

Vocational Training Regulations and the Process Behind Them



Federal Institute for
Vocational Education
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Federal Institute for Vocational Education and Training (BIBB)

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This brochure informs readers about Germany's unique process for developing initial vocational training regulations. These regulations are the basis for initial vocational education and training within the dual system (a company-based apprenticeship combined with part-time vocational school) in which many young people in Germany gain their first vocational qualifications.

The great advantage of this process is that its outcomes are fully accepted by all parties involved in initial vocational training practice, since the parties concerned – employers' organisations on behalf of the companies and trade unions on behalf of employees – are fully involved in all important decisions about the content, objectives, duration, and requirements of initial vocational training.

How does this process work? Experts from initial vocational training practice work jointly with the Federal Institute for Vocational Education and Training (BIBB) on the drafting of new training regulations, and they confer with experts from the part-time vocational schools in order to coordinate these regulations with the draft framework curricula. Employers and trade unions then publicise the new training regulations in their firms, and the federal government enacts them in law.



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Foreword

The German Vocational Training Act (*Berufsbildungsgesetz*, BBiG) of 1969 was reformed in 2005. The reform entered into force on 1 April 2005.¹ The aim of the law is to equip young people about to enter the world of work with complete occupational proficiency within a broadly contoured area of work. Only in this way can they meet the constantly changing demands of the workplace. In both the old and the reformed law, the state has declared all non-school-based vocational education² a public responsibility, but has nevertheless assigned responsibility for its implementation largely to employers in the private sector and public administrations. All players involved in vocational education work together in planning and preparing the profiles for new or updated occupations:

- the companies and chambers (employers),
- the trade unions (employees),
- Germany's federal states (*Länder*) and
- the German federal government.

¹ The Vocational Training Act of 1 April 2005 does not apply to vocational training provided at vocational schools that are subject to state (*Land*) education laws. It also does not apply to vocational training provided through courses of study that lead to specific vocational qualifications or comparable study courses provided at higher education institutions on the basis of the Framework Act for Higher Education and the higher education acts of the individual German federal states (*Länder*), nor to vocational training provided for persons employed under public law or to vocational training provided on merchant ships (Section 3 (2), Nos. 1–3 of the Vocational Training Act).

² In the event of concurrent *Land* and federal legislation, Germany's constitution – the Basic Law (*Grundgesetz*) – stipulates that the federal government is responsible for laws pertaining to economic affairs and labour matters (Article 74, Nos. 11 and 12 of the Basic Law). Hence, company-based initial vocational training falls within its purview, while the school system – including part-time vocational schools – is the responsibility of the individual *Länder*.

The Works Constitution Act (*Betriebsverfassungsgesetz*, BetrVG) and the Staff Representation Act (*Personalvertretungsgesetz*, PersVG) give trade unions a considerable say in the implementation of vocational education and training (VET). The employers' associations represent the interests of – mainly private-sector – companies in which initial vocational training takes place.

The federal government provides the legal framework for initial vocational education and training through laws and ordinances. The term “training regulation” refers to a set of regulations laying down the objectives, content and examination requirements for company-based initial vocational training. These are enacted by the relevant federal ministries in concert with the Federal Ministry of Education and Research (BMBWF) by means of ordinances that do not require approval from the upper house of parliament (*Bundesrat*). They apply nationwide and have the force of legislation.

The Federal Institute for Vocational Education and Training (BIBB) was founded in 1970 on the basis of the 1969 Vocational Training Act. One of its tasks is to prepare the content of training regulations. BIBB develops draft regulations in collaboration with experts from vocational training practice, who are delegated by the employers and the trade unions. Many of the provisions laid down in the Vocational Training Act for the regulation of initial vocational training are based on arrangements that have been developed over time and proven in vocational training practice.

Training regulations – frameworks for recognised occupations in the dual system

When they leave school, most young people in Germany – almost two thirds of an age cohort³ – start their initial vocational training with an “apprenticeship”, i.e. a programme of initial vocational training in the dual system.

The system is referred to as “dual” because training takes place in two different learning venues: in a company and at a part-time vocational school. Another possible arrangement is extra-company training, which can take place in vocational training establishments that are not part of the in-company and part-time vocational school system.

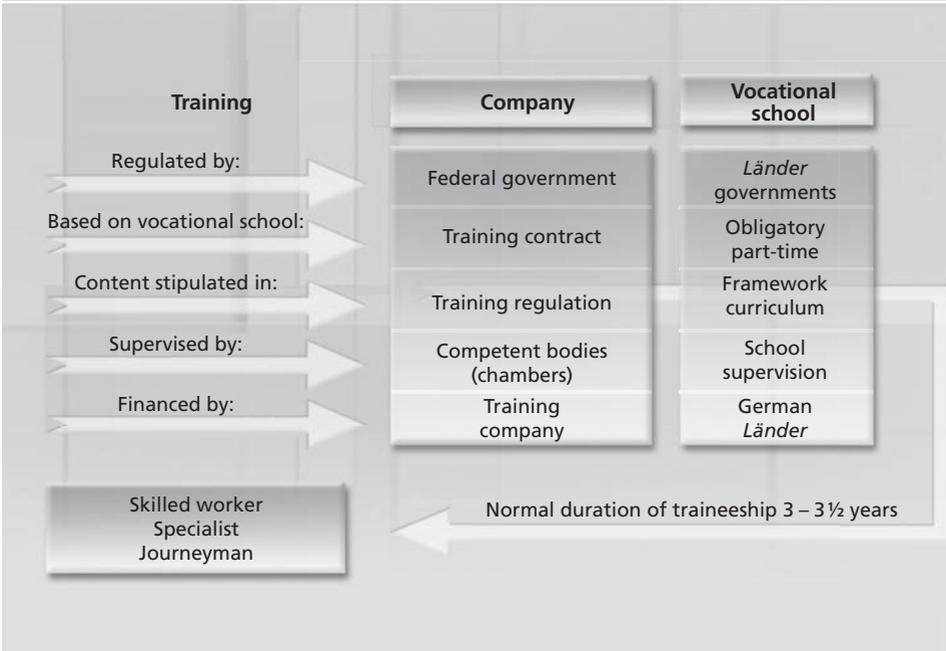
Access to a dual-system apprenticeship does not formally depend on a particular school-leaving qualification. As a rule, initial vocational training in Germany is

