three ministries concerned (MES, Ministry of Economy, Ministry of Labour and Social Policy) confirmed their strong will to act and implement DVET sustainably. Therefore, we can conclude that the DVET reform continues to benefit from highly favourable conditions to be sustainably integrated and to become an important component of the overall VET offer in Bulgaria. After two years of successful implementation, the reform process is outperforming the initial plan, even

though Bulgaria has seen a period of political instability and regular changes of power, especially at the MES. However, the staff at technical level has remained unchanged and shows strong support for the reform, and we have found evidence of replication outside the project coverage and without any major external support, as stated above.

Yet so far we have not been able to get hold of a clearly formulated idea of the full *'model'* to be developed from a VET systems perspective. There is no vision of the future Bulgarian DVET system as such, but so far only a limited model that functions on a project basis. The role of the DVET stream in the overall VET offer and secondary education as such remains unclear. How does the model fit into the current system? Who will cover what functions in the future? What are the roles of the state and the private sector and how is their cooperation organised on the national and local levels? What are the legal, financial and organisational conditions and how can the actors meet them? How can the DVET system be organised without structural external project support? Finally, the costs of scaling up the model are not yet known, and neither are the benefits or savings.

The leading ministry, the MES, expressed its gratitude and satisfaction with the project's progress and the model developed. Nevertheless, the ministry also indicated that it plans to continue the reform process with significant project support, making EU structural funds available for continued activity. It is well understood and broadly shared that the introduction of DVET as a major educational reform will not be concluded within a four-year project cycle. DOMINO never aimed to do this. Further support for the reform triggered by the Bulgarian government and supported by DOMINO is highly welcome and needed. However not all resources, structures, functions and tasks needed for DVET and not all functions currently covered by DOMINO should continue on a project basis. Many elements of the model developed by DOMINO should and could easily become part of the VET system by the end of the DOMINO project if – but only if – the state and the private sector actors involved now set the course, take decisions, deploy resources and initiate the development needed. They should create or designate the docking-stations needed for the project to hand over its resources, and develop the capacities of these actors to fulfil their role once the project comes to its end. The legal basis for doing so is available (VET Act and dual VET regulation) and allows for immediate action.

Coordination mechanisms and platforms for dual VET are most important in this regard, since DVET is a public-private partnership. The state cannot run, steer and finance the system alone; eventually DVET also means power sharing and the taking over of responsibility by the private sector. Such cooperative systems need exchange and coordination mechanisms and platforms in order to work successfully. For the time being, these are the Forum, the SteeCom (however without the private sector involved), the National Consultative Group on VET (NCG) and the PMU. Contrary to what the project document states on sustainability, these are project based and project dependent, and the Forum is about to end (last session planned in autumn 2017). The actors involved have not come up with a solution as to how these crucial functions shall be continued and covered in the future. When developing a solution, the actors involved should bear in mind that such platforms and cooperative functions should not be fully integrated into state structures, but remain organised in a way that guarantees the involvement of the private sector as an equal partner in DVET. The NAVET could serve as the body to take over these roles and responsibilities, since it acts as a joint body at the national level (as per the VET Act, chapter 6, section I, Art. 41ff).

Cooperation mechanisms are important at the local level too, where private and public actors are not used to cooperating in the way needed for DVET. The developers of the DOMINO project have identified this challenge and have suggested the creation of so-called operational partnership groups (OPGs) at local level to serve as cooperation platforms. Since the project grew faster

than planned in terms of outreach and numbers, but not in terms of resources, it was not possible to set up and moderate such local platforms actively. Findings from the field reveal that in some cases municipalities, schools and local companies run such platforms on their own initiative. They are usually run by schools, which integrate them into their activities reaching out to students, parents and companies. The project supports such activities within the realm of possibility. Developing a model and guide for OPGs based on existing good practice, and developing local capacities to support such processes (e.g. with DTEs) would be an important asset for the project.

The model as such is another important aspect of sustainability. The DVET model developed accepts the fact that VET students should receive a state diploma allowing them to continue their studies after their initial VET training. Together with the restrictions due to the labour code, the inclusion of the general school leaving certificate limits the time students can spend in companies. Therefore, the model offers relevant training at work only in the third and fourth years, when the students spend 60% of their learning time, i.e. three out of five days, in companies. Over the course of four years, the total amount of learning time spent at the workplace adds up to only 35%. This compromise is well understood and accepted within the Bulgarian context. From a DVET perspective, though, the total time spent in companies is too limited both in time span (basically only the last two years offer relevant training in-company training) and in total amount of working and learning hours at the disposal of the companies. First, socialisation within the firm takes time and is important for creating a social tie and loyalty, which reduces poaching. Experience teaches that this takes at least two years of working and learning together. While the model is still compliant with this requirement, it is on the short side. The one day per week students spend in companies in year two of the training is certainly a positive element from this point of view. Second, DVET needs business engagement. The businesses will only opt for DVET in the long run and invest in training their own workforce if the system pays off considering all costs and benefits. Again, experience and studies show that a functioning DVET system should not fall short of at least 50% of the learning time offered at the work place.<sup>1</sup> Representatives of the private sector raised this issue at the debriefing session on 2<sup>nd</sup> June and requested the actors involved to develop the model further in this direction, e.g. increasing the time spent at the workplace in years 9 and 10 of schooling. We recommend developing the model further in this direction.

