

Attachment 3.3

ERASMUS+-Project “National Authorities for Apprenticeships: Policy learning and support to promoting apprenticeship systems and VET policy experimentation under the European Alliance for Apprenticeship”

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Preamble

This report is a synthesis of relevant actual publications by BIBB and other German VET actors on the German apprenticeship system. It has been written by BIBB project team. It especially draws from BIBB publication ‘training regulations and how they come about’ (BIBB, 2014). All sources are mentioned in each chapter.

1. Country context

1.1. Economic context

Germany has 81.1 million inhabitants (2014). In 2014 42.6 million persons were in employment. The numbers are growing since 2006. Reasons for the growth are migration and a mobilisation of the hidden reserve, especially the increase of employment among women. In spite of the growth of the labour force the demographic change remains a challenge. The declining numbers of school leavers

have already an impact on the number of newly signed training contracts in the dual apprenticeship system.

The unemployment rate in 2014 was 4.7 % with a youth unemployment rate of 7.4 %. According to EUROSTAT in 2014 59.8% of the population aged 25-64 had an upper secondary qualification (ISCED 3-4) and 27.1% held a tertiary level qualification (ISCED 5-8).

The German economy is largely characterised by small and medium-sized enterprises. Of the 3.6 million companies in 2012, 99.3 % were SMEs. They include the majority of the 583,668 craft enterprises. More than 60% of the workforce in Germany is employed in small and medium sized enterprises (SMEs). SMEs play also a crucial role in providing training to apprentices in the dual apprenticeship system.

In the last decades Germany has undergone a substantial shift from an industrial to a service economy and the manufacturing sector has become more service intensive. The service sector is the largest sector and generated in 2013 69% of the GVA (gross value added), whereas the industry/manufacturing sector accounted for 30.2% and the agriculture/forestry sector for only 0.8%. This is also mirrored in the employment statistics. Three out of four persons were employed in the service sector in 2012, and the number of employed persons in agriculture/forestry has halved since 1991.

Germany was also hit by the global financial crisis leading to a negative economic growth in 2009. Afterwards the economy recovered and growth rose again driven by export and private consumption. The economy is highly export oriented. In 2014 the foreign trade balance reached a record balance surplus. Main export goods are motor vehicles and motor vehicle parts, followed by machines.

There are strong regional disparities in the German economy. Very roughly said there is a North-South and an East-West divide. East Germany still has a much lower labour productivity and less industrial companies, but there are also less prosperous regions in West Germany. Some regions and branches are already affected by skills shortage. It is expected, that especially small and medium sized enterprises will have growing difficulties to recruit skilled personnel. This is already mirrored in growing difficulties of enterprises to fill their training places.

Sources and further reading:

- Federal Statistical Office of Germany Destatis: www.destatis.de (available in English)
- EUROSTAT: <http://ec.europa.eu/eurostat/data/database>

1.2. Political and social context of the Apprenticeship system

Competences

The Federal Republic of Germany consists of 16 states [Länder]. They have responsibility for legislation and administration in the areas of education, science and culture. The distribution of legislative competence between the Federal Government and the Länder is defined in the Basic Law, in that the Länder shall have the right to legislate insofar as the Basic Law does not confer legislative power on the Federal Government (Article 70). Educational and cultural legislation is therefore primarily the responsibility of the Länder.

The regulation of the in-company part of the dual apprenticeship training is the only direct competence area of the federal government within the field of education. Because of the importance of apprenticeships for the economy the German government puts a high emphasis on the promotion of the system. It addresses the challenges through initiatives and programmes. The core of the dual

apprenticeship system is the institutionalized cooperation of the federal government, the federal states and the social partners based on a principle of **consensus**. The offer of in-company training places is the decision of the company and subject to **market conditions**.

History

Historical roots of the in-company training go back to the Middle Ages. Individual craft and trade associations, the guilds, regulated apprenticeships for their enterprises. A systematic form of training in enterprise and school, the so-called master craftsmen training, developed out of those occupational regulations. As the process of industrialization began, the industries adopted the concept of craft training and adapted it to their needs. They regulated vocational training through the establishment of a mandatory catalogue of skills and knowledge and guidelines for the duration of the training.

Gradually “national standards” were created for the qualification of skilled workers. But it was not until after the Second World War, in 1953, that vocational training in the crafts was regulated under the Crafts and Trade Code (Gesetz zur Ordnung des Handwerks –HwO). In 1969 the Vocational Training Act (BBiG) was adopted and amended in 2005.

Vocational schools also look back on a long tradition that can be traced back to the 16th and 17th centuries. Although compulsory vocational school instruction was not finally introduced until 1938, the public authorities could already oblige enterprises to send their apprentices to vocational school more than a hundred years ago.

Key features in short

In Germany apprenticeship in the dual system is (still) the main pathway into employment for young people. Depending on the occupation it is also a widely accepted option for young people with university entrance qualification. Many companies consider training as a social task and take pride in being a training company. The relatively smooth transition into employment and the resulting low youth unemployment are seen as important strengths of the system. At the same time many young people that wish to enter an apprenticeship end up in the so-called transition system of pre-vocational training.

In the recent years the system started to get under pressure due to the trend towards academic studies. Traditionally youth entering the dual apprenticeship system outnumbered higher education entrants. In 2011 the numbers were even for the first time, and since then higher education enrolments dominate.

The foundation of the system is the **occupational concept**. Apprentices are trained in a recognized training occupation according to national valid standards. The overall aim is to equip the individual with abilities, knowledge and skills – referred to as **professional ability to act** – necessary for the exercise of a qualified vocational activity in a changing working environment. This way the interests of the apprentices to gain a labour-market relevant qualification and of the companies to get a skilled labour force are intended to be balanced. The occupation also serves as resource for social integration and personal identification.

The apprenticeship system in numbers

In 2012 the calculated share of the resident population starting an apprenticeship in the dual system was 55.7%. In total 1,391,900 young people were in an apprenticeship in 2013. From the apprentices starting in 2013 42.3% had a general secondary education leaving certificate, 29.5% a secondary education leaving certificate and 25.3% were holding a university entrance qualification.



The number of newly-concluded apprenticeship contracts was 522,200 in 2014. Over one third of the contracts were concluded in the ten most frequent training occupations.

