

Vocational education and training in Germany

Short description

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A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (<http://europa.eu>).

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‘The cohesion and social development of our society, our prosperity and the competitiveness of our industry depend more and more on the importance which is attached to education. Education is the decisive factor, not only for the future of our country, but also for the opportunities of each and every person.’

‘Working together for Germany – with courage and compassion’
Coalition agreement between the CDU, CSU and SPD of 11 November 2005

Introduction

This overview of vocational education and training in Germany has been produced to mark Germany's Presidency of the Council of the EU. It forms part of the series of short descriptions regularly published by Cedefop on national VET systems.

Information on vocational education and training will also be found in Cedefop's databases. They contain country-specific data that are regularly updated by ReferNet ⁽¹⁾. Descriptions of national VET systems can also be found on the Cedefop website (see European Training Village) ⁽²⁾.

The present publication was drawn up by Ute Hippach-Schneider, Martina Krause and Christian Woll of the Federal Institute for Vocational Education and Training (BIBB) in close cooperation with Sylvie Bousquet of Cedefop. We should also like to thank all our colleagues who have helped in the production of this short description, particularly the German representatives on Cedefop's Governing Board – Barbara Dorn, Hans-Detlev Küller and Peter Thiele.

Germany is one of the European countries in which learning on the job is a traditional component of the education system. All vocational training is aimed at imparting comprehensive professional competence in the occupation. Vocational training in Germany is guided not only by the requirements of the labour market, but also by the need for individuals to acquire skills, knowledge and competences that enable them successfully to prove themselves on the labour market. Training programmes are designed on the principle that they should be as broad as possible and as specific as necessary.

The main challenges facing VET systems today are globalisation, increased personal mobility, structural change in industrial life, technological advances and demographic change. Some improvements have already been made.

The permeability of the education system is steadily being improved. Existing barriers between individual areas of education are being dismantled, so that qualifications in one area can constitute entry to another, and learning content already acquired does not have to be lived and learned all over again. We are currently making rapid progress with the development of an interdisciplinary National Qualifications Framework (NQF), to make it easier for qualifications and learning outcomes to be recognised across all areas of education.

For Germany, an export-oriented country at the heart of Europe, the promotion of mobility is of particular importance. There is a marked focus on imparting international skills in

⁽¹⁾ Cedefop's European network of reference and expertise. The Federal Institute for Vocational Education and Training (BIBB) is both a member and coordinator of ReferNet in Germany, www.refernet.de.

⁽²⁾ www.cedefop.europa.eu and www.trainingvillage.gr/etv/Information_resources/NationalVet/

education and training, such as a knowledge of foreign languages or an understanding of foreign markets and corporate cultures.

At European level, Germany is concerned to ensure that VET provision can be linked internationally. It should be possible for qualifications and competences acquired in the German VET system to be put to use in the labour markets and education systems of other countries without obstacles, particularly within Europe – and vice versa. The creation of European instruments such as the European Qualifications Framework (EQF) and the European Credit System for Vocational Education and Training (ECVET) will make a substantial contribution to realising this.

With its description of the most important aspects of the German system, this publication provides an overview of vocational education and training in Germany. Further information can be found on the Cedefop and Eurydice ⁽³⁾ websites.

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⁽³⁾ www.eurydice.org

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GERMANY



1. General political context

1.1. Political system and management structure

Under Article 20 of the Basic Law (GG), the German constitution, the Federal Republic of Germany is a democratic and social federal state. It comprises 16 *Länder*: Baden-Württemberg, Bavaria, Berlin, Brandenburg, Bremen, Hamburg, Hessen, Mecklenburg-Western Pomerania, Lower Saxony, North Rhine-Westphalia, Rheinland-Pfalz, Saarland, Saxony, Saxony-Anhalt, Schleswig-Holstein and Thuringia. Berlin is both the country's capital city and the seat of government. Between 1949 and 1990, Germany was divided into two countries, the Federal Republic of Germany and the German Democratic Republic (GDR). The Federal Republic of Germany is a founding member of the European Union (EU), and has been a member of NATO since 1955 and a full member of the UN since 1973.

The Federal President is the Head of State. He is elected by the Federal Convention for a five-year term of office, and is essentially responsible for functions involving representation. The Federal Chancellor is the Head of Government. Within the Federal Government (Executive), he has the authority to decide on government policy. The *Bundestag* [Lower House of Parliament] and the *Bundesrat* [Upper House] are the two legislative bodies (legislature). The *Bundestag* is elected by the people every four years, in a general, direct, free, equal and secret ballot. The *Länder* contribute to the Federal Republic's lawmaking through the *Bundesrat*, which is composed of representatives of the 16 *Land* governments. Germany is strongly federal in nature. From a legal perspective, the 16 *Länder* are sovereign states with sovereign responsibilities. Each *Land* has its own executive, legislature and judiciary, giving rise to a second decision-making level.

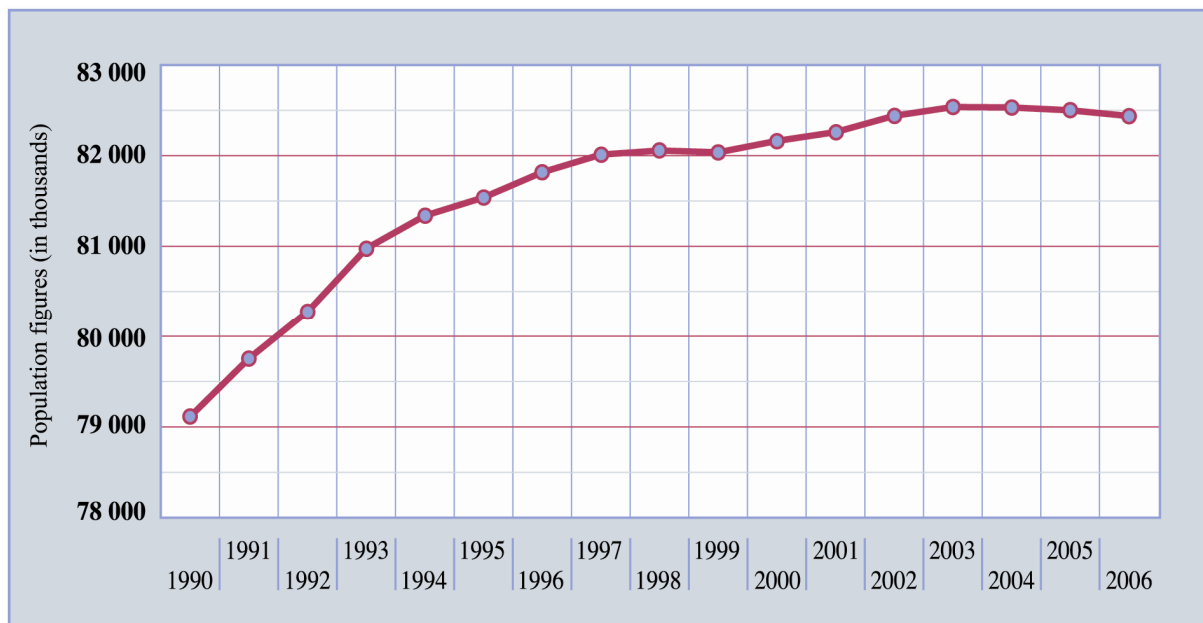
In so far as the Basic Law does not provide or permit otherwise, state responsibilities fall within the sphere of competence of the *Länder*. The *Länder* also have the right to legislate in so far as the Basic Law has not transferred this right to the Federation. Furthermore, through the *Bundesrat* the *Länder* play a part in the Federation's lawmaking and management and in European Union issues.

The *Länder* are fundamentally responsible for education and culture ('cultural sovereignty' of the *Länder*). Consequently, in some cases there are marked differences between the school systems of the individual *Länder*. To ensure a minimum level of common features and comparability despite this, the Standing Conference of Ministers for Education and Cultural Affairs (KMK) of the *Länder* was established, and meets three to four times a year. In the field of VET, the Federal Government is responsible for in-company vocational training, while the *Länder* are responsible for vocational training in schools, and hence also for vocational schools (see 3.1).

1.2. Population

The Federal Republic of Germany covers an area of 357 046 km². On 1 January 2006, the population of Germany was 82.44 million. The population figures in the reunited Germany initially increased (see Figure 1). This applies, in particular, to the period between 1990 and 1993 (refugees and asylum applicants, particularly refugees from the civil war in the former Yugoslavia and *Spätaussiedler* (ethnic German immigrants) from Poland, Romania and the countries succeeding the Soviet Union), and that between 1999 and 2003 (refugees from, in particular, Kosovo, Iran, Iraq and Afghanistan). Since 2003, however, the population has been decreasing slightly, since the immigration surplus now no longer compensates for the drop in the birth rate.