Last but not least, the sustainability of a model can be guaranteed by people, by structures, by describing the model, and by securing quality. The project supports the professional development of a group of highly qualified people – PMU and Forum partners, DTEs, teachers and instructors – and builds on an even larger group of highly professional people in Bulgaria, such as school managers and company HR staff. Also, it relies on structures still to be developed or to be prepared for taking over. Describing the model developed properly would add greatly to its sustainability. So far, the project has only described the standard and curriculum development procedures, although these are not yet publicly available. The project can improve sustainability considerably by putting the other resources it has developed on paper too, and by providing concrete input into systems development/systems visioning. Quality issues are highly important for sustainability.

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<sup>1</sup> See DC dVET (2016), *Dual Vocational Education and Training in Development Cooperation, Mutual Understanding and Principles*; and Samuel Muehlemann and Stefan C. Wolter (2013), *Return on investment of apprenticeship systems for enterprises: Evidence from cost-benefit analyses*. EENEE Analytical Report No. 16 Prepared for the European Commission.

### 3.3 Quality of DVET delivery

The project deals with important quality inputs from a VET systems perspective: professional profiles, curricula/syllabi, training and learning materials, teacher and instructor training as well as training infrastructure. It covers quality VET delivery quite comprehensively. The two main promises made by the DVET model developed and the comprehensive approach are: a) young people will be better trained and obtain better-paid jobs; and b) the companies will receive a higher-performing workforce, which will support them in becoming more productive and competitive. However, implementation is key, as the approach is an idea only. DOMINO can meet the promise of DVET and create broader social acceptance of DVET only if it can secure quality implementation.

Quality was a major issue, both positive and critical, raised by many partners during our review. We want to cover here key quality inputs such as standards and curricula, teacher training, learning material and teaching aids, the in-company training dimension, company prerequisites for training and quality assurance/oversight, as well as giving some thought to DVET as a business case.

First, DOMINO invests heavily in capacity development in important quality dimensions like teacher and instructor training, standards and curricula, and final examinations (upcoming). For the first time, Bulgarian DTEs led the workshops for curricula development in 2016, supervised by the experts from SFIVET and MES. According to the DTEs, the methodology transferred from SFIVET is fully applicable for VET in Bulgaria, and according to SFIVET experts the DTEs are well-prepared to fulfil this role.

As mentioned before, the situation differs when it comes to teacher and instructor training, and here the assessment also differs among the partners involved. The Bulgarian system lacks resources in VET pedagogy and VET didactics, which results in difficulties in linking the project with the system. As the project foresees the creation of capacities in this regard, it can only focus on persons, but will face difficulties in sustainably rooting the competencies. So far, the project can only offer single inputs rather than a systematic approach, a fact and approach that met with some criticism within the schools and companies involved, who ask for more continuous support, coaching and follow-up. Building a ToT and instructors' training system and Bulgarian capacities in professional pedagogy and didactics will be vital for the quality of DVET in the long run.

School principals, instructors and teachers paid special attention to the materials developed. At the same time, they shared their need for more and better teaching aids. So far, there has been very little effort to create up-to-date teaching aids, while everybody knows and agrees that this is key. Material development was briefly touched on in the ToT workshops. However, many Bulgarian schools, including many of those involved in the project, continue to work with very old outdated materials and infrastructure. They will therefore not be able to comply fully with the new curricula and standards. The project should allocate resources to address these problems over the next two years, and try to create local capacities, by supporting local initiatives by engaged teachers and mentors, and by supporting peer-to-peer networks and sharing platforms.

When it comes to in-company training, one has to differentiate two important issues: first, selecting the good companies, and second supporting them in doing good training.

Principals and other interview partners raised the issue of employer selection for DVET. At this stage, during the pilot phase, the issue was not considered a major problem, since cooperation only took place with highly engaged pioneers. However, for DVET to expand, the number of employers needs to increase. Therefore, the MES should establish a quality regime including registration for employers, opting however for lean requirements in order not to reduce the readiness

of companies to train. Experience from Switzerland suggests a very lean approach in order not to reduce readiness to train. Key elements are: registry and oversight by the MES, and that companies work in the relevant sector and hire qualified personnel and trained mentors.<sup>2</sup> There should be generic minimum rules for all professions/branches regulated at ordinance or decree level, and specific rules for specific branches, reacting to the skills level and the specific contextual factors of a profession.