open to everyone. Young people sign an apprenticeship contract with a company that provides initial vocational training (referred to as a “training company”) for a stipulated period of training in a recognised occupation that requires formal training (a “training occupation”).

Young people under the age of 18 may only undertake in-company initial vocational training in state-recognised training occupations. This is known as the principle of exclusivity. The Vocational Training Act defines the requirements that apply to this type of training occupation. According to its terms, initial vocational training has to lay a broad-based foundation for performing a skilled occupation in the changing world of work and to equip young people with the necessary vocational skills, knowledge and capabilities

³ Today around two-thirds of an age cohort commence a programme of initial vocational training in the dual system (details cf. Gericke, N.; Uhly, A. & Ulrich, J. G.: *Wie hoch ist die Quote der Jugendlichen, die eine duale Berufsausbildung aufnehmen?* In: VET in Wissenschaft und Praxis, 40 (2011), pp. 41-43).

The dual structure of vocational training



by means of a regulated initial vocational training programme which also enables them to gain the requisite work experience. In keeping with German legislation on the protection of young persons, the Act thus ensures that company-based initial vocational training of young people meets binding quality standards.

Training regulations for recognised training occupations are issued by the responsible ministry – as a rule the Federal Ministry for Economics and Technology (BMWi) – acting in concert with the Fed-

eral Ministry of Education and Research (BMBF). They contain minimum standards for the in-company part of initial vocational training.

Currently, (as of 1 October 2010) there are 349 1. state-recognised training occupations in Germany on offer.

Germany also has a host of other occupations which are regulated outside the scope of the Vocational Training Act by other legal provisions. One example of these are health care occupations, which are regulated under the Nursing

Act (*Krankenpflegegesetz*, KrPflG) rather than the Vocational Training Act.

The historical roots of the regulation of in-company vocational training go back to the Middle Ages. Individual craft and trade guilds developed rules for apprenticeships in their own companies. These occupational rules for apprenticeships overseen by a master craftsman have developed into today's system of initial vocational training shared between a company and the part-time vocational school. The origins of Germany's modern training regulations date from the beginning of the 20th century: as industrialisation began, industrial firms adopted the concept of a craft apprenticeship but adapted it to their own needs. Thus initial vocational training was regulated by specifying a list of obligatory skills and knowledge⁴ and stipulating the duration of training in order to arrive at uniform training standards. This eliminated not only regional differences but also discrepancies arising due to company type and size.

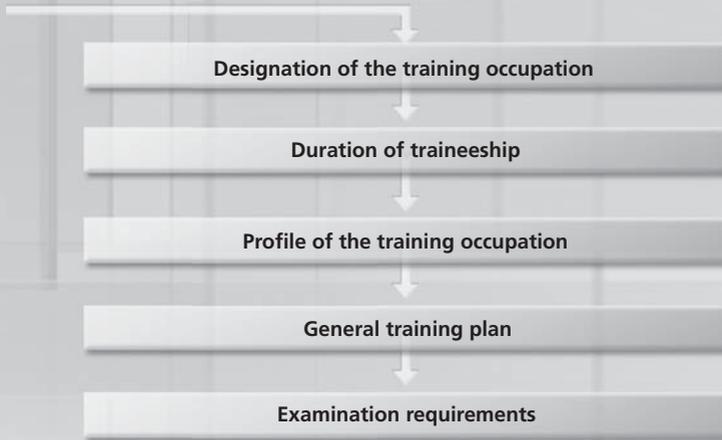
Gradually national standards of skilled-worker-level training and qualifications

were established. Other industrialised countries with a history of craft and trade-based initial vocational training did not take this step.

Legal regulations only came about very much later, however. A bill introduced in 1919 failed because of irreconcilable differences between employers and trade unions who were demanding a say in the process. Only after the Second World War, in 1953, regulations for initial vocational training in the crafts were passed in the Act Concerning the Regulation of Crafts and Trades (*Gesetz zur Ordnung des Handwerks*, HwO). Germany's Grand Coalition government of Christian Democrats and Social Democrats' passed legislation in 1969 that is unique in the world, regulating how employers, trade unions, chambers and government bodies were to work together for the purpose of providing vocational education, training and qualifications for the majority of the population: the original Vocational Training Act (*Berufsbildungsgesetz*, BBiG). The same principle of parity in decision-making was maintained in the reformed Vocational Training Act of 2005.

⁴ The amended Vocational Training Act of 2005 made reference to "capabilities" in addition to "skills and knowledge"; the phrasing in use today refers to "skills, knowledge and capabilities". For some time now the same idea has been expressed in terms of the higher-level concept of "competence", which encompasses a personal dimension in addition to specialist, methodological and social skills, knowledge and capabilities. So the presupposed concept of competence is a combination of specialist, methodological, social and personal competence.