Figure 1: Population in Germany, 1990 to 2006

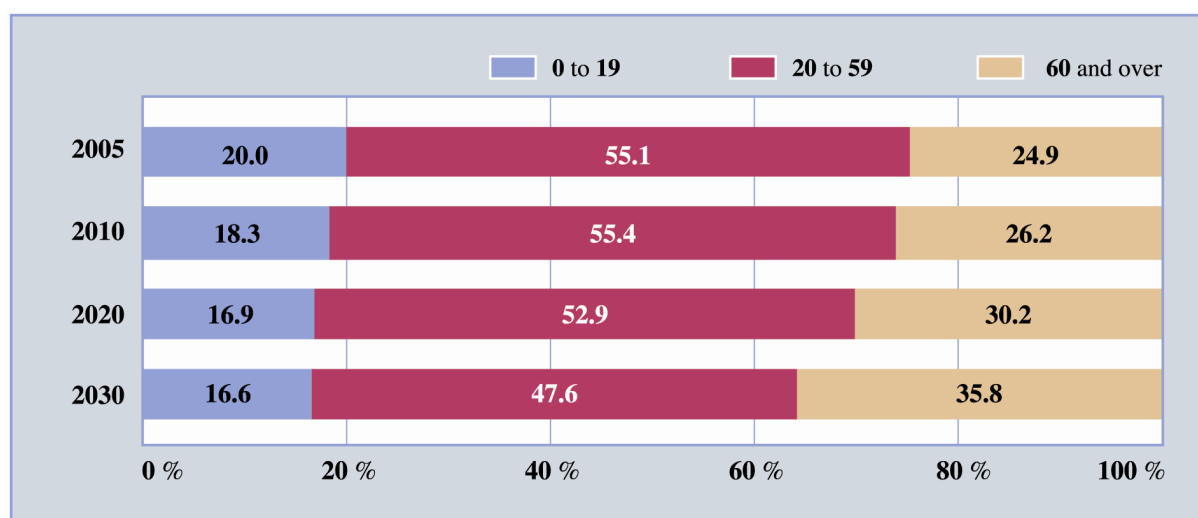


Source: Eurostat, Population statistics, 2006.

If the birth rate remains as low as it is at present, the process of population decline will not only continue, but also accelerate in the long term. According to the mean variant of the Federal Statistical Office's 11th coordinated population forecast⁽⁴⁾, dating from 2006 (assumptions: increase in life expectancy to 83.5 for men and 88.0 for women by 2050; immigration surplus of at least 200 000 persons a year), the population will fall to 74.0 million by 2050. In parallel with the quantitative decline in the population, there will be a marked shift in the age structure, in which the overall population structure will shift towards older age groups (see Figure 2).

⁽⁴⁾ www.destatis.de/presse/deutsch/pk/2006/bevoelkerungsprojektion2050i.pdf

Figure 2: Population by age groups (%) 2005 and forecasts for 2010, 2020 and 2030



Source: Federal Statistical Office, 11th coordinated population forecast, 2006.

The overall figure for foreign nationals is 6.8 million. This represents just over 8 % of the population as a whole (Central register of foreign nationals, cited 31.12.2005). Of these, the largest numbers originate from Turkey (26.1 %). The next largest numbers, some way behind, are from Italy (8.0 %), Serbia/Montenegro (7.3 %) and Poland (4.8 %). 31.7 % of foreign nationals are nationals of another EU Member State. Approximately one in five foreign nationals – and in the case of Turks as many as one in three – was actually born in Germany, and is thus a second- or third-generation migrant.

1.3. Economy and labour market

The economic system of the Federal Republic of Germany is described as a social market economy. The aim of Germany's social market economy is to allow the greatest possible freedom that is compatible with social justice. The state reserves the right to intervene in economic life for the purpose of redistribution, while at the same time the economy is geared to the market. The Federal Governments of the 1990s and the 2000s ensured increased competition by privatising a number of large federal institutions and special funds (e.g. the federal rail and postal services).

The German economy is strongly export-oriented. At the same time, however, as a country with a shortage of raw materials Germany is also dependent on imports, particularly in the field of energy (petroleum, natural gas). In 2005, exports were equivalent to 35.0 % of GDP and imports to 27.9 %. The importance of foreign trade to the German economy is also apparent from the fact that in 2005, Germany was the world's largest exporting nation for the third time in succession, ahead of the USA, China and Japan. Germany's main exports include cars and car parts, machinery, chemical and electrical products and foods.

In recent decades, there has been a steady decrease in economic growth. Between 1981 and 1991, the average annual increase in GDP was 2.6 %, but between 1992 and 2001 the figure was down to 1.7 %, and in 2002 and 2003 growth almost completely stagnated (Konsortium Bildungsberichterstattung, 2006, p. 8). In addition to increased international competition, the main reasons for this trend were German reunification (1990) and the introduction of the euro (2002). Following a slight recovery in 2004 and 2005, in 2006 German economic growth exceeded the two-per-cent mark again for the first time since 2000, with 2.7 % (see Table 1).

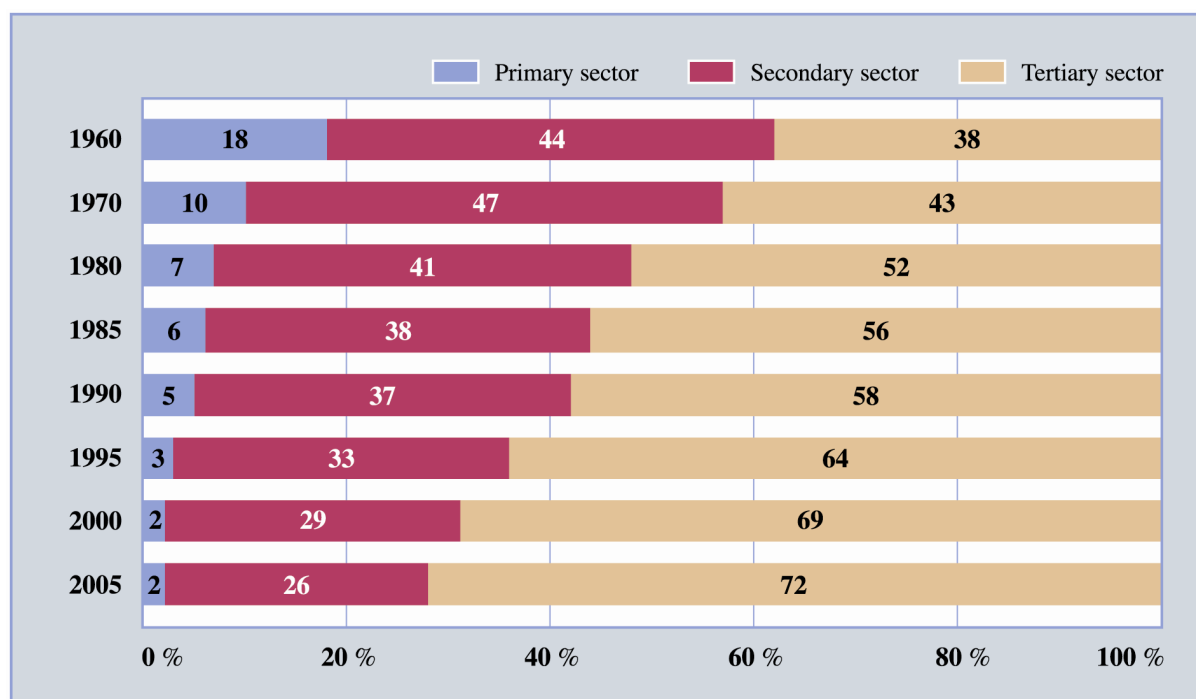
Table 1: Growth rate of GDP in real terms – percentage change compared with the previous year, 1997, 2000, 2005 and 2006

Year	Germany	EU 15	EU 25
1997	1.8	2.6	2.7
2000	3.2	3.9	3.9
2005	0.9	1.5	1.7
2006	2.7	2.7	2.9

Source: Eurostat, National Accounts, Eurostat database, 2007.

With regard to the three sectors of the economy, in the last few decades Germany has undergone a substantial shift from an industrial economy to a service economy, although it has done so later than other countries. The service sector is now far and away the largest sector of the economy, in terms of both gross value added and income structure (see Figure 3).

Figure 3: Trend in employment 1960 to 2005 by economic sectors



Source: Statistisches Jahrbuch der Bundesrepublik Deutschland 1962, 2000, 2006.

In the past ten years there has been a substantial deterioration in the situation on the German labour market. In 2005 the unemployment rate was above the EU average, at 9.5 %, having risen by 1.5 percentage points in comparison with 1995. On the other hand, the unemployment rate for those aged 15-24 has remained below the EU average (see Table 2).

Table 2: Overall unemployment rate and unemployment rate by gender and among persons aged under 25 in Germany, EU-15 and EU-25, 1995, 2000 and 2005 (in %)

	Germany				EU-15				EU-25			
	Women	Men	Overall	15-24	Women	Men	Overall	15-24	Women	Men	Overall	15-24
1995	10.9	5.8	8.0	14.9	12.0	8.7	10.1	21.4	:	:	:	:
2000	8.7	6.0	7.2	10.6	9.2	6.4	7.6	15.5	10.1	7.4	8.6	17.5
2005	10.3	8.8	9.5	14.8	9.0	7.1	7.9	16.8	9.9	7.9	8.8	18.6

(:) No data available.

NB: The unemployment rate is the percentage of unemployed workers in the working population.

Source: Eurostat, EU Labour Force Survey, Eurostat database, 2006.

In contrast to the unemployment rate, the employment rate has remained largely unchanged in the past ten years (see Table 3). It has even risen slightly in comparison with 1995. This is due, in particular, to the increasing proportion of women in employment, which was larger than the decline in the employment rate among men. In a European comparison, the proportion of women in the working population is somewhat higher than the EU average, while the employment rate among men is just below it.

Table 3: Employment rates (among persons aged 15-64) in Germany, EU-15 and EU-25 by gender, 1995, 2000 and 2005 (in %)

	Germany			EU-15			EU-25		
	Women	Men	Overall	Women	Men	Overall	Women	Men	Overall
1995	55.3	73.7	64.6	49.7	70.5	60.1	:	:	:
2000	58.1	72.9	65.6	54.1	72.8	63.4	53.6	71.2	62.4
2005	59.6	71.2	65.4	57.4	72.9	65.2	56.3	71.3	63.8

(:) No data available.

Source: Eurostat, EU Labour Force Survey, Eurostat database, 2006.

1.4. Education level of the population

A high proportion of upper secondary level qualifications is a characteristic feature of the level of education of the German population. One reason for this is the longstanding tradition

of the dual system of vocational training. In 2005, Germany was again well above the EU average in respect of upper secondary level qualifications, with 60 % (see Table 4).