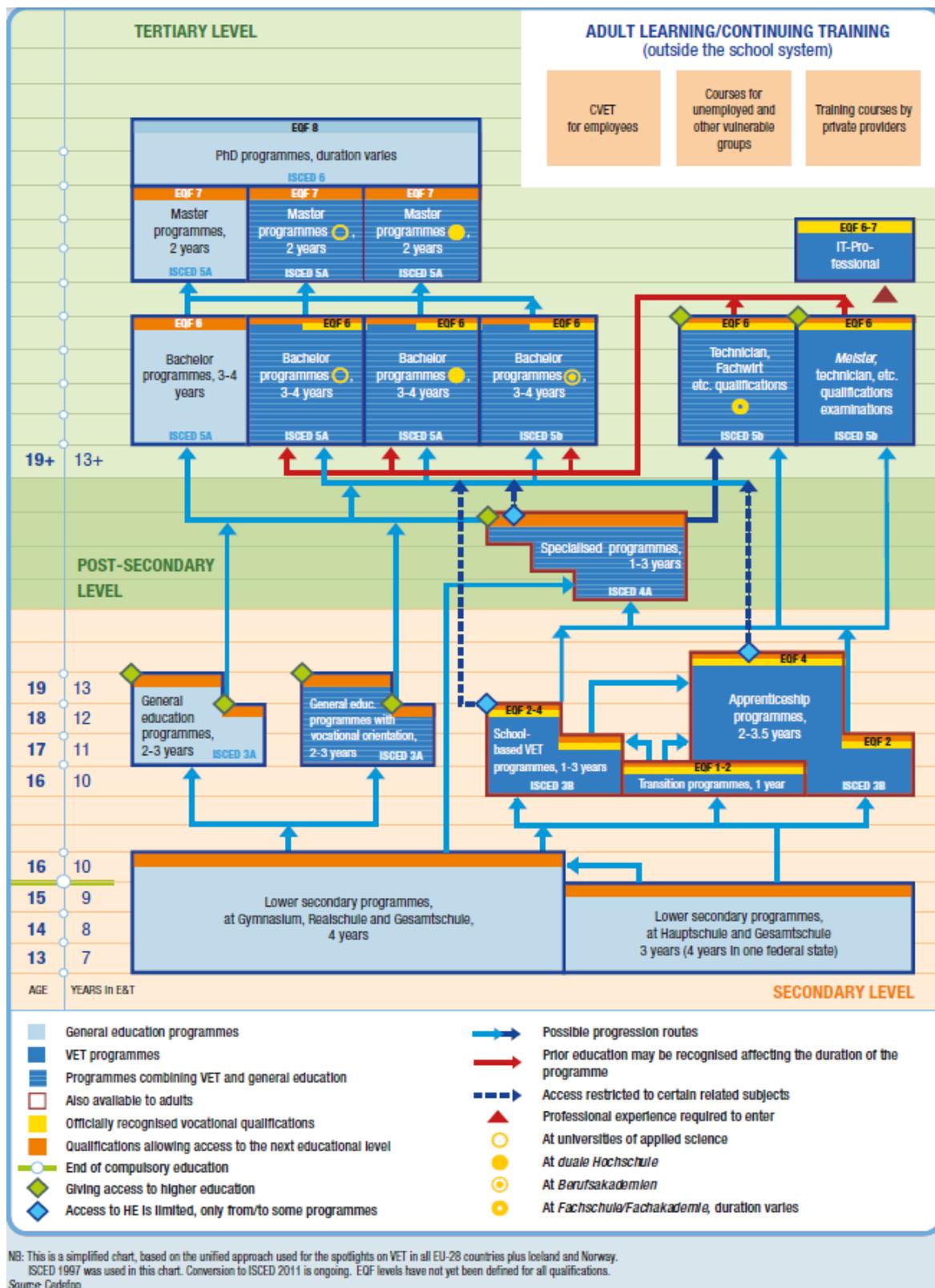
The number of part-time vocational schools was 1559 in 2013. At the end of the same year 438.000 companies participated in the apprenticeship system, a rate of 20.7%. In 2012 two thirds of the apprenticeship graduates were taken on as employees, at very small companies it was half the graduates.

Sources and further reading:

- BIBB 2015: VET data report Germany 2014.
<http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7722> [15.10.2015]
- Federal Statistical Office of Germany Destatis: www.destatis.de (available in English)



1.3. The overall education system and the VET system



The school system

Due to the cultural sovereignty the education systems of the federal states differ slightly. Full time school attendance in Germany is compulsory for ten years starting at age 5 or 6, depending on the state. Pupils that are not continuing full time general or vocational school after those ten years are subject to the compulsory part time vocational school attendance until they turn 18 or for the duration of their apprenticeship in the dual system. After 4 or 6 years (depending on the federal state) in primary education pupils continue in different educational tracks (secondary general school, intermediate general school, grammar school or a comprehensive school combining the other types). Depending on the school type they can achieve three different leaving certificates:

- the general secondary education leaving certificate after Grade 9,
- the secondary education leaving certificate after Grade 10 and
- the university entrance qualification (Abitur) after Grade 12 respectively 13.

Graduates of the general school system have the opportunity to enter

- the dual apprenticeship system leading to a recognized training occupations (open to everyone that finished compulsory education if they find a training company)
- the vocational school system leading to a state certified occupation and
- general education programmes with vocational orientation (both requiring a general secondary education leaving certificate)

Pre-vocational training measures are available for young people that did not succeed in finding a training company to start an apprenticeship.

Initial VET

Regarding intake, the dual apprenticeship system dominates the German VET system. Full-time vocational school system encompasses the VET programmes outside the dual apprenticeship system, which are regulated by other federal or federal state laws. Those are for example occupations in the health and the social sector or the so-called assistant occupations. Many occupations in the health sector also encompass two learning venues, e.g. a hospital and the vocational school. Another option is programmes that combine general upper secondary and vocationally oriented education, usually leading to an university entrance qualification.

Formal continuing vocational education and training (CVET)

In Germany there is a very broad offer of CVET, mostly based on an open market. For VET graduates there are nationally regulated further training qualifications, e.g. the “Meister” and qualifications issued by the chambers available. Both are based on the Vocational Training Act and the Crafts and Trade Code.

The trade and technical schools of the federal states offer state recognized VET qualifications at a higher level, e.g. to become a technician. Most further training qualifications and certificates of trade and technical schools enable access to university.

Tertiary system

German universities and universities of applied sciences offer bachelor and master programmes. The dual university, vocational academies and universities of applied sciences also run dual study programmes that combine learning at the higher education institution and the company.

German Qualifications Framework

The German Qualifications Framework for Lifelong Learning (GQF) was developed involving the relevant stakeholders and adopted in 2013. The GQF has – equivalent to the EQF – eight levels to which formal qualifications from general education, higher education and vocational education are assigned. The two-year occupations of the dual system are assigned to level 3, the three-year and three-and-a-half-year occupations to level 4. Advanced training occupations in the IVET sector are assigned up to level 7. In 2017 the assignments will be reconsidered, taking into account the hitherto unassigned general education diplomas. The concept of action competence is at the centre of the GQF. In the vocational sphere it is equated with vocational capacity as defined in the Vocational Training Act.

Further reading:

- BIBB 2015: Germany. VET in Europe – Country report 2014.
http://www.refernet.de/media/BIBB_ReferNet_barrierefrei.pdf [15.10.2015]
- Arbeitskreis Deutscher Qualifikationsrahmen 2011: Der Deutsche Qualifikationsrahmen für lebenslanges Lernen.
http://www.dqr.de/media/content/Der_Deutsche_Qualifikationsrahmen_fue_lebenslanges_Lernen.pdf [15.10.2015]
- Bundesministerium für Bildung und Forschung / Kultusministerkonferenz 2013: German EQF Referencing Report. http://www.dqr.de/media/content/German_EQF_Referencing_Report.pdf [15.10.2015]

2. Key features

2.1. Governance of VET and regulatory framework

Governance

Fundamental to the success of the German dual apprenticeship model are the coordinated efforts by the Federal Government, Federal States (Länder) and the social partners as well as the responsibility assumed by companies for training young people. The education system as such is a state-run, predominantly public-sector with a legally regulated structure, which comprises various education institutions. Under the Basic Law, it falls within the cultural sovereignty of the Länder and therefore has a federal structure. This means that the Länder are running the VET schools whereas the Federal government is responsible for in-company VET training.

Stakeholders

The **federal government** defines the legal framework for the in-company part of initial vocational education and training through laws and regulations. Within the government the Federal Ministry of Education and Research (BMBF) is responsible for general policy issues of vocational education and training, e.g. the Vocational Training Act, training regulations and the implementation of programmes to foster vocational training. The single Federal ministries are responsible for the recognition of the training occupations in their competence areas. For most training occupations this is the Federal Ministry for Economic Affairs and Energy (BMWi). In order to recognise a training occupation an approval of the BMBF is necessary.

The Federal States run the part-time vocational schools as part of the dual VET system. They also supervise the chambers which play a crucial role with regard to the in-company part of the dual apprenticeship system.

According to the principle of consensus the **social partners** are involved in the governance of German VET on all levels. Under the Works Constitution Act and the Employee Representation Act the trade unions participate in the implementation of vocational education and training. The associations of employers represent the interests of the **training companies** – mostly private law entities – in which the training takes place.

Competent bodies

The implementation of initial vocational education and training in private enterprises is monitored by the chambers as “**competent bodies**”. All companies in a particular sector are compulsory, dues-paying members of the relevant Chamber. Decisions are made by a General Assembly elected by all members of the Chamber. The public service and religious organisations governed by public law have their own competent bodies.

VET research

The vocational training act regulates VET-research, planning and statistics. The Federal Ministry for Education and Research (BMBF) has to submit a yearly report on vocational education and training to the federal government. The report monitors the developments in the dual apprenticeship system, identifies challenges and proposes solutions.

According to the vocational training act the Federal Institute for Vocational Education and Training (BIBB) was established in 1970 as an institute for researching, developing and promoting out-of-school vocational education and training. The act specifies the statistical data that have to be compiled for the planning and organizing of vocational training. The BIBB and the Institute for Employment Research (IAB) of the Federal Employment Agency support the Federal Statistical Office in the preparation of the statistics. The BIBB publishes a yearly data report supplementing the report on vocational education and training of the BMBF. It also has the task of contributing to VET research by carrying out its own academic research.