What does a training regulation stipulate?



Part-time vocational schools in Germany also have a long tradition that can be traced back to the 16th and 17th centuries. In those days, reading, writing and arithmetic was taught in religious and trade-run “Sunday schools”. Although obligatory attendance of part-time vocational school was only introduced definitively in 1938, more than a hundred years ago companies could be obliged to send their apprentices to vocational school by means of public regulations.

Training regulations play a central role in the Vocational Training Act since they constitute the regulatory framework for recognised occupations.

A training regulation regulates (Section 5 (1) BBiG):

- the designation of the training occupation,
- the duration of traineeship – which should be no more than three years and no less than two,⁵

⁵ The majority of initial vocational training programmes are three years in duration, but a sizeable proportion are either shorter (two years) or longer (three-and-a-half years).

- the profile of the training occupation – the typical “skills, knowledge and capabilities” of the occupation in summarised form,
- the general training plan – an outline of the syllabus structure⁶ and time allocations for teaching the required skills, knowledge and capabilities,
- the examination requirements.

The regulations state the minimum requirements for a modern programme of initial vocational training. They define standards, i.e. the skills, knowledge and capabilities that a qualified skilled worker must have today, whilst giving VET practitioners sufficient latitude to be able to integrate further-reaching qualifications into the given programme and to make adjustments for future developments that are not yet foreseeable.

It is essential that initial vocational training within the dual system is kept open to new developments and a variety of training options. On that basis, firms will always be willing to train young people and able to rely on the occupational flexibility of qualified employees at the same time. The Vocational Training Act itself

allows scope for further developments in the dual system.

Under the amended Vocational Training Act that took effect in April 2005, trainees can now spend a limited period of time completing parts of their initial vocational training in another country. The period spent abroad is deemed by law to be a part of initial vocational training, as long as it is relevant to the training objective and does not exceed one quarter of the duration of traineeship stipulated in the training regulation.

The Act also states that a training regulation can also make provision for the teaching of “additional qualifications”⁷, which are extra qualifications that complement occupational proficiency; they are additional to the occupational skills, knowledge and capabilities specified in the profile of the training occupation. Additional qualifications are tested and certified separately in the final examination.

In parallel to their in-company vocational training, trainees attend vocational school on a part-time basis. Pursuant to the allo-

⁶ The syllabus structure outlines the learning content and learning objectives laid down in the training regulation.

⁷ The 2009 updating of the training occupation of Specialist Retail Assistant for the Music Branch (m/f) was the first occasion on which additional qualifications were included in the regulatory instruments.

cation of responsibilities set out by the German constitution, this school-based element of instruction falls under the purview of the *Länder* governments.

The general training plan specified in the training regulation for the company-

based element is coordinated with the corresponding framework curriculum addressed to the vocational schools, so that in-company training and classroom instruction complement one another.

Vocational education and training (BBIG Sections 1 and 6)



Companies and competent bodies – organisers of initial vocational training

Initial vocational training that does not take place in a school is regulated on a uniform and nationwide basis by the Vocational Training Act. Each individual company finances the training that it provides. The German government subsidises special services such as in-company vocational training for disadvantaged young people or inter-company training for trainees. This does not, however, nullify the principle that each company pays for its own in-house initial vocational training.

In order to be “qualified” to provide initial vocational training, a company must meet the criteria for a suitable training establishment and must employ trainers who have the requisite personal and professional aptitude for that role. Verification of these matters is the responsibility of

the “competent bodies” which supervise the provision of initial vocational training in private firms and public bodies.

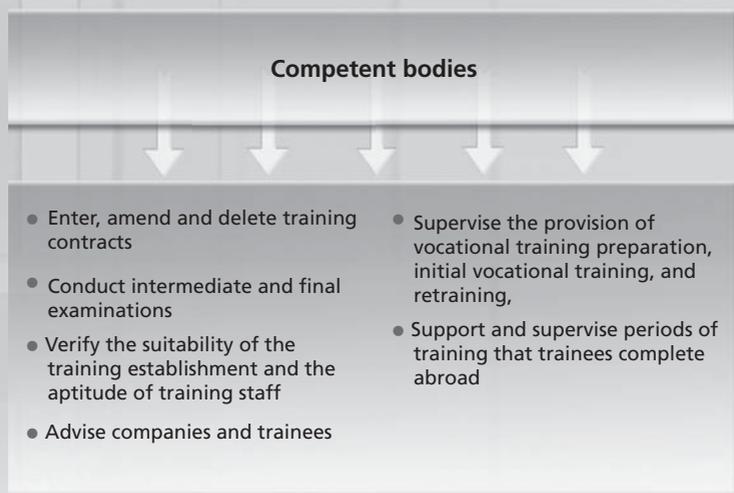
“Competent bodies” include the chambers⁸ (chambers of industry and commerce, chambers of crafts and trades, chambers of agriculture and chambers for the liberal professions such as general medical councils), relevant bodies in the public service sector, and relevant bodies that fall under the purview of the churches or other religious communities established under public law.

The competent bodies have the task of:

- supervising the provision of vocational training preparation, initial vocational training, and retraining,
- maintaining the register of training contracts⁹ (known in the skilled crafts

⁸ All companies in a particular branch of industry are compulsory, dues-paying members of the respective chamber. Decisions are taken by an assembly elected by all chamber members. Supervision concerning the legality of administrative actions is assigned to an upper-level Land authority – usually the ministry of economics.

