



Training regulations and how they come about



Training regulations and how they come about

Bibliographic information from the German National Library

The German National Library catalogues this publication in the German National Bibliography. Detailed information is available online at <http://dnb.ddb.de>.

© 2017 by Federal Institute for Vocational Education and Training, Bonn

Publisher:

Federal Institute for Vocational Education and Training, Bonn
E-mail: zentrale@bibb.de
Internet: www.bibb.de

Publication management: Division 1.4

Editors:

Barbara Lorig, Andreas Stöhr,
Henrik Schwarz

Sales address:

Federal Institute for Vocational Education and Training (BIBB),
Division 1.4 – Publication Management/
Library
– Publications –

Robert-Schuman-Platz 3 53175 Bonn
E-mail: vertrieb@bibb.de

Order No.: 09.209

Cover: CD Werbeagentur Troisdorf
Print setting: Christiane Zay, Potsdam
Printer: W. Bertelsmann Verlag, Bielefeld.
Printed in Germany.

8th, revised edition 2017

ISBN 978-3-945981-76-4



The content of this work is subject to a Creative Commons Licence (licence type:

Attribution – Non-Commercial – No Derivatives – 4.0 Germany).

For further information, please visit our Creative Commons information site online at <http://www.bibb.de/cc-lizenz>

This online publication has been registered and archived with the German National Library: [urn:nbn:de:0035-0644-6](https://nbn-resolving.org/urn:nbn:de:0035-0644-6)

Internet: www.bibb.de/veroeffentlichungen

This brochure provides information on a unique process for the development of training regulations. These regulations form the foundation of the dual system, in which many young people in Germany start their vocational training.

This process enjoys the considerable benefit of having its results completely accepted by training practice. It involves those affected – the employers' associations on the companies' side and the trade unions for the employees – in all important decisions relating to the contents, objectives, duration and requirements of training.

How does this process work? Experts from training practice join forces with the Federal Institute for Vocational Education and Training (BIBB) to draw up outlines for new training regulations and work with specialists from the vocational schools to harmonise these with the draft skeleton curricula. Employers and unions promote the new training regulations in companies, and the Federal Government enacts them.

Contents

Preface	7
Training regulations – The framework for occupations in the dual system	9
Companies and competent bodies – Organisers of vocational education and training	15
The Federal Institute for Vocational Education and Training – A development centre for new training regulations and a platform for dialogue between the social partners	17
Course of the process	24
Modernisation and initiation of occupations	26
Stage 1 – Stipulation of the benchmarks of the training regulations	26
Stage 2 – Development and harmonisation	28
Stage 3 – Enactment of the training regulations.....	30
Index of Recognised Training Occupations	32
Support for training practice via the Federal Institute for Vocational Education and Training.....	33
Implementation guides for training regulations	34
Further support from the Federal Institute for Vocational Education and Training	35

Preface

The Vocational Training Act of 1969 (BBlG) was updated in 2005. The reform came into force on 1 April 2005.¹ One of the aims of the law is to impart full occupational proficiency across a broad range of task areas to young people entering the world of work. This is the only way of meeting the requirements of a labour market which is in a constant state of flux. In both the old and updated laws, the state declared all extra-school vocational education and training² to be a public task. The execution of this remit is, however, largely transferred to employers in the private sector and to public government bodies. All participants in vocational education and training are involved in planning and preparing new or modernised occupations:

- ▶ the companies and the chambers (employers),
- ▶ the trade unions (employees),
- ▶ the federal states and
- ▶ the Federal Government.

The trade unions are accorded far-reaching rights of co-determination in the execution of VET via the Labour Management Relations Act and the Staff Representation Act. The interests of the largely private sector companies in which vocational education and training takes place are represented by the employers' associations.

The Federal Government stipulates the framework for VET by passing laws and ordinances. Training regulations set out the objectives, contents and examination requirements for company-based training. They are enacted by the relevant federal ministries in agreement with the Federal Ministry of Education and Research (BMBF) via legal ordinances which do

1 The Vocational Training Act (BBlG) of 1 April 2005 does not apply to vocational education and training provided by vocational schools, which are governed by the school laws of the federal states. Further, it does not apply to vocational education and training conducted via vocational or comparable courses of study at institutes of higher education on the basis of the Higher Education Act and the higher education laws of the federal states, to VET which takes place within the scope of a contract of employment under public law or to vocational education and training on merchant vessels (§ 3 Paragraph 2 No. 1–3 BBlG).

2 According to German Basic Law, the Federal Government is responsible for commercial and employment law within the scope of concurrent legislation (Article 74 Nos. 11 and 12, German Basic Law, GG). This means that it is also responsible for company-based vocational education and training. Responsibility for the school system, in this case the vocational schools, rests with the federal states.

not require the consent of the Federal Council. Training regulations apply nationwide and have the force of a legislative act.

The Federal Institute for Vocational Education and Training (BIBB), which was founded in 1970 on the basis of the Vocational Training Act (BBiG), prepares the contents of training regulations. It develops draft regulations in conjunction with experts from occupational practice who are appointed for the purpose by the employers and trade unions. Many of the provisions for the regulation of vocational education and training stipulated in the Vocational Training Act are based on arrangements that have been previously developed and tried and tested in training practice.

Training regulations

The framework for occupations in the dual system

After finishing school, more than half of young people in Germany³ start vocational education and training by embarking upon an “apprenticeship”, i.e. training in the dual system.

The system is described as “dual” because training is conducted at two training venues, the company and the vocational school. Extra-company training, which may take place in VET institutions outside the vocational school and company-based VET, is a further possible learning venue.

Access to vocational education is not formally linked to any particular school leaving qualification. The fundamental principle is that training is open to everyone.

Young people conclude a training contract with a company providing training. Under the terms of this contract, they are employed as a trainee and undergo training in a “recognised training occupation”.

The so-called “exclusivity principle” states that company-based training for young people aged under 18 may only take place in state-recognised training occupations. The Vocational Training Act (BBiG) defines the requirements made of such a training occupation. It stipulates that the purpose of vocational education and training is to impart the skills, knowledge and capabilities (employability skills) necessary in order to exercise a qualified occupational activity in a changing world of work within a regulated course of training. Vocational education and training should also facilitate the acquisition of necessary occupational experience (§ 1 Paragraph 3 BBiG). This ensures a binding quality standard for the company-based training of young people which is in line with the principle of “youth protection”.

3 In 2014, the training entrant rate, i.e. the arithmetical proportion of the resident population commencing training in the dual system, was 53.4 percent (Data Report to accompany the 2016 Report on Vocational Education and Training, pp. 155 ff., www.bibb.de/datenreport2016).