In addition to the VET research based on the vocational training act there are several university chairs for vocational education and training – setup in conjunction with the respective teacher training programmes – and independently operated institutions conducting VET research.

Regulatory framework

Vocational training act

The legal foundation of the dual apprenticeship system is the German Vocational Training Act. The 1969 Vocational Training Act (BBiG) was amended in 2005. Through this Act the State declares the entire field of non-school vocational education and training to be a public task. One of the goals of the Act is to ensure that young people just getting started in the world of work have full vocational capacity in a wide range of professional fields.

The Act regulates the vocational training preparation, vocational training within the dual apprenticeship system, continuing vocational training and vocational retraining. In particular it contains regulations on apprenticeship, the aptitude of the training staff and the training facility as well as on the examination system. Other topics are the organisation of vocational training, VET research and regulations regarding the federal institute for vocational education and training.

The Vocational Training Act defines the requirements that must be met by a training occupation regulation. It stipulates that initial vocational education and training shall impart the vocational skills, knowledge and abilities (professional ability or capacity to act) necessary to engage in a form of skilled occupational activity in a changing working world (section 1 of the Act). The Board of the Federal Institute for Vocational Education and Training may make recommendations for the uniform application of the Vocational Training Act.

Other relevant laws, regulations and practices

- The **Crafts and Trade Code** is the legal base for the German skilled crafts and their self-government. The part regulating the vocational training is adjusted to the Vocational Training Act.
- For each recognised training occupation the **training regulation** sets the objectives, content and examination requirements for training in enterprises. Training regulations apply nationwide and have the force of law.
- The **school laws** of the federal states regulate the school-part of the dual apprenticeship.
- A training company has to proof that at least one staff member has passed the trainer aptitude test conducted by a competent body. The **ordinance on trainer aptitude** regulates the structure and the content of the examination for the pedagogic aptitude of the trainers in the companies.
- The reinstatement of the requirement to provide proof that at least one employee of a training company has pass the **trainer aptitude test** obligates trainers to sit an examination conducted by a competent body.
- For apprentices under 18 the **youth labour protection law** regulates the working time, the paid vacation time guaranteed by law and the leave in order to attend the vocational school.
- Apprentices in the German dual apprenticeship system have the legal status as students in the vocational school and they are employees with a special legal status at the training company. The training is based on a training contract under private law between a training company and the trainee.. The specifications of the contract are regulated in the Vocational Training Act.

Sources and further reading:

- BIBB 2014: Training regulations and how they come about. <http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7324> [15.10.2015]
- Vocational Training Act 2005 (German Version): http://www.gesetze-im-internet.de/bundesrecht/bbig_2005/gesamt.pdf [15.10.2015]
- Prof. Dr. Volkmar Herkner: Vocational training, the public task - On the adoption of the Vocational Training Act 40 years ago <http://www.bibb.de/en/16619.php> [15.10.2015]

2.2. Business, social partner and state cooperation

The **in-company training** is highly regulated through the Vocational Training Act. Decision making and steering take place at national level. The responsible Federal Ministry of Education and Research also fosters the development of VET through initiatives and programmes. The federal states are autonomous in their decisions regarding the **vocational school** part. The responsible federal state ministers coordinate their policies in the “Standing Conference of the Ministers of Education and Cultural Affairs (KMK)”.

Business and trade organisations, social partners and the State in Germany cooperate on the basis of the **consensus principle**. Based on the Vocational Training Act the involvement of the social partners in decision making processes is institutionalized at all levels following the principle of equal participation:

- At national level representatives of all stakeholders – employers, trade unions, Germany's federal states and the federal government – work together on the **Board**, with each group having an equal share of votes. The Board is the executive body of the Federal Institute for Vocational Education and Training and also the German government's statutory advisory body in fundamental matters regarding vocational education and training. It comments on the drafts of training regulations and framework curricula and issues recommendations for the uniform application of the Vocational Training Act (e.g. on the structure and design of training regulations, examination requirements, competence-based approach etc.).

- Employers and trade unions participate intensively in the **development of training regulations** jointly with the Federal Institute for Vocational Education and Training in order to turn the experience from training to good use and to heighten the acceptance of new training regulations in the enterprises providing training. This intensive cooperation applies to the entire process.
- At the level of the federal states representatives of the social partners and the supreme federal state authorities form the **federal state boards**, which are advising the governments of the federal states on vocational education and training issues.
- At regional/local level the competent bodies set up **vocational education and training committees** consisting of six representatives each of trade unions, employers and teachers at vocational schools. Those committees must be informed and heard in all important matters concerning vocational education and training. Employer and employee representatives as well as vocational teachers also form the examination committees at the competent bodies.

At the end of 2014 the Federal Government concluded the “Alliance for Initial and Further Training 2015 – 2018” with the Federal States, business and industry, the unions and the German Employment Agency. It seeks to further increase the attractiveness of vocational training, to improve transitions between sectors, and to enhance dual vocational training’s ability to integrate a diverse range of young people and attract new target groups to train as future skilled staff. The Alliance partners have also agreed to guide every person interested in training on a path that can lead to that they gain a vocational qualification in an efficient manner. Further developing in-company training is a joint priority of all stakeholders.

Sources and further reading:

- BIBB 2014: Training regulations and how they come about. <http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7324> [15.10.2015]
- Vocational Training Act 2005 (German Version): http://www.gesetze-im-internet.de/bundesrecht/bbig_2005/gesamt.pdf [15.10.2015]
- BMBF: Allianz für Aus- und Weiterbildung (German). <https://www.bmbf.de/de/allianz-fuer-aus-und-weiterbildung-1071.html> [27.10.2015]

2.3. Financing of VET/apprenticeships

In the German apprenticeship system the training companies finance the in-**company training**. The Federal States fund the vocational schools (mainly teaching staff salaries) and the local authorities (equipment and infrastructures). **Inter-company training centres** are financed by the federal government, the federal states, the responsible chambers or specific funds. The **chambers** get their funding through the dues of the compulsory member companies.

The companies participate voluntarily in apprenticeship training and bear its costs. This includes for example the expenditures for:

- the apprentices (e.g. the allowances and social benefits)
- the in-company trainers (e.g. wages and trainers aptitude test)
- materials, tools, work and protections clothes, examinations fees, administration etc.

The highest cost factor for the companies is the **apprentice allowance**. The amount is usually fixed in the collective bargaining agreements. It varies between branches and regions.

If a company refrains from providing in-company training it has no levies to pay. Only in the construction sector all companies are financing a branch training fund that benefits training companies. There are frequent calls – especially from the unions – to extend this model to other branches or to introduce a general training levy.

For 83% of training companies, training skilled workers with the intention of employing them long-term in the company is an important reason for providing training. These companies see apprenticeship training as an investment in securing their future needs for skilled workers, and in order to avoid vacancies, for example. Many companies however state, that vocational training is a shared responsibility and hence a service for society. In making the decision to provide training, these companies are not taking account of company cost-benefit considerations alone. Some companies receive grants from support programmes run by the German federal government, the German federal states, the European Social Fund (ESF), the Federal Employment Agency, or occupational or sector associations (Jansen 2015).

In the education budget of 2010, €10.6 million were allocated for in-company dual vocational education and training. This corresponds to 0.4% of the gross domestic product. Public budgets contributed around € 2.9 billion to the financing; the private sector accounted for around €7.7 billion (net costs). Public funds are allocated by the Federal Ministry for Education and Research, Federal Ministry of Economic Affairs and Energy, Federal Ministry of Labour and Social Affairs, German Federal Employment Agency and the German Federal States (the detailed distribution of public expenditure is available in the VET data report Germany 2014). Those expenses are linked to the development, improvement, execution and promotion of apprenticeship, e.g. over support programmes or measures for guidance and counselling. In the case of inter-company apprenticeship for instance (especially in industrial and technical specialities) funds are also granted by the Federal Government, the Federal States, the Chambers or out of the branch-specific fund in case of the construction sector.