Responsibilities of competent bodies in connection with the provision and supervision of initial vocational training



as the apprentice roll) in which the essential provisions of each initial vocational training contract have to be entered,

- advising firms on all initial vocational training issues via training advisors,
- monitoring the aptitude of training personnel and the suitability of the training establishment,

- conducting intermediate and final (journeyman) examinations,
- supporting and supervising periods of training that trainees complete abroad.

Under the Vocational Training Act, competent bodies are required to set up vocational training committees comprised of six trade union representatives,

⁹ Companies that provide initial vocational training are required to report all training contracts to their chamber in order to ensure that this register is complete and up-to-date.



six employer representatives and six vocational school teachers. Vocational training committees must be informed and consulted about all important matters connected with vocational education and training (VET). Furthermore, under the Vocational Training Act they are tasked with working to continuously improve the quality of VET.

Training companies are responsible for organising and conducting their own in-house vocational training, for which numerous options and considerable la-

itude are available to them. For example, subject matter that the company providing the in-house training cannot teach itself (be it for technical, financial or staffing reasons) can be taught at inter-company vocational training centres or through training networks. The training content outlined in a training regulation constitutes the standard minimum requirement. Consequently, all training companies can include other topics in their initial vocational training and give their trainees the opportunity to gain additional qualifications.

BIBB – development centre for new training regulations and platform for the social partners’ dialogue

The Federal Institute for Vocational Education and Training (BIBB) was established in 1970 pursuant to the 1969 Vocational Training Act as an institute to research, develop and support VET that takes place outside the school system.¹⁰ It carries out its tasks within the framework of the German federal government’s education policies.

When recognised occupations have to be updated or replaced, BIBB acts as a research partner for the social partners (employers and trade unions) and the German government. Through its research and development activities, it provides flanking support for the consultation process undertaken by employers’ representatives, trade unions and the German

government to reach agreement on new training concepts. It also helps to develop initial vocational training regulations and to coordinate the general training plans stipulated in the regulations with the framework curricula for part-time vocational schools drafted by the *Länder*.

One of BIBB’s fundamental tasks is to “take part in the drafting of vocational training regulations and other ordinances” in accordance with the instructions of the responsible federal ministry (Section 90 (3), No. 1 of the Vocational Training Act). Vocational training research establishes the prerequisites for designing, revising and adapting training regulations to keep pace with economic, technological and societal change. An

¹⁰ The Vocational Training Act (*Berufsbildungsgesetz*, BBiG) of 2005 supersedes the 1969 Vocational Training Act and the 1981 Vocational Training Promotion Act as the current statutory basis for the Federal Institute for Vocational Education and Training (BIBB).

agreement reached between the federal and *Länder* governments in 1972 (known as the Record of the Results of the Joint Meeting) lays down the procedure for co-ordinating vocational training regulations and framework curricula.

In addition to these tasks, the Federal Institute for Vocational Education and Training also

- helps to prepare the annual Report on Vocational Education and Training¹¹ issued by the Federal Ministry of Education and Research,
- helps to compile VET statistics issued by the Federal Statistical Office,
- supports and funds pilot projects, including flanking studies,
- takes part in international collaborative activities in the field of VET,
- assumes on behalf of the federal government additional administrative tasks aimed at advancing VET,
- supports inter-company training centres and provides assistance in the planning, establishment and ongoing development of these facilities,
- maintains the official register of recognised occupations that require formal vocational training,

- carries out the tasks described in the Law on the Protection of Participants in Distance Learning (*Fernunterrichtsschutzgesetz*, FernUSG) and helps improve the quality and increase the amount of vocational distance learning on offer by supporting and funding development projects.

The Board of BIBB consists of eight employer representatives, eight trade union representatives, eight *Länder* representatives and five representatives of the federal government.

Employers' associations and trade unions are intensively involved in BIBB's drafting of vocational training regulations, with a view to making the greatest possible use of the expertise that day-to-day VET practitioners have to offer and boosting acceptance of new training regulations by companies. This intensive collaboration is a hallmark of the entire process. It begins with joint work to define the salient education-policy parameters for a regulatory measure, and extends all the way to the issue of a vocational training regulation. A regulation is generally issued only after the relevant employers' and union representatives have had an

¹¹ To this end, BIBB has compiled the "Data Report accompanying the Annual Report on Vocational Education and Training" annually since 2009.

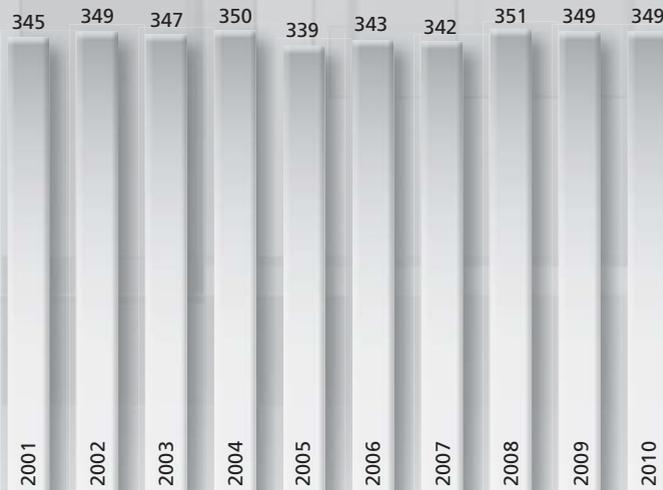
opportunity to express their official opinion and the Institute's Board has approved the draft regulations.

In the VET policy discourse, this is generally referred to as the "principle of consensus", an approach that ranges beyond the activities involved in developing

vocational training regulations. It also influences the implementation of vocational training regulations in day-to-day practice.

