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**Promotion of WBL via Vocational Education Training Triangle**

**VETriangle**

**Intellectual Output No 1**

**Capacity Building for Developing VETriangle**

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## Introduction

This intellectual output will focus on the role of intermediaries in the different partner countries. The German system of Dual Education and its specific roles and responsibilities for intermediaries will serve as a reference and as a role model. Note that it is not the target of this output to describe and compare the different systems and all their aspects in detail.

The main goal of this output is to provide an adaptable blueprint which at the same time offers detailed examples for best practice but can also serve as roadmap in a more general reading.

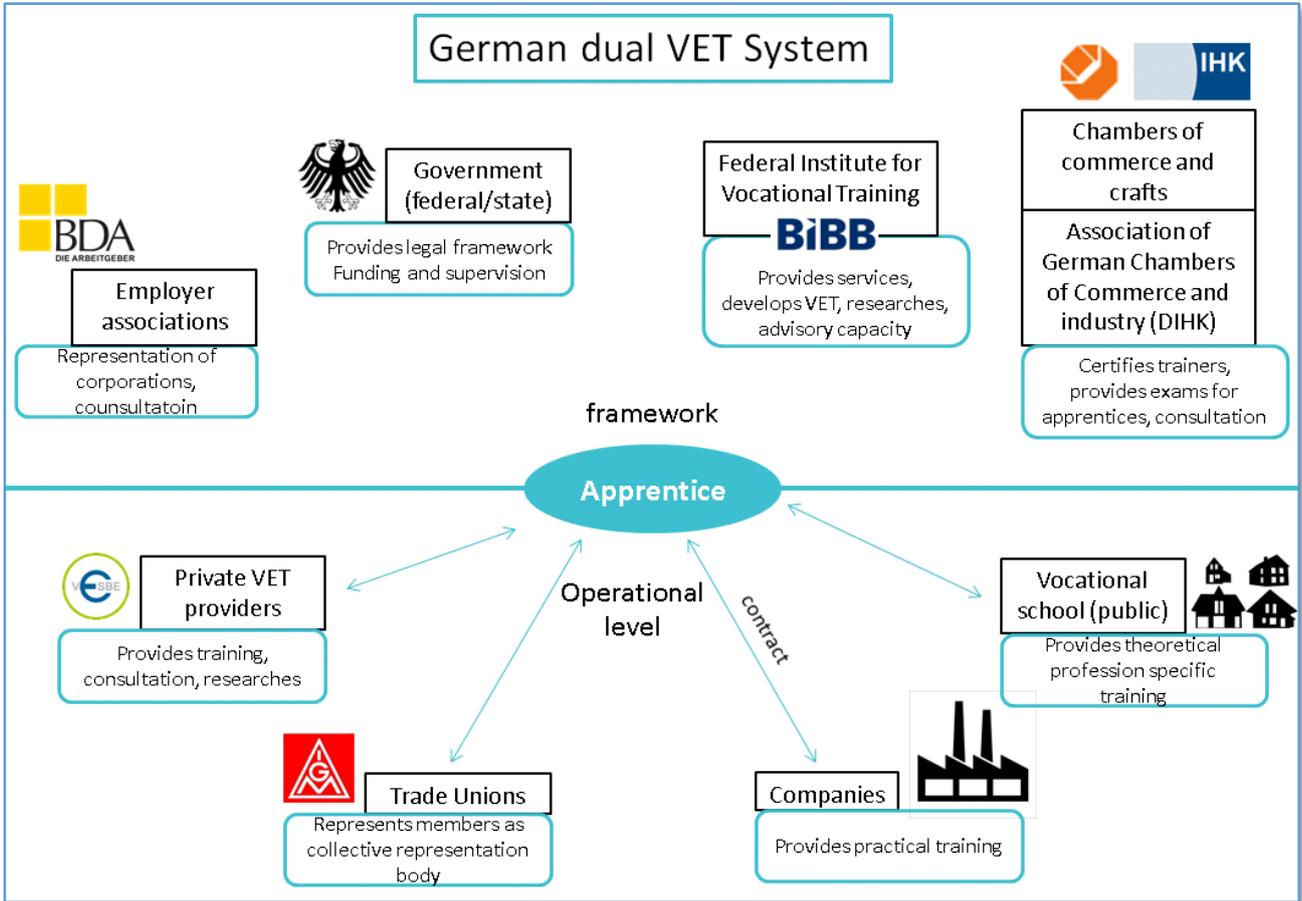
If there is no specific source declared content will be based on conversations with the project partners and the results of their research and their interviews with their country-specific intermediaries.

## Germany as a starting point

Because of the focus on the specific role of intermediaries we will use the following overview as a starting point for further consideration in order to establish a blueprint for a VETriangle.



Overview



Details

In Germany the following organizations and institutions are intermediaries in vocational educational training:

- BIBB
- Chambers
- Federal and state government
- Companies
- Employer associations
- Trade unions and employee associations
- VET providers



- Research organizations like universities, foundations...

An important specification in the German system also in the area of VET is cooperative federalism (distinction between federal government and Länder). In the educational sector and VET the Federal Government is responsible for training in companies while the Länder take care of the vocational training in schools.

The Vocational Training Act defines the different roles and tasks of the intermediaries (called competent bodies). Each of them has committees which representatives of employers, trade unions and teachers. Their main function is consultation for VET issues and regulation of VET implementation.<sup>1</sup>

Intermediaries participate in the main Board of the BIBB together with Federal and Länder representatives.

## Training

Some information about German dual training:

- Apprentices start normally when they are between 16 and 18 years old and completed compulsory education
- Target: “The primary aim of training is to enable young people to acquire comprehensive vocational competence designed to enable them to fulfil their duties as employees efficiently, effectively and innovatively, autonomously, and in cooperation with others.”<sup>2</sup>
- Competences and VET issues are regulated by the Vocational training act
- The final exam contains aspects of four to five fields which are typical for the occupation. Final examination is build towards the work environment and processes of the profession.
- In general the Federal Ministry of Economics and Technology is responsible for approval of individual occupations which require formal training. The consent of the Federal Ministry of Education and Research is obligatory
- Training regulation standards provide a uniform national standard → they provide information about the name of the occupation, the training duration, occupation profile, framework curricula and exam requirements
- According to the standards framework curricula are build for every occupation

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<sup>1</sup> Cf. BIBB. Hensen-Reifgens, Kristina Alice / Hippach-Schneider, Ute: Germany. VET in Europe – Country report 2014, p. 8, 14

<sup>2</sup> BIBB. Hensen-Reifgens, Kristina Alice / Hippach-Schneider, Ute: Germany. VET in Europe – Country report 2014, p. 13.



- Because education issues are competence of the Länder there is a standing committee of all Länder to achieve consensus in important aspects regarding school and higher education.<sup>3</sup>

### Who trains?

In the German System of dual VET there are different kinds of trainers and instructors with different tasks and responsibilities:

- Public vocational schools
- Private or public companies
- Independent private VET-schools

Apprenticeship in Germany combines theoretical and practical contents at a vocational college with concrete work-based learning at a company. About 70% of the contents are practical the rest is theoretical. Apprenticeships normally run 2-3,5 years depending on the profession. All graduates are examined and receive a certificate from the chambers.

For the duration of the apprenticeship companies and apprentices sign a contract which can be cancelled in probation period (1-4 months) by the apprentice or the company. About 24% of the contracts are deleted in this time. After graduation the chances to get hired for apprentices are good, 58% go to direct employment after graduation. Studying or additional education are further options.

Training personnel:

- Vocational school teachers: (study at university → bachelor focuses on occupational field, master focuses on subject-specific didactics + probationary period)
- Practical trainers (“normal” employees in companies, must be certified according to Trainer Aptitude Regulation → Ausbilder-Eignungsverordnung, AEVO)

Originating from this separation the German system is flexible and adaptable in this area. For example vocational school teachers who already gained the necessary skills in practical contents and profession specific training have the option to only retrain the pedagogical components and qualifications at university. There are also differences between chambers of commerce and chambers of crafts regarding the qualifications and regulations.

Besides the Trainer Aptitude Regulation there are some additional certifications and qualifications possibilities for trainers and teachers in VET:

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<sup>3</sup> Cf. BIBB. Hensen-Reifgens, Kristina Alice / Hippach-Schneider, Ute: Germany. VET in Europe – Country report 2014, p. 13, 19, 35.



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- Certificate for initial and continuing education pedagogues (geprüfter Aus- und Weiterbildungspädagoge)
- Certificate for vocational education pedagogues (geprüfter Berufspädagoge)
- Besides these formal certificates there are various non-formal ways of gaining additional qualifications and also companies offer training for trainers by themselves.

For the German dual system of VET the cooperation between the VET trainers, specialists and protagonists is of vital importance for building education links and chains.

### Target group

Specific training offers exist for various target groups in Germany (e.g.):

- Youths
- Unemployed persons
- Migrants
- Disabled persons

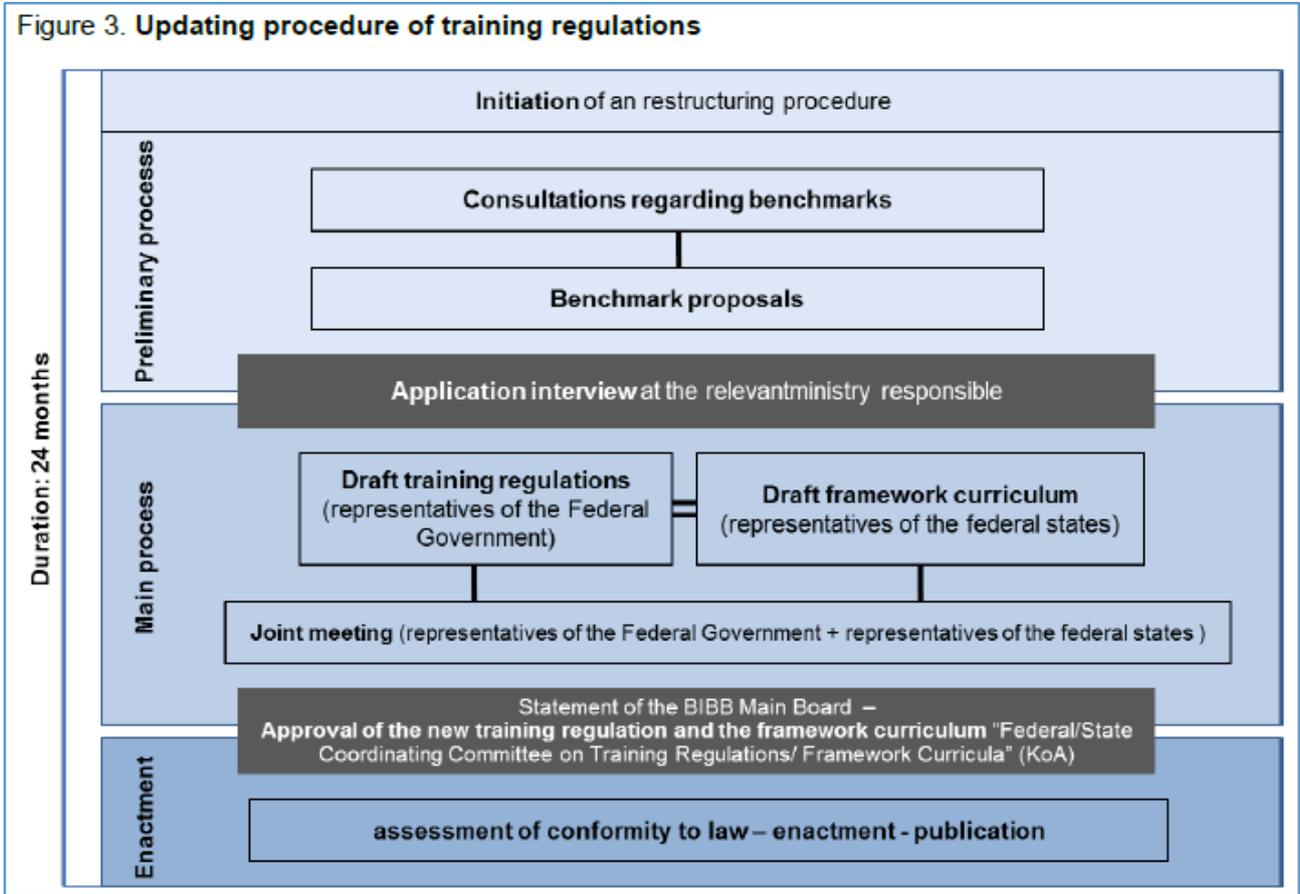
Besides the “standard” options for higher and additional education in Germany there are also more and more additional training and education programmes to achieve a higher permeability of the education and vocational education system. For example there are preparation measures for school drop-outs or people who were not selected for an application. These are kind of steps between secondary education and apprenticeship.





Curricula/Certification/Examination/Modernization

**Figure 3. Updating procedure of training regulations**



4

In Germany the task to create and modify curricula is shared between the government and the BIBB. It has to be noted that curricula and syllabuses are standardized. Additionally the chambers and the profession/sector specific associations are important protagonists in this issue. They can make suggestions for changes and modernizations to the BIBB and its main board. Also research related to VET is managed by the BIBB, guiding the multitude of universities, associations, trade unions and foundations researching in the area of VET.

Training modernization is managed by the BIBB, Federal and Länder government, employer-organizations, and the trade unions. All this stakeholders agree on basic adaptation aspects before modernization takes place in detail. This is called consensus principle in Germany and is a perfect example for a well functioning public private partnership because all intermediaries correspond that vocational training has to fit to the

<sup>4</sup> Illustration by the BIBB according to: Barbara Lorig et. Al. in: bwp, N. 20, June 2011 [www.bwpat.de/ausgabe20/lorig\\_etal\\_bwpat20.pdf](http://www.bwpat.de/ausgabe20/lorig_etal_bwpat20.pdf), in: BIBB. Hensen-Reifgens, Kristina Alice / Hippach-Schneider, Ute: Germany. VET in Europe – Country report 2014, p. 37.



demands and needs of the industry.<sup>5</sup> Apprenticeship and additional education options in Germany are established according to the demands of the industry and not as a top-down policy. The final decision on a modernization issue is the responsibility of the responsible Federal ministry in consultation with the Länder.

Examination and certification of apprentices and trainers is a task of the chambers in cooperation with vocational colleges and trade unions.

In Germany all protagonists in VET act according to the consensus principle. This means that two extreme antagonists like trade unions and employer associations are cooperating even in conflicts. As a consequence e.g. the amount of strikes in Germany is quite low. This also guarantees high possibilities for consensus solutions that are bearable for all protagonists in VET and therefore translate in strong and productive cooperation. Changes or regulations also adapt to this principle and will not be realized against the declared will of a social partner. As a disadvantage this principle may slow down modernization of the VET system or block it eventually.

### Work based learning

In Germany the system of dual VET is characterized by an action-oriented pedagogical approach towards developing a holistic occupational competence.

The key competence in this approach is the vocational action competence (BIBB has developed a concept of competence based training regulation based on this competence).



<sup>5</sup> Cf. BIBB. Hensen-Reifgens, Kristina Alice / Hippach-Schneider, Ute: Germany. VET in Europe – Country report 2014, p. 15.



Because of the high content of training in companies according to real job-specific demands and environment. Germany is kind of a role model for work based learning.

### Social Acceptance

In Germany social acceptance is high for historical reasons, but also because of the high percentage of Germans who did learn their professions in dual apprenticeships. This can be recognized immediately according to the numbers of apprenticeship training places. In 2013 562,200 places were offered in Germany, 542,500 in-company<sup>7</sup>.

### Problems/Challenges

Not all professions and industry sectors fit to dual training as a concept. In Germany there are areas like health care, education which do not include typical apprenticeship training even if dual elements can be found. The apprenticeship system focuses mainly on the commerce, industry, service and craft sector.

Because of demographic issues there will be more competition in future between higher education and dual training.<sup>8</sup> As a consequence some sectors (will) face serious problems in finding appropriately qualified trainees. There is a problem in the relation of demand and offer in some areas of the German system, which could not be solved until now.

This issue also may balance another natural weakness of the apprenticeship system – competition between apprenticeship applicants. Because the companies select apprenticeship applicants which fit best to their needs it may be difficult for applicants with poor grades or without a school-leaving certificate to enter apprenticeship. For this people the state offers different support options.<sup>9</sup>

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6 Hensen, K.A.; Hippach-Schneider, U. (2016). Key competences in vocational education and training – Germany. Cedefop ReferNet thematic perspectives series.  
[http://libserver.cedefop.europa.eu/vetelib/2016/ReferNet\\_DE\\_KC.pdf](http://libserver.cedefop.europa.eu/vetelib/2016/ReferNet_DE_KC.pdf), p. 6.