In terms of higher education, Germany is only in the middle of the range compared with the EU as a whole, although here too account must be taken of the fact that many skills are imparted in the dual system. To ensure that young people wishing to study are not prevented from doing so by financial obstacles, since April 2006 it has been possible to take advantage not only of aid under the pre-existing Student Aid Act (BAföG) (see 10.2), but also of general student loans from the *Kreditanstalt für Wiederaufbau* (KfW – Reconstruction loan corporation).

Table 4: Population aged 25 to 64 years by highest educational attainment in Germany and selected EU Member States, 2006, 2nd quarter (%)

Country	ISCED 0-2	ISCED 3-4	ISCED 5-6
EU-25	30	46	23
Czech Republic	10	77	13
Austria	20	63	18
Germany	16	60	24
Denmark	18	47	35
Finland	21	45	35
United Kingdom	27	42	30
France	33	41	25
Italy	49	38	13
Portugal	72	14	13

ISCED: International Standard Classification of Education

ISCED 0-2: Pre-primary education, primary education, lower secondary education, including 3c short (preparatory vocational and vocational education of less than 2 years duration);

ISCED 3-4: Upper secondary education without 3c short, post-secondary non-tertiary education;

ISCED 5-6: Tertiary education.

The countries are listed in order of the proportions of ISCED level 3-4 qualifications.

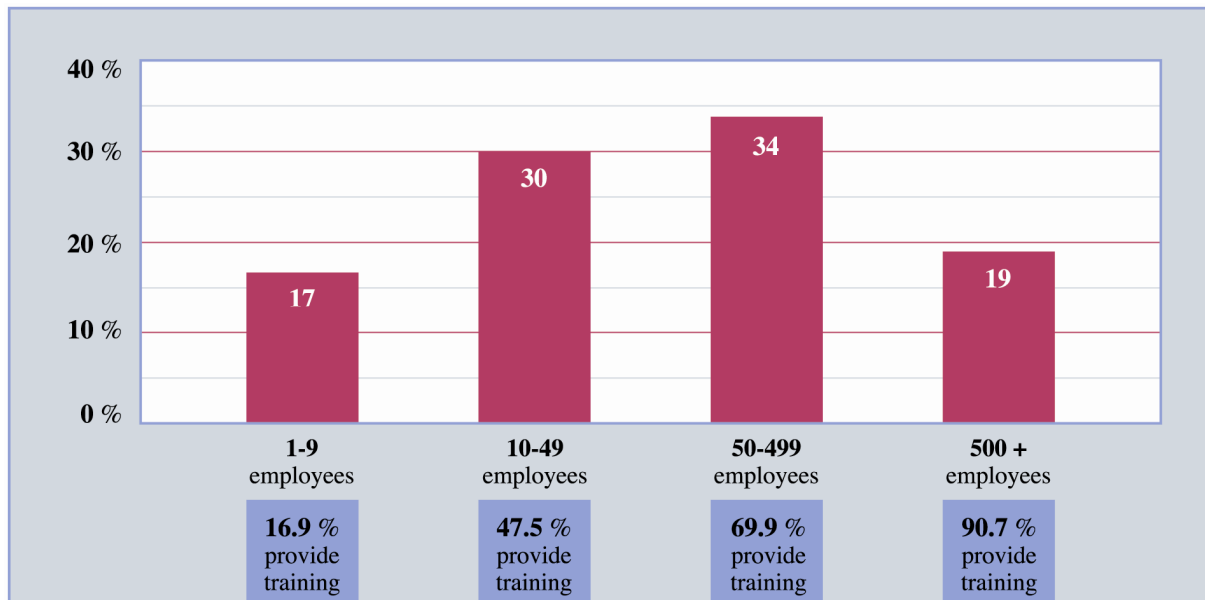
Source: Eurostat, EU Labour Force Survey, Eurostat database, 2006.

The overall economic trend, particularly the labour market situation, also affects enterprises' participation in training as a place of learning within the dual system. Overall, just under 25 % of enterprises are currently providing training. The proportion of training enterprises ⁽⁵⁾ increases with enterprise size. However, the distribution of trainees by enterprise size

⁽⁵⁾ Training enterprises as a percentage of all enterprises.

categories shows that small and medium-sized enterprises (SMEs, with up to 499 employees) offer the lion's share of training places (see Figure 4).

Figure 4: *Distribution of trainees and proportion of training enterprises by enterprise size categories, 2004 (%)*



Source: *Berufsbildungsbericht 2006*, pp. 144 and 151.

Since 1999, there has been a substantial decline in the number of in-company training places. Since the officially recorded demand for in-company training places has fallen to only a much smaller extent over that time, this means that there is a 'gap' in training provision. The public sector has responded with additional measures involving skills training for young people not provided for and with incentives to make enterprises more willing to provide training (see 10.1). In June 2004, the Federal Government and the employers' associations of German industry also concluded a Memorandum of Understanding, the *Nationaler Pakt für Ausbildung und Fachkräftenachwuchs in Deutschland* (known as the apprenticeship pact) ⁽⁶⁾, in which the partners undertook to offer training provision to every young person desirous of and capable of undergoing training, in close cooperation with the *Länder*. As a result of this the number of training contracts signed in 2004 and 2006 has risen ⁽⁷⁾.

⁽⁶⁾ www.bmbf.de/pub/ausbildungspakt_2004.pdf

⁽⁷⁾ See *Berufsbildungsbericht 2004* (BMBF, p. 9) and *Berufsbildungsbericht 2006* (BMBF, p. 377).

2. Current political developments

The vocational education and training system will face three key challenges in the course of the next ten years. Accordingly it is to these that the current priorities of VET policy relate.

2.1. Taking account of demographic change

Across Germany, the demand for training places will continue to increase even further until 2008. After that, the declining birth rate, which is already making itself felt in the new *Länder*, will have an effect throughout the country. The number of young people aged under 20 will already be 10 % lower in 2010 than in 2006, and will then continue to decline markedly ⁽⁸⁾. Demographic change will then also have an effect on VET provision and infrastructure and on teaching and training personnel working in VET. Consequently, there is a need, firstly, to ensure that we now have adequate provision of training places or comparable skills training options that can be put to good use on the labour market. Secondly, the interfaces to the upstream and downstream areas of education must be optimised, in order to avoid unnecessary VET measures and to improve the transitions between the various forms of vocational training provision available.

2.1.1. Increasing training opportunities

In order to increase the training opportunities for young people, we need above all to make better use of enterprises' existing training potential. The apprenticeship pact concluded between the Federal Government and the central associations of German industry in June 2004 for a term of three years is making a major contribution to this. In this pact, the partners undertook to work closely with the *Länder* to effect a substantial increase in training provision by the end of 2007, and to optimise the training process and to orient it more strongly towards individual young people ⁽⁹⁾.

In addition, initiatives were launched to improve the supply of training places. These included the Federal Ministry of Education and Research's programme 'JOBSTARTER – für die Zukunft ausbilden' [training for the future] (see 10.1). This programme, launched at the beginning of 2006, is aimed at improving regional training structures and hence the supply of in-company training places ('Structural incentives instead of per capita incentives') ⁽¹⁰⁾.

Efforts are also being made to increase the participation of migrant enterprises in training.

⁽⁸⁾ www.destatis.de/presse/deutsch/pk/2006/bevoelkerungsprojektion2050i.pdf

⁽⁹⁾ Federal Government, 2004.

⁽¹⁰⁾ www.jobstarter.de/

2.1.2. Improving permeability

When the various areas of education and training are interlinked and made more permeable, this makes vocational education and training more attractive. So in conjunction with the *Länder*, the Federal Government is endeavouring to develop standards that are as uniform as possible for the access of people with vocational qualifications to higher education. The aim is to open up access to institutions of higher education and to shorten the period of study for this target group owing to the qualifications they have already obtained. Projects and programmes include the BLK (Federal-*Länder* Commission for Educational Planning and Research Promotion) programme *Weiterentwicklung dualer Studiengänge im tertiären Bereich* [Further development of dual study programmes in higher education] (running from 1.4.2005 to 31.3.2008) ⁽¹¹⁾ and the Federal Ministry of Education and Research's project *Anrechnung beruflicher Kompetenzen auf Hochschulstudiengänge* [Counting vocational competences towards programmes of higher education] (ANKOM) (running from 2005 to 2007/2008) ⁽¹²⁾.

The development of a National Qualifications Framework (NQF) (see 11.1) is also intended to further improve permeability and interlinking of the various areas of education ⁽¹³⁾.

2.1.3. Optimising transition management

The aim is to provide support as early as possible for young people who are having problems making the transition to training for various reasons.

Thus there is a need to investigate, in the field of education/training measures preparing trainees for an occupation, how better coordination can be achieved between various measures of the *Länder* and the Federal Agency for Employment (BA) (see 4.4).

Support for disadvantaged persons is being further developed as an integral component of VET. By means of individual assistance, socially disadvantaged and underperforming young people should also be able to acquire a vocational qualification without unnecessary breaks and waiting periods. In its final phase, the BQF programme of the Federal Ministry of Education and Research (BMBF), *Kompetenzen fördern – Berufliche Qualifizierung für Zielgruppen mit besonderem Förderbedarf* [Promoting competences – vocational training for target groups in need of particular assistance] ⁽¹⁴⁾, which runs until the end of 2006, is concentrating in particular on examining and evaluating the results of the individual projects, and preparing them for larger-scale transfer.

⁽¹¹⁾ www.blk-bonn.de/modellversuche/duale_studienangebote.htm

⁽¹²⁾ <http://ankom.his.de/index.php>

⁽¹³⁾ See *Erste deutsche Stellungnahme zu einem 'Europäischen Qualifikationsrahmen (EQR)'*. (BMBF/KMK, 2005, p. 5).