Fundamental responsibilities¹² associated with the drafting of vocational training regulations are lodged with the depart-

Trend: Number of training occupations



Change in the absolute number of training occupations

¹² Other departments at BIBB are also involved in qualifications research, early identification of skills needs and the testing of vocational training concepts.

ment of BIBB responsible for the regulation of VET.

These tasks include, first and foremost, conducting preparatory research for the respective occupational field and carrying out the actual process of framing the individual training regulations. This department also examines and evaluates the application of new and updated training regulations and the implementation of new examination structures in day-to-day VET practice.

New vocational training regulations and framework curricula have been issued for numerous occupations, reflecting recent developments in technology, the economy and society. Antiquated occupations have been dropped and entire occupational fields revised, updated, and merged into complex new occupations.

For example, in the late 1980s many of the old specialised occupations in the metalworking and electrical engineering sectors – which are very strongly affected by technological advances and changes in the organisation of work – were combined to make a smaller number of new occupations.

It has also become necessary to develop entirely new occupations; for example, the new occupation of Production

Technologist (m/f) entered force as of 1 August 2008. New qualification requirements were becoming obvious in plant and machinery construction. The use of new combinations of production technologies and the processing of new materials calls for increasingly widespread use of information technologies. These were qualifications that the profiles of the conventional metalworking occupations were unable to meet. Development of the advanced training regulation for the occupation of Certified Process Manager – Production Technology took place concurrently. Intermeshing initial and advanced vocational training regulations in this way helps to keep the German VET system up to date. Equally, it helps to raise the attractiveness of the VET system by opening up new career paths for skilled workers and giving companies the opportunity to provide their employees with initial and continuing vocational training as part of the work process.

In an effort to improve the accessibility of the dual system, training modules have been developed. These are aimed at bringing unplaced applicants from previous years into standard dual-system programmes of initial vocational training. Credit can be awarded for completed modules by allowing a time deduction from the overall length of training or by granting admission as a mature candi-

date to the chamber's qualifying examination. The training modules for the profile of a recognised training occupation are developed from the current training regulation underpinning that occupational qualification and from the corresponding framework curriculum. They must completely cover the (minimum) contents pre-

scribed in these regulatory instruments. They are informed by the principle of a "complete action" (comprising elements such as planning, decision-making, execution, review and evaluation), and are geared towards taking "action in situations". The time allocations for all the modules amount to the standard dura-

New and updated training occupations 2001–2010



tion of training as specified in the training regulation.

others to complete work tasks efficiently, effectively and innovatively.

The aim of initial vocational training is to help young people to acquire comprehensive occupational proficiency that enables them to work independently, self-responsibly and in cooperation with

This higher-level objective has been acknowledged in the Vocational Training Act by incorporating the concept of "occupational proficiency".

What is occupational proficiency?

Specialist competence

Personal competence



Methodological competence

Social competence

As the world of work evolves increasingly rapidly and changes the way in which people work and the jobs that they do, only extremely well trained specialists will be able to keep pace. Specialist knowledge learned at one time will not be sufficient to last an entire professional lifetime. One key aspect of initial vocational training is therefore to instil a willingness to keep learning in order to meet the changes and new challenges of the workplace. In parallel, it is becoming ever more important in initial vocational training to develop broad-based social, methodological and personal competences alongside specialist know-how.

In preparation for the systematic integration of these dimensions of competence into training regulations, growing numbers of initiatives, strategic concepts and approaches are attempting to establish the concept of competence as the guiding principle for regulatory work. Yet there are still divergent views on how "competence" should be understood. Staff at BIBB are therefore working intensively to develop a uniform competence model that is broad enough to transcend occupational boundaries, as a sound basis for VET.

Description of the procedure

As a rule, the initiative for updating the content or structure of a training occupation or for developing an entirely new occupation comes from industry associations, from the top-level employers' organisations, from trade unions or the Federal Institute for Vocational Education and Training. After hearing the views of all the parties concerned, the responsible federal ministry decides in consultation with the *Länder* governments whether to proceed. In many cases, BIBB issues an advisory opinion or, particularly when larger-scale revisions are being considered, conducts a research project before the ministry takes its decision.

The development of new vocational training regulations and framework curricula or the adaptation of existing regulations in response to changes in day-to-day occupational practice follow a systematic

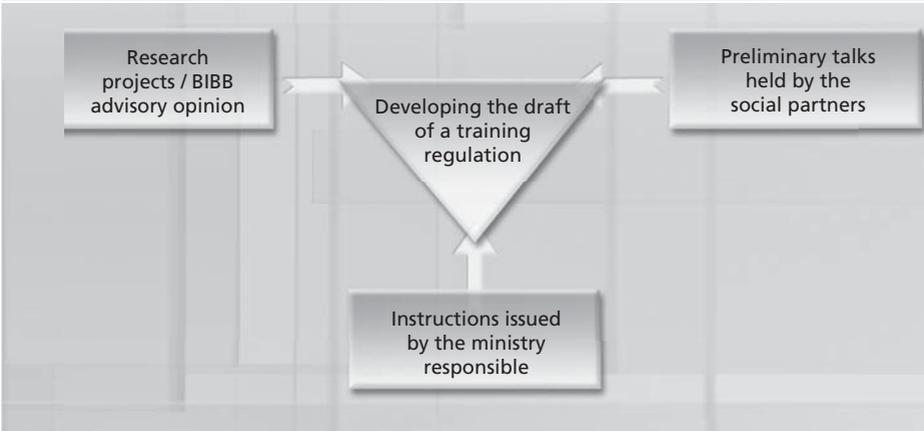
procedure. The participants involved are the federal government, the *Länder* governments, employers, trade unions and the VET research community.