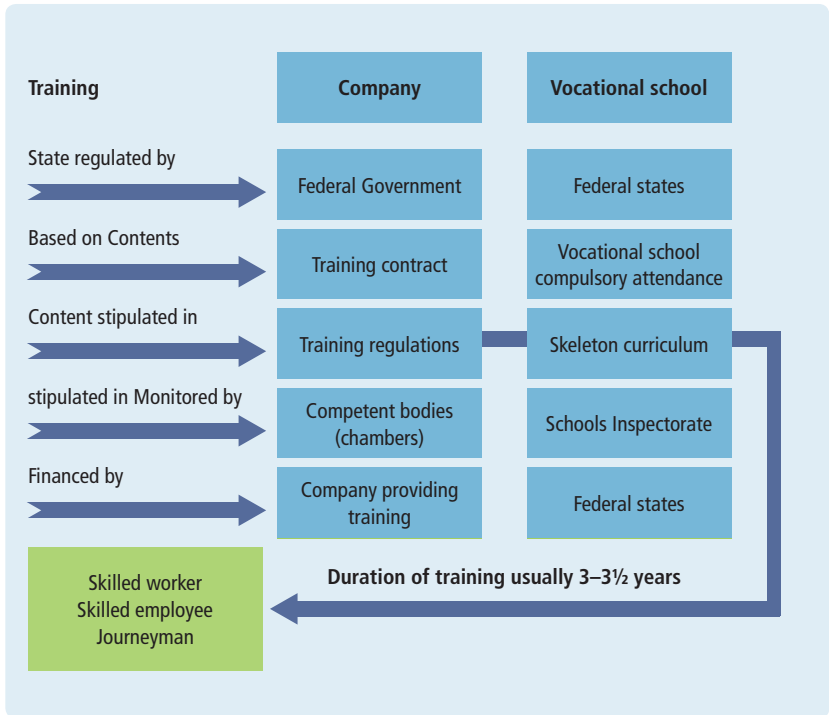


Figure 1: Duality of vocational education and training

The Federal Ministry responsible, usually the Federal Ministry for Economic Affairs and Energy (BMWi), enacts training regulations for recognised training occupations in agreement with the Federal Ministry of Education and Research (BMBWF). These regulations contain minimum standards for the company-based element of training.

There is currently (as of 1 October 2015) a choice of 328 state-recognised training occupations.

In addition to this, however, Germany has a further series of occupations which lie outside the scope of application of the Vocational Training Act and are governed by other legal regulations. One example here would be healthcare professions, which are regulated via the Nursing Act rather than pursuant to the BBiG.

The historic roots of the “regulation” of company-based training can be found in the Middle Ages, when individual professions, trades and guilds

controlled the teaching that took place at companies. Systematic training at companies and vocational schools developed from these occupational regulations, known as the master craftsman system. The origins of our modern training regulations date back to the start of the 20th century. As industrialisation began to take place, companies adopted the concept of training in the craft trades and adjusted it to suit their needs. Vocational training was regulated in the form of the binding stipulation of a catalogue of skills and knowledge⁴ and specification of the duration of training in order to arrive at uniform training standards. This resolved both regional discrepancies and differences which arose because of the type and size of companies.

“National standards” for skilled worker training were gradually created. Other industrialised countries which also had a history of training in the craft trades did not undertake this step.

Statutory regulation did not, however, occur until much later. A bill put forward in 1919 failed due to irreconcilable opposition between the employers and the trade unions, the latter demanding co-involvement. Vocational education in the craft trades was not regulated until after the Second World War, when the Law on the Regulation of Craft Trades (Craft and Trades Regulation Code – HwO) was passed in 1953. Finally, in 1969, the Grand Coalition of Christian Democrats and Social Democrats passed a law unique anywhere in the world which covered cooperation between employers, unions, chambers and state bodies for the purpose of occupational training for the majority of the population. This was the Vocational Training Act (BBiG). The reformed Vocational Training Act of 2005 also continued to adhere to the principle of equal co-determination.

The vocational schools also have a long tradition which can be traced back to the 16th and 17th centuries. During this period, knowledge of reading, writing and arithmetic was imparted at religious and commercial “Sunday schools”. Although compulsory vocational school attendance was not finally introduced until 1938, public regulations had been in place for more than a hundred years that required companies to send their apprentices to vocational schools.

4 In the Vocational Training Act of 2005, the term “skills and knowledge” was extended to encompass the concept of “competences”. Reference is now made to “skills, knowledge and competences” within the meaning of comprehensive employability skills.

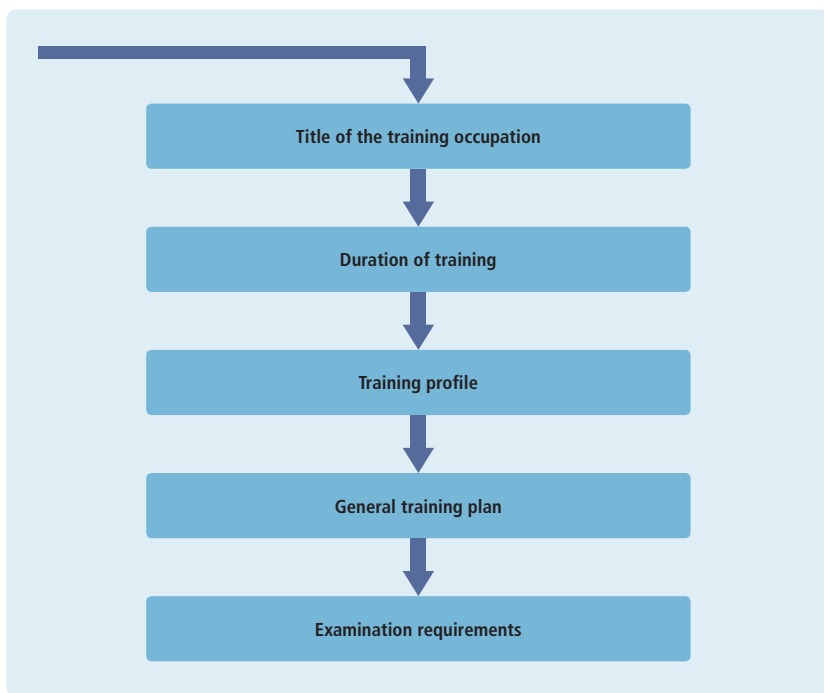


Figure 2: What do training regulations stipulate?

The training regulations play a central role in the Vocational Training Act and form the regulatory framework for occupations.

Training regulations (§ 5 Paragraph 1 BBiG) govern:

- ▶ the title of the training occupation,
- ▶ the duration of training, which should be not more than three years and not less than two years,⁵
- ▶ the training profile of the occupation – the typical “skills, knowledge and competences” of the occupation in summary form,
- ▶ the general training plan – a guide to how the imparting of the skills, knowledge and competences should be structured in terms of content⁶ and scheduling,
- ▶ and the examination requirements.

5 Most training courses last for three years. However, a not inconsiderable proportion of courses are of shorter (two years) or longer (three and a half years) duration.