Second, in-company training is central to the learning success of students, as they spend a significant amount of time there, and as the company wants them to learn and work. In-company training in Bulgaria is still in at a very early stage of development since only limited number of pupils attend it. The employers interviewed, as well as the SFIVET experts, expressed their concern that no in-company curricula/syllabi have been developed with project support so far, while such plans are very important for in-company mentors and therefore for successful DVET. Due to the small scale of the project and the high engagement from all sides, schools and employers coordinated this process on their own, and developed such plans. The project should put more effort into developing the quality of in-company training over the next two years, capitalising on the work done so far on the spot, by disseminating these learnings and by supporting all initiatives from companies and schools in this regard. Additionally, a mentoring training programme should be introduced based on the work done by DOMINO. The training offer for mentors should also include continuing education options for upgrading profession-specific, pedagogical and didactic skills. Such programmes should be compulsory after a certain period. The project has to work on this issue over the next two years, though it is beyond its remit to develop and run such a system with its own resources.

An important concern that was raised regarding quality deals with the understanding of DVET. As mentioned above and as repeatedly raised in many interviews, the private sector should be given more power and more responsibility in DVET in order both to support schools in delivering high-quality and up-to-date education, and to have more business incentives to invest resources in it. To introduce DVET successfully, employers should understand DVET as a business case: an engagement in DVET is interesting if the investment in training young professionals pays off in the end, reducing salary and recruitment costs and increasing quality and therefore productivity and competitiveness in the medium and long run. This is a decisive factor for making DVET a real option for the Bulgarian training system, and it is only possible if young people already do real productive work while they are in training. So far, there is only very limited information available on this quality dimension. The employers interviewed stated that their incentive to join the project was mainly corporate social responsibility rather than financial profit or strategic investment in workforce development. However, there have been other voices who understand DVET as a strategic investment that should pay off. During the final presentation a business representative raised this issue and suggested that the model should be further developed in this direction by giving companies the leading role in trainee selection and by giving trainees even more time in companies than was foreseen by the model, as mentioned above. The CSR motivation is, however, not surprising because of the lack of previous experience in the country, and CSR was in many cases a good entry point, opening doors for the project that would otherwise have remained closed. Most probably, employers will quickly detect their financial interest in DVET and will require from the government more know-how support instead of financial or tax incentives.

Finally, yet importantly, the final examination is highly important for the quality of DVET. Their requirements largely define the level of quality, since training providers, public or private, orient

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<sup>2</sup> For details refer to *Verordnung über die Berufsbildung*, SR 412.101, available within the PMU in English.

their efforts towards what is requested in the final exam. We do not know whether state requirements have been changed in all the professions DOMINO works with. The project does not cover this important step consistently, and has not yet started to work on the final exams. It is planned to work on final assessments starting in early 2018, covering the exams in 2019. Final examinations are one important moment where the private sector should be strongly involved, in defining the requirements, in assessment and in certification. All actors in Bulgaria agreed that this is what they aim for, and that parts of the examination shall be held at the workplace. This will be very important for the consistency of the reform, and for the acceptance the graduates and the profiles find in the world of work.

### **3.4 Organisational and financial aspects**

The project set-up is quite specific, with a project management unit physically integrated into the Ministry of Education, steered by a Swiss interministerial steering group and run by only three people who act countrywide and who are engaged by the Swiss embassy to Bulgaria, adding a special Swiss touch to it. The unit's location in the MES's premises as well as the highly qualified staff with an MES background are highly important for the project and are appreciated by all actors involved. They give authority and credibility to the project and allow it to create the necessary links, greatly supporting sustainability, since the staff is familiar with administrative procedures and thinking. Yet the PMU is not fully integrated into the ministry. This enables it to act independently and to be perceived as such. Non-public actors confirmed to us that this aspect allows the PMU to act as a neutral and broadly accepted, credible partner for DVET which is able to act quickly and according to needs.

While this set-up is positive overall and adds greatly to the successful implementation of the DOMINO project, it comes with some challenges. The employment contracts based on standard Swiss local staff regulations limit the capacity to act of the PMU and the team leader in particular, creating unnecessary administrative procedures both for the project and for SDC. Delegation of a well-justified degree of financial and decision-making power combined with reasonable accountability mechanisms seem more appropriate, given the set-up and the qualification of the team leader.