The federal and *Länder* governments have agreed as a matter of principle to limit the duration of this procedure to one year. As a rule, the experts¹³ should complete their work within eight months following the decision by the coordinating committee (the body in which the federal and *Länder* governments resolve any differences).

The work on drafting or amending these regulations must take into account the binding force of the envisaged legal norm setting out the content and objectives of initial vocational training for the particular occupation. On the other hand, it must also be responsive to the pace of tech-

¹³ The federal government's experts support the drafting of the training regulation including the general training plans for use by companies. They are nominated by the social partners. The *Länder* experts, nominated by the Standing Conference of Ministers of Education and Cultural Affairs of the *Länder* (Kultusministerkonferenz, KMK) develop the framework curricula for the part-time vocational schools.

Initiation of a procedure to update a training regulation



nological, economic and societal change. Vocational training regulations do not stipulate the use of any specific methods or technical systems. They list the targeted learning objectives in a way that is as technology-neutral and function-oriented as possible, so as to remain open to new developments.

The subsequent procedure for developing a vocational training regulation consists of the following steps:

- defining the parameters for the vocational training regulation,
- drafting and coordination phase,
- issuing the ordinance.

These are the steps whereby the application submitted to the responsible ministry results in a new recognised occupation.

To give a more concrete idea of the abstract procedure, the process for developing training regulations is illustrated here using the example of initial vocational training in the field of geoinformation technology. This example also clarifies the broad range of options available to the drafters of regulations.

Background information:

Progressive technological advances in the three training occupations of Surveying Technician, Mine-Surveying Technician and Cartographer meant that it was becoming necessary to use geoinformation systems for the capture, processing and visual display of geodata. Due to new qualification requirements, the vocational content of the above-mentioned occupations was unexpectedly converging and/or diverging, so that the existing demarca-

tions in terms of content were no longer meaningful.

To address this development properly and to open up this initial vocational training programme to other branches of industry, the social partners agreed upon a new overall model of initial vocational training in geoinformation technology (involving just two training occupations). They proposed that the occupations of Geomatician (m/f) and Surveying Technician (m/f) - with "land surveying" and "mine surveying" as two fields of specialisation within the latter - should be brought into tandem by commencing initial vocational training with a common core of content. Two occupations were scheduled for suspension; it was decided to integrate the content from the occupation of Cartographer largely into the occupation of Geomatician, and the content from the occupation of Mine Surveying Technician largely into the occupation of Surveying Technician.

Initiating new and updating existing occupations

Proposals regarding the parameters of a training occupation can emerge in different ways:

- out of preliminary talks held by the social partners (employers and trade unions),
- from the findings of research projects conducted or advisory opinions drafted by the Federal Institute for Vocational Education and Training (BIBB),
- from instructions issued by the responsible ministry.

As a rule, the parameters are developed by the social partners when they see a need for creating a new occupation or revising an existing one. Their top-level organisations, the German Employers' Organisation for Vocational and Further Training (*Kuratorium der Deutschen Wirtschaft für Berufsbildung*, KWB) and usually the Confederation of German Trade Unions (*Deutsche Gewerkschaftsbund*) submit the proposed parameters to the body that will issue the ordinance (i. e. the responsible ministry) with the request that they be examined and a meeting be set up to discuss the application.

1. First step: Defining the parameters of the training regulation

The parameters of the training regulation are defined during an “application meeting” at the responsible ministry (usually the Federal Ministry of Economics and Technology).

In the application meeting in January 2009, the following parameters were specified for the updating of initial vocational training in geoinformation technology:

Initial vocational training in the training occupations of Geomatician (m/f) and Surveying Technician (m/f) would be assigned to a single occupational family under the designation of “Initial Vocational Training in Geoinformation Technology” and published in an ordinance. The common qualifications would amount to at least twelve and a maximum of eighteen months of training.

a) Designation of occupation

Geomatician (m/f)

Surveying Technician (m/f)

b) Length of training

Training for each of these occupations lasts three years.

¹⁴ **Monolithic occupations** describe self-contained initial vocational training programmes for which the qualification profile requires no formal specialisation. The contents of initial vocational training are identical for all trainees.

Internally differentiated training occupations are initial vocational training programmes with particular training contents for specific areas of responsibility or fields of work. Specialisation is formally undertaken in terms of either a specific focus or a field of specialisation. Differentiation by **specific focus** reflects company-specific characteristics. In the second and third years of initial vocational training, areas of focus normally account for no more than six months of the total initial vocational training period. Where industry-specific factors come into play, there is greater differentiation by **field of specialisation**. The third year of training is designed to impart the necessary skills, knowledge and capabilities. Unlike areas of specific focus, every field of specialisation has its own specified examination requirements.

The use of **optional qualifications** is mainly intended for highly specialised branches in which every company serves a slightly different spectrum, and specialisation beyond the subject area is required. This model allows different skill-sets to be combined into the occupational profile during the second half of initial vocational training. There is considerable breadth of variation in the number and possible choices of optional qualification units on offer and the amount of time they take up during initial vocational training.

¹⁵ These time allocation guidelines break up the training content outlined in the general training plan into individual content segments. A suggested timeframe (in weeks) is noted for each segment. The guidelines indicate the approximate amount of time that should be set aside for teaching the respective subject matter and for reinforcing that learning in the workplace.

¹⁶ Resolution No. 73 of the Board of the Federal Institute for Vocational Education and Training of 4 / 5 February 1988: "Inclusion of environmental protection issues in vocational education and training".