Costs and benefits

BIBB conducts a regular representative survey on the costs and benefits of training. The last survey for the training year 2012/13 showed that companies have average net costs of EUR 5,398 per apprentice. This amount varies according to training professions and domain of training, the duration of the training programmes, and the size of the training companies and regions.

2/3 of gross costs are off-set by the productive outputs of apprentices. An additional benefit arises most of all when companies hire their apprentices as skilled workers on completion of their training thus saving recruitment (incl. advertising costs and personnel costs for the selection process, costs of external advisers and intermediaries) and induction costs. Benefits are also accrued due to companies' prior knowledge about their apprentices and vice-versa. At the end of the apprenticeship, companies can recruit among their apprentices the most successful ones.

Sources and further reading:

- Jansen, A. (et al. 2015): Apprenticeship training in Germany remains investment-focused – results of BIBB Cost-Benefit Survey 2012/13. BIBB REPORT 1/2015. Bonn. <http://www.bibb.de/en/25852.php> [27.10.2015]
- BIBB 2015: VET data report Germany 2014. <http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7722> [15.10.2015]
- BIBB (2015): Trainees have significantly more in their pockets once again. Press release. http://www.bibb.de/en/pressemitteilung_23931.php [27.10.2015]

2.4. National standards - matching supply and demand

Assessment/forecasting of skills needs

Collecting and gathering data of VET and apprenticeship is a major task of the Federal Institute for Vocational Education and Training (BIBB). BIBB works in close cooperation with the German Institute for Employment Research (IAB, associated with the Federal Employment Agency in the processing of data on the labour market and VET market developments. They cooperate in developing sectoral

forecast studies, regions and vocational professions. The data collection feeds into the annual Vocational Education and Training Report of the Federal Ministry of Education and Research as well as the annual yearly VET data report by BIBB. BIBB participates in the compilation of the Vocational Education and Training Statistics of the Federal Statistical Office.

These reports provide data along with statistical surveys and panels such as the survey of newly-concluded apprenticeship contracts, BIBB company panel on qualification and competence development (together with TNS Infratest; so-called qualification panel), German Institute for Employment Research company panel, the IAB/BIBB applicant survey, BIBB/IAB qualifications and occupational field projections or the BIBB wb-monitor survey for further training. The data inform all main decision-making processes by competent authorities on VET and apprenticeship at Federal level as regard the definition of vocational training regulations, and the development of Federal VET programmes.

Sources and further reading:

- Maier, T. (et al. 2014): Shortages in the medium qualifications area despite increased immigration. BIBB report 23/2014. Bonn. <http://www.bibb.de/en/14071.php> [27.10.2015]
- BIBB Website: Das Projekt QuBe - Qualifikation und Beruf in der Zukunft. <http://www.bibb.de/de/11727.php> [27.10.2015]

Matching supply and demand

The German vocational education and training system is considered as a market-driven system. The demand for apprenticeship placement stems from individuals interested in apprenticeship training and the supply stems from private and public organisations offering apprenticeship placements. Supply and demand for apprenticeship placements depend upon many factors such as the overall development of the economy and the labour market, demographic trends as well as the experiences with offering apprenticeship placements in previous years.

The development of vocational education and training market is monitored by the Federal Institute for Vocational Education and Training and the German Institute for Employment Research (→ see section on assessment/forecasting of skills needs). The update and creation of new Federal training regulations can also be considered as part of the matching process since this activity mirrors the need of economic actors for manpower in given professions and the requirement to design VET professions aligned with the economic and technological state-of-the-art (→ see section on Training regulations).

The apprenticeship system in Germany is negatively impacted by mismatches between supply and demand at the regional level and for specific VET professions. An efficient match of supply and demand of apprenticeship places is a shared task by all VET actors as defined in the national pact for VET (renewed in 2015). It is implemented through initiatives taken at federal level (such as JOBSTARTER or educational chain initiative), and at the level of the Länder. Further remedial and preventive measures to ensure an optimal match are undertaken by actors such as chambers of commerce and industry, chambers of crafts, Federal Ministry of Education and Research etc. (→ see section on VET excellence and attractiveness).

Sources and further reading:

- BIBB 2015: VET data report Germany 2014. <http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7722> [15.10.2015]
- BIBB 2015: Datenreport zum Berufsbildungsbericht 2015. http://www.bibb.de/dokumente/pdf/bibb_datenreport_2015.pdf [27.10.2015]

Training regulations

The Vocational Training Act defines the requirements that must be met by a training occupation. It stipulates that initial vocational education and training has to provide the abilities, knowledge and skills (**professional ability to act**) necessary to undertake a qualified vocational activity in a changing working environment and through a well-regulated course of training. It also has to enable the acquisition of the occupational experience required (article 1, paragraph 3 BBiG).

The training regulations define minimum requirements for a modern course of training. They include:

- a description of the typical “skills, knowledge and abilities” of the occupation
- the duration of the training
- the framework training curriculum for the in-company training and
- the requirements for the examination at the competent body.

The trade associations, the employers’ umbrella organisations, the trade unions or the Federal Institute for Vocational Education and Training usually initiate the renewal of an existing training occupation or the creation of a new training occupation. The decision is taken by the competent Federal Ministry in coordination with the federal states after consulting all stakeholders. The Federal Institute for Vocational Education and Training (BIBB) will often first issue a position statement or – especially in the case of a major reform project – carry out a research project to evaluate the existing training occupation or to assess the demand for a new training occupation.

The elaboration of a new or modernized training regulation is a regulated procedure involving the federal government, the state governments, employers, trade unions and vocational education researchers. The outlines are developed in the BIBB together with experts from the relevant occupations who are delegated by the employers and trade unions (See Governance). Training regulations are issued for recognised training occupations by the relevant ministry, usually the Federal Ministry for Economic Affairs and Energy (BMWi), in agreement with the Federal Ministry of Education and Research (BMBF). They contain minimum standards for the in-company part of initial vocational education and training.

Coordination of the curricula for in-company training and vocational schools

The framework training curricula in the training regulations for the in-company training are coordinated with the corresponding framework curricula for vocational schools, so that in-company training and vocational school education complement one another. The coordination procedure is regulated in an agreement between the Standing Conference of the Ministers of Education and Cultural Affairs (KMK) of the federal states and federal government (“joint memorandum”).

Sources and further reading:

- BIBB 2014: Training regulations and how they come about.
<http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7324> [15.10.2015]
- KMK 1972: Joint Memorandum on the coordination of the curricula for in-company training and vocational schools (German):
http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/1972/1972_05_30-Ergebnisprot-Ausbildungsord-rlpl.pdf [27.10.2015]

Examination and certification of training

After the successful completion of the apprenticeship the apprentices receive three different certificates:

- the examination certificate of the competent body (usually the chamber),

- the certificate of the vocational school and
- the reference of the training company.

The examination certificate represents the craft certificate (Facharbeiterbrief) and is therefore the most important certificate. The examinations are regulated in the Vocational Training Act and respective in the Crafts and Trade Code for craft occupations. The competent body is legally required to set up an independent examination committee for each training occupation – assembled by the same number of competent employer and employee representatives and at least one teacher from a vocational school. There are specific requirements for the membership of an the examination committee and this activity is an honorary position.

2.5. Programmes and pathways in the apprenticeship system

Apprenticeship programmes and qualifications

In the training year 2014 there were 328 recognized training occupations. The number differs slightly each year. A general trend over the last years points to a decrease in the number of training occupations. One of the reasons is that in the course of modernisation sometimes different training occupations are integrated in a single one. New training occupations are also being developed to cover emerging needs on the labour market.

Most of the training occupations have a duration of three years, but there are also some with a duration of two years or three and a half years. The occupations of three years and more are mapped at EQF-Level 4, the two-year occupations at Level 3. Almost all of the two-year training occupations offer a clear progression route to a determined training occupation with a longer duration. The apprentices spend three to four days a week in the company. It is also possible to alternate blocks of several weeks duration.

There are different structures within training occupations. Alongside so-called mono occupations, which do not exhibit any differences in terms of content and still represent the majority of training occupations, there are occupations with features such as specialties, main focus areas or elective qualifications units. Some occupations also allow training companies more flexibility through optional or additional qualifications.