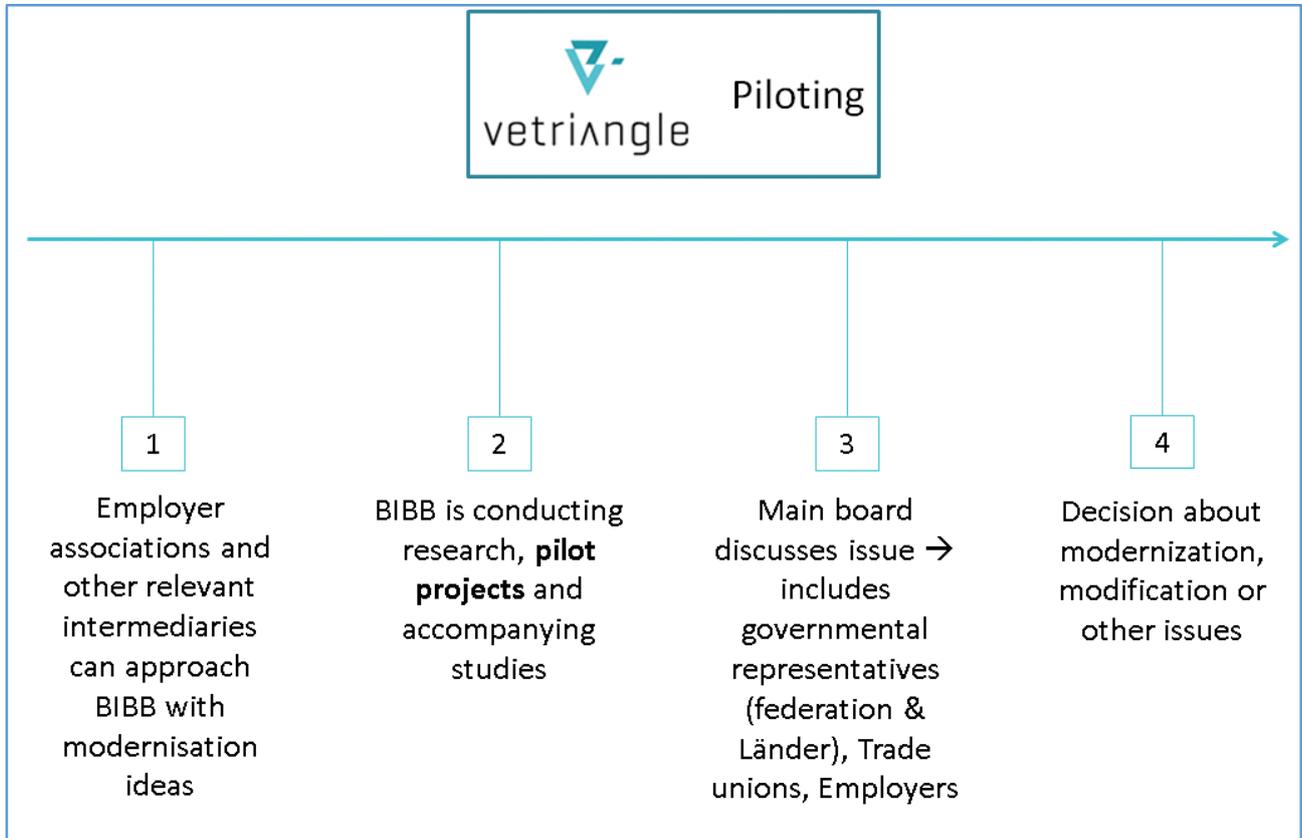
7 Cf. BIBB. Hensen-Reifgens, Kristina Alice / Hippach-Schneider, Ute: Apprenticeship-type schemes and structured work-based learning programmes, 2014, p. 6.

<sup>8</sup> Cf. BIBB. Hensen-Reifgens, Kristina Alice / Hippach-Schneider, Ute: Germany. VET in Europe – Country report 2014, p. 9.

<sup>9</sup> Cf. Hensen-Reifgens, Kristina Alice / Hippach-Schneider, Ute: Germany. VET in Europe – Country report 2014, p. 15.



## Piloting/Best Practice



A best practice from Germany definitely includes the financial contribution to education and training costs in the education system.

To give some example with realistic numbers the BIBB evaluated the apprenticeship year 2012/2013 to find out about company training costs:

For the apprenticeship year 2012/2013 the total training costs per apprentice for a company were on average 17.933€. This costs include personnel costs for apprentices and trainers as well as equipment costs and costs like chamber fees, administration ... On the plus side the apprentices are already productive during their apprenticeship and contribute to the companies profit. This productivity results in about 12.535 € per apprentice and year. As a consequence the total costs on average per apprentice did only include 5.398 €. Normally the apprenticeship costs are to be treated as an investment for most cases in the mid- and long run. None the less 28 % of apprentices already generate returns during their apprenticeship (Details can be found on this list: <https://www.bibb.de/de/11060.php>). For whole Germany these numbers for the apprenticeship year 2012 can be estimated for the 1,43 apprentices. Cost of 25.6 billion



minus productivity returns of 17.9 billion € result in total costs of 7.7 billion € for training which were paid by companies.

What also has to be taken into account for the evaluation of investment and training costs for apprenticeship is the comparison with recruiting costs. If a company has to hire skilled personnel from the labour market this costs 8,715 € on average per employee. This costs can be avoided if a company is covering its need for skilled personnel via apprenticeship training.<sup>10</sup>

Companies have a special role regarding training and dual VET. Besides the in-house trainings they are also direct contract partners of their apprentices. It has to be noted that only one fifth of the companies provides training.

Benefits for companies to provide dual training:

- Assurance of the own need for skilled and qualified employees
- High quality
- High productivity
- The company has direct influence on the training contents and can shape possible future employees through in-house trainings.
- Improved productivity and innovation, as well as quality of services and products
- High ROI (return on investment) in the long run
- CSR (corporate social responsibility)
- The entry time for new employees is not as cost and time consuming if an apprenticeship graduate is hired because every apprentice already had a high amount of training on the job and the companies know their trainees very well (and vice versa). This saves salary costs for the recruiting company. Retraining is barely needed.
- There is no obligation for the training enterprise to hire apprentices after their apprenticeship.
- Trainees build up competences and practice realistic work tasks.
- “Homegrown” apprentices identify with their employers and may be loyal in times of crisis.
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<sup>10</sup> Cf. BIBB, <https://www.bibb.de/de/11060.php>.





## Recommendations

### General

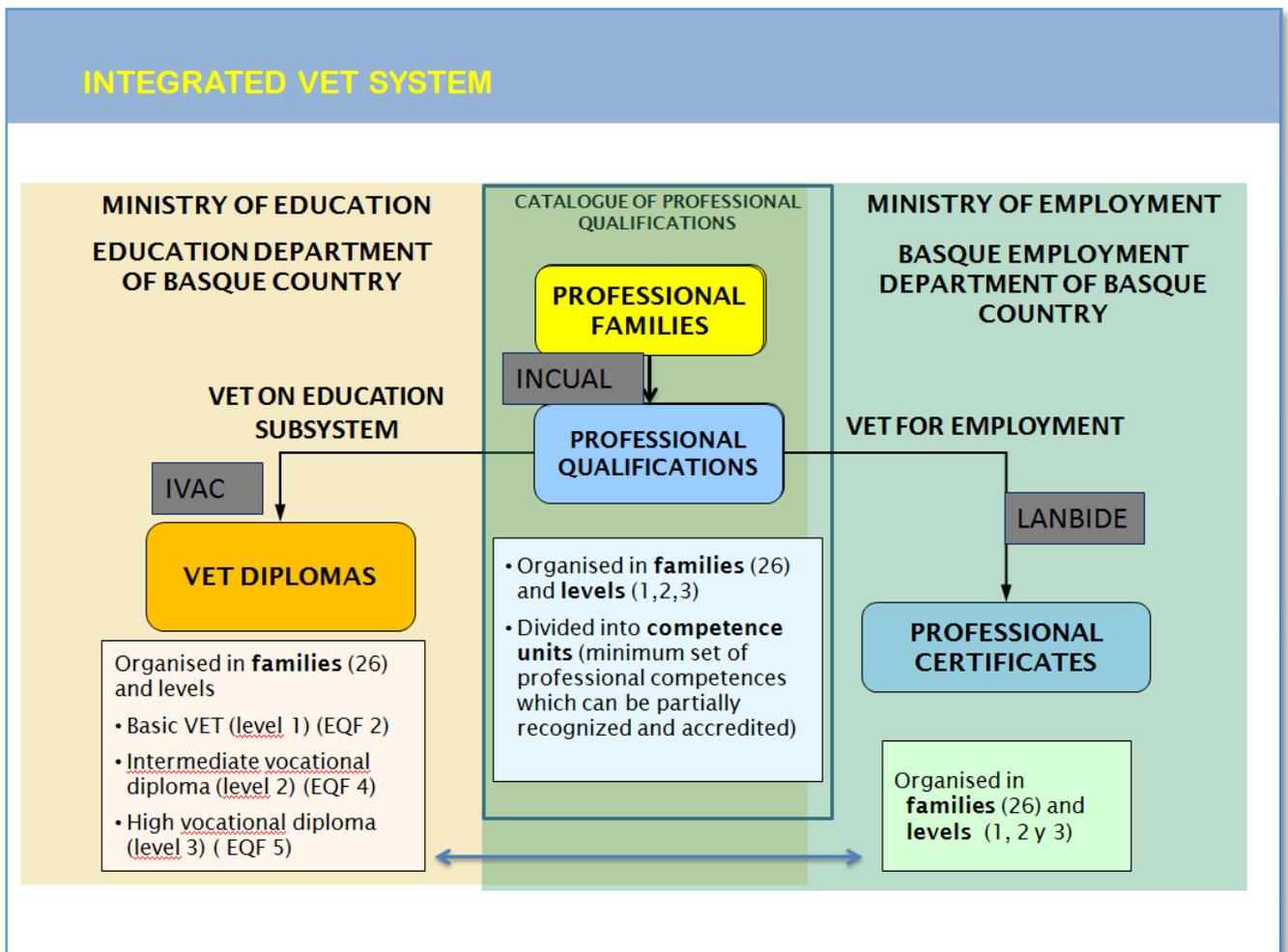
- In some parts of the system it is useful to adapt the apprenticeships and dual training programmes towards a more modular approach. This is the case for example in partial qualification courses or programmes for specific target groups
- Despite the good reputation of apprenticeship training there is a trend of young people to apply for university rather than start an apprenticeship. Awareness campaigns already were started in the past but additional efforts could be necessary to stop this trend.
- A testing environment for new contents, curricula and courses could be a promising approach for faster changes and modernization of the system and the different profession curricula. This could include testing and pilot courses in consultation with all relevant intermediaries on a local level.

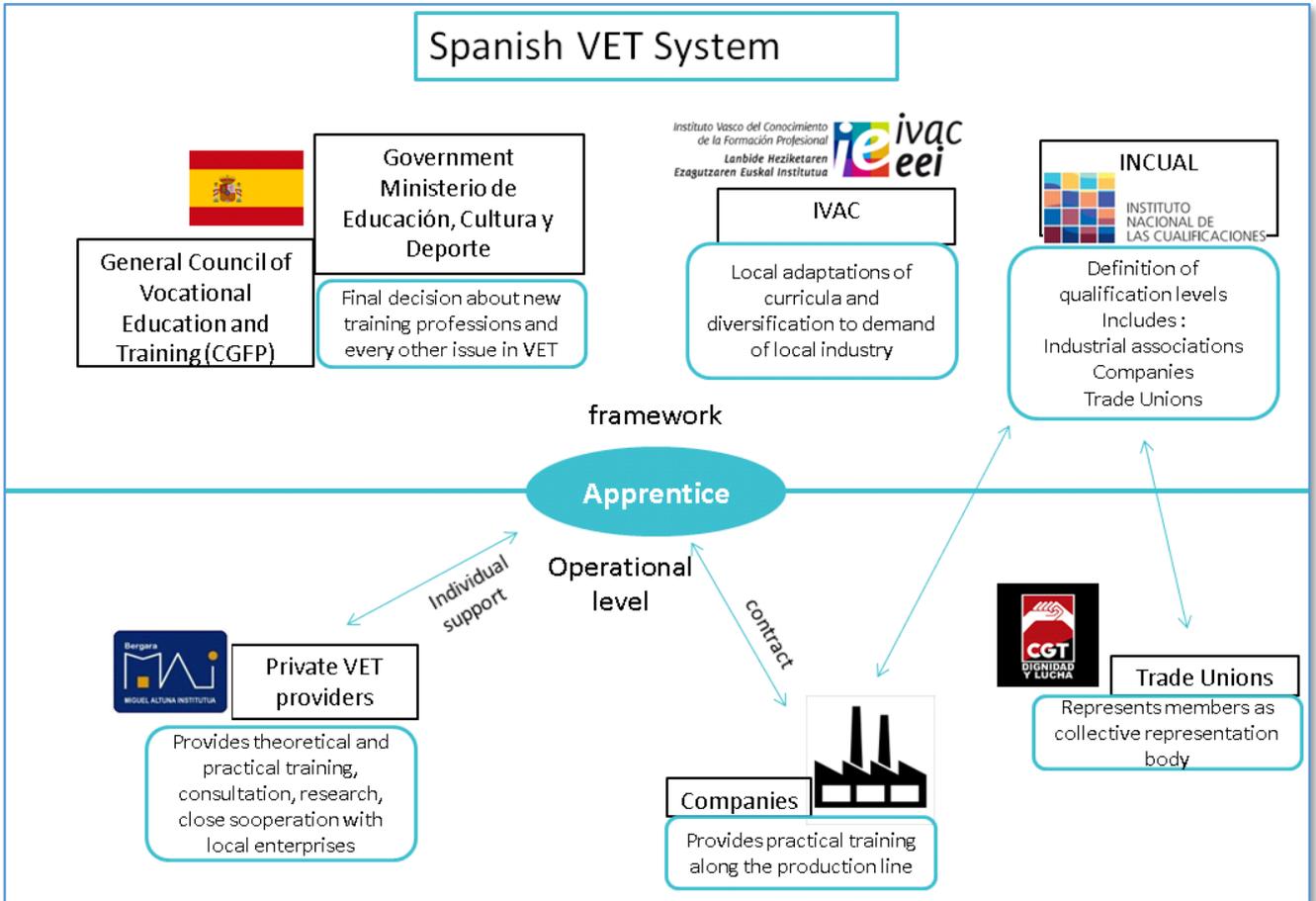
### Project

- During IO3 T-t-T workshops e.g. in didactics or WBL content are possible in Germany



Overview





### Details

In Spain there are two main protagonists in the area of intermediaries in VET: INCUAL and regional body. In this case, in Basque Country it is IVAC.

INCUAL has kind of an observatory role regarding the education system as a whole, quality assurance, training, and new National Occupational Standards. INCUAL was created by Royal Decree 375/1999 of 5 March 1999. It is the technical instrument, endowed with capacity and independence, which supports the Spanish General Council of Vocational Education and Training in order to attain the objectives of the National System for Qualifications and Vocational Education and Training (known in Spanish as SNCFP), which is the body in charge for defining new qualifications. To create new a qualification the INCUAL has their regulations and method to communicate and obtain information from companies or sectorial associations (Questionnaire, MAI, p. 2). INCUAL is not simply one intermediary but also works with industrial associations, companies and trade unions in form of 26 working groups for 26 profession sections. Every stakeholder can contribute and express their needs if new qualifications are developed. It has to be noted that all decisions are taken by governmental bodies and institutions in the area of VET. Companies and other stakeholder can contribute their needs and suggestions but the final decision remains with the central government. Of course it is easier for big companies to be noticed and to be included in the decision preparation process. On the regional level IVAC as a regional governmental agency is





responsible for adaptations and diversifications within the Basque region but it is not allowed to create new qualifications without INCUALs approval.

As an example INCUAL may provide a national qualification standard for the profession of mechatronics which can be adapted to the regional context and the demands of companies on the local level.

Trade unions only take part in the mentioned working groups of INCUAL when a new qualification is defined. On comparison to the German “consensus principle” there is no such clear consensus between the unions and employer associations in Spain regarding the overall support of the industry and the dual VET system. Trade unions as intermediaries are not directly involved in the training process and only play a role if the trainees enter companies as workers. One of their main responsibilities is to ensure that there is no wage dumping and the trainees do not have to do the same work as fully trained and qualified personnel. The influence and role of trade unions as intermediaries is a possible issue that can be improved in comparison to Germany but also to other partner systems.