¹⁷ The list of skills, knowledge and capabilities is set out in all training regulations.

c) *Structure and organisation of initial vocational training*¹⁴

Monolithic occupation

Occupation differentiated into two fields of specialisation

d) *Form of examination*

There is an intermediate and a final examination for each occupation.

e) *Time allocation structure*

*Time allocation guidelines*¹⁵ in weeks, split either side of the intermediate examination.

f) *Environmental protection*

*Learning objectives broader in scope than the standard topic of "environmental protection"*¹⁶ are taught with other learning content in an integrated way.

g) *List of skills, knowledge and capabilities*¹⁷

The list of skills and knowledge contains the minimum requirements of the initial vocational training programme for the training occupations of Geomatician (m/f) and Surveying Technician (m/f).

2. Second step: Drafting and coordination phase

In this phase, the training regulation for the given training occupation (setting out the company-based elements of initial vocational training) and the corresponding framework curriculum for vocational schools are drafted and coordinated with one another.

BIBB asks the top-level employers' and trade union organisations to nominate representatives of company-based training practice who, acting as experts for the federal government (since company-based vocational training falls within its purview), work jointly with BIBB to develop new training regulations or revise existing training regulations.

A training regulation is drafted in two parts: a "provisions section" and an appendix containing the general training plan. The syllabus and time allocations are specified in the general training plan, while the provisions section covers such matters as the designation, the occupational profile and the examination requirements for the given training occupation.

The top-level employers' organisations and trade unions nominated the stipulated numbers of experts and representatives to participate in the BIBB procedure for revising the training regulations. These experts collaborated in drafting the necessary documents for each of the revised training occupations. In selecting the experts, particular importance was attached to ensuring that they represented the technical fields of specialisation that were previously part of the occupational profile, i.e. land surveying, mine surveying and cartography, as well as the new area to be integrated, that of remote sensing.

Proceeding in concert with the work done by the federal government's experts, the experts delegated by the *Länder* develop a draft curriculum for instruction at part-time vocational schools. At the end of the drafting phase, the two groups of experts meet to discuss the two drafts and bring their respective content and timetables into alignment.

After this coordination phase, the finalised draft training regulations are forwarded to the Board of BIBB for its comments. The Board's statement of approval of the draft regulations is a simultaneous recommendation to the federal government to "issue" the particular vocational training regulations in the submitted form.

In addition, the designated experts drafted a EUROPASS certificate supplement for each occupation to accompany the final certificate. With a view to improving occupational mobility, mainly within Europe, and to increasing the ease of cross-border applications, EUROPASS certificate supplements are produced in English, French and German. They are part of the EUROPASS, a free service provided by the European Commission aimed at helping to present qualifications, capabilities and competences in a way that can be understood throughout Europe. The purpose of the EUROPASS is to document all the

qualifications that have been acquired – by whatever route – over the course of a lifetime. It is focused more on learning outcomes and less on particular educational pathways and course lengths.

Working in conjunction with the Federal Institute for Vocational Education and Training (BIBB) and the responsible government ministries from April 2009 through January 2010, the federal government’s experts formulated draft training regulations and the general training plans for the training occupations of Geomatician (m/f) and Surveying Technician (m/f).

Particular attention at the meetings was directed to the following questions:

- *What is the common learning content of both occupations and to what depth does the common content need to be taught?*
- *What period of the initial vocational training programme must be taken up with the common content?*
- *How do the learning objectives for the occupation of Geomatician (m/f) need to be formulated so that initial vocational training for this occupation can take place in a variety of different fields?*
- *Does the field-of-specialisation model adequately reflect the specific contents of land surveying and mine surveying, or does it make more sense to differentiate by means of specific focuses?*

As a result of these consultations, it was decided to specify a monolithic training occupation of Geomatician (m/f) and to include “land surveying” and “mine sur-

veying" as two fields of specialisation within the training occupation of Surveying Technician (m/f). Both occupations have common content spread across the first twelve months of initial vocational training.

In parallel to the nomination of the federal government's experts, the Secretariat of the Standing Conference of Ministers of Education and Cultural Affairs of the Länder (KMK) appointed a framework curriculum committee coordinated by the Land of North Rhine-Westphalia to develop the framework curriculum for classroom instruction at part-time vocational school. The draft framework curriculum was drafted from June 2009 through January 2010.

Coordination of in-company and school-based initial vocational training



3. Third step: Issuing of the training regulation

The Federal-Länder Coordination Committee for Vocational Training Regulations/ Framework Curricula (KoA)¹⁸ finally approves the new vocational training regulation and the framework curriculum that has been coordinated with it.

The responsible ministry in conjunction with the Federal Ministry of Education and Research subsequently issues the training regulation and publishes it in the Federal Gazette. The date that a new regulation goes into force is usually the start of the next training year – i.e. 1 August in Germany.

As a rule, the individual *Länder* adopt the framework curriculum for the particular occupation or incorporate it into their own specific curricula for part-time vocational schools.

The revised programme of initial vocational training in geoinformation technology including the two training occupations of Geomatician (m/f) and Surveying Technician (m/f) was approved by the Board of BIBB, and subsequently adopted by the Federal-Länder Coordination Committee for Vocational Training Regulations/Framework Curricula (KoA) on 25 March 2010. After the Federal Ministry of Justice had examined the new training regulation to ensure that it complied with the required legal formalities, it was enacted by the Federal Minister of Economics and Labour and the Federal Minister of the Interior on 30 May 2010.¹⁹

¹⁸ The Federal-Länder Coordination Committee for Vocational Training Regulations / Framework Curricula (KoA) is comprised of representatives of the ministries of Germany's 16 Länder that are responsible for vocational school instruction, the Federal Ministry of Education and Research and the federal ministries responsible for the particular training regulations (usually the Federal Ministry of Economics and Technology). This committee is not a statutory body but rather owes its existence to an agreement between Germany's federal and Länder governments (Record of the Results of the Joint Meeting of 30 May 1972).