The dual apprenticeship system does not cover all sectors in Germany. For example many social occupations like child care worker are part of the full-time vocational school system of the federal states. Most of the occupations of the health sector also have their legal base outside the Vocational Training Act.

With the amendment of the vocational training act in 2005 the federal states can declare full-time school vocational training programmes as equivalent to existing training occupations. Criteria are e.g. the correspondence in scope and content and sufficient practical work experience. Graduates of those programmes are then entitled to register for the final exams in the according training occupation at the competent body.

Sources and further reading:

- BIBB 2015: VET data report Germany 2014. <http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7722> [15.10.2015]
- Bretschneider, M./Schwarz, H. 2015: Bringing order to the regulations - A heuristic for the structuring of training occupations. <http://www.bibb.de/en/32647.php> [27.10.2015]

Access to apprenticeship

Access to an apprenticeship is not formally dependent on a particular school-leaving certificate; training is basically open to anyone. In practice though interested young people have to find a training company to start an apprenticeship, and at this point the school leaving certificate and the obtained grades actually tend to play an important role. In some rather demanding occupations of

the dual system the university entrance qualification (“Abitur”) has basically become the unofficial entrance requirement.

To better integrate young people into training and counteract shortages of skilled staff, the Federal Ministry of Education and Research (BMBF), the Federal Ministry of Labour and Social Affairs (BMAS) and Federal Employment Agency (BA) consolidated and expanded certain funding measures in 2014. Especially relevant initiatives are the “Educational Chains” (“Abschluss und Anschluss - Bildungsketten bis zum Ausbildungsabschluss”) initiative or the legislative initiative for “Assisted Vocational Training” (→ see section 2.7)

Pre-vocational training

For young people that cannot find a training place and for young people with learning difficulties, handicaps, social disadvantages or language problems there are two types of pre-vocational training available:

- The pre-vocational training year offers participants preparatory education in full-time schools in order to be able to comply with the demands of vocational training. It is part of the compulsory school attendance and the participants can obtain the secondary education leaving certificate.
- The basic vocational training year provides the participants with basic vocational knowledge in a certain field either in a full-time school or in cooperation with a company. It can be credited as the first year of vocational training in related training occupations and equals the general certificate of secondary education.

Training modules

For some training occupations of the dual system training modules were developed. The modules are based on typical work processes within the occupation and the combination of all modules covers the standards set in the training regulation. The training modules are aimed at young people that failed to enter a regular apprenticeship and they are also used for second chance qualification.

Guidance and Counselling

Guidance and counselling on apprenticeship is offered by many different providers. The Federal Employment Agency has a legal responsibility for vocational guidance. In addition different initiatives and offers are made by public and private actors.

The “Standing Conference of the Ministers of Education and Cultural Affairs (KMK)” has a formal cooperation agreement with the Federal Employment Agency on the cooperation of local employment agencies and schools for the guidance at schools. Career education is integrated in different subjects and it is normally supported by a career counsellor of the local employment agency. This includes visits to the Career Information Centres of the employment agency and to companies as well as compulsory practical work experience in companies from one to three weeks. In recent years vocational orientation became a growing policy priority. A large number of initiatives focused on vocational orientation were launched on local, regional, federal state and national level.

Sources and further reading:

- BIBB: The Vocational Orientation Programme of the Federal Ministry of Education and Research (BMBF): <http://www.bibb.de/en/737.php> [27.10.2015]
- BIBB: Education Chains initiative. <http://www.bibb.de/en/1222.php> [27.10.2015]
- BMBF: Jobstarter Connect (German): <http://www.bmbf.de/de/13386.php> [27.10.2015]
- BIBB: Inter-Company vocational training centres: <http://www.bibb.de/en/12303.php> [27.10.2015]

Recognition of prior learning

The Vocational Training Act provides two options for recognition of prior learning:

- “External Examination”: An individual, who did not undergo a training in a recognised occupation can under certain preconditions register for the final examination at the premises of the relevant competent body. The applicant has to either proof professional practice of at least 1.5 times the duration of the training for the occupation - training in a related training occupation can be counted into this practice. Otherwise, the candidate has to proof that he has achieved comprehensive vocational competence for the training occupation in question in another way. This could be certificates from educational institutions, foreign certificates or professional practice abroad.
- Reduction of the training duration: Before concluding the apprenticeship contract the future apprentice and the employer can agree on reducing the training duration. Accepted reasons are e.g. training in another occupation or work experience in the field of training. Also the university (of applied sciences) entrance certificate is accepted.

In 2014 the Federal Ministry of Education and Research started an initiative on the validation of non-formal and informal competences. It encompasses a pilot project to elaborate and test a validation tool to measure equivalence of non- and informal acquired competences to training occupations.

Further reading:

- BIBB: Prüferportal. Schwerpunktthema Externenprüfung (German).
<http://www.prueferportal.org/html/1645.php> [27.10.2015]
- BIBB: HA-Empfehlung zur Verkürzung der Ausbildungszeit (German)
http://www.bibb.de/dokumente/pdf/ha-empfehlung_129_ausbildungszeit.pdf [27.10.2015]

Progression and Permeability

Further vocational training for apprenticeship graduates

For graduates of the apprenticeship system there exist further training occupations leading to formal qualifications. Further vocational training for apprenticeship graduates is regulated through the Vocational Training Act and for the skilled crafts in the Crafts and Trade Code. According to those laws the ministries in charge can issue regulations on the examinations. Usually the social partners initiate the process of elaboration and participate actively in it. The procedure is in most cases similar to the elaboration of training regulations for initial VET, involving also experts nominated by the social partners. The regulations only cover the examination, which is taken at the competent body in charge, usually the chambers. Preparation courses are offered by various institutions and are subject to market conditions. Important players in this field are training providers linked to the chambers. The further training occupations are mapped on the EQF from level 5 up to level 7.

The chambers can also issue rules for further training examinations in fields or specialisations that are not covered by national regulations. Alternative career advancement pathways for graduates of the dual apprenticeship system are the recognized qualifications at the trade and technical schools of the federal states.

Further reading:

- BIBB 2013: Fortbildungsordnungen und wie sie entstehen (German).
<http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7062> [27.10.2015]

University entrance opportunities

Graduates of the dual apprenticeship system with several years of work experience in their occupational field can get subject-related access to courses at higher education institutions. The requirements are regulated in the federal state laws and the decision on admission is taken by the higher education institution. The higher education institution can also ask for additional entrance tests or an interview assessing the aptitude of an applicant.

Most of the further vocational training occupations and the certificates of trade and technical schools are accepted as university entrance qualifications.

Further reading:

- KMK 2009: Hochschulzugang für beruflich qualifizierte Bewerber ohne schulische Hochschulzugangsberechtigung (German). http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2009/2009_03_06-Hochschulzugang-erful-qualifizierte-Bewerber.pdf [27.10.2015]

Integration of VET and academic programmes

In Germany the Dual University, universities of applied sciences and universities of cooperative education offer dual courses of study at EQF level 6 and partly also level 7. Dual courses of study include learning in a higher education institution and in a company. They are targeted at school leavers with a (subject-restricted) university entrance qualification. The students have to find a company to contract them in order to be accepted at the higher education institution.

Permeability between VET and academic programmes

Various initiatives and pilot programmes have been designed to foster permeability and recognition of parts of the dual apprenticeship training or of advanced training occupations, e.g. through recognition tools or joint curriculum development. Examples of initiatives run by the Federal Ministry of Education and Research are the ANKOM initiative for transition between vocational and academic education, the open university contest, and the current campaign to recruit higher education drop-outs for the dual apprenticeship system. Courses attended in higher education institutions can be credited towards a shortening of the duration of the apprenticeship programme.

Further reading:

- BIBB: ANKOM (German). <http://www.bibb.de/ankom> [28.10.2015]
- BMBF: Aufstieg durch Bildung: offene Hochschulen (German). www.wettbewerb-offene-hochschulen-bmbf.de [28.10.2015]

Diversity

Disabled persons

The Federal Government approved in June 2011 its national action plan for implementing the UN-convention for the rights of handicapped persons. It aims at including persons with handicaps into society and consequently education and training. Training in a recognized training occupation should be open to disabled persons. The Vocational Training Act as well as the Crafts and Trade Code provide that their special situation has to be considered by the competent bodies, e.g. through adjusting the structure of the apprenticeship, the duration of examinations and through permitting auxiliary means in examinations. Part-time training is also possible. If an apprenticeship is not suitable for a disabled person, the competent body can upon request issue special training regulations based on recognized training occupations. The regulations have to be designed according to the recommendations of the Board of the Federal Institute for Vocational Education and Training. For some occupations the special regulations are elaborated in the Federal Institute for Vocational Education and Training in a similar process as the regular training regulations.