The fact that the project operates countrywide with a considerable number of schools, companies, government and private sector partners while having only three central PMU staff is remarkable. Even though the project receives strong operational support from SDC, BSCC and SFIVET, it remains the central body coordinating and implementing all project activities. As elaborated above, the increased outreach due to opportunities and higher demand challenges the project, since project resources have not been increased accordingly. The greater outreach is therefore secured by an exceptional engagement of the PMU, by high efficiency, but also by accepting that the project cannot follow up on all project activities with the initially planned accuracy, potentially resulting in some quality risks and limited time and resources to take strategic action to ensure sustainability.

As regarding the steering of the project, it seems appropriate to include two private sector representative in the steering committee. This would support strategic action for sustainability, since DVET is about cooperation and power sharing between the state and the private sector.

Last but not least, the role of SFIVET needs clarification in two dimensions: first, SFIVET is an observer on the steering committee but attended the meetings only once (first meeting), was not invited later on and not included in the communication and documentation of the SteeCom. SFIVET would obviously prefer to sit on the steering committee. The review team, however, gives priority to including private sector representatives on the SteeCom. Yet SFIVET, as an important

partner in the project, should be involved more closely in project planning and strategic thinking, especially when it comes to capacity building in the dimensions they cover. Second, the relation between SFIVET, SDC and the PMU needs clarification. Since SDC directly contracts SFIVET, SFIVET reports directly to SDC. Based on our findings, there are some hiccups in this communication and contractual triangle, leading to some misunderstandings and discontent on all sides. We suggest proactively clarifying these issues to benefit future collaboration.

## 4 Conclusions and recommendations

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The project overachieved its outreach during the first two years by almost doubling the number of professions and schools covered. This approach answered the demand and current labour market needs. The next two years have to focus on documenting the processes and investing in effective quality assurance measures that will be good enough to guarantee the quality of DVET and at the same time lean enough not to discourage schools and employers from participating in it.

### 4.1 For the PMU

**Recommendation 1:** Publicly available guides on the DVET model, targeted at the actors involved.

The project has just launched a new website that can become a great depository for all the documents developed during the project. Many of the people interviewed expressed their desire to have easy access to user-friendly guides on DVET. Such guides are not easy to develop but the project can use the next two years to prepare documentation that will guarantee sustainability and will be used for new professions and partnerships.

**Recommendation 2:** Quality in the workplace: Continued support for instructors and mentors including coaching, peer networks and well-executed in-company training syllabi.

Owing to its rapid expansion, the project has focused its efforts mostly on supporting schools during the first two years, but the quality of in-company training is also a key factor for the successful implementation of DVET in Bulgaria. During the next two years, the project can work more closely with employers. The initial efforts to create a registry and training for mentors and instructors have to be continued. At the same time, additional efforts to support instructors and mentors by creating capacity for peer exchange and coaching will add value to in-company training. Employer organisations can undertake such responsibilities in the future. The MES has to create and maintain an employers' register and lean criteria for their registration in order to guarantee the security and quality of in-company training.

**Recommendation 3:** Strategic planning: Commonly agreed and binding planning of handover.

The new governmental programme for the next four years declares education as a strategic goal and dual education as one of the measures to be taken. The document includes the following text: "Development of VET education in partnership with the employers through active implementation of dual education." Everyone agrees that the PMU has been the motor of the development of DVET in Bulgaria over the past two years. The next two years of the project have to be planned as time for transferring know-how from the PMU to the MES and other stakeholders in order for the VET education priority set by the new governmental programme to be realised.

**Recommendation 4: Capacity development: Institutions, local actors and local coordination, training of trainers and instructor training.**

Capacity development at local and national levels has to continue in order to support the sustainability of DVET in Bulgaria. At the same time, additional efforts have to be made with local actors (schools, employers, authorities) in order to improve the coordination between them and to increase the promotion of DVET. Such efforts will increase the opportunities for DVET and make it available to more pupils. Capacity development efforts have to include activities to improve knowledge exchange and support among teachers, mentors and instructors through peer networks and coaching.

**Recommendation 5: Learning material: Support the development and the sharing of educational aids.**

A well-functioning DVET model requires up-to-date educational aids. Such materials have to be developed by instructors and teachers and the project has to support this process over the next two years. It will be great if the project suggests a way for peer sharing and continuously updating such educational aids by developing a virtual space for them. Such efforts will add value to the efforts to develop publicly available materials for targeted actors.

**Recommendation 6: Increase awareness and advocacy on national and local levels involving project partners.**

As DVET is not a completely new concept for Bulgarian society, especially for those who are over 50 years old, the PMU has to continue the great efforts so far made to increase awareness. Such activities have to be organised together with other project partners and targeted at pupils and their parents. Such efforts will address the still too low participation of 16-18 year-olds in upper secondary education. However, the DVET system should not be introduced as an option for the underprivileged and poor, resulting in some sort of second-best programme with a social touch. DVET should rather continue to focus on a high-quality and medium-to-high-skilled workforce, making a real difference to productivity and generating a competitiveness gain for companies. The advocacy of project partners has been great so far, but the next two years have to be the time for real action to establish and scale up the model in order to create a conducive environment for DVET in Bulgaria.