¹⁹ Ordinance concerning initial vocational training in geoinformation technology of 30 May 2010 (Federal Gazette, Volume 2010, Part I, No. 28, Bonn, 4 July 2004).

This description of the procedure for developing new vocational training regulations or revising existing regulations sheds light on how responsibility and purview for VET are related to and intermeshed with one another. Vocational training regulations find acceptance among training companies and trainees only when they have been developed in consensus with all parties involved. Consequently, this procedure can produce viable results only when the various interests and wishes of all involved are taken into account.

Register of recognised training occupations

Vocational training regulations are published in Germany's Federal Law Gazette. They are also published together with the respective framework curricula and training profiles in the Federal Gazette. New training regulations are entered in the register of recognised training occupations maintained by the Federal Institute for Vocational Education and Training. The updated register is published once a year.

This register lists the names of the recognised training occupations as well as those being piloted and those suspended and modified, and contains information about the duration of initial vocational training programmes and their legal bases (i.e. references to legal sources). It provides information about the Austrian and French equivalents to German examination certificates in the individual occupations. The register also contains federal and *Länder* regulations pertaining to occupations in the health care sector and social welfare field and provisions governing initial vocational training for people with disabilities. It also includes the provisions regulating continuing vo-

ational training and retraining, a list of competent bodies and a statistics section

The register of recognised training occupations is published annually on 1 October as a supplement to the Federal Gazette. The printed section of the register can also be ordered in book form from either of the publishers Bundesanzeiger-Verlag or W. Bertelsmann Verlag (wbv), while the online section can be viewed on the BIBB website at:

www.bibb.de/de/wlk49696.htm
(in German)

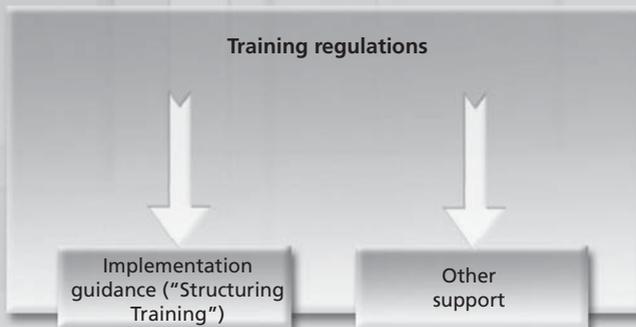
Support for VET practitioners provided by BIBB

Responsibility for the implementation of training regulations and framework curricula rests with the companies and vocational schools. Nevertheless, support is provided by the Federal Institute for Vocational Education and Training (BIBB) through publications and diverse advisory work.

This takes the form of:

- implementation guidance on training regulations (“Structuring Training”),
- other support provided by BIBB.

Services provided by BIBB



Implementation guidance on training regulations (“Structuring Training”)

Particularly the implementation of new vocational training regulations in day-to-day practice makes great demands upon all parties involved, be they based in companies, part-time vocational schools, inter-company training centres and competent bodies, and of course upon the trainees. The “Structuring Training” (“*Ausbildung gestalten*”) series of guides issued by BIBB offer valuable support and ideas.

These publications describe and explain new provisions in detail, and contain an extensive commentary on each provision of the regulation in question. Explanatory notes on the learning objectives targeted by the general training plan give illustrative examples of the training content. The skills, knowledge and capabilities to be taught are exemplified in terms of concrete learning projects and assignments to facilitate the trainers’ task of delivering the specified training. Practical examples of the structure of intermediate and final examinations for new or updated occupations offer valuable tips for trainers, examiners and even trainees. These specimen arrangements give an insight into the spectrum of examination requirements. Tips for planning vocational training – such as checklists for the training company, explanatory notes on developing an in-house training plan and examples of

training logs help everyone involved in initial vocational training. The training profile and framework curriculum for classroom instruction at part-time vocational school are included for information purposes. The explanatory notes and guides for day-to-day VET practice are supplemented by information about possible continuing training programmes and qualifications in the respective occupation, and suggestions for further reading.

Implementation guides have been issued for around 150 new or updated training occupations in recent years.



Further details and ordering instructions can be found at www.bibb.de.

During the process of revising the training regulations, the employers’ representatives and trade unions asked BIBB to develop implementation guides on the new initial vocational training programme in geoinformation technology to assist VET practitioners. These were developed in collaboration with some of the federal government experts who had previously been involved in the revision procedure, and were made available as of April 2011.

Other support provided by BIBB

In addition to the forms of assistance mentioned above, the Federal Institute for Vocational Education and Training (BIBB) makes information available in numerous other ways to all parties involved or interested in VET. A variety of advisory services are offered via different web portals.

The examiners' portal *Prüferportal* provides information and gives answers to questions concerning examinations (www.prueferportal.org).



The vocational trainers' forum *foraus.de* offers advice to initial vocational trainers (www.foraus.de).



News from the field of initial and continuing vocational education and training, publications and information on support programmes, events and the latest findings from VET research can be found on the BIBB website 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). Legal provisions that outline the aims and content of and examination requirements for in-company training are training regulations.

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.