⁽¹⁴⁾ www.kompetenzen-foerdern.de/

New methods are being developed for ‘second-chance’ qualification of young adults without educational or training qualifications, particularly concepts involving a combination of work and qualification ⁽¹⁵⁾.

2.2. Opening up new fields of activity

Analyses of employment and training trends in the growing service sector have shown that there is still a considerable amount of ground to be made up, at least in parts of the tertiary sector where no tradition of training has as yet developed. In innovative and research-oriented sectors with increasing employment, for example in technologies involving optics, in bio- and nanotechnology or microsystems engineering, training places are to be specifically created. Increased attention is therefore being devoted to creating a new training culture and developing job profiles.

Recognised training occupations and training directives are subject to ongoing modernisation. Against the background of rapid technological development and increasing international job sharing, vocational and qualification requirements are constantly evolving.

2.3. Globalisation and international recognition of German VET

The challenges of globalisation and VET developments at European level must be utilised for the purpose of strengthening the VET system, since within the European Union, cooperation in general education and VET is making dynamic progress.

With regard to the Copenhagen Process, which aims at improving mobility, transparency, recognition and quality of VET systems and qualifications, what this means for Germany is the following:

- Strengthening of the European dimension of vocational training

With the amendment of the Vocational Education and Training Act (see 3.2), longer periods, of up to one quarter of the training period laid down in the training directive, can now be spent outside Germany. This option should find greater use. Greater emphasis is also being placed on imparting ‘intercultural competences’ and language skills in the training directives and framework curricula of relevant occupations.

- Promotion of transparency of qualifications, information and advice

In the next few years we must publicise and implement on a large scale the instruments of the Europass framework ⁽¹⁶⁾, particularly the European CV and the Europass Certificate Supplement, and must develop certificate supplements for all vocational qualifications.

⁽¹⁵⁾ For example, www.bibb.de/de/wlk17222.htm

We shall be endeavouring to achieve comprehensive implementation in the coming years. At the same time, user-friendliness is being tested.

- Crediting and recognition of competences and qualifications

In the initial German opinion on the consultation process, the development of a European Qualifications Framework (EQF) using a few descriptors and levels to describe learning outcomes and competences is essentially welcomed⁽¹⁷⁾. The German opinion also picks out areas in which, from the perspective of the Federal Government and the *Länder*, revision, research and testing are still required. There is no dissent as regards the objectives targeted (transparency, recognition, permeability). However, we still need to hold a national dialogue of all involved (Federal Government, *Länder*, the social partners) in order to answer the question of how these objectives can be achieved.

Pilot projects are planned in the context of developing a European Credit System for Vocational Education and Training (ECVET), for example under the Leonardo da Vinci programme, since the principles and processes developed need to be comprehensively tested at both European and national level, to ensure that they are suitable for use in practice.

In these European processes, every effort is being made appropriately to take account of and classify dual vocational training (see 11.1).

The aim of the *Innovationskreis für berufliche Bildung* [VET innovation group] and the *Innovationskreis Weiterbildung* [continuing-training innovation group], which were convened by the Federal Ministry of Education and Research in spring 2006, is to lay the foundations for new structures in initial and continuing training (see 5.4). The committees are composed of senior representatives of companies, academia, employers' associations, trade unions and the *Länder*⁽¹⁸⁾.

To complement the current priorities, in 2006 the Federal Ministry of Education and Research launched a VET research initiative⁽¹⁹⁾.

⁽¹⁶⁾ <http://europass.cedefop.europa.eu>

⁽¹⁷⁾ See *Erste deutsche Stellungnahme zu einem 'Europäischen Qualifikationsrahmen (EQR)'*. (BMBF/KMK, 2005, p. 1).

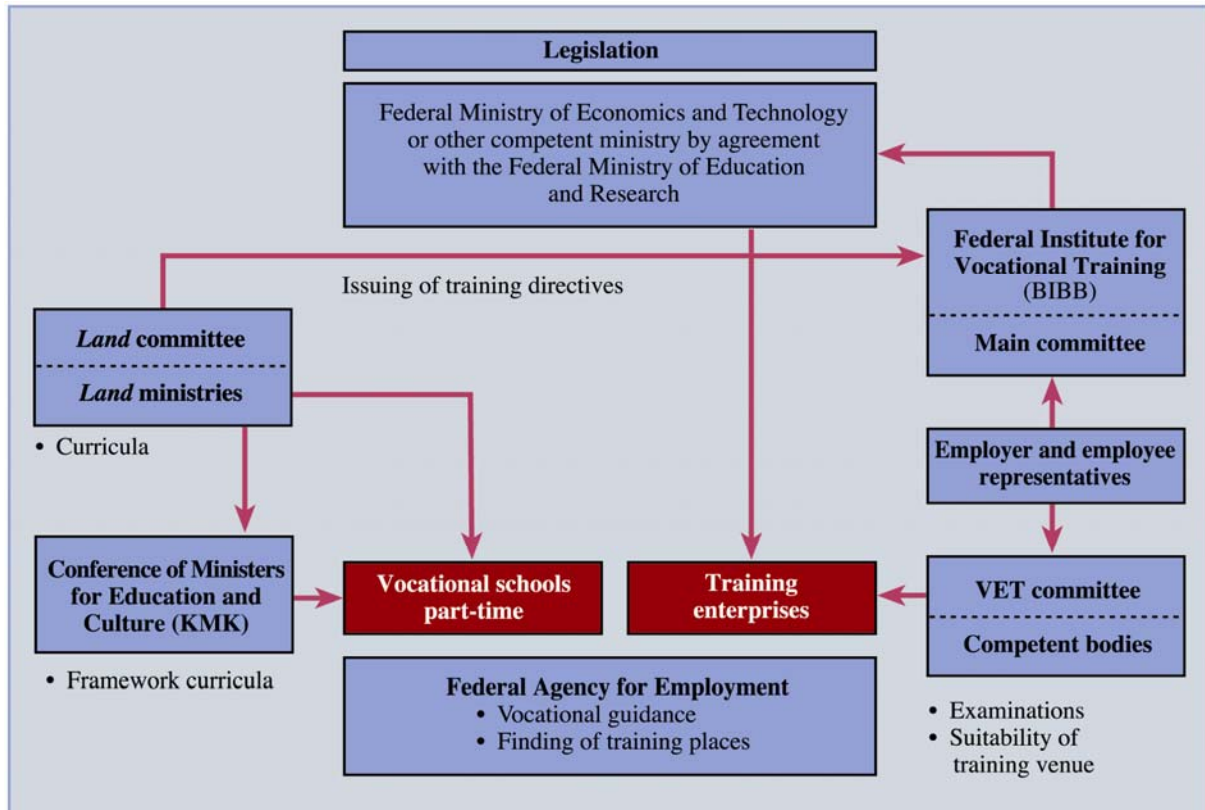
⁽¹⁸⁾ www.bmbf.de/de/6190.php

⁽¹⁹⁾ www.bmbf.de/de/6201.php

3. Institutional framework

3.1. Responsibilities

Figure 5: Responsibilities in the field of vocational training



Source: Federal Institute for Vocational Education and Training, 2006.

In Germany, the state's functions are shared out between the Federal Government and the 16 *Länder* ⁽²⁰⁾. Fulfilment of these functions is a matter for the *Länder*, provided that the Basic Law does not provide or permit otherwise (Article 30).

The *Länder* are also responsible for public-sector schools and education, and hence for vocational schools, the majority of which come under the responsibility of the *Land* and a local authority (see 10.1). All legislation on schools, including that on vocational schools, is *Land* legislation. The Standing Conference of Ministers for Education and Cultural Affairs (KMK) is an important institution working to harmonise education policies in the 16 *Länder* ⁽²¹⁾.

⁽²⁰⁾ www.gesetze-im-internet.de/bundesrecht/gg/gesamt.pdf

⁽²¹⁾ www.kmk.org

In contrast, the Federal Government is responsible for in-company, non-school VET. The Federal Ministry of Education and Research (BMBF) has general responsibility here, and is also responsible for coordination (including central coordination of the Vocational Education and Training Act, responsibility for fundamental issues of VET policy). In addition, new training directives can be adopted only by agreement with the BMBF (see 3.2).

Owing to this division of responsibilities, a procedure has been developed for the field of vocational training that ensures close coordination and cooperation between the Federal Government and the *Länder*, with the involvement of the social partners (see 3.3).

3.2. Legal framework

In the area of VET, the Vocational Education and Training Act (BBiG) is of crucial importance.

The Law of 1 April 2005 reforming vocational education and training ⁽²²⁾ comprehensively amended and combined the 1969 Vocational Education and Training Act ⁽²³⁾ and the 1981 Aid for Vocational Trainees Act. The aim of the reform was to safeguard and improve youth training opportunities and high-quality vocational training for all young people, irrespective of their social or regional origin.

Major innovations since the introduction of the Vocational Education and Training Reform Act are the recognition of time-limited training periods completed outside Germany, the amendment of the Enabling Standard for the promulgation of training directives by the Federal Institute for Vocational Education and Training (BIBB), and the amendment of the crediting of prior VET to the training period.

Other important VET legislation includes the Regulation on Craft Trades (HwO), the Regulation on Trainer Aptitude (AEVO), the Safety at Work for Young Workers Act (JArbSchG), the Works Council Constitution Act (BetrVG), the Aid for Further Training for Advancement Act (AFBG) and the Distance Learning Courses Act (FernUSG).

The legal bases for the promulgation of training directives are Section 25(1) BBiG and Section 25(1) HwO. These sections provide that the Federal Ministry of Economics and Technology (BMWi) or the otherwise competent ministry, by agreement with the Federal Ministry of Education and Research (BMBF), may publicly recognise training occupations via statutory instrument and may issue training directives for training occupations.