## 4.2 For other actors

**Recommendation 7: DVET as a system of joint responsibility between public and private actors: The private sector should act and be seen as an *equal* partner. Therefore, the coordination and consultation functions of the Forum should be continued and the PMU's function as a driver of DVET should find a place in the system with some independence and links to the private sector.**

A dual VET *system* relies on the joint responsibility of the public and private actors involved. In a state-run system such as exists in Bulgaria, this means systematically involving the private sector, and eventually also sharing power. The systematic involvement of the private sector in all DVET processes ensures that the professional competencies obtained during training meet the demands of the economy. In the longer run, it means also that companies are in the driving seat when it comes to recruitment – what professions, *who and* how many – which leads to a system that also quantitatively meets the demands of the economy better than today. For such a system to work properly, coordination mechanisms have to be in place. The project introduced the

Forum and the PMU as two successful operating platforms and actors fulfilling this function. It will be important for the future of DVET in Bulgaria to assign these tasks to a body that is neither state nor private sector only but which is able to offer the platform needed for the collective steering and decision-making of DVET. Both the credibility and the sustainability of the newly-developed system will depend heavily on how the Bulgarian actors solve this key issue. As the NAVET is a tripartite body (government, recognised employers' associations and trade unions) as per its composition and definition, it might take over an important role in DVET. However, DVET needs similar structures and processes on the regional and local levels.

**Recommendation 8: Regulating DVET properly: Implement the legislative and regulatory recommendations of the Forum.**

Introducing DVET into the Bulgarian education system is an innovation. The new law on DVET strongly supports this process. However, this is not enough: The reform project identified and documented a number of key regulatory challenges to making DVET a serious option for the many and for allowing the pilot model to become an important element of Bulgarian VET provision. These regulatory bottlenecks have been identified jointly in the Forum sessions and have strong and unanimous support from all actors involved in DVET. It is now up to the government of Bulgaria and the parliament to act in favour of DVET. Immediate action is possible as the legal framework allows for it, offering a conducive framework for DVET implementation. The analysis of the legal DVET framework foreseen under DOMINO II should also focus on how to strengthen the role of private actors in governing, financing and delivering DVET.

**Recommendation 9: Strategic planning and preparation for scaling-up: Commonly agreed and binding handover planning and system visioning for a DVET system operating under regular, non-project conditions. Public and private actors are to create or designate institutional structures to fully implement DVET and plan resources accordingly.**

For the project to hand over its model and resources properly it has to know who will take over. As of today, however, the public and private actors involved lack a DVET system vision. So far, the project logic is dominant and even though all parties agreed in the project agreement to do what is needed to implement and take over the model developed, and even though there is a serious public interest and will to do so, the necessary preparations have so far not been made. It will be important to jointly agree on how the DVET system should operate as a regular system and not under project conditions, and to take all measures and decisions necessary to do so from the public and private sides. The project can support this process by providing input on what a future system could look like and acting as a moderator and catalyst of the processes necessary.

**Recommendation 10: Define a *lean* system for quality assurance for DVET and develop relevant capacities.**

The DVET system implies that trainees/apprentices spend a considerable amount of their training in companies; the world of work becomes the second learning site. As for the first learning site, the school, the regulators should make sure that the quality of the training the young trainees follow is of good quality. It was acceptable to somewhat neglect this dimension under the current pilot-project conditions, since the innovators and spearheads involved in the pilots are usually well-selected and highly motivated to do a good job. Yet, for scaling-up the DVET system a *lean* quality control system for VET provision at the workplace is crucial for guaranteeing the well-being of the youngsters trained and therefore also for the social acceptance of the

DVET approach as such. The planned register (to be implemented under DOMINO II according to MES VET directorate) and licence to train is one important measure. The state as a non-partisan actor should run this register, since private actors such as employers' associations might face role conflicts. The NAVET might run the registry since it is responsible for quality (VET Act Art. 42, paragraph 2a). The licence to train should remain lean; otherwise, the readiness of firms to train is at stake. In addition to registers, and similar to school, it will be most important to support the actors implementing dual VET at company sites, namely instructors, by offering them initial and further training and a system of P2P exchange/community of practitioners.