6 Content structuring includes the learning contents and objectives of the training regulations.

These regulations describe the minimum requirements for contemporary training. They define both the standards, i.e. the skills, knowledge and competences currently indispensable for a qualified skilled worker and the areas of leeway within practice required in order to be able to integrate further skills and developments in training that are not yet foreseeable.

The openness of training in the dual system to new developments and different training opportunities is an essential prerequisite for the readiness of companies to train young skilled workers and for occupational flexibility on the part of employees. The Vocational Training Act is open to further developments within the dual system. Since the entry into force of the updated Vocational Training Act (BBiG) on 1 April 2005, trainees have been able to complete time-limited sections of VET abroad. In legal terms, such periods of training spent abroad are treated as a part of vocational education and training as long as they serve the training purpose and do not exceed one quarter of the duration of training set out in the regulations.

The law also provides for training regulations to include the imparting of additional qualifications⁷. These complement employability skills and expand the occupational skills, knowledge and competences stated in the training profile. Additional qualifications are separately tested and certified in the final examination.

Part-time vocational school teaching is imparted parallel to company-based training. In accordance with the distribution of competences according to German Basic Law, this lies within the area of responsibility of the federal states.

The general training plans for the companies set out in the training regulations are harmonised with the relevant vocational school skeleton curricula to ensure that company-based VET and vocational school teaching complement each other.

In overall terms, vocational education and training pursuant to the Vocational Training Act encompasses vocational training preparation, vocational education and training itself and retraining.

7 Additional qualifications were included in the regulatory instruments for dual training for the first time in 2009 for the occupation of specialist retail assistant for the music branch.

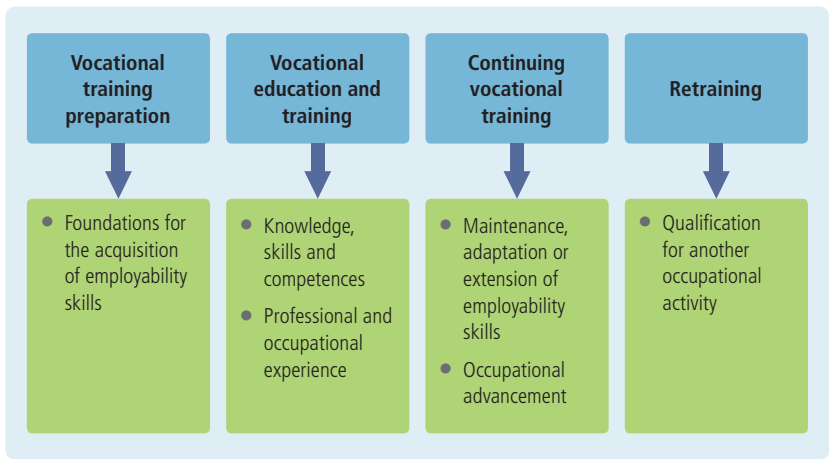


Figure 3: Vocational education and training

Companies and competent bodies

Organisers of vocational education and training

Extracurricular vocational education and training is uniformly regulated at a national level by the Vocational Training Act. Each individual company finances its own training. Although the state pays grants for special services such as the company-based training of disadvantaged young people or extra-company training, this does not abrogate the principle that companies fund the vocational education and training they provide.

A company's capability to provide vocational education and training depends on whether it is a suitable training centre and on whether it employs trainers with the appropriate personal and professional skills. The testing of this "capability" is the responsibility of the competent bodies.

The execution of vocational education and training in private sector companies and at public bodies is monitored by the "competent bodies". "Competent bodies" are designated as being the chambers⁸ (i.e. the chambers of commerce and industry, the chambers of crafts and trades, the chambers of agriculture and the chambers representing the liberal professions, such as the medical councils), the competent bodies within the public sector and the competent bodies of the churches and of other religious communities governed by public law.

According to the Vocational Training Act, the competent bodies have the following tasks:

- ▶ to monitor vocational training preparation, vocational education and training and retraining,
- ▶ to maintain the index of vocational education and training contracts⁹, in which the main content of the VET contract should be entered (referred to in the craft trades sector as the "role of apprentices"),
- ▶ advise companies on all issues relating to training via training advisors,

8 All companies within a certain sector are compulsory fee-paying members of a chamber. Decisions are made by a plenary assembly elected by all chamber members. Chambers are subject to legal scrutiny by a supreme federal state authority, usually the ministries of economic affairs.

9 In order to ensure the completeness and current validity of this index, companies providing training are obligated to report all training arrangements or contracts to their chamber.

- ▶ monitor the suitability of training staff and the training centre,
- ▶ conduct intermediate and final examinations and journeyman examinations,
- ▶ and assist with and support periods of training spent abroad

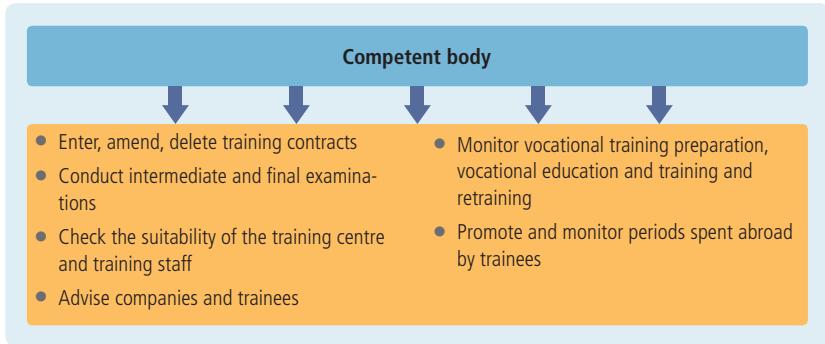


Figure 4: Tasks of the competent body in the implementation and monitoring of vocational education and training

According to the Vocational Training Act, each competent body is required to establish a VET Committee made up of six representatives each from the trade unions and the employers and six vocational school teachers. The VET Committees must be notified and consulted on all important matters relating to vocational education and training. Within the scope of the Vocational Training Act, VET committees are also required to focus on achieving a continuous development of quality of vocational education and training.

Responsibility for the execution and structuring of vocational education and training in the companies rests with them. Numerous possibilities and room to manoeuvre are available for this purpose. Training content which cannot be offered by the company actually responsible for providing training (for technical, economic or human resources reasons) may, for example, be imparted in inter-company training centres or in the form of cooperative training delivered in conjunction with other companies. The contents stipulated in the training regulations constitute minimum standards. For this reason, every company has the opportunity to address further topics within training and to offer trainees additional qualifications.

The Federal Institute for Vocational Education and Training

A development centre for new training regulations and a platform for dialogue between the social partners

The Federal Institute for Vocational Education and Training was set up in 1970 on the basis of the Vocational Training Act of 1969 to act as an institute for the research, development and promotion of extra-school vocational training.¹⁰ Today, it is the recognised centre of excellence for research into and the further development of initial and continuing vocational education and training, and implements its remit within the scope of the educational policy of the Federal Government.