Vocational Training providers fulfill kind of a transition role as a bridge between companies and decision makers in the government.

Examination is done by the training conductors themselves. The chambers which exist do not know the dual system well enough to be an important agent of change and are therefore not comparable to their German equivalents.

The Dual system in Spanish VET is managed by Labour or Education authorities, not by social agents

The General council of Vocational Training is the advisory body on VET issues. Together with other protagonists like enterprises it can make proposals for training profiles in the 26 working groups/branches. The occupational standards and the relevant regulations are defined in the National Catalogue of Professional Qualifications (CNCP).<sup>11</sup>by INCUAL.

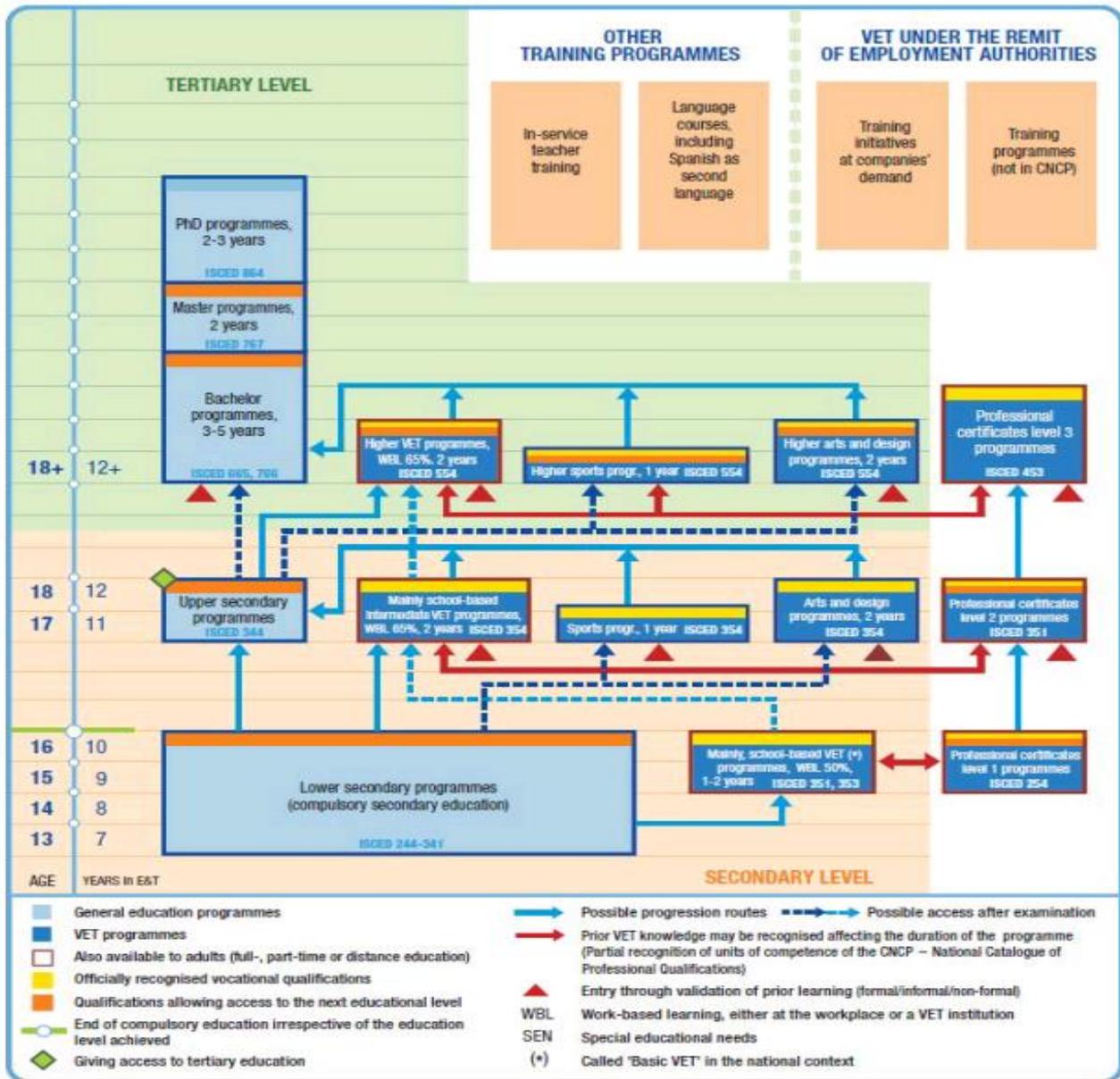


<sup>11</sup> Cf. ReferNet Spain: Apprenticeship-type schemes and structured work-based learning programmes, 2014, p. 4, f..



Training

Figure 12. Diagram of the Spanish education and vocational training system



NB. ISCED –P 2011. EQF levels have not yet been defined  
Source: Cedefop and Refernet Spain.

12

A typical dual training programme runs for two years and contains theoretical and practical components at VET schools as well as part-time job equivalent contents at companies.

<sup>12</sup> Cf. Spain: VET in Europe: Country report 2014, p. 21.



In September 2014 a new law was implemented (Law on education – LOMCE) which also regulated a new level of vocational training (Basic VET). This new level aims at 15 year old students who completed their third year of compulsory secondary education. The training leads to official qualifications and ensures access to intermediate VET programmes.<sup>13</sup>

### Who trains?

In the Spanish system in-house training at companies there are many well-equipped vocational schools for practical subjects. In this context it is important to stress the high pedagogic, organizational and administrative autonomy of education and training provider.<sup>14</sup> The VET providers create working and teaching environments which are close to the real life production lines. To achieve this they have profession specific workshops, labs and equipment so they can also conduct practical training contents. If this is not the case the VET providers look for close cooperation with enterprises to use their equipment and facilities for training. The resulting mix of theoretical and practical training contents from the VET provider covers more than 60 % of training programme.<sup>15</sup> Company training is mostly considered as additional training to gain experience along real production processes. This training makes up about one third of every training programme in dual vocational training. While the basic practical contents are covered in the VET schools, companies provide for real training experience along the production lines. Both areas supplement each other so all topics are covered for every individual schedule. This of course is a lot of effort for the supervising VET provider. To further complicate this issue not all students study in the dual system.. They may run parallel to practical training in VET schools or afterwards. Like in Germany trainees sign specific contracts and their salaries are paid by the companies. Logically the companies also pay their in-house trainers.

Because of the slow modernization of nation-wide curricula by INCUAL the companies communicate their demands and needs to local VET providers and develop specific training programmes. Especially at the beginning of development of new training courses and curricula there is a lot of communication between companies. Because of this the most information about modernization and needs of the industry is exchanged on a local and regional level. The cooperation between these intermediaries is formalized via cooperation contracts. This cooperation also works the other way around if training providers adapt their programmes when they see that students need extra training in companies. These extra training is sometimes afterwards included as regular content to adapt the programme to the real needs of the industry and to ensure modern training contents. While the companies profit through training the VET providers get opportunities to include modern training equipment and machines in their programmes which can be a very successful synergy for both intermediaries.

Regarding teaching staff there is a clear distinction in Spain between teachers in training schools and practical training staff in companies. While most teachers in VET schools hold university degrees this is not necessary for instructors in enterprises or practical training. In these cases the companies are completely free in their decision who will train the participants along the production line. The company may choose according to job experience or relevant university degrees depending on which qualifications and skills are

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<sup>13</sup> Cf. Spain: VET in Europe: Country report 2014, p. 22, f..

<sup>14</sup> Cf. Spain: VET in Europe: Country report 2014, p. 22, f..

<sup>15</sup> Cf. ReferNet Spain: Apprenticeship-type schemes and structured work-based learning programmes, 2014, p. 8.





evaluated higher. Until now the Spanish VET system has no specific obligations or degrees which are mandatory for teaching staff. Also there is no specific pedagogical or didactical training required.

Cooperations between companies to conduct training programmes together as cooperations are not very common in Spain, there are only few examples.<sup>16</sup> This is remarkable because of the existing local exchange and communication about training and demands with VET providers. Potential for cooperation should be obvious at last for VET providers because they know the different needs.

Regarding cooperation and networking the organic law on qualifications and vocational training established a network for VET centers to improve quality and harmonize the training programmes. This network contains:

- Vocational training centers
- Public and private schools
- National reference centers
- National employment system centers (may belong to independent communities)
- Private centers which are accredited by the National Employment Subsystem<sup>17</sup>

There are different kinds of training options:

- Training by companies and individual training is completely or partly financed by public funds as an incentive to meet specific training needs of companies and employees.
- Modular training programmes (e.g. for unemployed) that lead to professional certificates via partial qualifications. Types of subsidized training include:
  - Training programmes for unemployed
  - Training programmes for workers
  - Training programmes for groups with special education needs and job-seekers
  - Training programmes for unemployed that include Job-Placement measures afterwards

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<sup>16</sup> Additional Input MAI, Skype Interview, min. 57..

<sup>17</sup> Cf. Spain: VET in Europe: Country report 2014, p. 331, f..



- Training and apprenticeship contracts (dual model) which combine practical on-the-job training with workplace training and dual VET.<sup>18</sup>

### Target group

Beside the typical target group of secondary school graduates there are also special training programmes for adults who do not have secondary school qualification as part of “Adult education” programmes like mentioned above. These measures support them to achieve further education certificates.<sup>19</sup>

### Curricula/Certification/Examination/Modernization

As already mentioned curricula are normally developed by IVAC in the Basque region departing from a minimal established curriculum (National level) Adaptation and modernization of curricula are very slow and the development of new qualifications and programmes can take up to three years! INCUAL additionally is responsible for research in the VET area. Local VET providers can support research activities and are often more effective especially regarding local industry demands and skill gaps.

Besides industry demands for modernization there can also be demands of the government in specific areas and for specific groups. This demand may contain training programmes for specific target groups like disabled persons or unemployed because there may be no industrial demand in this areas. As a consequence the government is interested in a stronger involvement of companies in the dual system to reduce youth unemployment. To achieve this there are some tax reductions and social contracts for companies who conduct training.

### Work based learning

. Around one Fifth of all students is trained in dual programmes. But even the normal training programmes do include practical contents , elements of work-based and action-based learning and 360 hours of work experience in companies. Also the VET providers recognize more and more the value of practical training and shift towards work-based and action-based methods and contents.

Often there is a certain natural WBL share in training programmes because companies contract a training provider to make a tailored training programme according to their needs.<sup>20</sup>

### Social Acceptance

The social acceptance of VET is changing at the moment. In general it is traditionally not high in Spain because most people aim for university degrees<sup>21</sup>. In the last 5-10 years there is a noticeable change in social acceptance. People recognize VET may offer better job opportunities and comparable salaries in comparison to university degrees. This is also true for companies even if dual VET is still a “new” approach for most of them. This can be seen in increasing numbers of apprentices in dual training, a higher number

<sup>18</sup> Cf. Spain: VET in Europe: Country report 2014, p. 32.

<sup>19</sup> Cf. Spain: VET in Europe: Country report 2014, p. 22, f..

<sup>20</sup> Cf. ReferNet Spain: Apprenticeship-type schemes and structured work-based learning programmes, 2014, p. 6.

<sup>21</sup> Cf. Bundesinstitut für Berufsbildung (BIBB), iMOVE: Training – Made in Germany: marktstudie Spanien. Für den Export beruflicher Aus- und Weiterbildung, 2016, p. 9, 24.



of VET providers and a rising participation of companies in training<sup>22</sup>. So for the most relevant intermediary partners VET awareness is not a problem. The only protagonist who has not yet recognized the value of dual VET and practical training as a whole are as already mentioned the trade unions.

In recent years the social acceptance of VET has improved and it is becoming a more popular choice after graduation from secondary education.<sup>23</sup> In this context it is important to note that the Spanish economy is still recovering from the 2008 economic crisis. Unemployment rates are still very high with 45,5% youth unemployment in 2015.<sup>24</sup>

A proof for this change can also be seen in the increasing importance of practical training for new teachers.<sup>25</sup>

### Problems/Challenges

What is extremely important for practical dual VET in the Spanish system is its strong focus on individual supervision and monitoring of the trainees. Every student has an individual schedule and is receiving individual evaluation. This may cause problems for evaluation and certification and is a great effort for VET training providers and there are some attempts to develop more standardized evaluation methods to reduce this supervision effort. This of course increases the complexity of the Spanish (dual) VET system in total. Additional factors are wide varieties of practical training contents in companies according to specific operational areas and the dedications of in-house trainers to accept their role as instructors and mentoring persons for the students.

The education system as a whole is financed mostly by the state (80%) while private protagonists contribute the remaining 20%. It has to be noted that the private contribution is for the most part money from families which is invested in the education of children and not investments of companies.<sup>26</sup>

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<sup>22</sup> Cf. Bundesinstitut für Berufsbildung (BIBB), iMOVE: Training – Made in Germany: marktstudie Spanien. Für den Export beruflicher Aus- und Weiterbildung, 2016, p. 25.

<sup>23</sup> Cf. Spain: VET in Europe: Country report 2014, p. 22, f..

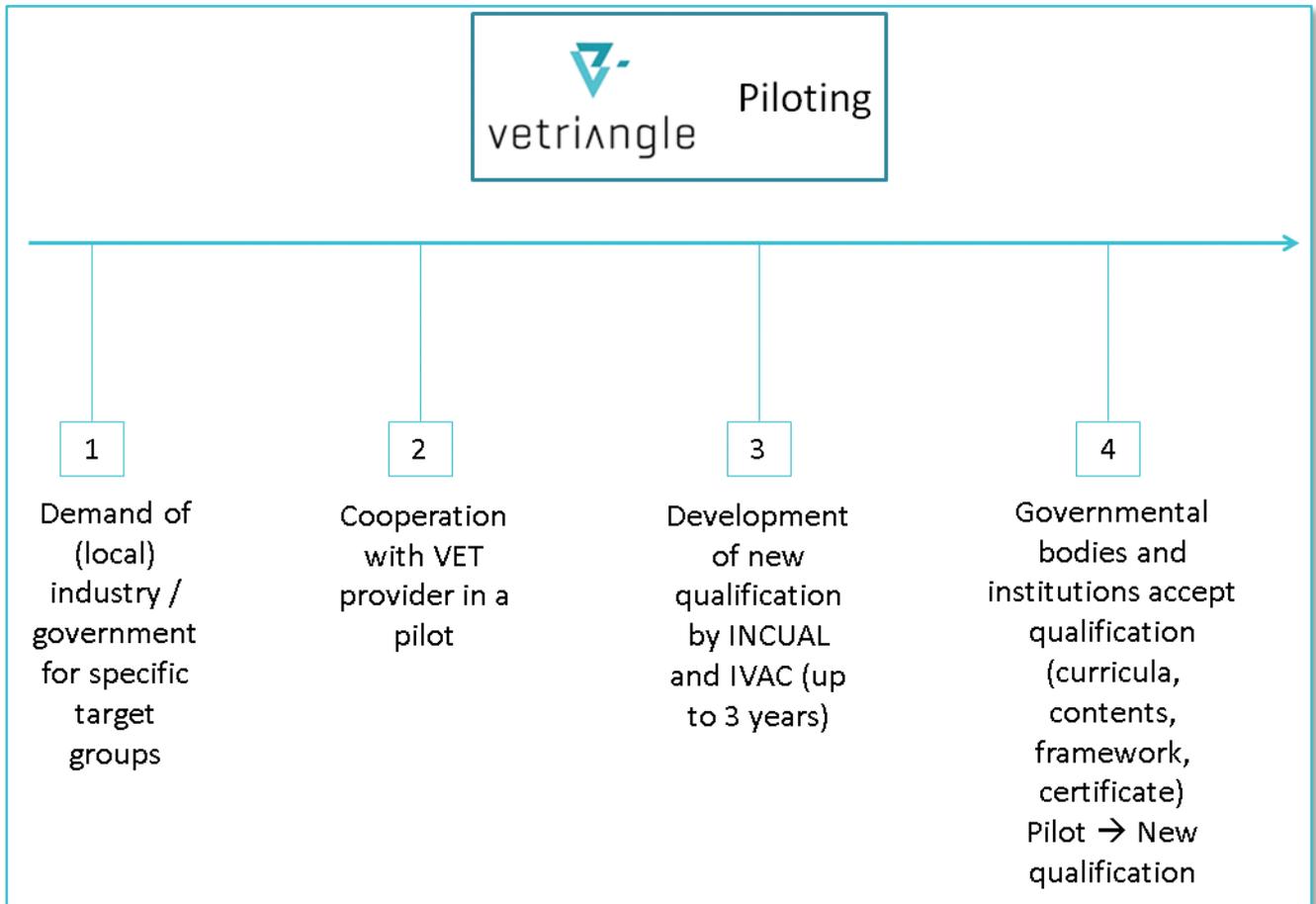
<sup>24</sup> Cf. Bundesinstitut für Berufsbildung (BIBB), iMOVE: Training – Made in Germany: marktstudie Spanien. Für den Export beruflicher Aus- und Weiterbildung, 2016, p. 11.