Further reading:

- BIBB 2013: Menschen mit Behinderungen im Spiegel der Berufsbildungsstatistik (German). www.bibb.de/dokumente/pdf/ab21_dazubi_Kurzpapier_Menschen_mit_Behinderung_in_der_Berufsbildungsstatistik_201306.pdf [28.10.2015]

- BIBB 2015: Datenreport zum Berufsbildungsbericht 2014, Kapitel A 4.4 115: Die Entwicklung der Ausbildungsberufe für Menschen mit Behinderung (German). <http://www.bibb.de/datenreport/de/2014/19510.php> [28.10.2015]
- BMAS 2011: Nationaler Aktionsplan der Bundesregierung zur Umsetzung der UN-Behindertenrechtskonvention (German). www.bmas.de/DE/Service/Publikationen/a740-aktionsplan-bundesregierung.html [28.10.2015]

Disadvantaged young people

For disadvantaged young people that did not obtain a placement in a regular apprenticeship there is an opportunity to get a placement in extra-company training. Extra-company training is delivered by a training provider that acts as substitute for a regular training company. Those training providers usually cooperate with companies. Additionally the apprentice visits the regular vocational part-time school. The objective is always to integrate the participants into regular in-company training. If that is not possible, they can complete the whole apprenticeship at the training provider.

Provisions for other target groups

The amended vocational training act from 2005 opens the option of part-time apprenticeship. There has to be a legitimate interest, usually a handicap or the responsibility for a child or family members in need of care. Part-time apprenticeships were tested in several projects.

A variety of government initiatives and programmes aims at the integration of special groups in the dual apprenticeship system, e.g. migrants, long-term unemployed, senior apprentices and university dropouts. The Federal Government runs with ESF-funding for instance the initiative 'Strengthening the youth' to support the transition between school and profession by offering a financial support to local communities and municipalities.

Sources and further reading:

- Vocational Training Act §§ 65 and 66 (German): http://www.gesetze-im-internet.de/bbig_2005/_65.html, http://www.gesetze-im-internet.de/bbig_2005/_66.html [28.10.2015]
- Bundesministerium für Bildung und Forschung 2015: Berufsbildungsbericht 2015 (German). https://www.bmbf.de/pub/Berufsbildungsbericht_2015.pdf [28.10.2015]
- Initiative Jugend stärken (Strengthening the youth, German). <https://www.jugend-staerken.de/> [28.10.2015]
- ESF programme "Integration through Exchange". http://www.ida.de/ida/EN/Home/home_node.html;jsessionid=D3DDE2698EA5B93F72D48FD374BB2C7F [28.10.2015]

2.6. Company training and teaching at schools

Learning in companies

Formal prerequisites

To offer training a company has to prove its suitability as a training facility and that it employs in-company trainers with the required personal and professional qualifications. The verification of this "training competence" is the responsibility of the competent bodies.

The company is suitable as a training facility when it can enable the apprentice to learn all the skills, knowledge and abilities named in the training regulation. This also covers the technical equipment of the training company required to comply with the specification of the training regulation. In-company trainers have to prove their qualification to train by passing the trainer aptitude test conducted by a competent body.

Before starting training

The training employer and the future trainee sign a training contract under private law before the apprenticeship begins.

The training company has to draw up an in-company training plan based on the outline of the syllabus and timetable stated in the training regulation, a so-called framework training plan. The in-company training plan is based on the company's infrastructure and work processes and gives an indicative timeframe of topics that have to be covered over the duration of the apprenticeship.

Employer involvement

The implementation and design of initial vocational education and training in companies is the responsibility of the employers. Each company might include additional topics in its training and offer the trainees additional qualifications.

There is a great variety in employers' involvement. In large industrial companies training departments with full-time in-company trainers run the apprenticeship offers. The training is very structured and there are training workshops with state-of-the-art equipment. Often the trainees pass through different departments of the company. In small and medium sized companies, the training is usually more dependent upon the commitment of key staff such the in-company trainers or the operations managers. The trainers often train the apprentices in addition to their regular tasks in the company. In the crafts sector, apprenticeship occurs in very small enterprises where the apprentice from the beginning is directly involved in customer orders.

Inter-company vocational training centres and training alliances

If a company is not able to offer all the training content required in the training regulation, it has the opportunity to cover the missing parts at inter-company vocational training centres. These centres are a third learning venue in the dual system. They are subsidised by the State and they are usually governed by the chambers. During the last years the training centres developed into competence centres, which also offer further education and training and other services.

Another option for companies that cannot cover all contents is the formation of training alliances with other companies.

Further reading:

BIBB: Inter-company vocational training centres. <http://www.bibb.de/en/12303.php> [28.10.2015]

Written record

The apprentice has to keep a written record of its training by regularly documenting the fulfilled tasks. Usually the apprentices fill out the record book every week noting the contents of the training and the topics of the vocational school. The entries have to be checked by the instructor and signed by both sides. A complete record book is a prerequisite for the admission to the final exams.

Training support

According to the Vocational Training Act the competent bodies appoint training advisors. The advisors visit companies, give information on training opportunities, acquire new training companies and counsel the company and the apprentices during the apprenticeship. Training assistance also addresses apprentices with difficulties to ensure the successful completion of their apprenticeship. It encompasses all technical questions and also covers socio-educational problems and language deficits. The assistance is financed by the local employment agency and conducted by experts working at training providers. Currently the Federal Ministry of Education and Research finances a 'senior expert service' initiative enabling retired 'senior experts' to support apprentices on an voluntary basis and to avoid drop-outs. The Federal Institute for Vocational Education and Training offers information and materials for the individual training occupations and operates internet platforms for in-company trainers and examination committee members.

Further reading:

- SES: Initiative VerA zur Verhinderung von Ausbildungsabbrüchen (German). www.vera.ses-bonn.de [28.10.2015]
- BIBB: Foraus.de – Internet platform for in-company trainers (German). <http://foraus.de/html> [28.10.2015]
- BIBB: Prüferportal – Internet platform for examination committee members (German). <http://www.prueferportal.org> [28.10.2015]

Learning at schools

The apprentices in the German dual system learn the theoretical knowledge required for their occupation at part-time vocational schools, supplemented by general subjects such as German and Basic social science. School either takes place every week on one or two days or in blocks of several weeks. For training occupations with fewer apprentices the classes are created on regional, federal state or national level.

Integrating learning at work and at school

The contents of the framework training curriculum and the framework school curriculum are coordinated during the elaboration of the training regulation. In training practice it is not always possible to synchronize the contents taught in the company and at school, because each company has an individual in-company training plan.

Ideally the training instructor and the teachers at the vocational school are in a steady exchange on the learning progress of the apprentice. The extent of the cooperation is not regulated and depends on the commitment of the involved persons.

Pedagogical methods

The overall aim of the in-company part of the dual apprenticeship training is the development of the professional ability to act, i.e. vocational capacity necessary for the exercise of a qualified vocational activity in a changing working environment. The trainees assume tasks in the company and learn through a planned and systematic work experience. This encompasses the knowledge of complete business and/or production processes and their reflection. This way apprentices are supposed to develop comprehension for the overall context within the company in order to enable them to act as competent professionals.

Vocational schools follow the learning field concept. Content is no longer taught in subjects but in thematic units. Those units are based on typical work processes or situations and focus on action orientation.

Teacher and trainer workforce

In-company trainers

According to the vocational training act apprentices can only be trained by persons who have the necessary personal and professional qualifications. Professional qualifications are sub-divided into vocational and teaching qualifications. For the teaching qualifications the in-company trainers have to proof that they have passed the examination on trainer aptitude. The content and the structure of the examination are regulated in the ordinance on trainer aptitude.