⁽²²⁾ www.bmbf.de/pub/bbig_20050323.pdf; www.bmbf.de/pub/die_reform_beruflichen_bildung.pdf

⁽²³⁾ www.bibb.de/dokumente/pdf/bbig_1969.pdf

Training directives are prepared by the BIBB. The BIBB also carries out research projects and helps in the further development of in-company VET by means of development, promotional and advisory work.

The Standing Conference of Ministers for Education and Cultural Affairs (KMK) issues framework curricula for vocational education at vocational schools. These framework curricula are harmonised with the Federal Government's training directives.

Curricula for general education at vocational schools are essentially developed by the individual *Länder*.

The Federal Agency for Employment (BA) is responsible for consultancy on and provision and promotion of vocational education and training for young people and companies, on the basis of the *Sozialgesetzbuch III* [social legislation] (SGB III) ⁽²⁴⁾.

3.3. The social partners

The training partners in the economy are industry, commerce, agriculture, the liberal professions, public administrations, health services, and over 900 inter-company training venues (see 4.3.1). The various Chambers ('competent bodies') are responsible for advising companies, registering trainees, certifying trainers' specialist aptitude, accepting examinations and conducting social dialogue at regional level.

The partnership between employers and unions manifests itself at federal level through cooperation in the main committee of the BIBB, at *Land* level in the competent ministry's VET committee, and at regional level in the Chambers' VET committees and examination committees. The VET committees are responsible for important tasks in the implementation and supervision of pre-vocational training (see 4.3.3 and Glossary), and of vocational training, further training and retraining (see 5.1) ⁽²⁵⁾.

The social partners have responsibilities at four levels:

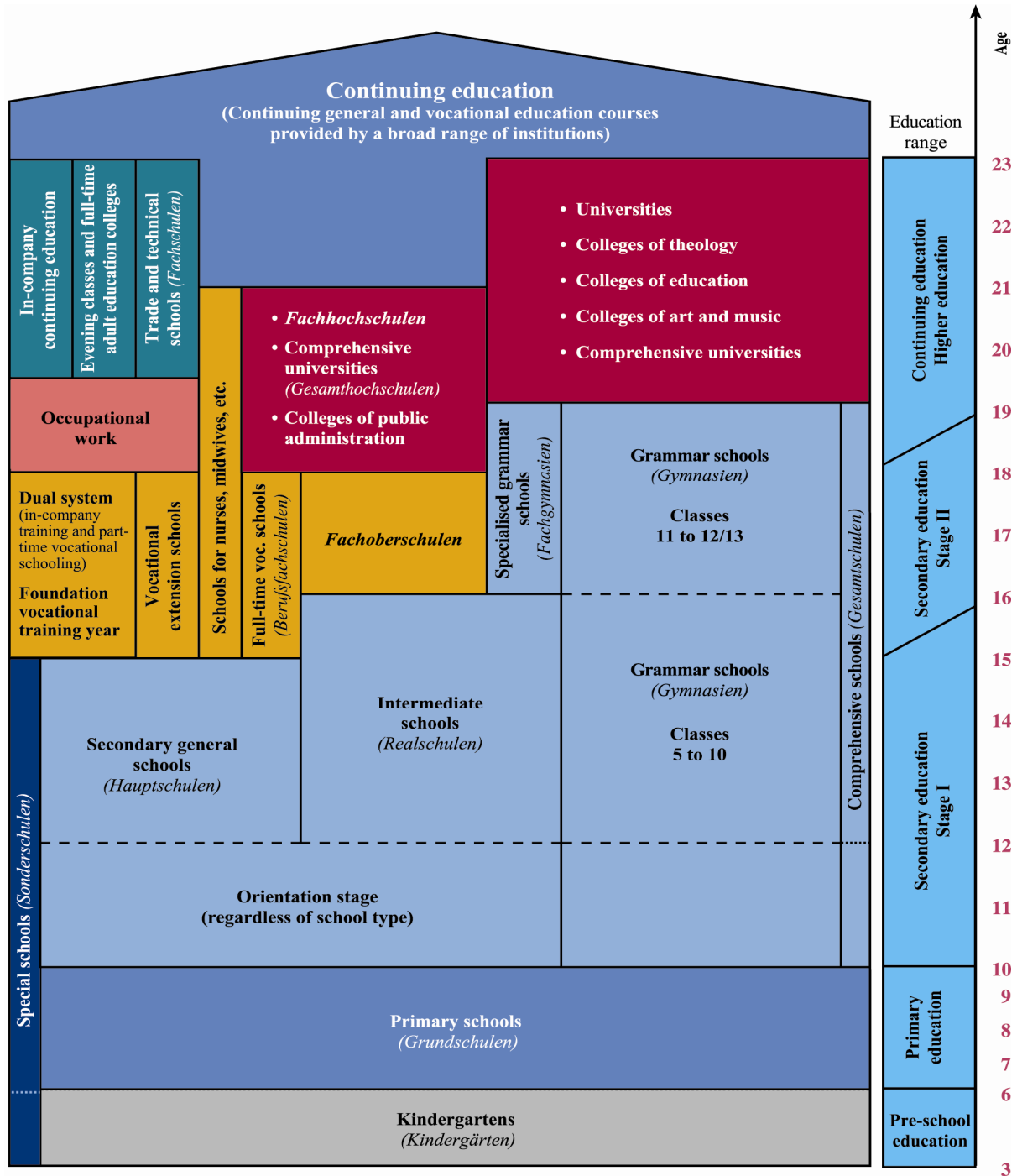
1. National level: participation in developing training programmes/standards, recommendations in all areas and aspects of VET.
2. Regional level: a) *Land* level – recommendations in all areas of VET in respect of coordination between school and enterprise; b) level of the competent bodies – advice, supervision of training provision in enterprises, implementation of examinations, award of qualifications.
3. Sectoral level: negotiations on provision of training places; collective agreements on remuneration of training.
4. Company level: planning and implementation of in-company training.

⁽²⁴⁾ www.bibb.de/dokumente/pdf/a22_ausweitstat_schaubilder_heft-2006.pdf

⁽²⁵⁾ www.bibb.de/dokumente/pdf/fohlenband_puetz-deutsch.pdf

4. Initial vocational training

Figure 6: Education in Germany: basic structure



- Diagrammatic representation of the typical structure of the education system in the Federal Republic of Germany. In individual *Länder* there are variations from the above pattern.
- The age given for attendance at the various educational institutions refers to the earliest possible typical entry.

Source: Based on BMBF, 2004.

4.1. Overview of the education system

(See Figure 6)

Compulsory full-time education begins at the age of six and lasts nine years (or ten years, depending on the *Land*). After that young people who are no longer in full-time education must attend a part-time (vocational) school for three years. To simplify, in Germany compulsory education exists for persons aged 6-18 and for trainees in the dual system (even if they are over 18).

Following four years of primary school for all, educational paths are divided in the **‘subdivided school system’** consisting of secondary general schools, intermediate schools, grammar schools and, in almost all the *Länder*, also comprehensive schools.

In the **dual system**, the various paths often come together again. Those learning under it include those who have completed their education in special, secondary general, intermediate, comprehensive, vocational and grammar schools. The dual system is far and away the largest field of education at upper secondary level, with approximately 53 % of an age cohort training for a recognised training occupation. After completing their training in the dual system, the majority of participants then take up employment as a skilled worker – later on, many of them make use of the opportunities for continuing vocational training. Under certain conditions, however, those who have qualified may also obtain the academic standard required for entrance to a *Fachhochschule* in one year at school full-time, and go on to higher education. Successful participants in continuing vocational training are also increasingly permitted to study at colleges.

Of the **vocational schools**, the **full-time vocational schools** have the highest numbers of students. These schools prepare students for an occupation **or** for vocational training, usually in the dual system. Under certain conditions, attendance at a full-time vocational school is credited as the first year of training in the dual system. Entitlement to study at a college or *Fachhochschule* can be acquired in some educational programmes in the full-time vocational schools. Educational programmes last one to three years, depending on the particular vocational orientation and objective. Around one in six students at a full-time vocational school is learning a recognised dual-system training occupation. In such cases, the schools’ final examinations may be given parity with examinations in the dual system by means of Federal statutory instruments.

Large numbers of students also attend the **schools for nurses, midwives, etc.**, which provide training for non-academic occupations in the healthcare sector, such as nursing and paediatric nursing, midwifery, therapeutic massage and occupational therapy. As regards organisation and premises, many of these schools are attached to hospitals, in which both theoretical and practical training takes place.

Fachoberschulen and vocational secondary schools normally build on vocational training in the dual system, consolidate vocational knowledge and lead to the academic standard required for entrance to a college.

Overall, there are many points of transition between school-based and dual vocational training and from vocational training to colleges. In 2005, some 20 % of those beginning academic studies had completed a course of training in the dual system (see 4.3.2).

Tertiary education includes the colleges and other institutions offering programmes of study providing vocational qualifications for students who have completed upper secondary education with an entitlement to study at a college or *Fachhochschule*.

4.2. General lower and upper secondary education

The structure of types of school and educational programmes in lower secondary education is based on the principle of general basic education, emphasis on the individual, and performance-related support. Educational programmes in lower secondary education focus primarily on general education, while in upper secondary education, in addition to the grammar-school educational programme, programmes of vocational education are to the fore.

Thus upper secondary educational programmes lead either to the qualifications required for entrance to higher education, entitling students to enter institutions of higher education, or to vocational qualifications, enabling those so qualified to enter employment as a qualified skilled worker, for example in a recognised training occupation (in accordance with Federal regulations) or working in an occupation as an assistant (in accordance with *Land* regulations).