The Federal Institute for Vocational Education and Training is the academic research partner of the social partners (the employers and trade unions) and of the Federal Government for the updating of occupations. It carries out research and development to support harmonisation and agreement in respect of new educational concepts between the employers, unions and Federal Government. It also shapes the process for drawing up training regulations and assists in harmonising these with the relevant vocational school skeleton curricula produced by the federal states.

One of the main tasks of the Federal Institute for Vocational Education and Training is to “act in accordance with a directive issued by the relevant federal ministry (...) in involving itself in the preparation of training regulations and other legal ordinances” (§ 90 Paragraph 3 No. 1 BBiG). Vocational education and training research creates the prerequisites which permit training regulations to be newly developed, revised or adapted in line with economic, technical and societal changes. An agreement concluded between the Federal Government and the federal states in 1972 (“Joint Results Protocol”) governs the procedure for the coordination of training regulations and skeleton curricula.

10 Originally governed by the Vocational Training Act (BBiG) of 1969 and subsequently by the Act for the Promotion of Vocational Education and Training (BerBiFG) of 1981, the Federal Institute for Vocational Education and Training has its current legal basis in the Vocational Training Act (BBiG) 2005.

Further tasks of the Federal Institute for Vocational Education and Training include the following:

- ▶ Involvement in the preparation of the annual Report on Vocational Education and Training¹¹ produced by the Federal Ministry of Education and Research
- ▶ Assistance with the management of the vocational education and training statistics prepared by the Federal Statistical Office
- ▶ Funding pilot projects including evaluation research
- ▶ Involvement in international vocational training cooperation
- ▶ Assumption of further administrative tasks undertaken by the Federal Government to promote vocational education and training
- ▶ Funding of inter-company training centres and support for the planning, establishment and further development of these institutions
- ▶ Management of the Index of Recognised Training Occupations
- ▶ Assumption of the tasks described in the Act for the Protection of Distance Learning and contribution towards the improvement and expansion of distance vocational learning by funding development projects.

The Board of the Federal Institute for Vocational Education and Training comprises eight representatives, one for each of the employers, trade unions and federal states, and five representatives of the Federal Government.

The employers and trade unions are heavily involved in the drawing up of training regulations via the Federal Institute for Vocational Education and Training in order to make use of experiences from training practice and strengthen the acceptance of new training regulations by the companies providing training. This concentrated cooperation applies to the whole of the procedure. It begins with the joint preparation of the educational policy benchmarks essential to a regulatory measures and continues until the enactment of the training regulations. Enactment does not usually take place until the social partners responsible have been afforded an opportunity to respond to the draft regulations and the Board has given its consent.

This means of proceeding, which is generally referred to in VET policy debate as the “principle of consensus”, extends beyond the area of the preparation of training regulations. It also determines the implementation of the training regulations in practice.

11 Since 2009, the Federal Institute for Vocational Education and Training has for this purpose prepared an annual Data Report to accompany the Report on Vocational Education and Training: datenreport.bibb.de.

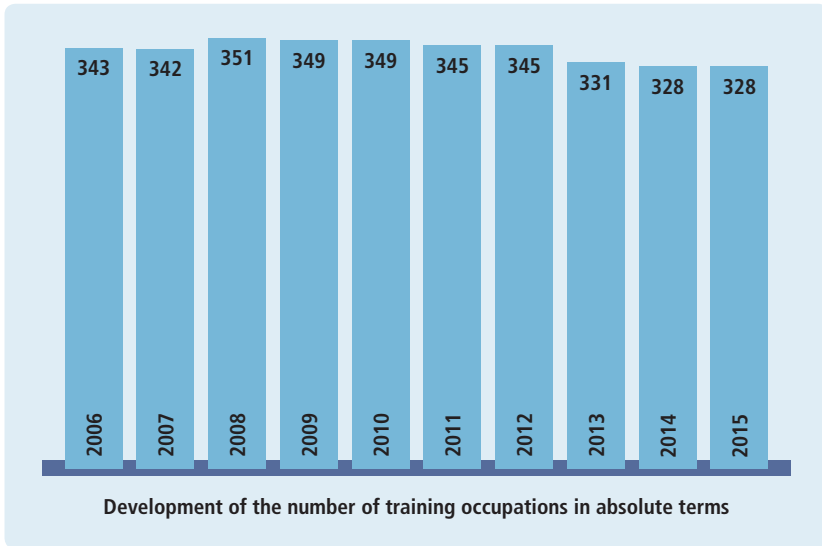


Figure 5: Number of training occupations

At the Federal Institute for Vocational Education and Training, the main tasks associated with the preparation of training regulations¹² are housed at the department which is responsible for the structure and regulation of VET.

This department mainly conducts preparatory research work and the actual regulatory procedures themselves separated by occupational area. BIBB also investigates and evaluates the application of new and modernised training regulations and the implementation of new examination structures.

New training regulations and skeleton curricula have been enacted for numerous occupations in order to take account of technical, economic and societal developments. Obsolete occupations have disappeared, and whole occupational fields have been revised and re-regulated and consolidated to form new complex occupations.

At the end of the 1980s, for example, many old specialised occupations in the metalworking and electrical sector, an area which is strongly affected

12 Other departments at the Federal Institute for Vocational Education and Training also deal with skills research, early recognition and the piloting of new training concepts.

by changes to technology and work organisation, were combined to create a small number of new occupations.

It has also become necessary to develop completely new occupations. The new occupation of production technologist, for example, came into force on 1 August 2008. New training requirements were becoming apparent in the field of engineering and plant construction. The integration of new production technologies and the processing of new materials required greater use of information technologies. The conventional metal working occupations were unable to cover these skills. At the same time, new advanced training regulations were developed, leading to the qualification of certified process manager in production technology. Such an interlinking of initial and advanced training regulations can bring about a modernisation of German vocational education and training. It can also enhance the attractiveness of the VET system by opening up new career pathways to skilled workers and also by providing the companies with an opportunity to offer their staff initial and continuing training that relates to the work process.

A total of 149 training occupations were re-regulated between 2006 and 2015. These included 130 modernised occupations and 19 new training occupations (see Figure 6). 17 modernised training occupations came into force in 2015 (Data Report to accompany the 2016 Report on Vocational Education and Training, p. 111, <http://www.bibb.de/datenreport2016>).

Training modules have been developed in order to facilitate access to the dual system. The aim of these is to open up transition to regular dual training together with the possibility of time credit transfer for qualifications already acquired or admission to an external examination conducted by the chamber to unplaced training applicants from previous years¹³. The modules making up a training occupation are developed on the basis of the current training regulations governing the occupation and the relevant skeleton curriculum. They are required to encompass in full the (minimum) contents stipulated in these regulatory instruments. Modules are aligned to the principle of the self-contained activity and are oriented towards “acting in situations”. The total of all module times corresponds to the usual duration of training set out in the regulations.