Teachers at vocational schools

Vocational teachers are employed as civil servants at the vocational schools. There are two types of vocational teachers:

- Vocational teachers that studied at university to become a vocational teacher in a certain field. They have had to take the state examination for teachers and teach vocational and general subjects. Often teachers with vocational subjects have started their professional career as

apprentices. “Alternative recruitment“ of graduated Engineers into targeted in –service teacher training programmes is also a common practice across federal states.

- Teachers for vocational practice are e.g. master craftsman, state-certified technicians or have another relevant qualification according to their subject. Additionally they have to undergo a specific pedagogic training over one-two years. They provide the apprentices with practical training for their occupation with a focus on skills and technological operations.

Further reading:

- BIBB 2015: Compendium. Quality of In-Company Vocational Education and Training. <http://www.bibb.de/veroeffentlichungen/en/publication/download/id/7602> [28.10.2015]
- Bauer, W. (2007). TVET teachers and instructors in Germany. In P. Grollmann & F. Rauner (Eds.), *International Perspectives on Teachers and Lecturers in Technical and Vocational Education* (pp. 123-158). Dordrecht: Springer.

2.7. VET excellence/Image and Marketing of apprenticeships

Attractiveness of apprenticeship

The German apprenticeship system is affected by demographic trends and economic developments. Excellence and image of VET and apprenticeships are fuzzy terms. Apprenticeship in Germany is obviously attractive since it is chosen by a large proportion of youngsters and their families as a pathway to access the labour market as well as further training. The German apprenticeship system attracts around 50% of an age cohort. It is traditionally highly viewed in the German civil society. Statistical data show that the unemployment rate of apprenticeship graduates upon graduation remains low in compared to other choices of education and in comparison to statistics from other Member States. Within the German population handcraft professions are highly appreciated. Yet an increasing number of young people choose educational paths within the higher education sector.

Next to supplying companies with qualified skilled staff and ensuring a long-term connection with companies, apprenticeship is attractive to companies since it signals responsibility and social prestige, it contributes to the reduction of the age of the staff, and it is cost efficient. The attractiveness of apprenticeship for young persons will depend upon the type of school they attend, the branch and VET professions they train for, the apprenticeship salary, and the participation in guidance activities while being at school.

The attractiveness and the image of apprenticeship in Germany are stimulated by a number of measures and initiatives developed by different partner institutions in the German VET system. Marketing and awareness-raising campaigns for apprenticeship are run throughout the year. Single private and public organisations carry out recruiting campaigns using the daily press and advertising campaigns in businesses. Chambers of commerce and industry, chambers of crafts as well as major organisations for craftsman such as German Confederation of Skilled Crafts carry out awareness-raising campaigns using social media, and they design support for its members through traditional media platforms to attract young persons to apprenticeships. The Federal government also conceived a major VET campaign ‘Vocational training – practically unbeatable’ on different media. Large events such as the World skills competition in 2013¹ are widely advertised in mass media.

¹ http://www.worldskillsleipzig2013.com/en/the_event/program/

General and professional schools are cooperating with companies to introduce professions to pupils and by offering guidance and orientation.

Further reading:

- German Confederation of Skilled Crafts: Awareness Campaign (German). <http://handwerk.de> [28.10.2015]
- VET-Campaign “Vocational training – practically unbeatable”. http://www.praktisch-unschlagbar.de/information_in_english.php [28.10.2015]
- World Skills Leipzig 2013. http://www.worldskillsleipzig2013.com/en/the_event/program [28.10.2015]

Mutualising resources of all VET stakeholders

Since 2010 the ‘National Pact for Vocational Education and Training and Skilled Manpower Development’ sets the frame to support the supply of adequate offers of VET placements and qualifications to all young persons. Since 2014 this pact runs under the title ‘Alliance for Initial and Further VET’ (2015-2018). It calls for support of VET attractiveness, a reduction of early school leavers, information and guidance as part of the youth employment guarantee, a reduction of mismatch due to geographical or professional choices, a reduction of learners in the transition system, a further development of VET quality and a strengthening of further and continuing training. The alliance partners (economic actors, trade unions, Federal state and Länder) commit themselves in their respective remits to the provision of an agreed number of apprenticeship and internship placements for pupils. They also commit themselves to reinforcing activities, which may improve the access to VET and to the labour market. While the Länder concentrate their efforts on guidance, the Federal State shall increase its support within its initiative ‘assisted vocational education and training’ (*assistierte Ausbildung*) and develop measures to reduce the numbers of early-school leavers.

Initiative ‘Graduation and continuation – Education chains up to the vocational training qualification’

One major aspect of VET attractiveness is to ensure that learning pathways lead to a full qualification. The Federal initiative ‘educational chain’ (2010-2014; budget 460 million Euros) focuses on preventive and all-encompassing activities to ensure educational success to young persons and progressive integration of these activities in a coherent infrastructure by Federal and Länder stakeholders. This initiative encompasses different programmes to support the image of apprenticeship in the society and to improve guidance. The programmes are for instance vocational guidance programme (*Berufsorientierungsprogramm in überbetrieblichen und vergleichbaren Berufsbildungsstätten – BOP*), specific programme educational chains (*Berufseinstiegsbegleitung Bildungsketten*), structural VET programme focusing on apprenticeship in SME (JOBSTARTER) as well as projects based upon voluntary actions for prevention of drop-outs (*Verhinderung von Ausbildungsabbrüchen – VerA and coach@school*). Due to the Federal structure of the VET system, the Federal government meets agreements with its partners in the Länder to implement the initiative.

Quality assurance

The training company is responsible for the quality assurance of the in-company training. The vocational training act requires the companies to elaborate a training plan and the apprentices to keep a record book.

Besides regular quality assurance systems there exists a range of specific instruments for quality assurance of the in-company training, e.g. a regular self-assessment of the apprentices.



The quality assurance of the school part is the task of the federal states. The framework curriculum is usually either directly adopted by the individual federal states or transformed into state-specific curricula for the vocational schools.

Further reading:

- BIBB 2015: Compendium. Quality of In-Company Vocational Education and Training. <http://www.bibb.de/veroeffentlichungen/en/publication/download/id/7602> [28.10.2015]
- DEQAVET – German Reference Point for Quality Assurance in VET: <https://www.deqa-vet.de/en/> [28.10.2015]



3. Recent developments

There are a number of trends, which affect German VET and the apprenticeship system in particular. These are a decrease in school graduates, and increased interest of school graduates to enrol in higher education and mismatches in supply and demand.. Around 522.200 newly-concluded apprenticeship contracts have been registered in 2014. According to the vocational training statistics, 1,391,900 young people were in the dual system of vocational education in 2013, mostly in the western part of Germany. The stock drops slightly from year to year.

Consequently the VET policy decision makers have committed themselves at the beginning of 2015 to the alliance for initial and continuing VET and most of them are developing awareness-raising campaigns and initiatives to support apprenticeship. For all VET actors the challenges imply that the modernisation of the apprenticeship system is a continuous task. One specific target is to establish VET qualifications and programmes as equivalent alternative to higher education qualifications in view of access to the labour market and as part of lifelong learning strategies. Further thematic priorities are listed in the VET Federal report (2015). These are:

- Further development of the Federal initiative 'Graduation and continuation – Education chains up to the vocational training qualification'
- Further development of vocational guidance
- Improvement of customized placements
- Recruiting higher education drop-outs for VET qualifications
- Improvement of permeability between vocational education and training and higher education
- Further support to youngsters with a migration background into vocational education and training
- Development of validation of informal and non-formal learning outcomes within VET
- Campaigns to support attractiveness of VET
- Further development of international cooperation in VET.