Lower secondary education covers the 10-16 age group, and upper secondary education the 15-19 age group. The transfer to the various types of upper secondary school is based on students' scholastic performance.

Types of school with a programme of lower secondary education are the secondary general, intermediate and grammar schools. In addition to these three types, there are also types offering several educational programmes, such as comprehensive schools (see Glossary).

In lower secondary education, an initial introduction to the world of work takes place either via an independent subject, via preparation for working life (*Arbeitslehre*), or via integration of the relevant teaching and learning materials into the other subjects. Periods of work experience in the last two classes provide the first concrete experience of working life.

4.2.1. Secondary general schools

Secondary general schools provide their students with a basic general education. They normally cover classes 5 to 9. At the end of class 9, students in all the *Länder* have the option of acquiring a first certificate of general education known as the secondary general school certificate.

This certificate of general education is usually used to take up a course of vocational training in the dual system. Under certain conditions, it also entitles holders to enter, for example, a full-time vocational school or to undertake a foundation vocational training year.

4.2.2. Intermediate schools

Intermediate schools provide their students with an extended general education. They normally cover classes 5 to 10. At the end of class 10, in all the *Länder* the intermediate certificate can be acquired, the final certificate from intermediate school. It entitles holders to go on to further courses of education, for example to specific full-time vocational schools and to *Fachoberschulen*, and can also be used to take up a course of vocational training in the dual system. Where students' performance merits it, they can transfer at any time from an intermediate school to a grammar school, and also from a secondary general school to an intermediate school.

4.2.3. Grammar schools

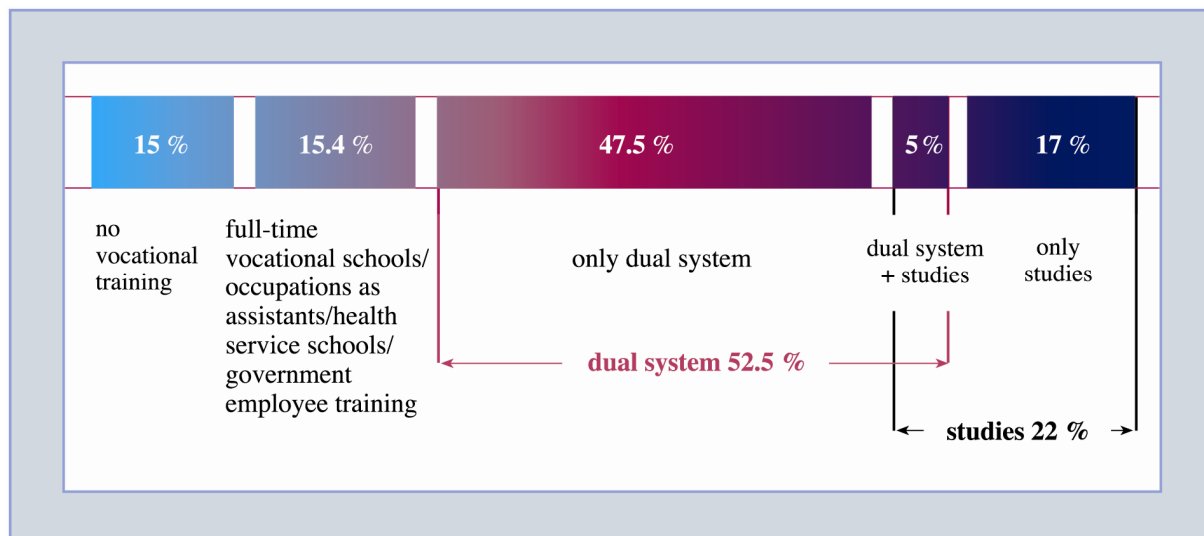
Grammar schools provide their students with an in-depth general education. The harmonised programme of grammar-school education at lower and upper secondary levels normally covers classes 5 to 13. Almost all the *Länder* are currently going over from nine years to eight years of grammar school. At the end of lower secondary education, it is not normally a final certificate that is issued, but an entitlement to go on to the upper level of grammar school.

The upper secondary level of grammar-school education ends with the *Abitur* examination. Students who pass it obtain the *Abitur* certificate, the final school-leaving certificate entitling holders to enter any institution of higher education, which also opens the way to vocational training.

4.3. Vocational education and training at upper secondary level

Figure 7 shows the crucial importance of dual training in Germany. In it, the various training programmes are brought together to give an overall picture showing the training status ultimately achieved by one cohort. In 2004, approximately 53 % of the young people in one cohort completed a course of vocational training in the dual system.

Figure 7: Cohort structure by type of qualification, 2004



Source: Schaubilder zur Berufsbildung, BIBB, 2006;
www.bibb.de/dokumente/pdf/a22_ausweitstat_schaubilder_heft-2006.pdf

4.3.1. Dual system

The system is described as *dual* because training is conducted in two places of learning – companies and vocational schools. It normally lasts three years. (In addition to training occupations requiring only two years' training, there are also statutory regulations facilitating a reduction in the training period with enterprises' agreement, e.g. for trainees with the *Abitur* [final school-leaving certificate entitling holders to enter any institution of higher education].)

The aim of training in the dual system is to provide, in a well-ordered training programme, broadly based basic vocational training and the qualifications and competences required to practise an occupation as a skilled worker in a changing world of work. Successful completion of the programme entitles the trainee to practise an occupation as a qualified skilled worker in one of the 346 currently recognised training occupations (cited 1.10.2006) ⁽²⁶⁾.

Compulsory full-time education must have been completed by the time of commencing vocational training. There are no further requirements for access to training in the dual system; it is essentially open to all.

However, the majority of trainees hold either the intermediate certificate or an entitlement to higher education (see 4.2). Training takes place on the basis of a private-law vocational training contract between a training enterprise and the young people. The latter are trained in the enterprise for three to four days a week and in the vocational school for up to two days a week.

⁽²⁶⁾ See *Liste der staatlich anerkannten Ausbildungsberufe* (BIBB, 2006).

The enterprises bear the costs of the in-company training and pay the trainee remuneration for training that is regulated by collective agreement between the parties. The amount of the remuneration increases with every year of training, and averages about one third of the starting pay for a trained skilled worker.

The professional competences in the occupation to be acquired in in-company training are specified in a training directive and put in concrete form by the training enterprise in an individual training plan. For the teaching in the vocational school, a framework curriculum, harmonised with the training directives, is drawn up for every recognised training occupation (see 3.2 and 7.1).

Comprehensive information and data on VET and on the dual system in particular will be found in the annual VET report of the Federal Ministry of Education and Research ⁽²⁷⁾ and on the website of the Federal Institute for Vocational Education and Training (www.bibb.de).

The enterprise as place of learning

Training places are offered in enterprises in industry and in the public service, in practices of the liberal professions and, to a very limited extent, also in private households. Enterprises enter into a contract with trainees, in which they undertake to provide them with the professional competences in the occupation provided for in the training directive for the relevant training occupation.

The binding requirements of the training directives guarantee a uniform national standard irrespective of current enterprise needs, which corresponds to the requirements in the relevant occupation. Training may take place only in training enterprises in which the skills required by the training directive can be imparted by training personnel who are appropriate both personally and in terms of specialised knowledge. The suitability of training enterprises and in-company training personnel is monitored by the relevant autonomous industrial bodies (Chambers). Proper provision of the training itself is also monitored by the Chambers.

The training enterprise draws up an in-company training plan for trainees. This plan must correspond to the training directive in terms of its practical and time structure, but may deviate from it if particular features of company practice require this and, for the rest, all training content is included.

Small and medium-sized enterprises in particular are often unable to provide all the learning content. Sometimes they lack suitable training personnel, or, owing to their particular specialisation, do not cover all the training content themselves. There may also be other reasons why training is made more difficult or is even prevented.

There are various possible ways of overcoming these problems:

- Educational institutions offer intercompany training periods (intercompany VET facilities, ÜBS), designed to supplement in-company training. They are often sponsored by

⁽²⁷⁾ The *Berufsbildungsbericht 2006* is available on the Internet at: www.bmbf.de/pub/bbb_2006.pdf

autonomous bodies in the relevant sectors of industry. The BMBF supports the sponsors with investment subsidies. The BIBB bears statutory responsibility for implementing the sponsorship.

- Enterprises form coherent training structures (*Ausbildungsverbünde*). There are four particular traditional models for this, e.g. the ‘lead enterprise with partner enterprise’ model, in which the lead enterprise bears overall responsibility for training, but parts of the training are conducted in various partner enterprises, or the ‘training to order’ model, in which some periods of training take place outside the regular enterprise, perhaps in a nearby large enterprise with a training workshop, on the basis of an order and against reimbursement of costs.

Vocational school as place of learning

In the dual system, the vocational school is an autonomous place of learning. Its task is to provide basic and specialised vocational training and to extend previously acquired general education.

Under a KMK decision ⁽²⁸⁾, vocational schools must provide at least 12 hours’ teaching a week, normally eight hours devoted to vocational subjects and four hours to general subjects such as German, social studies/business studies, religious education and sport. Appropriate account is also to be taken of foreign language teaching, depending on its importance to the training occupation concerned.

Vocational schools decide on how to allocate teaching in consultation with training enterprises, the schools inspectorate and the competent industrial bodies. The aim of the various organisational forms is to ensure that trainees spend as much time in the enterprise as possible while, at the same time, allocating teaching in a way that is tenable in terms of both pedagogics and the psychology of learning.

4.3.2. (Full-time) vocational schools

Vocational schools include full-time vocational schools, *Fachoberschulen*, vocational/trade and technical grammar schools, vocational secondary schools and other types of school that exist only in individual *Länder* or only on a very small scale.

Full-time vocational schools

Full-time vocational schools introduce students to one or more occupations, provide them with partial vocational training in one or more training occupations, or take them through to a vocational training qualification in one occupation. Today vocational foundation courses are provided at the full-time vocational schools (one year) or students achieve higher general school certificates.