<sup>25</sup> Cf. Servicio Público de Empleo Estatal (2016). Supporting teachers and trainers for successful reforms and quality of vocational education and training: mapping their professional development in the EU – Spain. Cedefop ReferNet thematic perspectives series, p. 7.

<sup>26</sup> Cf. Bundesinstitut für Berufsbildung (BIBB), iMOVE: Training – Made in Germany: marktstudie Spanien. Für den Export beruflicher Aus- und Weiterbildung, 2016, p. 52.



## Piloting/Best Practice



As an example there are some pilot and specialized training programmes outside of the official qualification system which started as close cooperation between corporations and VET providers. These programmes include very specific and innovative curricula which are a direct reaction to a specific company demand. For these exceptions certification can be complicated because of the high amount of specialization. If the company is big enough to train many participants and is an important industry stakeholder certification is accepted by the government normally. As a result graduates are able to apply at other companies and institutions even with their specific training contents. This approach could be a good practice on faster reactions of the government to industrial training needs and sector specific programmes. An example could be to specialize training programmes like mechatronics to more specific professions like car mechatronics.

As a best practice of the Spanish project partner MAI is a specialization programme in the area of designer manufacturing processes. The programme is based on company demands and is developed as a dual training programme. It runs one year (900 hours) after high school graduation. The VET providers in this cooperative do the administrative work like contacting and communicating with IVAC and the production of new learning materials. In total 25 companies contributed training staff and training of trainers. Contents and details were defined in cooperation between schools and companies. This training programme is a



success because it combines close cooperation of the companies and MAI as well as demand specific contents which will ensure good job opportunities for graduates.

## Recommendations

### General

- Acceptance/Development of some guidelines or learning outcomes for courses. This could include a higher part of competence based learning and would mean less administration and support effort for VET providers because the students would not need to get as much individual support as right now. The NetWBL toolkit provides for a training guide that is aimed at in-company trainers:  
<http://www.WBL-toolkit.eu/site/toolkit/listoftools/database/477.html>,  
<http://www.dualvet.eu/Productos.asp>
- Existing incentives for companies to implement apprenticeships and dual training like tax reductions could be increased
- Trade unions and companies should engage more in training issues and act as an intermediary
- The share of training in companies along real production chains should be increased if possible.
- Further promotion of dual training, WBL and apprenticeship models
- More flexible curricula should be developed. Or at least curricula with flexible parts that can be adapted to local contexts and needs.
- More cooperations between companies and VET providers. Ideally this cooperation could be institutionalized as a new task for IVAC.

### Project

- For Implementation of the curricula from IO2 we should try to establish a training cooperation with more than one company. This not only makes it more easy to include SMEs but also can strengthen the curricula and enables us to provide for some specific or additional modules. This fits basically to MAIs best practice.
- Another aspect that could be approached is the missing obligations for teaching staff at companies. In our project we could implement peer-learning or provide didactical training in IO3. Here we could also use the NetWBL Toolkit. This would also help with sometimes missing dedication of in-house trainers.
- Trade Unions could be approached as an intermediary and should be more open towards the potential of WBL and dual training apprenticeships. Although an equivalent to the German “Consensus principle” is neither necessary nor realistic we should try to include the trade unions on a local level as intermediaries during the future project duration. For IO 2 this could mean to get their opinion on the curricula.
- Development of standardized evaluation guidelines for the curriculum in IO2. This could reduce the supervision effort for the training intermediaries. Since there is no chamber equivalent protagonist, evaluation, examination and support for students is very time intensive for VET providers.

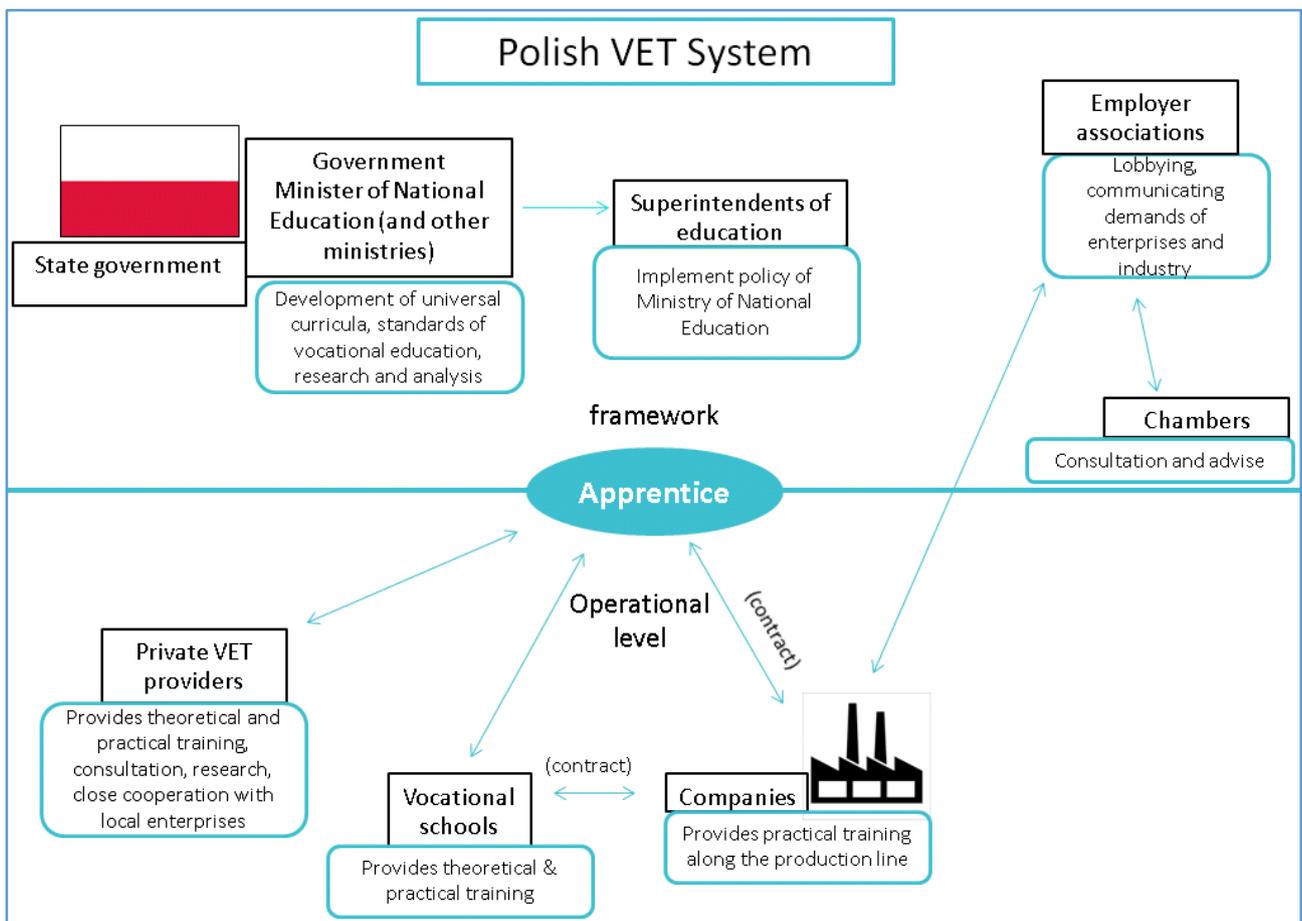




## Poland

### Intermediaries

#### Overview



#### Details

In Poland the following organizations and institutions can fill the role of intermediaries in VET:

- Chambers
- Government - Minister of National Education
- State government



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- Companies / Factors
- Employer associations
- Superintendents of education

The chambers as an intermediary are not as reputable anymore as they were in the 1950's during the industrial development. Their main task is training in craft professions and they also certify the trainees with the certificate of a foremen / journeyman. Additionally the chambers represent the craft sector and its interests. Main activities are provision of advisory, marketing and training assistance (ex. creation and operation of Centers of Consultancy, Education and Economic Promotion). Certification is specific for each craft but the students have to pay for examination. The Polish Craft Association, as an organization of employers representing the small and medium enterprises sector, participates in social dialogue.

Superintendents of Education are responsible for pedagogical supervision on a regional level. As regional administration officials they are appointed and supervised by the voivode subordinate to the Prime Minister. They also are responsible for the correct implementation of the policy of the Minister of National Education and the relevant Acts, laws and regulations. They supervise public and non-public schools in pedagogical issues.<sup>27</sup>

In Poland the rules in force in education system determines the government. Trade unions defend the rights of the employee but does not affect the education system in the country.

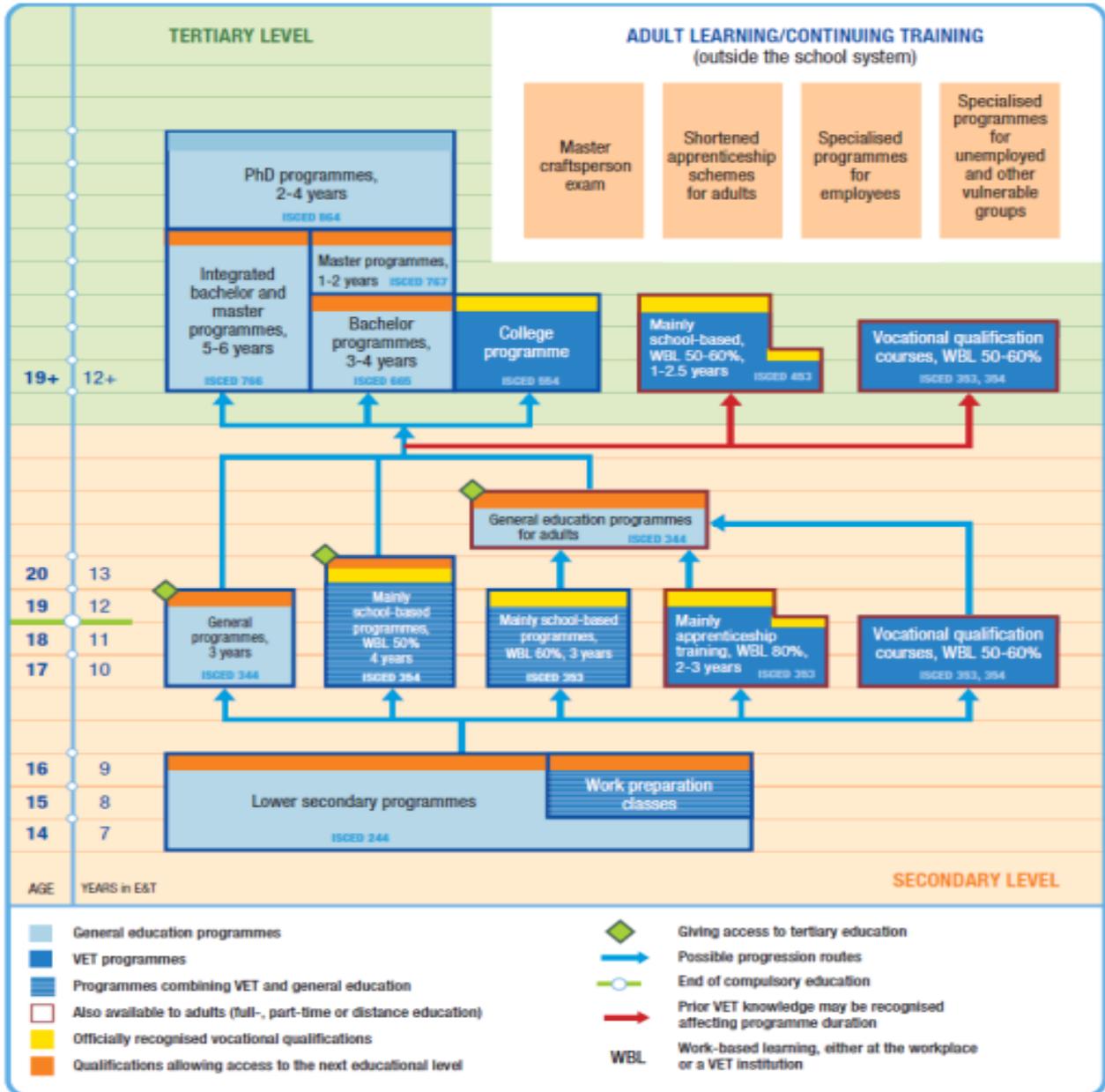
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<sup>27</sup> Cf. Polish EURYDICE Unit: The system of Education in Poland, Warsaw, 2012, p. 16.



Training

Figure 1. Diagram of the national education and training system



NB: ISCED-P 2011.  
Source: Cedefop and ReferNet Poland.

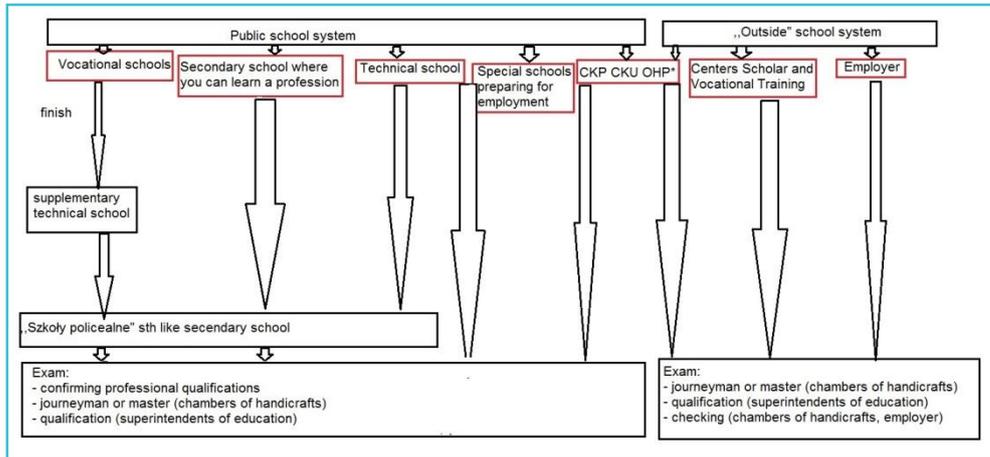
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<sup>28</sup> Poland: VET in Europe: Country report 2014, p. 15



## Who trains?

In Poland there are different possible training conductors:



General policies of the system of vocational education in Poland are governed by regulations department of education and the education and work. Vocational education in Poland can be done in school and in extracurricular activities.

Public:

- public vocation school
- \* Out of school forms vocational training:
  - Centra Kształcenia Praktycznego (CKP)- Young people- student,
  - Centra Kształcenia Ustawicznego (CKU) - for adults ,
  - Ośrodki Doskonalenia i Doskonalenia Zawodowego (ODDZ)- adults

Ochotnicze Hufce Pracy (OHP)- is a budget unit supervised by the Minister responsible for work. OHP provides services to adolescents aged over 15 years in the field of prevention of marginalization and social exclusion, and employment.<sup>29</sup>

Additionally also the employers themselves can (re-)train their employees. This support option mainly contains secondary or post-graduate level programmes and is conducted in most cases as short course. These offers are tailored to the specific profession and training need. Besides this offers for employees there are also preparation courses for students from SMEs in the craft sector. Here the SME cooperates with a school and offers practical contents which fit to the schools theoretical ones. Although schools are involved, this option takes place outside of the regular school system.<sup>30</sup>

<sup>29</sup> Additional Input KTP, p. 5.

<sup>30</sup> Cf. Poland: VET in Europe: Country report 2014, p. 32 f, 50.



Teachers of practical training should have appropriate education in the profession and pedagogical training. The trainee can get certified professional training if he or she finishes additional courses and training, and after graduating from university.

Teachers should also have the defined amount of practice in the profession. The length of the probation depends on academic degree. It may last from 3 to 6 years.

An example: A teacher who finished vocational school can be practical trainer provided always that he has four-year practical work in this profession. After graduating from technical school or technical college just three years probation will be enough. When the person finishes other specialization (not connected with the one he wants to teach) he/she can start teaching after 6 years of work at a suitable profession.

In Poland there are various kinds of training options to improve the professional qualifications of all teachers so that the personnel is educated and more open to new technologies. Through training and cooperation with other organizations teachers know what skills are needed in the labour market and can more effectively educate and prepare young people for work.