4. Sources and further reading

1. Country context

1.1 Economic context

- Federal Statistical Office of Germany Destatis: www.destatis.de (available in English)
- EUROSTAT: <http://ec.europa.eu/eurostat/data/database>

1.2 Political and social context of the Apprenticeship system

- BIBB 2015: VET data report Germany 2014.
<http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7722> [15.10.2015]
- Federal Statistical Office of Germany Destatis: www.destatis.de (available in English)

1.3 The overall education system and the VET system

- BIBB 2015: Germany. VET in Europe – Country report 2014.
http://www.refernet.de/media/BIBB_ReferNet_barrierefrei.pdf [15.10.2015]
- Arbeitskreis Deutscher Qualifikationsrahmen 2011: Der Deutsche Qualifikationsrahmen für lebenslanges Lernen.
http://www.dqr.de/media/content/Der_Deutsche_Qualifikationsrahmen_fue_lebenslanges_Lernen.pdf [15.10.2015]
- Bundesministerium für Bildung und Forschung / Kultusministerkonferenz 2013: German EQF Referencing Report. http://www.dqr.de/media/content/German_EQF_Referencing_Report.pdf [15.10.2015]

2. Key Features

2.1 Governance of VET and regulatory framework

- BIBB 2014: Training regulations and how they come about.
<http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7324> [15.10.2015]
- Vocational Training Act 2005: http://www.gesetze-im-internet.de/bundesrecht/bbig_2005/gesamt.pdf [15.10.2015]
- Prof. Dr. Volkmar Herkner: Vocational training, the public task - On the adoption of the Vocational Training Act 40 years ago <http://www.bibb.de/en/16619.php> [15.10.2015]

2.2 Business, social partner and state cooperation

- BIBB 2014: Training regulations and how they come about.
<http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7324> [15.10.2015]
- Vocational Training Act 2005 (German Version): http://www.gesetze-im-internet.de/bundesrecht/bbig_2005/gesamt.pdf [15.10.2015]
- BMBF: Allianz für Aus- und Weiterbildung (German). <https://www.bmbf.de/de/allianz-fuer-aus-und-weiterbildung-1071.html> [27.10.2015]

2.3 Financing of VET/apprenticeships

- Jansen, A. (et al. 2015): Apprenticeship training in Germany remains investment-focused – results of BIBB Cost-Benefit Survey 2012/13. BIBB REPORT 1/2015. Bonn.
<http://www.bibb.de/en/25852.php> [27.10.2015]

- BIBB 2015: VET data report Germany 2014.
<http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7722> [15.10.2015]
- BIBB (2015): Trainees have significantly more in their pockets once again. Press release.
http://www.bibb.de/en/pressemitteilung_23931.php [27.10.2015]

2.4 National standards - matching supply and demand

- Maier, T. (et al. 2014): Shortages in the medium qualifications area despite increased immigration. BIBB report 23/2014. Bonn. <http://www.bibb.de/en/14071.php> [27.10.2015]
- BIBB Website: Das Projekt QuBe - Qualifikation und Beruf in der Zukunft.
<http://www.bibb.de/de/11727.php> [27.10.2015]
- BIBB 2015: VET data report Germany 2014.
<http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7722> [15.10.2015]
- BIBB 2015: Datenreport zum Berufsbildungsbericht 2015.
http://www.bibb.de/dokumente/pdf/bibb_datenreport_2015.pdf [27.10.2015]
- BIBB 2014: Training regulations and how they come about.
<http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7324> [15.10.2015]
- KMK 1972: Joint Memorandum on the coordination of the curricula for in-company training and vocational schools (German):
http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/1972/1972_05_30-Ergebnisprot-Ausbildungsord-rlpl.pdf [27.10.2015]

2.5 Programmes and pathways in the apprenticeship system

- BIBB 2015: VET data report Germany 2014.
<http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7722> [15.10.2015]
- Bretschneider, M./Schwarz, H. 2015: Bringing order to the regulations - A heuristic for the structuring of training occupations. <http://www.bibb.de/en/32647.php> [27.10.2015]
- BIBB: The Vocational Orientation Programme of the Federal Ministry of Education and Research (BMBF): <http://www.bibb.de/en/737.php> [27.10.2015]
- BIBB: Education Chains initiative. <http://www.bibb.de/en/1222.php> [27.10.2015]
- BIBB: Training modules - competence and outcome orientation in educational provision within the transitional sector. <http://www.bibb.de/en/23185.php> [27.10.2015]
- BMBF: Jobstarter Connect (German): <http://www.bmbf.de/de/13386.php> [27.10.2015]
- BIBB: Inter-Company vocational training centres: <http://www.bibb.de/en/12303.php> [27.10.2015]
- BIBB: Prüferportal. Schwerpunktthema Externenprüfung (German).
<http://www.prueferportal.org/html/1645.php> [27.10.2015]
- BIBB: HA-Empfehlung zur Verkürzung der Ausbildungszeit (German).
http://www.bibb.de/dokumente/pdf/ha-empfehlung_129_ausbildungszeit.pdf [27.10.2015]
- BIBB 2013: Fortbildungsordnungen und wie sie entstehen (German).
<http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7062> [27.10.2015]
- KMK 2009: Hochschulzugang für beruflich qualifizierte Bewerber ohne schulische Hochschulzugangsberechtigung (German).
http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/2009/2009_03_06-Hochschulzugang-erful-qualifizierte-Bewerber.pdf [27.10.2015]
- BIBB: ANKOM (German). <http://www.bibb.de/ankom> [28.10.2015]
- BMBF: Aufstieg durch Bildung: offene Hochschulen (German). www.wettbewerb-offene-hochschulen-bmbf.de [28.10.2015]
- BIBB 2013: Menschen mit Behinderungen im Spiegel der Berufsbildungsstatistik (German).
www.bibb.de/dokumente/pdf/ab21_dazubi_Kurzpapier_Menschen_mit_Behinderung_in_der_Berufsbildungsstatistik_201306.pdf [28.10.2015]

- BIBB 2015: Datenreport zum Berufsbildungsbericht 2014, Kapitel A 4.4 115: Die Entwicklung der Ausbildungsberufe für Menschen mit Behinderung (German). <http://www.bibb.de/datenreport/de/2014/19510.php> [28.10.2015]
- BMAS 2011: Nationaler Aktionsplan der Bundesregierung zur Umsetzung der UN-Behindertenrechtskonvention (German). www.bmas.de/DE/Service/Publikationen/a740-aktionsplan-bundesregierung.html [28.10.2015]
- Vocational Training Act §§ 65 and 66 (German): http://www.gesetze-im-internet.de/bbig_2005/_65.html, http://www.gesetze-im-internet.de/bbig_2005/_66.html [28.10.2015]
- Bundesministerium für Bildung und Forschung 2015: Berufsbildungsbericht 2015 (German). https://www.bmbf.de/pub/Berufsbildungsbericht_2015.pdf [28.10.2015]
- Initiative Jugend stärken (Strengthening the youth, German). <https://www.jugend-staerken.de/> [28.10.2015]
- ESF programme “Integration through Exchange”. http://www.ida.de/ida/EN/Home/home_node.html;jsessionid=D3DDE2698EA5B93F72D48FD374BB2C7F [28.10.2015]

2.6 Company training and teaching at schools

- BIBB: Inter-company vocational training centres. <http://www.bibb.de/en/12303.php> [28.10.2015]
- SES: Initiative VerA zur Verhinderung von Ausbildungsabbrüchen (German). www.vera.ses-bonn.de [28.10.2015]
- BIBB: Foraus.de – Internet platform for in-company trainers (German). <http://foraus.de/html> [28.10.2015]
- BIBB: Prüferportal – Internet platform for examination committee members (German). <http://www.prueferportal.org> [28.10.2015]
- BIBB 2015: Compendium. Quality of In-Company Vocational Education and Training. <http://www.bibb.de/veroeffentlichungen/en/publication/download/id/7602> [28.10.2015]
- Bauer, W. (2007). TVET teachers and instructors in Germany. In P. Grollmann & F. Rauner (Eds.), International Perspectives on Teachers and Lecturers in Technical and Vocational Education (pp. 123-158). Dordrecht: Springer.

2.7 VET excellence/Image and Marketing of apprenticeships

- German Confederation of Skilled Crafts: Awareness Campaign (German). <http://handwerk.de> [28.10.2015]
- VET-Campaign “Vocational training – practically unbeatable”. http://www.praktisch-unschlagbar.de/information_in_english.php [28.10.2015]
- World Skills Leipzig 2013. http://www.worldskillsleipzig2013.com/en/the_event/program [28.10.2015]
- BIBB 2015: Compendium. Quality of In-Company Vocational Education and Training. <http://www.bibb.de/veroeffentlichungen/en/publication/download/id/7602> [28.10.2015]
- DEQAVET – German Reference Point for Quality Assurance in VET: <https://www.deqa-vet.de/en/> [28.10.2015]