**Recommendation 11: Develop institutional capacities in professional pedagogy and didactics.**

As stated in the paragraph above, DVET is about learning at work and at school. Both learning at work and the intersection of learning at work and at school are specific to DVET, and demand specific pedagogical and didactical competencies both at schools and at companies. The project offers small inputs in this regard – teacher and instructor training – but it cannot be a substitute for the missing capacities in the Bulgarian education system. As stated in the findings above, all actors agreed that there is not a competent actor to develop such competencies on a system level. We strongly recommend developing a competence centre for teacher and instructor training in professional pedagogy and didactics in order to guarantee high-quality initial and continuous training for future DVET actors in Bulgaria.

## 5 Final remarks and observations

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We want to thank all partners involved in this MTR. All project stakeholders, and especially the project management unit (PMU), strongly supported the process and engaged openly in exchange with the review team.

The high level of public interest and the strong support dual VET receives from all actors involved in vocational education and training on all levels, together with the economic opportunities and high economic demand for well-trained professionals, creates a highly fertile environment for successfully introducing DVET in Bulgaria as a major pathway to success. The dedication of the actors we met to creating a Bulgarian DVET system was impressive, and it is only a small step now to make it a reality. The regulatory framework is conducive for moving forward, while the project structures will continue to act as a change maker together with the Bulgarian decision makers and those driving the system and change on ground level. The Swiss support for this major reform process is highly appreciated and remains important.

## Annexes

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### Programme

The MTR time plan defined in the ToR will be realised as foreseen. There is no delay in the programme and no other relevant remarks on the programme. The table below is a summary of the evaluation procedure as agreed.

|                    | <b>Franz Kehl</b>   | <b>Gergana Andreeva</b>   |
|--------------------|---|---|
| <b>19 May 2017</b> | 9-10 Phone interview with SDC <ul style="list-style-type: none"> <li>- Roland Python, Head of Swiss Contribution Office Bucharest</li> <li>- Sophie Delessert, programme manager Bulgaria</li> </ul>                    |   |
| <b>22 May 2017</b> | Inception report  |   |
| <b>23 May 2017</b> | 14-16 Focus Group Discussion with involved <b>SFIVET team</b> in Zollikofen <ul style="list-style-type: none"> <li>- Erik Swars</li> <li>- Hanspeter Tanner</li> <li>- Martin Holder</li> <li>- Mergim Jahiu</li> </ul> | <b>Morning</b><br>Meeting with at least two of the DVET-Experts who conducted the workshops for the new professions developed in 2016   |
|                    |   | <b>Afternoon</b><br>Meetings with Stefka Limanska – Director of Professional qualification directorate, Ministry of Labour and Social Policy<br><br>Meeting with Zecho Zechev – Director of Economic Policy for Stimulating entities, Ministry of Economy       |
| <b>25 May</b>      |   | <b>Morning</b><br>Travel to Kazanlak<br><br>Meeting with the teachers and principal of Ivan Hadjigenov VET School<br><br><b>Afternoon</b><br>Meeting with the management of Arsenal JSC<br>Meeting with the management of M+S Hydraulic<br>Travel back to Sofia |
| <b>26 May</b>      |   | <b>Morning</b><br>Travel to Pernik  |

|                           |   |   |
|---------------------------|---|---|
|                           |   | <p>Meeting with the teachers and principal of St Ivan Rilski VET school for textile and tourism</p> <p><b>Afternoon</b></p> <p>Travel back to Sofia</p> <p>Meeting Hilton Sofia HR Manager</p> <p>Meeting with Chief of Villa Park Victoria</p> |
| <b>29 May 2017</b>        |   |   |
| Morning                   | 12.15 Arrival and pick-up at Sofia Airport, LH 1702 from Munich   |   |
| Afternoon,<br>15:30-17:30 | <p>Briefing and workshop with the <b>Project Management Unit (PMU)</b></p> <ul style="list-style-type: none"> <li>- Petya Evtimova, Team Leader</li> <li>- Polina Zlatarska, Expert Business Services, PMU</li> <li>- Nikolay Georgiev, VET Expert, PMU</li> </ul> <p>Issues:</p> <ul style="list-style-type: none"> <li>- Programme of the week/organisation</li> <li>- MTR interview</li> </ul> <p><u>Venue:</u> MES, Floor 7, Hall 2</p> |   |
| <b>30 May 2017</b>        |   |   |
| Morning                   | <p>10-12 DOMINO <b>Steering Committee</b> Meeting</p> <p><u>Venue:</u> MES, Floor 7, Hall 2</p>   |   |
| Afternoon                 | <p>14-16 Meeting with Ms. <b>Maria Todorova, Director of VET Directorate</b>, Ministry of Education and Science (MES)</p> <p>Main issues:</p> <ul style="list-style-type: none"> <li>- legal and financial sustainability</li> <li>- VET systems functions needed for dual VET</li> <li>- Further development/outlook</li> </ul> <p><u>Venue:</u> MES, Floor 7, Hall 2</p>  |   |
|                           | <p>16:00-17:00 Meeting with Mr. <b>Dotcho Mihailov</b> – Bulgarian backstopper</p> <ul style="list-style-type: none"> <li>- Project setup / SWOT</li> <li>- VET systems development</li> </ul>  |   |