### Target group

As well as in Germany Poland provides training programmes and contents for specific target groups:

- Youths
- Unemployed persons
- Disabled persons

There are special programs for people with disabilities or reduced mobility and also schools for people that are handicapped. The government wants to encourage employers to employ people with disabilities by establishing benefits for companies which offer jobs to disabled persons.<sup>31</sup>

Programmes and training support for unemployed is covered by the Labour fund, which is distributed to individuals and groups via the Labour offices.<sup>32</sup>

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<sup>31</sup> Additional Input KTP, p. 6.

<sup>32</sup> Cf. Poland: VET in Europe: Country report 2014, p. 45 f..



## Curricula/Certification/Examination/Modernization

In Poland, the curricula are the responsibility of the Ministry of Education. The content and scope of the curricula is set by the government. The teacher can choose the curricula, which according to him/her would be the most appropriate for the chosen subject. He/she may also modify and add additional content but with the permission of the headmaster and the teachers council. Curricula are universal for the whole country. Each unit can modify the curricula to their own needs or to the needs of the market, but before it is put into service it must be approved by government. The core curricula do not provide guidelines for the implementation of key competences.<sup>33</sup> Modification of curricula is possible, depending on market needs. Also, schools are changing their profiles and they introduce new competition, which will be able to learn if needed because of arise of new factories, etc. The introduction of new curricula standards and programs is a long-term process. It may take even several years.

In Poland, for the content and scope of examinations and conducting corresponds to the Central Examination Commission (*Centralna Komisja Egzaminacyjna CKE*). CKE validates conduct examinations and confer entitlement to examination for examiners. Procedure teaching and examination program and teaching are the same in Poland. It depends on the type of school where training is given.

The development of quality standards is done by the Department of Vocational and Continuing Education Ministry of Education and the National Centre for Supporting Vocational and Continuing Education.

Research is conducted by the general statistical office *GUS*, Ministry of National Education and other institution in the state depending on research subject. Additionally each CKE conducts research and monitoring. There is also Board of Education which controls carried out activities of schools.

## Work based learning

The Polish vocational education are introduced tentatively as "Class patronage "consisting of education of students in the workplace. This type of learning has many advantages because students learn a profession that will carry in adult life. Learning system WBL is very important. In Poland it is getting more and more common recently but it is still treated as a new and innovatory system.

In the 90s Colleges/ University were the most popular school in Poland. Most people started college to have a master's degree or engineer degree. A few years ago a discussion has started on vocational training. In Poland there was a shortage of people with vocational education, which is why in recent times discourse about the benefits of practical training and acquirements of a specific occupation increased. More and more companies in Poland want to work with schools to educate their future employees.

In Poland, the dual training system is based mainly on the craft sector, because this is where a practice is required that cannot come from books. Outside the craft sector dual system training could be implemented in areas such as administration like: shipper, logistics, accounting.

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<sup>33</sup> Cf. Siekiera, A.; Luck, A. (2016). Key competences in vocational education and training – Poland. Cedefop ReferNet thematic perspectives series, p. 17.



In Poland there are four main options that relate to WBL:

- Apprenticeship (dual system): There is a contract between the apprentice and the company. Like in Germany training is theoretical and practical (2 days a week in school and 3 days a week at the company). Apprentices graduated normally from basic vocational schools.
- Alternance training (dual system): There is a contract between the school and the company, not between the student and the company. Practical training is conducted according to the enterprise demands and has to be 50% of the overall content at last.
- On the job training: Traineeships which last 4-12 weeks and are mandatory for technical or post-secondary level occupations.
- WBL in school: Simulation and training contents in school laboratories and workshops or training centers.<sup>34</sup>

Additionally there are cooperations with foreign vocational schools (e.g. in Germany) where students can start apprenticeships and also didactic visits to companies which provide interested students with information and knowledge about their professions.<sup>35</sup>

### Social Acceptance

Traditionally learning in the workplace is a very strong role model in Poland. This is supplemented by the ideal that the state is responsible for the area of education and that there is no obligation for the private sector to contribute. As a result dual training and apprenticeship are not as established as in Germany for example. These two issues are changing more and more because companies see the need for changes in education. The Ministry of Education tries to support this engagement and changes the traditional beliefs and images (cf. questionnaire, p. 5).

Apprenticeship is gaining popularity in Poland, it became an attractive educational option.<sup>36</sup>

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<sup>34</sup> Cf. Poland VET in Europe – Country report 2014, p. 19, and Poland Apprenticeship-type schemes and structured work-based learning programmes, p. 4.

<sup>35</sup> Cf. Poland: VET in Europe: Country report 2014, p. 50.

<sup>36</sup> Cf. Poland: VET in Europe: Country report 2014, p. 20.



## Problems/Challenges

One main problem is the shortage of qualified teachers in vocational schools.<sup>37</sup>

Unlike in Germany the companies see training and also cooperation with schools as costs not as an investment. Main reasons for this are:

- Bureaucracy
- Lack of financial incentives
- Legal problems
- Possible personal problems with future trainees<sup>38</sup>

As a consequence apprenticeships are often funded by the Labour offices. Besides direct funding there are also loans available for unemployed which can help to cover training costs. These loans can be up to 400% of the average monthly salary.<sup>39</sup>

What could be incentives for companies to contribute financially to the training costs in Poland?

- forms appropriate professional competence described in the core of vocational curricula ,
- developing personal and social competencies necessary to acquire and improve professional qualifications,
- adjusts the learning outcomes to labour market requirements,
- shapes the student's entrepreneurial attitudes conducive to active participation in economic life,
- It gives different learning opportunities (ex. additional permissions and certificates), including those with special educational needs,
- facilitates entry student on the labour market and participation in the process vocational training,
- solid preparation for the exam of professional qualifications,

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<sup>37</sup> Cf. Siekiera, A.; Luck, A. (2016). Supporting teachers and trainers for successful reforms and quality of vocational education and training: mapping their professional development in the EU – Poland. Cedefop ReferNet thematic perspectives series, p. 7.

<sup>38</sup> Cf. Poland: VET in Europe: Country report 2014, p. 50.

<sup>39</sup> Cf. Poland: VET in Europe: Country report 2014, p. 45 f..



- promotes the professional skills of their students and analyze jobs for graduates, draws conclusions from the analysis of graduates.
- Inform employers of the benefits of investing in students. Provide adequate jobs in factories. Provide more funding for companies from the state.

The main obstacle to the introduction of WBL and dual training is low interest in workplaces for that kind of learning. Employers do not want to have problems related to the organization of work for young people and learning the profession which do not guarantee that they will be their employees. To solve this problem the government whether should allocate additional funds to subsidize jobs and make additional profits for companies that take the trouble of teaching. The example of such a benefit is a tax relief for such an enterprise / company etc. Since 2014 there exists a national Training fund which supports employers when they provide training and is part of the labour fund. This fund was established following some amendments in the Act on promotion and employment and institutions on the labour market and other acts.<sup>40</sup>

Another obstacle is the fact that the exam that students have to pass in other conditions than they have in the workplace where they learn.<sup>41</sup>

One additional challenge is the lack of cooperation between schools, local authorities and employers in planning in education and training issues (cf. questionnaire, p. 6).

The biggest obstacle in the education system in Poland is too small cooperation between companies and institutions that are working on the core curricula. An important element in the establishment of new educational programs is to know the needs of labour markets, training in professions that will be needed in the factories. The rapid development of assistive technologies etc. causes that the core curricula are not adapted to the requirements of the labour market. Changes in the basic program take a very long time. Core curricula rarely aim in learning of new technologies, which are often already used in the workplace. Polish educational system is based on the lower level information from the field, which are often already out of date or not used in the industry.

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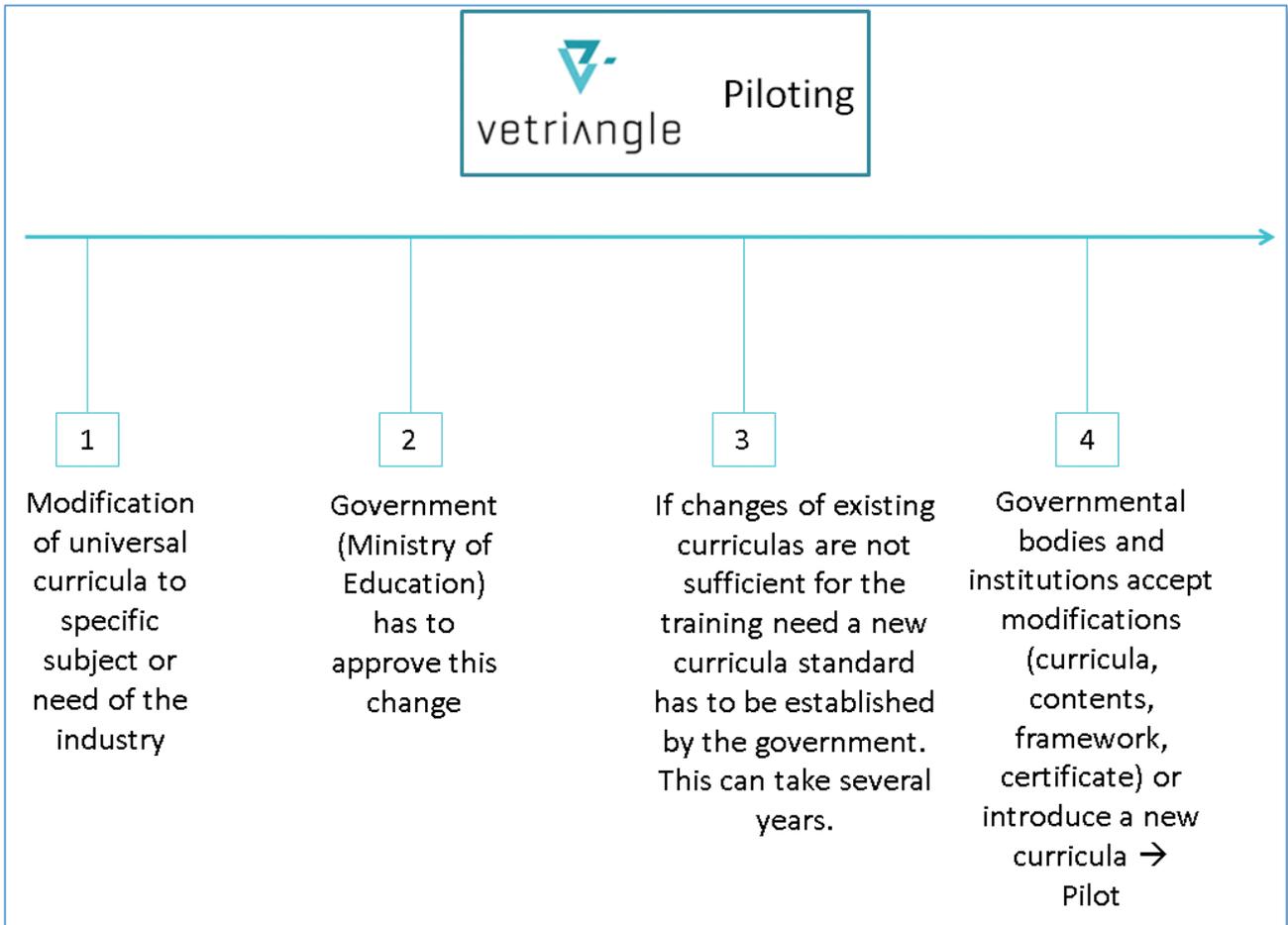
<sup>40</sup> Cf. Poland: VET in Europe: Country report 2014, p. 49.

<sup>41</sup> Additional Input KTP, p. 13.





## Piloting/Best Practice



Combination of education with industry would be the main objective of the implementation of the VET system in our country. With connected theoretical training with practical profession we can educate people who would meet industrial requirements and could get a good job.

The main protagonists:

- vocational schools
- companies
- government



Good example of pilot courses can be found in the building industry. An interesting solution can be the introduction of such training in the field of innovative solutions. If a new technology appears on the market then it would advance to impose the need for education in certain factory.

Before the implementation of such pilot courses a change in the examination system and rules of granting certificates of qualification is preferable. Testing dual VET might begin by entering "*class pilot*" in a vocational school. Very important conclusion from the introduction of the system is to be sure to take follow-up effects into account, e.g. to observe the career of graduated classes that finished this kind of education. It is a long process, but to have positive effects and the positive status of implementation of systems such observation and research activities are necessary.

The introduction of the VET system can bring many benefits to the employer. As first most important to educated workers, who will be most appropriate to do their work immediately after graduation. Businesses employing young man immediately after school will not have to waste time for learning a profession. This will also be financial benefits, as apprenticeship employee is associated with additional courses. If the employee has the right skills, then he works more efficient and better perform their jobs.

The worst side of this solution is limit choice and knowledge of another profession by the student. Training in one direction in the workplace can raise the desire to learn and acquire new skills. Often young people who have to choose their profession at the age of 16 ignore whether it is a job they would like to do all their life. A more general education in schools gives greater opportunity to learn different contents and thus widen the choice of the young people.

In Poland the best practices of VET system might be to introduce a greater amount of hours of practice in vocational schools. Workplaces should be created, which will have the appropriate staff, who will be focusing on the students and teach them vocational training. There should exist professional associations who would gather professional tutors, who would work on the core curriculum and exams. Those teachers should also be employees of the factories and pursue that profession. It would also introduce additional training for teachers.

## Recommendations

### General

- The government could support cooperations between VET providers and corporations with financial incentives for enterprises like tax reductions or subsidies.
- Faster modernization of training contents and a more effective cooperation of curricula developing institutions and corporations could help the further promotion of WBL and dual training.
- Changes in the examination system and certification → An equivalent to the German chambers could be introduced as a new institution.





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- More research on the needs of the labour market which can help in modernizing curricula and the system as a whole.
- Trade unions should get more involved as an intermediary
- Internships for teachers should be included as a mandatory form of their training and qualification.
- More practical training contents in vocational schools which are linked to existing demands of the industry.
- Additional training for teachers and creation of a work environment which can use the full potential of WBL.
- Teachers or teacher association should be included in decisions about modernizing curricula.

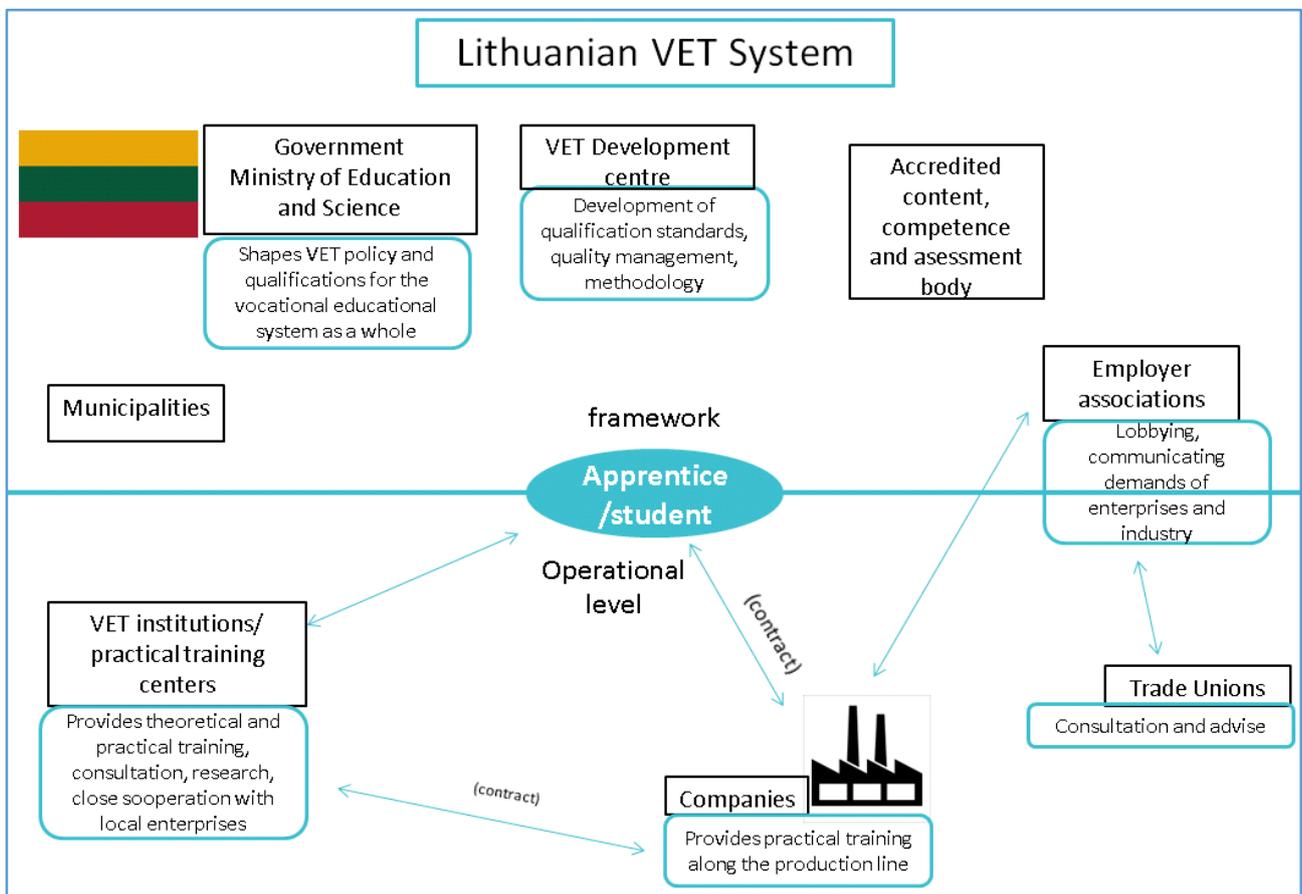
#### Project

- A potential link to our project could be to provide didactical training during IO3 for practical trainers.
- Like in Spain we could try to get the feedback and opinions of trade unions for curricula as an additional intermediary.
- For piloting (“class pilot”) it will be a sub-target to establish close links between industry and VET providers that can last. This linkage should also include the approach to make the company pay for training and to show the value of dual training. This could be achieved in providing training according to the companies specific needs or at least provide some specific modules (WBL). It could be necessary to conduct some kind of need analysis to learn about the specific training needs of the relevant corporations. The craft sector could be most suitable because it is most promising for dual training in Poland and because it covers the area of advanced manufacturing which will be focused also in IO2. This could also include changes in examination and certification.