13 Unplaced applicants from previous years are members of previous school leaving cohorts who have thus far failed to obtain a training place.

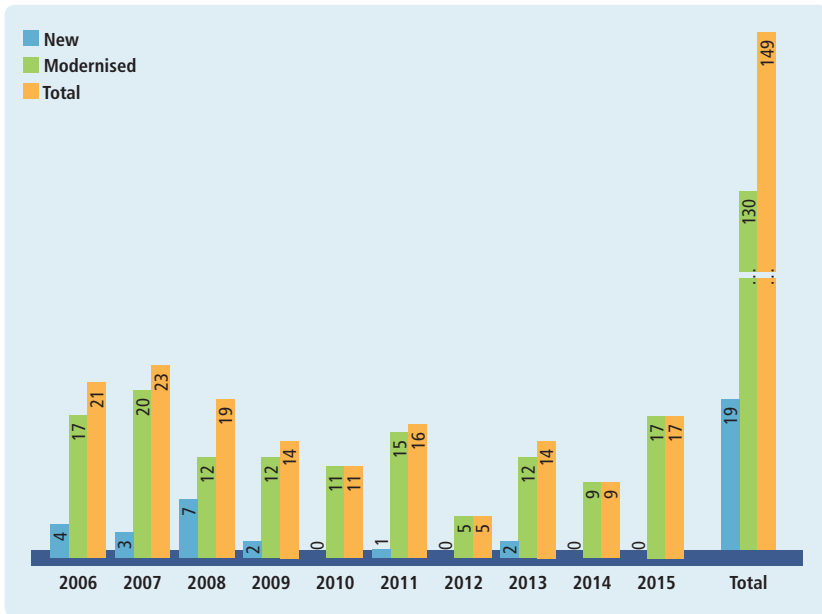


Figure 6: New and modernised training occupations 2006 to 2015

The aim of training is to enable young people to acquire comprehensive employability skills, which will qualify them to act efficiently, effectively and innovatively as well as independently, autonomously and in cooperation with others. The revised Vocational Training Act of 2005 takes this overarching objective into account by including the concept of employability skills. Only very well-trained skilled workers will be able to keep pace with the ever increasing speed of the developments that are changing people's work and their occupations. Because professional knowledge acquired once is not sufficient for the entire duration of working life, the aim is to stimulate the readiness for ongoing learning during training in order to react appropriately to the changes and new challenges which are arising in the workplace. Parallel to this, the development of social competence and autonomy alongside specialist knowledge and skills is becoming increasingly significant in training.

This competence dimension is also accorded due consideration in the German Qualifications Framework (DQR), which was adopted in 2013. In October 2006, the Federal Ministry of Education and Research (BMBF) and the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK) agreed to work together

er on the development of a German Qualifications Framework for Lifelong Learning. Over the following years, the relevant stakeholders were involved in developing, piloting and revising the DQR prior to its final adoption in May 2013. The DQR forms the prerequisite for the implementation of the European Qualifications Framework (EQF) in Germany and aims to foster transparency and permeability between the sub-areas of the educational system.

The DQR contains eight reference levels, to which formal qualifications from general education, higher education and vocational education and training are to be aligned. Qualifications are described in specific terms on the basis of the competence categories of “professional competence” and “personal competence”. These are each once again respectively divided into two sub-categories (professional competence = “knowledge and skills, personal competence = “social competence and autonomy”).

Level indicator Requirements structure			
Professional competence		Personal competence	
Knowledge	Skills	Social competence	Autonomy
Depth and scope	Instrumental and systemic skills, judgement	Team/leadership skills, involvement and communication	Independence/ responsibility, reflectiveness and learning competence

Figure 7: Structure of the DQR (DQR Working Group 2011, p. 5)¹⁴

The concept of competence is at the heart of the DQR. “In the DQR, the term competence depicts the ability and readiness of the individual to use knowledge, skills and personal, social and methodological competences and conduct himself or herself in a considered and individually and socially responsible manner. Within this context, competence is understood to refer to employability skills.”

Within the scope of the implementation of the DQR, the Federal Institute for Vocational Education and Training worked in conjunction with the social partners and ministries on the adoption in June 2014 of a Board Recommendation on the structure and design of training regulations which addressed the topic of competence orientation.

14 www.dqr.de/media/content/Der_Deutsche_Qualifikationsrahmen_fue_lebenslanges_Lernen.pdf. Further information on the DQR is available at www.dqr.de.

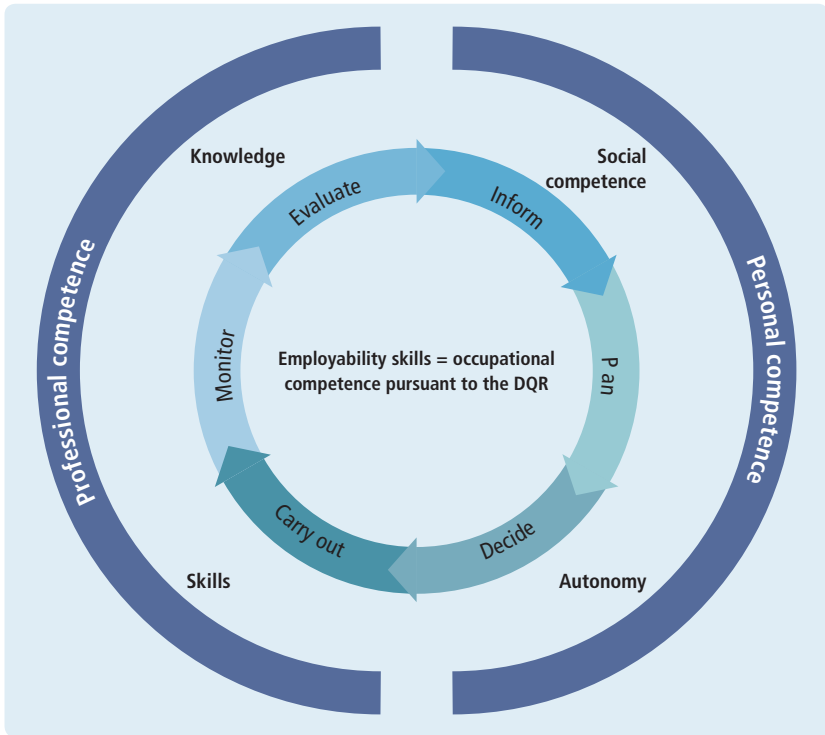


Figure 8: What are employability skills?

This means that employability skills pursuant to the Vocational training Act are equated with the definition of occupational competence contained within the DQR. In all training regulations developed from 2015 onwards, the intention is for systematic consideration to be given to the four competence dimensions of the DQR in order to more firmly establish competence orientation within regulatory work.