|                    |  |   |
|--------------------|--|---|
|                    | <u>Venue:</u> MES, Floor 7, Hall 2   |   |
| <b>31 May 2017</b> |  |   |
| Morning            | 10:00-12:00 Visit to <b>Henri Ford VET School</b> in Sofia ( <b>Gas Technicians</b> ) and Meeting with the principal and teachers <ul style="list-style-type: none"> <li>- Role change</li> <li>- Trainings, Curricula and Learning Material</li> <li>- Cooperation with Businesses</li> </ul>   |   |
| Afternoon          | 14:00-16:00 Visit to <b>Overgas Company</b> and meeting with students and instructors <ul style="list-style-type: none"> <li>- Motivation for engagement, also financial</li> <li>- Role of in-company instructor</li> <li>- Perspectives / employability of students</li> </ul>   |   |
| Early Evening      | Working dinner for both experts  |   |
| <b>1 June 2017</b> |  |   |
| Morning            | 09:30-10:30 Meeting with <b>Mr Vasil Radoynovski</b> , Head of the Secretariat of the <b>Bulgarian-Swiss Chamber of Commerce</b><br>Main issues: <ul style="list-style-type: none"> <li>- Role of BSCC and the private sector incl. the Swiss companies</li> <li>- Perspectives towards DVET</li> </ul> <u>Venue:</u> MES, Floor 7, Hall 4 | 09:30-10:30 Meeting with <b>Mr Vasil Radoynovski</b> , Head of the Secretariat of the <b>Bulgarian-Swiss Chamber of Commerce</b><br>Main issues: <ul style="list-style-type: none"> <li>- Role of BSCC and the private sector incl. the Swiss companies</li> <li>- Perspectives towards DVET</li> </ul> |
| Afternoon          | Conclusions and Recommendations session together with PMU  |   |
| <b>2 June 2017</b> |  |   |
| 9.30-11.00         | <b>Presenting the Conclusions and Recommendation</b> to the SCO, National Coordination Unit (NCU), MES, PMU<br><u>Venue:</u> MES, Floor 7, Hall 2  |   |
| 14.10              | Sofia Airport, LH 1427 leaving for Frankfurt   |   |
| <b>9 June</b>      | Phone interview with <b>Thomas Meier, SFIVET</b>   |   |
| <b>16 June</b>     | Draft report   |   |

|                |  |
|----------------|--|
| <b>30 June</b> | Feedback on draft report from PMU, SDC, SFIVET |
| <b>14 July</b> | Final report                                   |

## 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 incl. Annexes
- 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

### Documents of the Government of Bulgaria:

- Vocational education and training act, version amended as of Oct 2015
- Regulation № 1 of 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

### Other relevant documents:

- Education and Training Monitor 2016 Bulgaria. European Commission.
- Short country study Bulgaria. Project Expanding Bequal Benchmarking tool and community of practice for quality assurance in VET (Bequal+)
- 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 will be semi-structured, based on guiding questions as given below. The evaluation team will adapt and add specific questions based on further insights gained on the spot and will select the questions relevant for the interview partner

|  |                  |
|--|------------------|
| <b>Interview partner:</b>  | <b>[fill in]</b> |
| <b>Date / place:</b>   | <b>[fill in]</b> |
| <b>Questions</b>   | <b>Answers</b>   |
| (a) <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 characterise DOMINO? What are good practices?  |                  |
| (b) In how far is what DOMINO does <b>relevant</b> for the Bulgarian VET system as a whole?<br>(c) To what extent does the project comply with the most recent development and <b>policy in VET</b> ? (VET law and strategy)<br>(d) How important is the intervention for the direct and indirect <b>target groups</b> (pupils, teachers, schools, companies) and to what extent does it address their needs and interests?<br>(e) How could the project even better address these needs?  |                  |
| (f) To what extent are the <b>objectives of the project achieved</b> ?<br>(g) 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)?<br>(h) How do you assess the quality of the outputs elaborated so far?<br>(i) Is the DOMINO “model” fit for Bulgaria? Where do you see room for improvement?  |                  |
| (j) <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?<br>(k) To what extent does the project strengthen local <b>ownership</b> and leadership?<br>(l) How are the resources developed (profiles, curricula and materials), DVET experts, expert trainers and teachers and mentors) and processes hooked up in the VET system?<br>(m) What can the project do to increase its relevance and sustainability?<br>(n) What risks and potentials do you see regarding the sustainability of the project and how likely is their occurrence? Who could bring about change in these issues, and how? |                  |
| (o) How does the DOMINO-model 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?  |                  |

|   |  |
|---|--|
| (p) Is the project set-up appropriate for reaching the goals set? Where do you see a need for change and room for improvement?    |  |
| (q) Are the financial resources available appropriate for reaching the goals set? Are the financial mechanisms defined conducive? |  |
| (r) How does the project environment affect the project? What do you expect to change – and how should DOMINO adapt?              |  |
| (s) Do you have any other comment on the project you want to share with us?   |  |
| (t) Any other business/question...  |  |