⁽²⁸⁾ Framework agreement on vocational schools of 15 March 1991: www.kmk.org/doc/beschl/rvbs91-03-15.pdf

The range of training provision in schools of this type is extremely diverse. There are full-time vocational schools for, for example, commercial occupations, occupations involving foreign languages, craft occupations, household and caring occupations, healthcare occupations and artistic occupations.

When these schools do not offer a full vocational qualification, if certain conditions are met attendance at a full-time vocational school can be credited as the first year of vocational training in the dual system. The requirement for entrance is normally the secondary general school certificate or the final certificate from intermediate school. The duration of educational programmes at full-time vocational schools varies (from one to three years) depending on the vocational specialisation and objective.

Fachoberschulen

Fachoberschulen cover classes 11 and 12 and build on the final certificate from intermediate school. The first year comprises in-company specialised practical training and teaching, while the second year involves general and specialised teaching. It leads to the academic standard required for entrance to a *Fachhochschule*. *Fachoberschulen* are subdivided into the following specialisations: business and administration, technical skills, healthcare and welfare, design, nutrition and home economics, and the agronomy. Teaching takes place in the following subjects: German, foreign languages, mathematics, natural sciences, economics and social science, and in a specialised subject. Students who have completed a course of vocational training, e.g. dual training, can enter class 12 of a *Fachoberschule* direct.

Vocational grammar schools/trade and technical grammar schools

Schools of this type are known as vocational grammar schools in some *Länder* and trade and technical grammar schools in others. Unlike grammar schools, vocational or trade and technical grammar schools have no lower or intermediate level (classes 5-10). They normally lead to a final qualification entitling holders to enter any institution of higher education.

In addition to the educational range offered by grammar schools providing a general education, these specialised grammar schools offer vocational subjects and priorities, such as business, technical skills, nutrition and home economics, agronomy, healthcare and welfare, and information and communication technology.

Some vocational/trade and technical grammar schools also offer the opportunity to acquire more than one qualification (educational programmes leading to dual qualifications): an academic qualification (entitling holders to study at a college or *Fachhochschule*) and a vocational qualification under *Land* law (e.g. for working in an occupation as an assistant). Courses of education leading to dual qualifications last three to four years.

Vocational secondary schools

In connection with the deliberations of the Standing Conference of Ministers for Education and Cultural Affairs (KMK) on the equivalence of general and vocational education, vocational secondary schools have increased in importance. In some *Länder* (e.g. Bavaria,

Baden-Württemberg, Berlin), they have been established in order to enable those completing vocational training in the dual system to obtain an entitlement to enter higher education. In two years of full-time education, vocational secondary schools lead to a subject-based entitlement to enter higher education and, with a second foreign language, to an entitlement to enter any institution of higher education. Vocational secondary schools may also operate on a part-time basis, with a correspondingly longer duration. To be accepted at a vocational secondary school, applicants need to have obtained the final certificate from intermediate school and to have successfully completed at least two years of vocational training, or to have worked in a relevant occupation for at least five years.

Vocational secondary schools offer training in the fields of technical skills, business, agronomy, nutrition and home economics, social affairs and design. The allocation of students to a training orientation is based on the initial vocational training already completed or the occupation already worked in.

4.3.3. Preparation for vocational training

Basic vocational education can be completed either in the form of a year at school full-time or in cooperative form in an enterprise and a school, which is known as the **foundation vocational training year (BGJ)**. Successful completion of the BGJ can be credited as the first year of vocational training in the training occupations assigned to the relevant occupational field. In the BGJ, students receive basic education in a specific occupational field (e.g. metalworking techniques, electrical engineering, business and administration).

The **pre-vocational training year (BVJ)** is a one-year course of training usually offered in full-time form and designed to prepare young people for the demands of vocational training. A clear majority of participants do not have a secondary general school certificate. However, this can be acquired in the course of the BVJ, thus improving the holder's prospects on the market for training places.

The **in-company entry-level vocational qualification (EQJ)**, introduced in 2004) involves 6 to 12-month periods of work experience in enterprises, as preparation for training (see 10.1). They are subsidised by the Federal Government, which provides a monthly grant to cover the trainee's subsistence costs and bears the cost of the flat-rate total social insurance contribution. The EQJ programme is aimed at young training applicants aged 15-25 with limited prospects of finding training, and young people not yet in possession of all the necessary training qualifications. Young people are given the opportunity, for example to obtain partial qualifications in a training occupation via qualification building blocks and specific vocational modules. On the basis of a testimonial from the enterprise, the successfully acquired entry-level qualification is certified by the competent body (e.g. Chambers of Industry and Commerce, Craft Chambers). Six months' training can then be credited to subsequent training.

4.4. Qualification measures for particular target groups

According to the evaluation of a microcensus, in 2004 14.9 % of all young people aged 20-29 had no vocational qualification, 11.3 % of German nationals and 36.6 % of foreign nationals in this age group ⁽²⁹⁾. Consequently, education and VET policy fundamentally aims to ensure that all young people who strive to do so and are in a position to do so obtain an offer of training and a qualification. For certain groups of persons, however, it is extremely difficult to take up initial vocational training. This applies in particular to young people not (yet) in possession of an entitlement to training, young people with learning difficulties, young people with disabilities, unskilled and semi-skilled young people, the socially disadvantaged, and young immigrants. Specific support is required to enable these people too to access training or work.

For people with learning difficulties or the socially disadvantaged, whose development to date means that they cannot yet be expected successfully to undergo training in a recognised training occupation or equivalent vocational training, there is the option of preparing for vocational training (pre-vocational training). In addition to pre-vocational training provision in schools and the in-company entry-level vocational qualification (see 4.3.3), it is also worth mentioning the pre-vocational educational measures (BvB) under Section 61 of the *Sozialgesetzbuch* (SGB III), which are directly subsidised by the Federal Agency for Employment. The target group for these measures includes young people and young adults who have not undergone initial vocational training, are not yet 25, and have completed their compulsory general education. Furthermore, the Federal Agency for Vocational Training also subsidises the vocational training of disadvantaged young people. The measures involved are:

- training support (abH) in the form of remedial tuition and socio-pedagogic support within the framework of an in-company training relationship;
- vocational training in non-company establishments (BaE) ⁽³⁰⁾ in a training occupation recognised under the Vocational Education and Training Act (BBiG) and the Regulation on Craft Trades (HwO), with a qualification on completion;
- transitional support (continuation of training support following completion or discontinuation of training);
- support for integration into employment, in the form of remedial tuition and socio-pedagogic support within the framework of an in-company training relationship.

The aim of the BQF programme, *Kompetenzen fördern – Berufliche Qualifizierung für Zielgruppen mit besonderem Förderbedarf* [Promoting competences – vocational training for

⁽²⁹⁾ See *Berufsbildungsbericht 2006* (BMBF, p. 142).

⁽³⁰⁾ These are publicly funded training places provided in training centres. They are normally run by the Chambers of Industry and Commerce and the Craft Chambers. In contrast to intercompany training, the non-company establishment must offer complete training programmes, supplemented only by periods of in-company work experience.

target groups in need of particular assistance] (2001-2006), was to make a contribution to further developing support for disadvantaged young people and to improving the education and training situation of migrants ⁽³¹⁾. Over the period as a whole, financial support was given to a total of 136 projects. The ‘transfer’ phase will run until autumn 2007; in this, particularly good examples are being put into large-scale practice.

There are also supporting measures that take account of the particular concerns of disabled people (see 10.3).

4.5. Higher vocational education

The higher education sector essentially comprises the various types of institutions of higher education and, to a limited extent, establishments outside this sphere. For example, in addition to institutions of higher education some *Länder* have vocational academies offering, as an alternative to courses of higher education, courses of education leading to vocational qualifications for those who have completed upper secondary education with at least a qualification entitling them to attend a *Fachhochschule*. Under the ISCED classification, the vocational schools, the vocational academies in Bavaria and the schools for nurses, midwives, etc. offering two- and three-year courses also come under the heading of higher education ⁽³²⁾.

4.5.1. Fachhochschulen

The course structure and the way in which teaching and study are organised in the *Fachhochschulen* are characterised by the particular emphasis on application and the increased focus on the requirements of occupational practice.

Of a total of 338 institutions of higher education, 164 are *Fachhochschulen* (117 universities or institutions equivalent to universities, and 57 colleges of art and music (as of December 2006)) ⁽³³⁾. In some instances the numbers of students and the programmes of study offered vary widely, with these variations contributing to particular subject and regional profiles for individual *Fachhochschulen*.

Entitlement to study in *Fachhochschulen* is provided by a certificate confirming the academic standard required for admission to higher education (*Hochschulreife*), a subject-based certificate confirming such a standard, or a certificate confirming the academic standard required for entrance to a *Fachhochschule*. In addition, for certain courses of study periods of course-specific work experience are required prior to commencing studies. In 2004, more than half the first-year students at *Fachhochschulen* had the *Hochschulreife*. Courses normally run

⁽³¹⁾ www.kompetenzen-foerdern.de/

⁽³²⁾ Source: www.kmk.org/dossier/tertiaerer_bereich.pdf

⁽³³⁾ www.hochschulkompass.de/

for 8 semesters. *Fachhochschulen* offer, in particular, courses of study in the following fields: engineering sciences, economic sciences/commercial law, social affairs, administration and administration of justice, computer science, design, mathematics, information and communication technology, healthcare/nursing.

4.5.2. Vocational academies

The vocational academies are higher education establishments providing academically based VET that is at the same time geared to practice via training in an academy and in an enterprise, as in the dual system. They exist in Baden-Württemberg, Bavaria, Saxony, Thuringia and Berlin. The first vocational academies were established in Stuttgart and Mannheim in 1974.