At top-level talks held on 31 January 2012, the Federal Government, the federal states, the social partners and the trade and industry associations reached agreement on the adoption of a joint position for the implementation of the German Qualifications Framework whereby two-year occupations within the dual system are aligned to level 3, and three and three and a half year training occupations are aligned to level 4. This alignment is indicated in EUROPASS Certificate Supplements and in the “Index of Recognised Training Occupations”. The plan is for further consultations regarding alignments to take place in 2017, when consideration will also be given to the general school leaving qualifications which have not thus far been categorised.

Course of the process

If the contents or structure of a training occupation are to be modernised or if a new occupation is to be created, the initiative for such a move usually originates from the specialist craft trade associations, from the umbrella associations of the employers, from the trade unions or from the Federal Institute for Vocational Education and Training. After consultation with all participants, the federal ministry responsible reaches a decision with the agreement of the federal states. The Federal Institute for Vocational Education and Training frequently gives a response in the form of an expert report or, particularly in the case of major reform plans, carries out a research project.

The development of new training regulations and skeleton curricula or the adaptation of existing training provisions to reflect changes in occupational practice is conducted within the scope of a regulated procedure in which the Federal Government, the federal states, the employers, the trade unions and vocational education and training research are all involved.

The Federal Government and the federal states have agreed that the duration of the processes should be limited to approximately one year. The work of the experts¹⁵ should generally be completed no more than eight months after a resolution has been adopted by the Coordination Committee, the body which harmonises cooperation between the Federal Government and the federal states.

The regulatory work conducted needs to accord due consideration to the binding nature of the intended legal norm which stipulates the contents and objectives of training as well as to the dynamism of technical, economic and societal development into account. The application of certain methods or the use of particular technical systems are not prescribed as mandatory in the training regulations. The regulations list the learning outcomes to be achieved in a way which remains as open as possible to the deployment of technology and in a functionally-oriented form in order to be able to accommodate new developments.

15 The Federal Government experts support the drawing up of the training regulations including development of the general training plans for the companies. They are appointed by the social partners. The experts of the federal states, who are nominated by the Standing Conference of the Ministers of Education and Cultural Affairs (KMK), develop the skeleton curricula for the vocational schools.

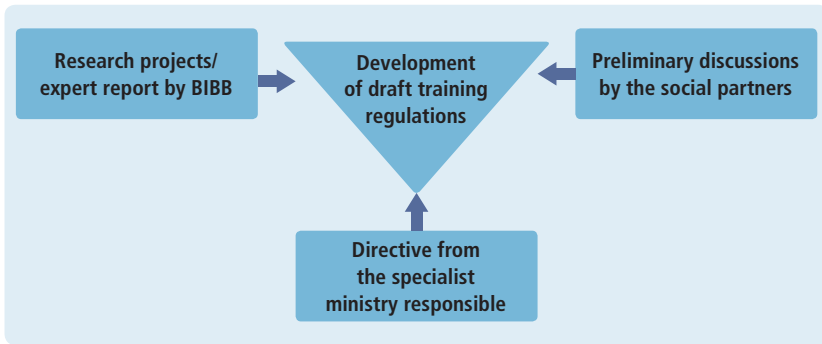


Figure 9: Initiation of an updating procedure

The subsequent procedure for the development of training regulations encompasses the following stages.

- ▶ Stipulation of “benchmarks” for the training regulations
- ▶ Development and harmonisation
- ▶ Enactment of the ordinance

These stages follow the application made by the specialist ministry responsible to the new occupation.

The development of training regulations will be described on the basis of the example of vocational education and training in the field of geo-information technology in order to make the abstract procedure easier to follow. This example also illustrates the breadth of structural options.

Initial situation

Ongoing technological developments in the three occupations of surveying technician, mining surveying technician and cartographer necessitated the use of geo-information systems for the recording, further processing and visualisation of geo data.

The new skills requirements combined and separated the professional contents of the occupations stated in a new way. For this reason, existing content delineations were no longer useful. In order to take account of this development and to open up training to new sectors, the social partners agreed a new overall concept for vocational education and training in geo-information technology (now including two training occupations). The intention was to link the occupations of geomatics technician and surveying technician (and the latter’s specialisms of surveying and mining surveying) via common contents at the beginning of training. The contents of the occupations of cartographer and mining surveying technician, which would be abolished, were to be mainly integrated into the occupations of geomatics technician and surveying technician respectively.

Modernisation and initiation of occupations

Benchmark proposals for a training occupation may be developed in different ways.

- ▶ On the basis of preliminary discussions by the social partners
- ▶ On the basis of research projects or expert reports from the Federal Institute for Vocational Education and Training
- ▶ On the basis of a directive issued by the specialist ministry responsible

Benchmarks are usually developed by the social partners when they perceive the need for re-development or revision of an occupation. The umbrella organisations of the social partners (German Employers' Organisation for Vocational and Further Training, KWB, and usually the German Confederation of Trade Unions, DGB) present the benchmark proposal to the promulgator of the ordinance (ministry responsible) together with a request for consideration and the scheduling of application discussions.

Stage 1 – Stipulation of the benchmarks of the training regulations

The “benchmarks” of the training regulations are stipulated within the scope of “application discussions” which take place at the specialist ministry responsible (normally the Federal Ministry for Economic Affairs and Energy).

In application discussions held in January 2009, the following benchmarks were stipulated for the re-regulation of vocational education and training in geo-information technology. Vocational education and training in the occupations of of geomatics technician and surveying technician would be collated into an occupational family under the designation of “vocational education and training in geo-information technology” and an ordinance would be published. The plan was for the joint qualifications to have a minimum duration of 12 months and a maximum duration of 18 months.

- a) **Occupational title**
- Geomatics engineer
 - Surveying technician

b) Duration of training

Duration of training is three years.

c) Structure and nature of the training¹⁶

Mono-occupation

Occupation differentiated into two specialisms

d) Form of examination

Intermediate and final examination in both occupations

e) Time structure

Suggested time allocations¹⁷ in weeks separated prior to and after the intermediate examination

f) Environmental protection

Learning objectives which go beyond the standard position of “Environmental protection”¹⁸ will be imparted in a way that is integrated with other learning contents.

g) Catalogue of skills, knowledge and competencies¹⁹

The catalogue of skills, knowledge and competencies contains the minimum requirements for vocational education and training in the training occupations of geomatics technician and surveying technician.