## Lithuania

### Intermediaries

#### Overview



#### Details

The main protagonist in Lithuania is the Ministry of Education and Science for the vocational education system as a whole. The Ministry shapes and implements VET policy, Qualifications and VET Development Centre develops qualification standards and methodologies, assesses quality of VET. Intermediaries are involved in VET policy development only through VET Council and the Central Professional Committee (cf.



Questionnaire GI, p. 2). During the council and consultation processes the Ministry includes other stakeholders into the decision making process. In a similar network like in Germany this list includes:

- VET institutions (47 in 2016)
- Municipalities
- Practical training centers
- Associations (Employer associations & trade unions)
- Enterprises
- Accredited content, competence and assessment body

Unlike in Germany companies can directly influence the conceptualization and approval of curricula according to their needs and implement adaptations in cooperation with VET centers. As a consequence specific curricula are not developed by the Lithuanian government but by VET organizations that respond to specific needs of the industry.

To become a VET provider any organization has to be registered in a specific national register, a license is provided by the Ministry of Education and Science. Besides vocational schools VET providers as organizations and also freelance teachers or schools and enterprises can become a certified VET provider.<sup>42</sup> Specific curricula may be developed according to approved training programmes by the government. These curricula have to be approved by the accredited content, competence and assessment body. Also the VET organization needs to send a statement about the programme to the employment office.

Another difference to Germany is the low level of organization of workers and the resulting weakness of trade unions as intermediaries. There are barely any strikes in Lithuania and companies and employer associations have a very strong position in labour conflicts. If there is a work related conflict the employee normally does not go on strike but changes the job unlike in other countries.

To achieve fundamental changes in the education system intermediaries can be key players. The concept of intermediaries is based on their awareness of the changing skills needs of the labour market – a precondition for employment and economic growth. Improving their involvement is based on understanding that vocational training has close links to the labour market and the economy. If governments are willing to empower intermediaries to be more involved in vocational training policies and implementation, they gain by developing expertise among their stakeholders. Their involvement becomes more and more important to preparing and developing new human resources and to ensuring the competitiveness of companies in the increasingly competitive human resources market. Intermediaries provide continuity in the function of systems, such as standards setting, quality assurance, training,

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<sup>42</sup> Cf. Qualifications and Vocational Education and Training Development Centre with contributions from members of ReferNet Lithuania: Lithuania: VET in Europe: Country report 2014, p. 18 ff.





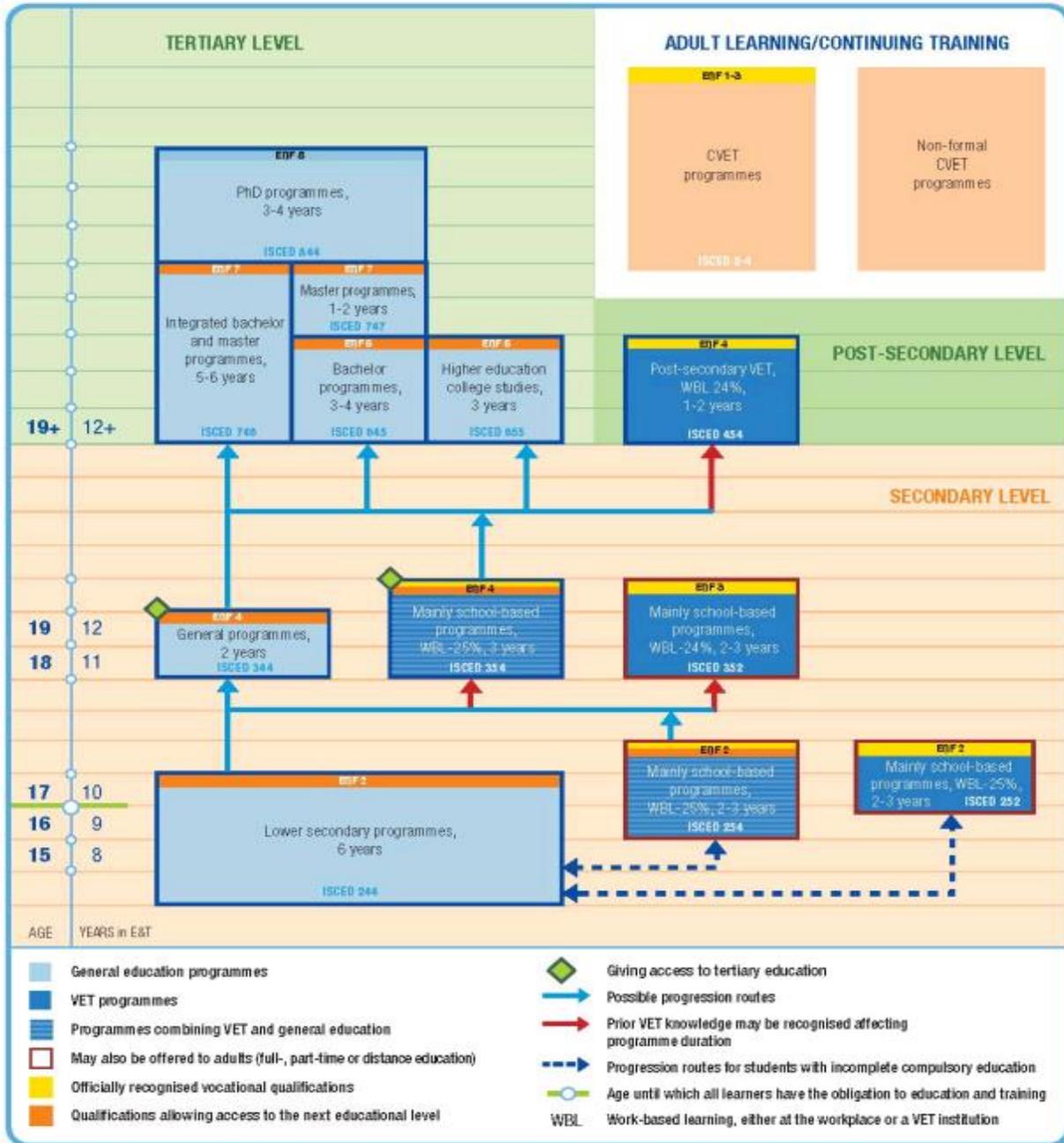
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advocacy, fund development and data collection. Intermediaries guide vision and strategy, support activities, establish practices, build public awareness and will, advance policy and mobilize funding (cf. Questionnaire, GI, p. 3 f.). This process begins with providing relevant and relatable information – creating context in which an issue is recognized to be personally relevant. Heightened personal relevance motivates not only to seek out new information but also process the information in a systematic manner.



Training

Figure 4. VET in Lithuania's education and training system



NB: ISCED-P 2011.

Source: Cedefop and ReferNet Lithuania.

Who trains?

<sup>43</sup> Qualifications and Vocational Education and Training Development Centre with contributions from members of ReferNet Lithuania: Lithuania: VET in Europe: Country report 2014, p. 14.





At the moment the main parts of training programmes contain about three months of practical training, the rest is theoretical training at VET schools. Additionally the training not always takes place in companies but often at VET centers, which is a disadvantage in combination with the missing practical experience and background qualifications of trainers and instructors.

Because every training provider can adapt the basic curricula to its needs as to say the needs of local industry, there is a wide variety of different curricula and specific modular training programmes in the country. Certification and recognition of these curricula and programmes is not a problem if the accredited content, competence and assessment body approved these. If it did, the programme and curricula are valid for whole Lithuania and there should be no problems for students and graduates to change the programme or to apply at companies because certification is not a problem. Testing and piloting of new training programmes therefor is not a high obstacle in Lithuania. At the moment VET institutions follow training plans which are annually accredited by the Minister of education.<sup>44</sup>

As a consequence it could be an incentive for enterprises and VET providers to strengthen their position as intermediaries if they could get additional responsibilities and influence in the area of curricula improvement/modernization and the implementation of standards (cf. Questionnaire, GI, p. 1).

For the teaching personnel in Lithuania there exist additional education opportunities. The teachers, who are normally general education language teachers can participate in continuing professional development (CDP). These courses are offered by accredited teacher training institutes like universities and are offered with different contents and for different areas. The teachers and the schools are independent in their choice.<sup>45</sup> The participation in these courses depends on the teachers personal initiative.<sup>46</sup>

### Target group

Because apprenticeships are still in development there are no tailored training programmes for specific target groups like in Germany. Never-the-less the system is expected to develop according to the role model of Germany in the next years, so this issue may change.

### Curricula/Certification/Examination/Modernization

When it comes to modification of curricula the government is not involved. Again the VET providers do the main work in close cooperation with the companies. They may contact enterprises to learn about industry specific needs and demands and adapt their training according to them. Companies themselves normally do not approach VET providers by themselves because they are not interested in dual VET. The reasons for this lacking interest have their origins in the lacking reputation of dual VET in Lithuania.

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<sup>44</sup> Cf. Kvalifikacijų ir profesinio mokymo plėtros centras (2016). Key competences in vocational education and training – Lithuania. Cedefop ReferNet thematic perspectives series, p. 6.

<sup>45</sup> Cf. Kvalifikacijų ir profesinio mokymo plėtros centras (2016). Key competences in vocational education and training – Lithuania. Cedefop ReferNet thematic perspectives series, p. 23.

<sup>46</sup> Cf. Vaitkutė, L. (2016). Supporting teachers and trainers for successful reforms and quality of vocational education and training: mapping their professional development in the EU – Lithuania. Cedefop ReferNet thematic perspectives series, p. 10.



If training providers develop new curricula or training programmes they follow VET standards and requirements of the Ministry of Education and Science or at least need the confirmation of the accredited content, competence and assessment body for changes. Before the courses start the social partners also implement competence assessment.<sup>47</sup>

### Work based learning

Since 2002 VET in Lithuania is designed with clear definitions of training objectives as well as competence-based teaching methods.<sup>48</sup> These competences are evaluated by the accredited competence assessment body for formal VET programmes since 2012.<sup>49</sup>

One consequence of the recent establishment of apprenticeship is also the lack of requirements for apprentice tutors. Practical instructors receive no special training or guidance.<sup>50</sup> Since 2012 all training staff in VET centers has to proof pedagogical training. Unlike in other systems this is the only requirement to become a trainer, additional obligations like practical job experience or specific certificates are not determined by the government. Changes regarding this issue may take time. As a consequence every VET provider and training conductor can hire the personnel which suits best its specific qualification requirements. The downside of this aspect is a lacking practical experience of VET trainers and instructors even for practical training contents.

### Social Acceptance

In Lithuania one has to note that there is not a strong dual system approach till now. Apprenticeships and apprenticeship like models are taking first steps right now. Mainly they are conducted with EU funding.<sup>51</sup>

Vocational training in general has a bad reputation in Lithuania and is basically seen as plan B if more preferable education options did not work out.

### Problems/Challenges

The skill gap for teachers is already addressed via EU projects like “Development and implementation of the system for improving the technical competences of vocational teachers and lecturers” (2010-2015). One of the activities of this project was to develop a model for improvement of technical competences of trainers. The project suggested to involve intermediaries in the technical training and development of competences of teachers<sup>52</sup>

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<sup>47</sup> Cf. Qualifications and Vocational Education and Training Development Centre with contributions from members of ReferNet Lithuania: Lithuania: VET in Europe: Country report 2014, p. 14.

<sup>48</sup> Cf. Qualifications and Vocational Education and Training Development Centre with contributions from members of ReferNet Lithuania: Lithuania: VET in Europe: Country report 2014, p. 14.

<sup>49</sup> Cf. Qualifications and Vocational Education and Training Development Centre with contributions from members of ReferNet Lithuania: Lithuania: VET in Europe: Country report 2014, p. 18 ff.

<sup>50</sup> Vaitkutė, L. (2016). Supporting teachers and trainers for successful reforms and quality of vocational education and training: mapping their professional development in the EU – Lithuania. Cedefop ReferNet thematic perspectives series, 1f.

<sup>51</sup> Cf. Qualifications and Vocational Education and Training Development Centre with contributions from members of ReferNet Lithuania: Lithuania: VET in Europe: Country report 2014, p. 14.

<sup>52</sup> Cf. Vaitkutė, L. (2016). Supporting teachers and trainers for successful reforms and quality of vocational education and training: mapping their professional development in the EU – Lithuania. Cedefop ReferNet thematic perspectives series, p. 15.





While big companies train their personnel by themselves, smaller ones do not train but need to hire employees who already provide the skills and qualifications needed. They do not see sufficient advantages in training and are willing to invest in higher salaries to get the people they want rather than investing in training. Although this behavior is more expensive in the long run the companies stick to it. Another reason for companies besides the lacking reputation for vocational training is their fear that apprentices might leave their training company when they graduated to receive higher salaries. People with further education often leave for countries with higher salaries like Norway or Great Britain. Therefore companies do not want to risk losing investments in training of employees who will eventually leave the company afterwards. As a consequence the financial contribution of companies and industry to the educational system is low. A comparable financial contribution of companies to the education system like in Germany is nearly impossible in Lithuania.. About two thirds of VET costs are covered by the state. While private funding is not increasing above 10 %. Funding from international organizations like the EU can cover the remaining costs.<sup>53</sup>

Like already mentioned the other vital aspect which stops companies from investing in VET is lacking reputation. Vocational training is seen as a plan B for people who can not apply for university or fail to finish their studies. In a country where even university graduates have high unemployment rates vocational education is only a last resort. This is also relevant for low motivation of participants and trainers in the area of vocational training and the main reason why VET teachers are aging and it is difficult to attract young teachers and employees to work as teachers in VET<sup>54</sup>.

While in some sectors trained professionals are missing completely other gaps are closed by students who do the work transitionally to finance their studies.

Both these issues are clear indicators that awareness campaigns and some other measures to improve the image of vocational training could be good supplements but the main problem namely the emigration of skilled workers remains a big problem.