## Achieved results for the first two years

| Progress in numbers              | 2016 | 2015 + 2016 | Overall results planned till 2019 |
|----------------------------------|------|-------------|-----------------------------------|
| PROFESSIONS                      | 3    | 8           | 10                                |
| SCHOOLS INVOLVED                 | 14   | 16          | 15                                |
| STUDENTS INVOLVED                | 404  | 481         | 1200                              |
| PARTNER COMPANIES INVOLVED       | 62   | 67          | n/a                               |
| VET TEACHERS TRAINED             | 24   | 37          | 100 (120)                         |
| INSTRUCTORS TRAINED              | 64   | 75          | 240 (300)                         |
| DVET EXPERTS TRAINED             | 4    | 13          | 30                                |
| NEW CURRICULA FOR DVET DEVELOPED | 3    | 8           | 10                                |



**LIST OF ATTENDEES**  
**DOMINO PROJECT MID-TERM REVIEW PRESENTATION EVENT**

|    | Representative  | Institution   |
|----|---|---|
| 1  | <b>Roland Python</b><br>Head of SCO   | <b>SCO</b>  |
| 2  | <b>Daniela Dimitrova</b><br>National Programme Officer                        | <b>SCO</b>  |
| 3  | <b>Franz Kehl</b><br>Consultant   | <b>Consultant</b><br><b>KEK Consultants, Switzerland</b>        |
| 4  | <b>Gergana Rakovska</b><br>Consultant   | <b>Business Foundation for Education, Bulgaria</b>              |
| 5  | <b>Petya Evtimova</b><br>PMU Team Leader                                      | <b>DOMINO Project</b>   |
| 6  | <b>Dobrinka Krasteva</b><br>Director<br>“Programming of EU Funds“ Directorate | <b>Central Coordination Unit</b><br><b>Council of Ministers</b> |
| 7  | <b>Elena Mincheva</b><br>Expert   | <b>Central Coordination Unit</b><br><b>Council of Ministers</b> |
| 8  | <b>Tanya Mihailova</b><br>Deputy Minister                                     | <b>Ministry of Education and Science</b>                        |
| 9  | <b>Maria Todorova</b><br>Director VET Directorate                             | <b>Ministry of Education and Science</b>                        |
| 10 | <b>Lachezar Borisov</b><br>Deputy Minister                                    | <b>Ministry of Economy</b>                                      |
| 11 | <b>Zhecho Zhechev</b><br>Expert   | <b>Ministry of Economy</b>                                      |
| 12 | <b>Krassimira Brozig</b><br>Executive Secretary                               | <b>National Agency on VET</b>                                   |
| 13 | <b>Rossitsa Stelianova</b><br>Director “Programs and Projects”                | <b>Bulgarian Industrial Capital Association</b>                 |
| 14 | <b>Dobrin Ivanov, Expert</b>  | <b>Bulgarian Industrial Capital Association</b>                 |
| 15 | <b>Julia Simeonova</b><br>Executive Secretary                                 | <b>Confederation of Independent Trade Unions of Bulgaria</b>    |
| 16 | <b>Vassil Radoynovski</b>   | <b>Bulgarian-Swiss Chamber of Commerce</b>                      |

|    |  |   |
|----|--|---|
|    | Head of Secretariat                                  |   |
| 17 | <b>Dotcho Mihailov</b><br>Consultant, BG backstopper |   |
| 18 | <b>Tanyo Stoytchev</b> , Principal                   | <b>VET school for Transport and Energy, Sofia</b>   |
| 19 | <b>Radka Ruseva</b> , Deputy Principal               | <b>VET school for Transport and Energy, Sofia</b>   |
| 20 | <b>Mardiros Zovikyan</b> , Principal                 | <b>VET school for mechanoelectrotechnics, Sofia</b> |
| 21 | <b>Iva Stomanyarska</b> , Chief teacher              | <b>VET school for mechanoelectrotechnics, Sofia</b> |
| 22 | <b>Nikolay Georgiev</b>                              | <b>PMU</b>  |
| 23 | <b>Polina Zlatarska</b>                              | <b>PMU</b>  |