-
- 16 **Mono-occupations** describe closed training programmes with a qualifications profile that does not formally exhibit any specialism. Training contents are identical for all trainees. **Training occupations with internal differentiation** are training programmes with particular contents for individual task areas or fields of activity. Specialisation particularly takes place in the form of main focuses and specialisms. Differentiation by **main focuses** takes particular company characteristics into account. During the second and third years of training, main focuses do not usually take up more than six months of the whole of the period of training. Differentiation via **specialisms** takes place to a greater extent if there are special sector-specific characteristics. The third year of training is earmarked for the imparting of necessary skills, knowledge and competences. In contrast to main focuses, examination requirements are stipulated for each specialism. The use of **elective qualifications units** mainly comes under consideration for highly specialised sectors, in which each company addresses a different spectrum and where specialisation going beyond specialisms is required. This model enables the mapping of specialist company requirements via a combination of different elective qualifications units. The number of elective qualifications units offered and to be selected and the scope of time needed during training exhibit a wide variance in some cases.
- 17 Division into suggested time allocations collates the contents of the general training plan into content sections. A suggested time allocation in weeks is stipulated for each content section. This states approximately how much time should be estimated for the imparting of contents and for more detailed practical training at the company.
- 18 Resolution No. 73 of the Board of the Federal Institute for Vocational Education and Training of 4/5 February 1988: Inclusion of principles of environmental protection in vocational education and training
- 19 The catalogue of skills, knowledge and competences is indicated in all training regulations.

Stage 2 – Development and harmonisation

During the development and harmonisation phase, training regulations for the companies and skeleton curricula for the vocational schools are drawn up and coordinated with each other.

The Federal Institute for Vocational Education and Training requests the umbrella organisations of the employers and trade unions to appoint experts, who then act as Federal Government experts (representatives of company practice) in developing the re-regulation of the training occupation in conjunction with BIBB.

Drafting training regulations involves developing the so-called paragraph part of the regulations and the general training plan, which is appended as an annex. The general training plan sets out the content and time structure, whereas the paragraph part of the regulations contains elements such as the title of the training occupation, the training profile and the examination requirements.

Federal state experts develop a skeleton curriculum for vocational school teaching in coordination with the work carried out by the experts of the Federal Government. A joint meeting takes place at the end of the development phase, at which the experts of the Federal Government and of the federal states conduct final consultations on the two drafts and reach agreement with regard to harmonising time and content.

The umbrella organisations of the employers and trade unions each appointed the respective requisite number of experts and deputy experts, who collaborated on drawing up the necessary re-regulation documents within the scope of the BIBB procedure. When selecting the experts, particular importance was attached to obtaining specialist representation from the previous areas of surveying, mining surveying and cartography as well as from the branch of remote sensing, which was now also to be integrated.

The agreed draft training regulations are forwarded to the Board of the Federal Institute for Vocational Education and Training for a formal response. A positive response from the Board also constitutes a recommendation to the Federal Government that the training regulations should be enacted in the form submitted.

In addition, the experts appointed draw up the EUROPASS Certificate Supplements for the respective occupation to be included with the final certificate. In order to improve occupational mobility in Europe in particular and facilitate cross-border applications, the EUROPASS Certificate Supplements are also prepared in French and English. They form part of the EUROPASS.

This is a free service offered by the European Commission, which helps to present qualifications, skills and competencies in a way which is comprehensible across Europe. The purpose of the EUROPASS is to record all qualifications acquired over the course of a life, regardless of the routes via which they have been obtained. It is increasingly aligned to learning outcomes rather than to educational pathways and learning times.

Between April 2009 and January 2010, the Federal Government experts prepared draft ordinances and general training plans for the training occupations of geomatics technician and surveying technician in conjunction with the Federal Institute for Vocational Education and Training and the federal ministries responsible.

The discussions held during the meetings focused on the following questions in particular.

- *What are the common contents of the two occupations and which level of depth is required with regard to the imparting of these common contents?*
- *Over which period of training should the common contents extend?*
- *How must the learning objectives for the occupation of geomatics technician be formulated so that training in this occupation can take place in many different areas?*
- *Can the specific contents relating to surveying and mining surveying be sufficiently represented in the specialism model or can differentiations more usefully be mapped via main focuses?*

The result of these consultations was the stipulation of the mono occupation of geomatics technician and a decision that the occupation of surveying technician should include the specialisms of surveying and mining surveying. Both occupations have common contents over a period of twelve months at the start of training.

Parallel to the appointment of the Federal Government experts, the Secretariat of the Standing Conference of the Ministers of Education and Cultural Affairs (KMK) nominated a skeleton curriculum development committee under the lead management of the State of North Rhine-Westphalia. The draft skeleton curriculum was developed during the period from June 2009 to January 2010.

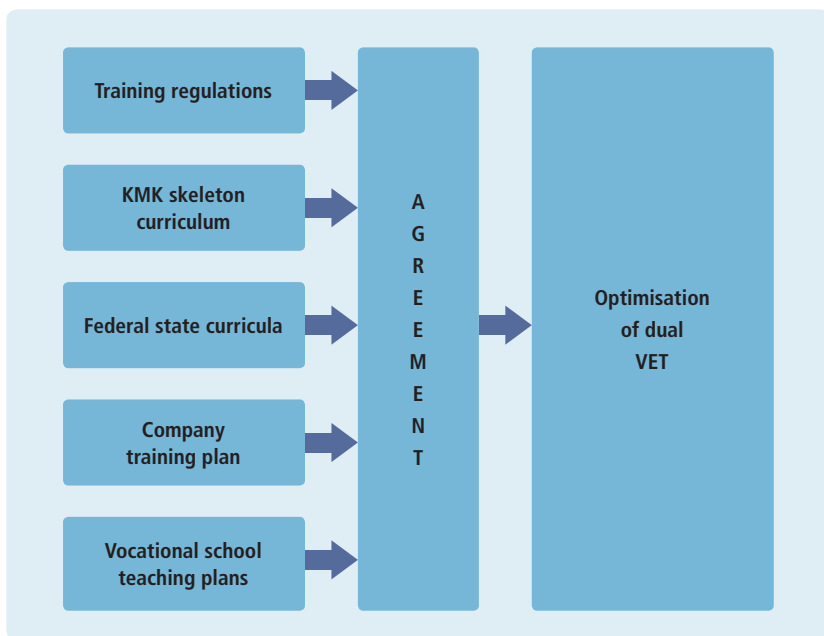


Figure 10: Harmonisation of company-based and school-based training

Stage 3 – Enactment of the training regulations

Finally, the new training regulations and coordinated skeleton curriculum receive consent from the “Federal Government/Federal States Coordination Committee for Training Regulations/Skeleton Curricula (KoA)”²⁰.

The ministry responsible subsequently enacts the training regulations in agreement with the Federal Ministry of Education and Research and publishes them in the Federal Law Gazette. The date of entry into force is usually stipulated as the beginning of the following training year, i.e. 1 August.

20 The “Federal Government/Federal States Coordination Committee for Training Regulations/Skeleton Curricula (KoA)” comprises representatives from the ministries responsible for vocational school teaching in all 16 federal states, from the Federal Ministry of Education and Research (BMBF) and from the specialist ministries responsible for training regulations, usually the Federal Ministry for Economic Affairs and Energy (BMWi). It is a non-statutory body which has its basis in a Federal-Government-federal state agreement (Joint Results Protocol of 30 May 1972).