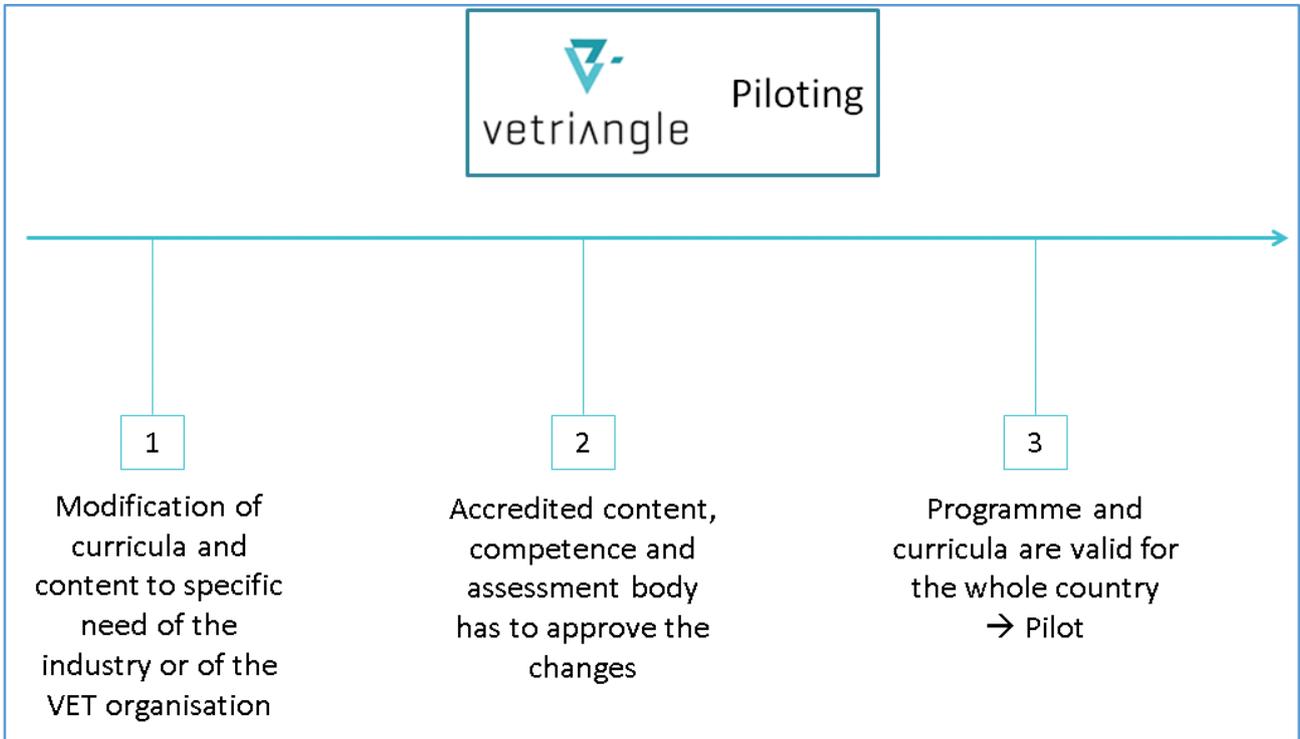
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<sup>53</sup> Cf. Qualifications and Vocational Education and Training Development Centre with contributions from members of ReferNet Lithuania: Lithuania: VET in Europe: Country report 2014, p. 23 ff.

<sup>54</sup> Cf. Vaitkutė, L. (2016). Supporting teachers and trainers for successful reforms and quality of vocational education and training: mapping their professional development in the EU – Lithuania. Cedefop ReferNet thematic perspectives series, p. 16.



## Piloting/Best Practice



## Recommendations

### General

- Enterprises and VET providers should strengthen their intermediary position if the government includes them more in the development of qualifications and curricula. Besides financial incentives for corporations to provide training this could be an alternative.
- More involvement of intermediaries in the technical training and development of competences of teachers is desirable
- Another suggestion is to hire practical trainers along skills profiles to ensure their qualification and skills level. This is also important to provide incentives for apprentices and graduates to stay at the company. Other extras beside salary like responsibility, perspective and activities could also achieve this target.
- More practical training at company facilities and workshops and more skilled practical trainers are preferable.
- The government should divide more responsibilities to intermediary protagonists.



- Government and VET providers could implement awareness campaigns to put something against the bad reputation of dual training and WBL.
- More research or the establishment an exchange platform could be helpful for intermediaries to make fast reactions on changing labour market needs and industry demands possible.

#### Project

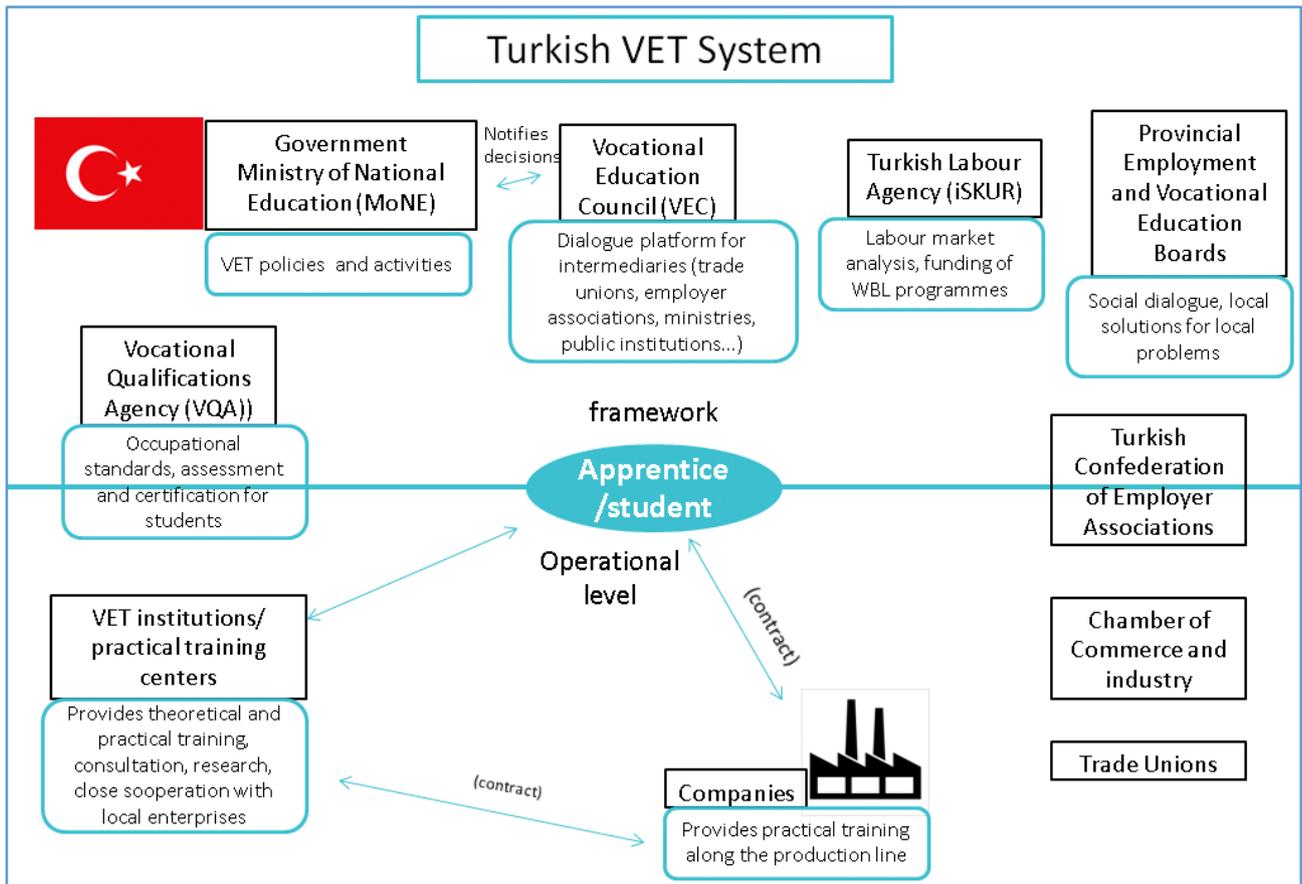
- Because piloting is not very difficult in comparison we should try to implement a close cooperation with a corporation and some dual WBL content. If an apprenticeship-like model is not possible because of the demand gap internships and job-placement activities can serve as substitutes.
- Like in Poland specific didactical training in IO3 seems like a good option to provide some content in this gap. There could be possible links to other EU projects which could be useful.
- If we can implement a small scale best practice with a successful and profitable cooperation with an enterprise this could raise awareness also on a regional/local level and fuel the interest of corporations and students in training. A high chance for implementation could be in a transition area of two existing qualifications or in “new” professions.
- Like in Spain and Poland trade unions and other intermediaries could be included in the piloting process at last on a local level. This will strengthen the support for the pilot course and also ensure that the different interests can be evaluated if possible.



## Turkey

### Intermediaries

#### Overview



#### Details

Vocational education policies and activities are mostly carried out by the **Ministry of National Education (MoNE)** within the framework of Law No. 3308.

**MOLSS (Ministry of Labor and Social Security)** is one of the main actors with which MoNE cooperates on human resources and apprenticeship works.

**Turkish Labor Agency (İŞKUR):** as an affiliated body of MoLSS İŞKUR implements and funds WBL programs all around the country, does labor market analysis twice a year.

**Vocational Education Council (VEC):** VEC is composed of the representatives of Ministries, public institutions and agencies, employers and workers. The council is an example of public-private partnerships, bringing together ministries, trade and employers' unions, public institutions and social partners. VEC takes



decisions on the issues of implementation of vocational and technical education programs at all formal, non-formal, apprenticeship education institutions. Council decisions are notified to the Ministry of National education.

**The Provincial Employment and Vocational Education Boards:** are important mechanisms having the potential to produce “local solutions for local problems” by means of social dialogue method. They have been created to mobilize local facilities and resources in the fight against unemployment by providing collaboration and peer between different institutions and organizations. They consist of the representatives of other public authorities, as well as workers, employers and trade organizations, industry chambers and other local organizations representatives.

**Vocational Qualifications Agency (VQA / MYK):** VQA develops occupational standards based on actual competencies required by the labour market and also has important responsibilities in the area of student assessment and certification.

Other than above mentioned main protagonists there are six main intermediary organizations in Turkey:

Employer organization is united with one central employers’ association and federated associations in most sectors: **TISK** (Turkish Confederation of Employer Associations). There is also a Chamber of Commerce and Industry, **TOBB**, and an artisan organization, **TESK** (Confederation of Turkish Tradesmen and Craftsmen).

The trade union side is more complex and divided between:

- The major modern and moderate union confederation, **TURK-IS** (Confederation of Turkish Trade Unions). TÜRK-İS benefits from a privileged position in social dialogue arrangements and it is obvious that both government and employers prefer to deal with this confederation.
- The more traditional and radical confederation, **HAK-IS** (Confederation of Turkish Real Trade Unions). In some sectors HAK-IS is more important and it has strong EU links despite its traditional policies, so is involved in some projects with employers and government.
- The modern and radical confederation, **DISK** (Progressive Workers’ Union Confederation). DISK is generally excluded, although it also has good EU links, and is regarded in some quarters as a revolutionary organization rather than a trade union.

In addition, there are also three trade unions representing government employees.

Representatives of intermediaries attend meetings of work groups formed under the project like curricula development, occupational standards, lifelong learning and quality assurance. Intermediaries play also an active role in the development of a national qualification framework including a law on the establishment of a vocational qualification agency.

There are trade unions in Turkey composed of different sector groups in the labor market. Issues such as employee salaries / wages and social rights between these trade unions and employers' organizations are

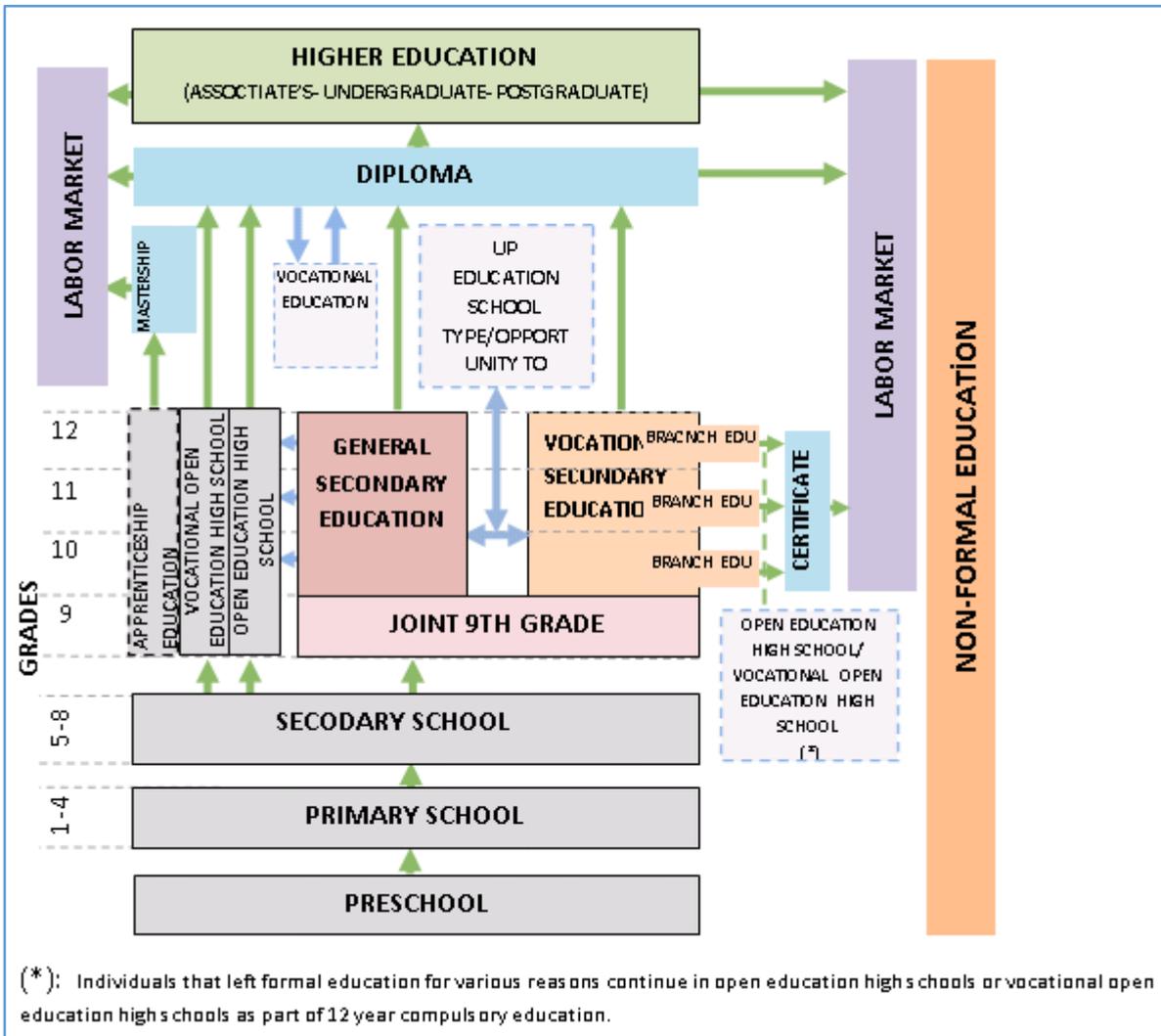


addressed by a joint decision with the representatives of the Ministry of Labor and Social Security (MoLSS). Regular annual meetings are organized and the balance and harmony between the labor market and the employers' organizations in the national sense is provided by the Ministry of Labor and Social Security.

There is no organic or hierarchical link in the structuring of trade unions and employers' organizations.

Representatives of different sectors (Trade Unions and Employers' Organizations) hold regular annual meetings and take an active role in all kinds of activities between labour market and employers in national and regional level.

Training



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<sup>55</sup> Ministry of National Education-DG for VET, Özlem Kalkan, 2015, p. 9.





There is 12-year compulsory education in Turkey. Education is divided into two groups such as formal education and non-formal education. In formal education, vocational and technical education is implemented in the schools called "Vocational and Technical Anatolian High School". The education duration of this school is 4 years. Students begin the vocational training in the second grade by selecting a vocational field. In vocational education is implemented theory and practice. Practical training is carried out in the school workshops according to the work-based training method. In the final year, students do internship three days per week in the companies. Students can get money while doing the internship and be employed in the company after graduation. After graduation, these students can have the authority to establish a company thanks to their title called "technician". In non-formal education, there are some courses like a certification programme. Since 2010, the courses have been implemented in the way of work-based training thanks to the Project called UMEM. The trainees have to do and complete the internship in order to get the certificate. For the others who cannot get benefit from those education programmes, there is an apprenticeship system. In this system, young people have only one day theoretical education in the schools and for the rest they work in the companies.

Practical training in Turkey is carried out in all kinds of commercial enterprises. According to Article 18 of the Vocational Education Law no. 3308 in Turkey, public and private institutions, institutions and enterprises employing ten or more personnel provide skills training to vocational education students not less than five percent of the number of personnel they employ. In order to employ trainee, apprentice and apprentice candidates, it is necessary for an enterprise to have personnel with the "qualified instructor" certificate. Students who have received vocational training at a certain level start practicing after formal protocols between practical training providers and schools. According to the vocational and technical education law, the enterprises employing ten or more staff are notified to the provincial directorates of national education and to the higher education institutions in the region by the directorates of Turkish Labour Agency.