The skeleton curriculum is usually either directly adopted by the individual federal states or implemented in the form of state-specific curricula for the vocational schools.

The updating process depicted clearly shows how responsibility for VET and remit areas relate to one another and are interlinked. Training regulations are only accepted by companies if they have been drawn up with the consensus of all parties. A sustainable result can thus only be achieved by carefully weighing up the various interests and wishes of all participants.

The Board of the Federal Institute for Vocational Education and Training consented to the fact that vocational education and training in the field of geo-information technology should be based on the two training occupations of geomatics technician and surveying technician. On 25 March 2010, the Federal Government/Federal States Coordination Committee for Training Regulations/Skeleton Curricula (KoA) also gave its approval. Following an investigation of the legal technicalities by the Federal Ministry of Justice, the new training regulations were enacted on 30 May 2010 by the Federal Minister of Economics and Technology and the Federal Minister of the Interior.²¹

21 Ordinance on Vocational Education and Training in geo-information technology of 30 May 2010 (Federal Law Gazette 2010, Part I No. 28, published in Bonn on 4 July 2010).

Index of Recognised Training Occupations

Training regulations are published in the Federal Law Gazette. They also appear together with their skeleton curricula in the Federal Gazette. The new training regulations are entered into the Index of Recognised Training Occupations, which is managed by the Federal Institute of Vocational Education and Training and annually published in updated form.

The index includes recognised training occupations that are being piloted and occupations which have been abolished or modernised. It also provides information on the duration of training programmes and legal foundations (sources) and on Austrian and French examination certificates which have been accorded equal status with German certificates. In addition, the index contains the regulations of the Federal Government and federal states on occupations in the healthcare and social sectors and provisions relating to the vocational education and training of persons with disabilities. It further encompasses the regulations of the Federal Government and competent bodies for advanced vocational training and retraining, as well as a list of competent bodies and a statistical section.

The Index of Recognised Training Occupations can be accessed online via the website of the Federal Gazette. It is also available in book form and can be ordered via the publishing house W. Bertelsmann Verlag (wbv). For more information, please visit the BIBB homepage at

<http://www.bibb.de/veroeffentlichungen/de/publication/seriesitem/id/7>

Support for training practice via the Federal Institute for Vocational Education and Training

The companies and vocational schools are responsible for the implementation of training regulations and skeleton curricula. Nevertheless, the Federal Institute for Vocational Education and Training supports training practice by offering publications and wide-ranging consultancy services.

This takes place via such vehicles as the “Structuring training” series of publications, via information and online materials relating to the respective training occupations and research results.

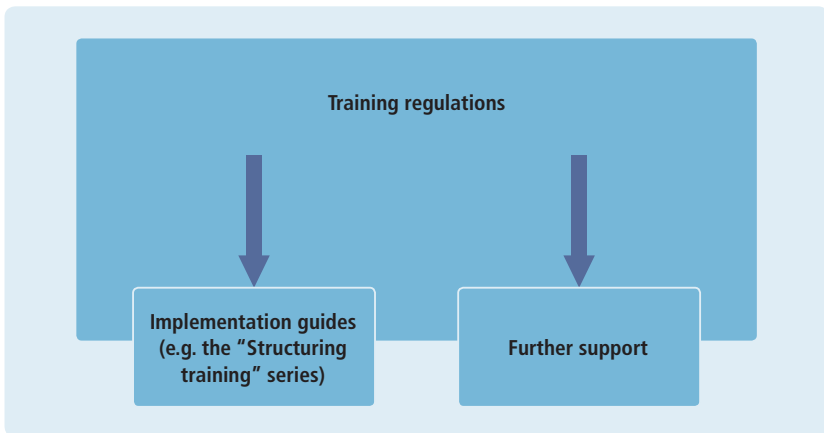


Figure 11: Services offered by the Federal Institute for Vocational Education and Training

Implementation guides for training regulations

The implementation of new training regulations into practical training in particular places high demands on everyone involved in the process at the companies, the vocational schools, the inter-company training centres and the competent bodies, as well as on the trainees themselves. The “Structuring training” series of publications from the Federal Institute for Vocational Education and Training provides valuable assistance and ideas in this regard. A summary of all the titles available in this series is available via the link www.bibb.de/ausbildung-gestalten

New aspects are presented and explained in detail. Comprehensive commentaries are provided for the individual paragraphs of the respective ordinance text. Explanations of the learning objectives of the general training plan illustrate the training contents. Sample learning projects and tasks help to specify the skills, knowledge and competencies to be imparted in a more concrete form and thus facilitate the execution of training for the trainers. Valuable tips for trainers, examiners and for the trainees themselves are provided via examples of how the structure of examinations is implemented in new and modernised occupations. These give an insight into the spectrum of examination requirements. All persons involved in training are assisted by the provision of hints on the planning process, such as check lists for the company providing training, explanations on how to draw up a company training plan and examples of written records of training. The training profile and the skeleton curriculum for the vocational school are provided for the purpose of information. The explanations and practical guides are supplemented by information on possible continuing training courses and other training programmes and by references to further literature.



Implementation guides for around 150 new and modernised training occupations have been published over recent years.

More detailed information and source references are available at www.bibb.de.

During the course of the updating procedure, the social partners asked the Federal Institute for Vocational Education and Training to support training practice by developing implementation guides on vocational education and training in geo-information technology. These guides were drawn up in conjunction with experts who were already involved in the updating process in their capacity as Federal Government representatives and have been available since April 2011.

Further support from the Federal Institute for Vocational Education and Training

Alongside the guides already mentioned, the Federal Institute for Vocational Education and Training offers numerous further opportunities to obtain information to all those involved with or interested in vocational education and training. Various advisory services are provided via a range of Internet portals.

The Examiners' Portal gives information and advice on issues relating to examinations (www.prueferportal.org).



foraus.de provides guidance to training staff (www.foraus.de).



Current news from the field of initial and continuing vocational education and training, publications, information on funding programmes and events and the latest findings to emerge from VET research can all be found on the website of the Federal Institute for Vocational Education and Training at www.bibb.de

Abstract

The German government uses laws and regulations to regulate the legal framework for vocational training in the “dual” vocational training system (which combines part-time vocational schooling with practical work experience). Training regulations are legal provisions that outline the aims and content of and examination requirements for in-company training.

The Federal Institute for Vocational Education and Training prepares the content of training regulations for the government. It develops drafts together with on-the-ground experts from the actual vocational training field who have been delegated by management and labour.

This brochure contains information about the process involved in developing training regulations and offers an overview of materials and aids that BIBB can provide for implementing training regulations in day-to-day practice.

Federal Institute for Vocational
Education and Training
Robert-Schuman-Platz 3
53175 Bonn

Phone (0228) 107-0
Fax (0228) 1072976/77

Internet: www.bibb.de
e-mail: zentrale@bibb.de