Practical training providers are responsible for:

- Business orientation of trainees,
- Placement of students according to their fields and branches and their pre-qualification,
- To carry out the certification activities of students from secondary education and higher education institutions,
- To send the qualified instructors of the firm as a commission member to the pre-graduation skills exam in the schools of the students coming from the secondary schools

Other commission members for this skill exam are:



- School Technical Assistant Principal,
- The relevant field chief at the school,
- The relevant branch chief at the school,
- Relevant field Teachers at School

### Who trains?

The main source for training of teachers is faculties of education. The Faculty of Technical Education, the Faculty of Vocational Education and the Faculty of Trade and Tourism Education that used to train teachers for vocational and technical secondary education institutions were closed down and new colleges called Faculty of Technology, Faculty of Art and Design and Faculty of Tourism replaced them on November 13th 2009 following a decision of the Turkish Parliament due to the employability problems that the graduates of those schools have faced in recent years and the suggestions of the Higher Education Council of Turkey (HEC). These new faculties train engineering students. Additionally, the graduates of these faculties can also become teachers at the technical or vocational high schools if they follow pedagogical courses.

Vocational education teachers graduated from above mentioned Turkish Vocational Higher Education Institutions have the flexibility to be employed in different firms in their fields other than teaching.

Vocational teachers have to have a 4-year bachelor's degree in the relevant fields of education faculties. There is no obligation for master's degree or PhD. Graduates of Engineering or Technology faculties can have teacher qualifications by participating in the Master's or Pedagogical Formation courses that are opened at some time, and they can become teachers in the vet schools affiliated to the Ministry of National Education.

On the other hand, practical training in workplaces is given by "qualified instructors" (practical work teachers). A "qualified instructor" is a person who has acquired mastery competence, is responsible for the training of the apprentice, foreman and vocational high school students, and knows and applies the vocational education techniques. They are mostly vocational education teachers hired as qualified instructors. Enterprises that will provide occupational skill training to 10 or more students, establish a training unit. In this unit qualified trainers/instructors having craftsmanship adequacy and professional competence with pedagogical training are appointed. The pedagogical training course which is provided by vocational education and public education centers is a must in order to take the qualified trainer / instructor exam and get the qualified trainer/instructor certificate.

For each group of students having practical training in enterprises, a coordinator teacher is appointed by the school in order to monitor and evaluate the practical training sessions in enterprises. So, it could be said that the schools examine the corporations and qualified instructors/trainers during the practical training period.



Ministry of National Education (MoNE), General Directorate of Vocational and Technical Education and Department of Curriculum and Instructional Materials are responsible for the preparation of VET curriculum

The department is responsible for:

- To prepare or make prepare teaching programs related to vocational and technical education taking into account the needs and expectations of labor market,
- Presenting the prepared curriculum and weekly course schedules to the Board of Education
- Preparing or making prepare textbooks, electronic books and course contents,
- To carry out research and development studies related to textbooks and educational materials, to present prepared textbooks to the Board of Education
- To define measurable competences according to the fields and branches
- To ensure the evaluation and recognition of the program contents acquired abroad

The VET system in Turkey includes different options:

- Training by Vocational and technical high school for the qualifications of specialized workers and technicians
- Apprenticeships as a cooperation between enterprises and vocational education centers
- Non-formal education is provided by vocational education centers<sup>56</sup>

### Target group

Formal vocational education and training providers do not provide specific training programmes for specific target groups but in the framework of non-formal and informal education (open vocational high schools, vocational education centers, public training centers, etc.) vocational education services are provided to every age group with every type and nature.

Turkish Employment Agency also provides vocational education and training to unemployed young over 15 after matching them with the employers.

### Curricula/Certification/Examination/Modernization

Ministry of National Education has been developing modular VET curricula since the year 1993. In particular, through EU funded SVET projects competency based modular VET curricula development studies have been intensified since 2002. In this context the programmes of grades 9-10-11-12 in 17 job families and 64 branches have been developed within the context of the Project and approved by the Board of Education. European Qualification Framework (EQF) which consists of 8 reference levels has been adopted by the Turkish Ministry of National Education and competency based modular VET curricula have been developed in accordance with the 8 reference levels of the EQF. First 4 reference levels (1, 2, 3 and 4.

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<sup>56</sup> Cf. UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training: World TVET Database Turkey, 2013, p. 9f.



levels) of the EQF have been handled by the MoNE and the rest (5, 6, 7 and 8. levels) were under the responsibility of Council of Higher Education (CoHE).

Students who receive vocational training in enterprises are taken to the skill exam in the last week of the course year for evaluation of skills training. This examination is applied in written and / or written according to skills' characteristics in accordance with the decision of the exam commission. Skill exams are carried out by a commission formed by the "qualified trainer or trainer of the employer, one of the field / department / workshop / laboratory chief of the relevant area in the school, field teachers and members representing the employer organization in that profession. Skill exam score, the sum of the score of the job file and the score after the exam evaluation. The skill test is evaluated over 100 points. 80 percent of this is given by the exam and 20 percent by the job file.

The National Vocational Qualifications System is being implemented by the Vocational Qualifications Authority in accordance with the European Qualifications Framework since 2007, and is developing a quality assured system of vocational qualifications based on national occupational standards which is driven by economic sectors. Sectorial awarding bodies (VocTest Centres) are established around the country. This system provides qualifications for continuing vocational education. The VocTest Centres are paid by VQA for occupational standards, testing and certification services.<sup>57</sup>

The provision of VET is centralized. Frame curricula are determined at national level.

The MoNE is the main body in charge of education in Turkey. Research is mostly conducted by Board of Education and Educational Research and Development Department of MoNE.

As for the vocational education and labor market research and analysis, social partners also take part in research activities.

For example, ISKUR (Turkish Employment Agency) does labor market analysis twice a year and those analyses help policy makers to take consistent decisions about vocational training by taking into account the long-term priorities and goals from strategic perspective. Besides, these surveys are considered to provide major contribution to strengthening the connection between vocational training and employment in addition to educating human resources fit for the needs of the labor market.

In Turkey, according to Article 18 of the Vocational Education Law no. 3308, public and private institutions, establishments and enterprises employing ten or more personnel train vocational and technical education students not less than five percent of the total number of personnel they employ.

In enterprises employing twenty and more employees trainees are paid a minimum of 30 percent of the net minimum wage and at least 15 percent of the minimum wage in enterprises employing less than twenty employees.

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<sup>57</sup> Cf. Fusun Akkok: Country report. Turkey, 2016 update to the European inventory on validation of non-formal and informal learning, p. 13.





Apart from this, the enterprises pay additional amount according to the economic value created by the trainee to the workplace. In Automotive (bodywork, paint, assembly), furniture, metal (welding assistant) sectors apprentices can be put into production immediately and the enterprise can make profit.

### Work based learning

The Ministry of National Education (MoNE) recognizes the increasing importance of VET. It aims to base VET on:

- Demands and requirements of the labour market;
- A participatory-approach;
- International employability of VET graduates; and
- Continuous development and quality-improvement.

### Social Acceptance

Public perception about VET in Turkey, like in any other country in the world, has a number of dimensions that need be corrected. For instance, general academic learning is much more acknowledged than VET by most parents since the public has still an understanding that students who go for vocational learning are the less able and that students in academic learning are more intelligent and will be better off in their life. However the reform being implemented in Turkey is not directly addressing the parity of academic and vocational routes. Instead it focuses on promoting VET through some real examples of good practices. On the other hand, it is also good to know that this prejudice is slowly breaking down mainly thanks to the recent VET reform programmes (such as the SVET the MVET projects and the HRDVET projects).

There is still a long way until the public perception about VET comes to a point where it does not conjure up any negative picture and is considered as one of the normal learning streams that anyone could opt for. To achieve that goal; ministry has been organizing various events such as information seminars, career days, entrepreneurship conferences, lifelong learning seminars, establishment of VET Information Centers etc.

In this context The Ministry has recently launched an online portal named “National Career Information System”. The system, which is a career guidance and counseling service, will be used for career planning purposes for all VET students and all individuals who need to learn more about VET programs they are interested in. Therefore unemployed people and those who want to change their job will also benefit from the portal very much. In basic terms any individual who wishes to make a career planning for him/herself answers a list of questions, reads the profile prepared by the system for her/himself and identifies his/her career opportunities.

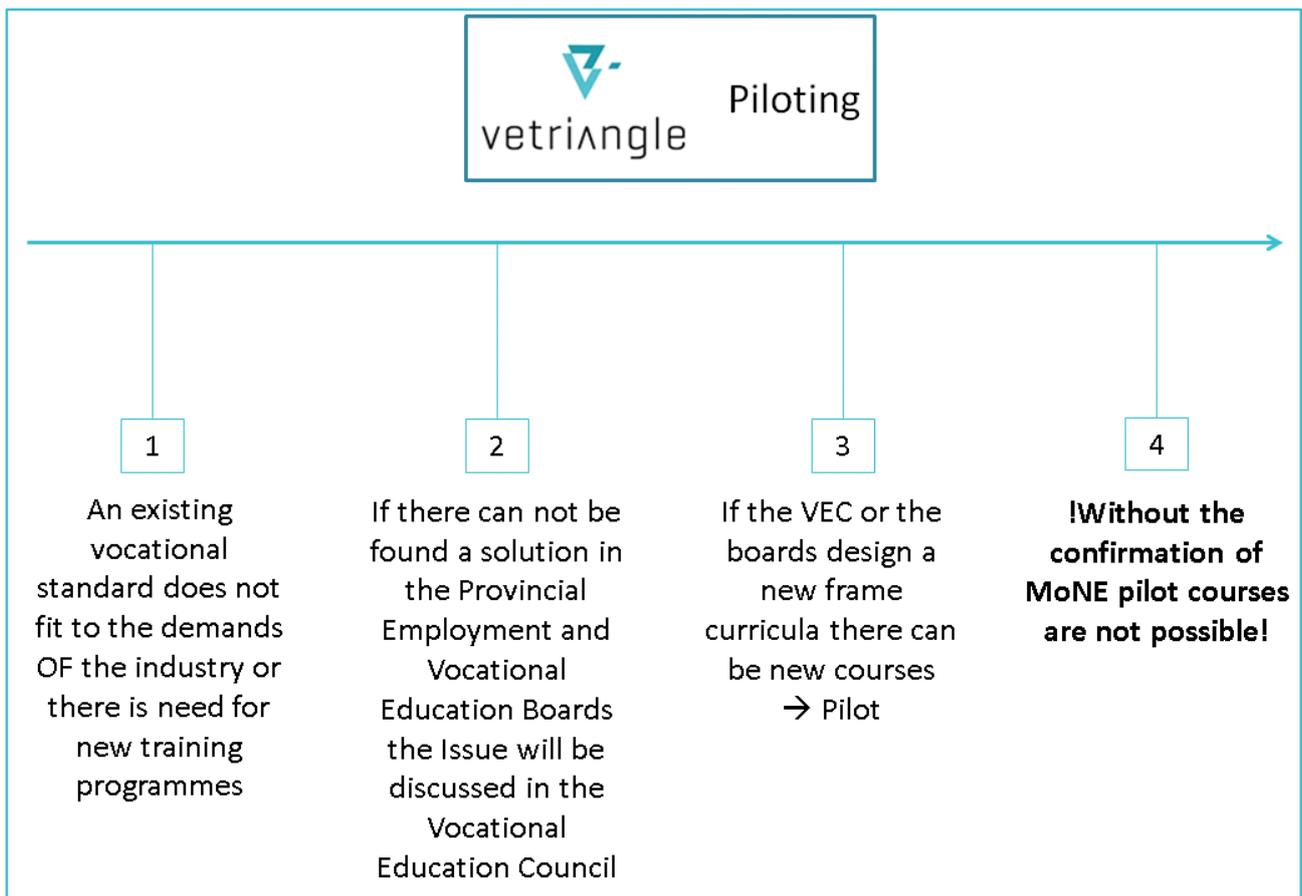


## Problems/Challenges

The centralized VET system in Turkey makes it very difficult to address local demands and needs of the industry (Cf. Questionnaire, p. 2). The advantage of clearly divided responsibilities and tasks towards central organizations and institutions can not compensate for regional or local differences and is therefore not flexible enough to react on fast changes in industrial demands. One example for this can be found in the impossibility to test new contents or conduct pilot courses without the permission of MoNE.

Another issue which is related to this is the lack of dialogue between employers and vocational education decision makers (cf. questionnaire, p. 4). Although this kind of dialogue is established in institutions like the VEC on paper it gets ineffective and inefficient in reality because it is not conducted in a sufficient way.

## Piloting/Best Practice



Which sectors and professions are suitable to an apprenticeship-like model in Turkey?

- Information technologies
- Electric-electronic technology



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- Ship construction
- Construction technology
- Chemical technology
- Jewelry technology
- Machine technology
- Printing technology
- Metal technology
- Furniture and interior design
- Motor vehicles technology
- Plastic technology
- Ceramic and glass technologies
- Agriculture
- Textile technology
- Installation technology and air conditioning

## Recommendations

### General

- Because the VET system is quite centralized and has a lot of protagonists and intermediaries it could be efficient to make the education system more efficient in the long run especially when it comes to pilot courses or testing of new contents. More competences and responsibilities for the Provincial Employment and Vocational Education Boards could be an option.
- Because of this centralization it could be an interesting approach to have a stronger focus on local demands and implement a local VEC with all intermediaries. This could also be interesting as a supplement regarding the cooperation of trade unions and employer associations.
- More competences for local branches of intermediaries to be able to react on local needs and demands of the industry → Bottom-up approaches should be encouraged



## Project

- Like in other countries successful pilots could be a good promotion tool for dual VET and WBL. In this issue a cooperation with MoNE could be fruitful.
- For IO2 it could be a valuable target to include other regional groups of intermediaries besides the enterprises (trade unions, alumnis, ...) before the curriculum is sent the responsible institutions for accreditation.

## Transition to IO2

MAI will use this intellectual output as a basis for the development of a model curricular for IO2. Synergies may be used according to the role of intermediaries as well as possible new linkages between them. A direct link could be found in the different responsibilities and tasks of the institution/organization in the different countries which is responsible for developing curricula. A good solution could be to involve different social partners in the development of curricula for IO2. Besides the training providers (vocational schools & enterprises) the students and apprentices themselves could be involved in the development of curricula, teaching materials and learning objectives.

- Students / apprentices should be involved in the development process together with VET providers and enterprises
- They could also design flexible parts of the curriculum
- There should be a consultation/discussion platform like a round table with all participating intermediaries
- If the pilot in the later project process has not apprenticeship character there should be additional measures like internships, Job placement activities ...<sup>58</sup>

For practical training contents and training in companies it is important to have qualified instructors and trainers who not only are trained and qualified in the practical contents and processes they teach but also in competence and modular teaching approaches. Besides profession specific work experience they also need to have didactical and pedagogical skills. At the end of the day they also should be kind of a mentor for the apprentices. This mentoring role can also be a possible solution to the fear of enterprises that they train apprentices for nothing because other corporations hire them without compensation. An apprentice who established a positive relationship to his trainer and to his corporation will think twice before leaving.

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<sup>58</sup> Cf. Grazia Violi, Valentina Maria, Karner, Ida et. Al: NetWORK BASED LEARNING. Needs and gaps report, p. 17f.





The role of the practical instructor is therefore really important and should not be underestimated for a successful pilot course or apprenticeship. As a consequence it could be useful for training companies to develop skills profiles for instructors and put some effort in staffing these positions. Also additional measures like peer-learning with school teachers, pedagogical/didactical training or specific promotion initiatives could be good incentives to increase the impact of qualified training staff.<sup>59</sup>

In the long run it could be a useful approach to implement not only training cooperations with one company but also to support training cooperations between different companies in the same industry sector. This reduces training costs for companies which is a valuable factor especially for SMEs but also can have positive effects on the training contents and curricula e.g. with additional contents or modules.<sup>60</sup>

A last aspect to be considered is a reasonable balance between a holistic competence based approach like in Germany and a strong modular focus like in Spain. A balanced approach somewhere between this kind of extreme systemic approaches will suit best for most system changes.

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<sup>59</sup> Cf. Grazia Violi, Valentina Maria, Karner, Ida et. Al: NetWORK BASED LEARNING. Needs and gaps report, p. 23.

<sup>60</sup> Cf. Grazia Violi, Valentina Maria, Karner, Ida et. Al: NetWORK BASED LEARNING. Needs and gaps report, p. 29.



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