The enterprises bear the costs of the in-company training and pay the trainee remuneration for training, including for the duration of the phases of training in theory in the vocational academy. Depending on the law of the *Land* concerned, for entrance to a vocational academy applicants must have a certificate confirming the academic standard required for admission to higher education (*Hochschulreife*), a subject-based certificate confirming such a standard, or a certificate confirming the academic standard required for entrance to a *Fachhochschule*, and also a training contract. Again depending on the law of the *Land* concerned, applicants without one of the above certificates but with a vocational qualification may be able to sit an entrance examination. Once they have concluded a training contract, applicants are registered with the vocational academy by their training enterprise. Training leads to bachelor qualifications (see 7.2.2). Courses of study are offered in the fields of economics, engineering and social affairs in particular. The relevant *Land* law normally lays down a period of study of three years.

4.6. Additional qualifications and dual study programmes

Nowadays there are many ways in which school-leavers can enter working life. The alternatives are no longer only training or a course of study – instead, young people prepared to work hard can combine dual training with an additional qualification or can combine training geared to practice with academic study in a dual programme of study.

4.6.1. Additional qualifications

Additional qualifications obtained to supplement initial vocational training open up the possibility of acquiring additional competences, such as foreign-language classes, EDP courses or particular engineering courses. At present some 28 000 such offers are listed, in

which over 100 000 trainees are working to acquire qualifications. This represents over 6 % of all trainees in Germany ⁽³⁴⁾.

Additional qualifications are primarily offered by training enterprises and vocational schools. Other important providers of additional qualifications include the Chambers of Industry and Commerce, Craft Chambers and their education centres.

4.6.2. Dual study programmes

As the vocational academies have developed (see 4.5.2), since the mid-1970s more and more dual study programmes have been offered. These combine in-company vocational training with a course of study at a *Fachhochschule*, university, vocational academy or administration and business academy.

In recent years there has been a steady increase in provision of such dual study programmes. Enterprises obtain highly qualified and motivated young workers, and institutions of higher education benefit both in terms of content and, often, financially from the extensive contact with the world of work and create a distinctive image for themselves by offering demand-based courses of study. Students obtain high-quality training that improves their labour market and career prospects and benefits them both financially and in terms of time.

Dual study programmes integrated with training

- alternate between theory phases in the institution of higher education or academy and practical phases in the training enterprise;
- regulate the practical training in a training, student-employee or unpaid-trainee contract;
- are characterised by close dovetailing of the content of vocational activity in the training enterprise and the acquisition of theoretical knowledge in the institution of higher education/academy;
- involve close coordination of and cooperation between institution of higher education/academy and enterprise.

The commonest combination is a course of business management plus commercial training. However, a course in engineering or computer science can also be combined with technical training. Overall, there is a very wide range of possible subject areas, with insurance, mechatronics, commercial law, health economy, mathematics and media informatics being just a few examples.

Over 600 dual study programmes are now listed in the fields of business management, engineering, computer science and natural sciences.

⁽³⁴⁾ www.ausbildungplus.de/

5. Continuing vocational education and training

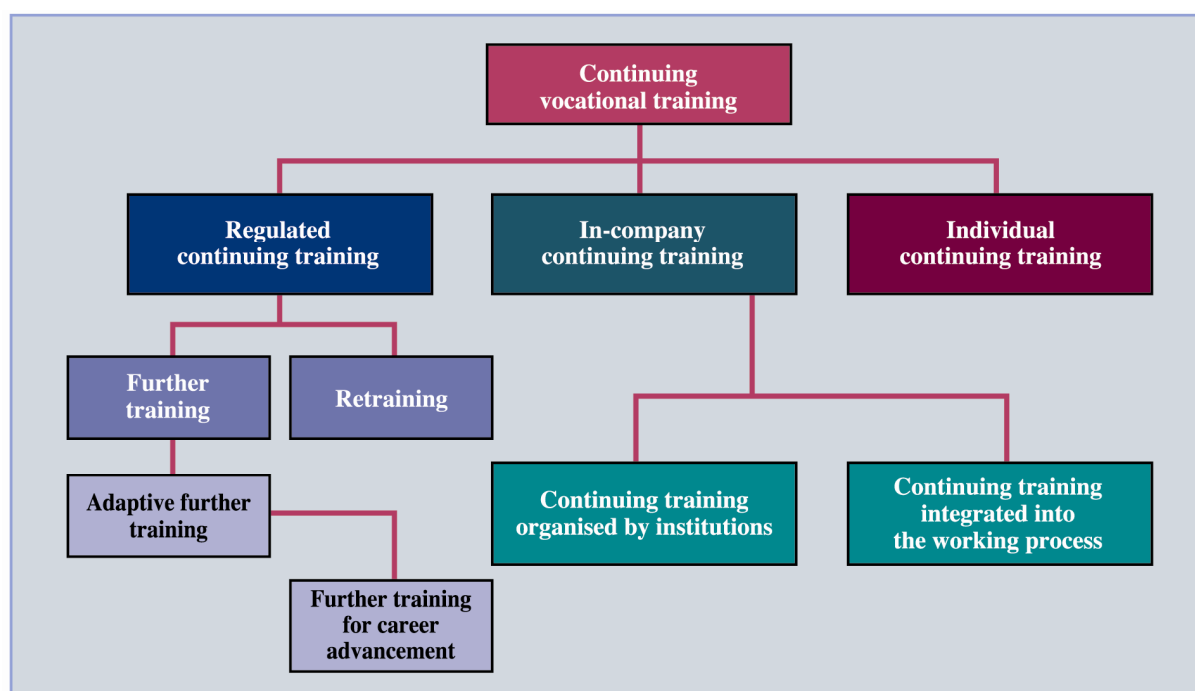
5.1. Overview

Continuing education or training is understood to be the continuation or resumption of organised learning following completion of an initial phase of education of varying scope ⁽³⁵⁾. In addition to continuing ‘vocational’ education/training, this includes continuing general and political education, which is also subsumed under the heading of ‘adult education’.

In Germany, continuing vocational education/training is characterised by receptiveness, flexibility and ongoing changes. The state has only a minor regulatory and creative function in this area. The complexity and heterogeneity of continuing VET is reflected in the variety of activities in the areas of financial support, research, development and quality assurance.

Continuing VET is also *per se* a system involving many components (see Figure 8).

Figure 8: Continuing VET in Germany



Source: Based on Bernien, 1997.

A distinction must be made between two kinds of regulated continuing training, namely further vocational training and vocational retraining (Vocational Education and Training Act).

⁽³⁵⁾ See Deutscher Bildungsrat, 1970, p. 197.

A completed course of vocational training or appropriate vocational experience, or both, is normally required for further vocational training. In the context of further vocational training, a distinction must be made between further training making advancement in the occupation possible (further training for advancement) and further training aimed at maintaining or extending vocational knowledge, skills and competences, or updating them in line with technical or economic developments (adaptive further training).

Well-ordered further vocational training and retraining that is standardised across Germany is based on statutory regulations. In these, the content, objective, examination requirements, conducting of examinations, conditions for authorisation and designation of the qualification (master, business administrator, graduate in business administration, skilled worker) are regulated by the Federal Ministry of Education and Research by agreement with the competent ministries and following consultation with the Standing Committee of the Federal Institute for Vocational Education and Training (BIBB).

Many bodies undertake further vocational training measures, including enterprises, Chambers, employers' and trade associations, employee organisations and vocational schools. At Federal level there are currently some 200 such qualifications, approximately 170 of them being 'master' qualifications ⁽³⁶⁾.

Since January 1996, particular financial support has been given to further vocational training for advancement. Would-be masters, technicians and skilled workers can apply for financial support under the Support for Further Training for Advancement Act ('Meister-BaföG') (see 10.2).

Distance learning has been an established continuing education/training method for several decades. In Germany, it can be used as a second chance to obtain educational qualifications and to fulfil continuing education/training objectives in both general education and vocational training, but also in the field of hobbies.

Distance-learning provision is covered by the Protection of Participants in Distance Learning Act (FernUSG), which stipulates extensive duties of information and contractual obligations. It stipulates that courses must be licensed by the state ⁽³⁷⁾. In 2005, there were a total of 1 971 licensed distance-learning programmes (2004: 1908). Of these, 1 344 relate to VET. In 2005, there were 320 institutes offering distance-learning programmes (2004: 286; an 11.9 % increase).

⁽³⁶⁾ For an overview, see the continuing training reference system, WBmonitor: www.bibb.de/de/773.htm

⁽³⁷⁾ www.zfu.de/

5.2. Providers and participants

The Federal Agency for Employment's KURS database offers a national overview of continuing VET provision⁽³⁸⁾. It is Germany's largest continuing education database, with over 420 000 (as of 2005) designated events in the field of continuing vocational training, including examinations for continuing education qualifications (master, business administrator, technician, etc.) and provision of courses of higher education in institutions of higher education by approximately 12 500 providers.

Between January 2001 and January 2005, the range of provision in KURS increased by almost 40 %. Ninety-five per cent of continuing education/training events are designed to update and extend vocational knowledge and skills, and they are usually of short duration (2005: 51.2 % lasted up to three days). The content and qualifications are normally neither bindingly regulated nor recognised nationwide. Regulated further training for advancement accounts for 2.9 % of provision.

Two out of three continuing education/training events in KURS are provided by private-sector educational/training establishments. A long way behind come public-sector establishments (2005: 11.8 %), Chambers (9.5 %), establishments of trade and professional associations (6.7 %), social welfare/church establishments, etc. (2.2 %) and so on.

In 2002, 68 % of participants in continuing vocational education took part only in in-company programmes, just under one fifth took part only in non-company continuing education, and the remaining 13 % utilised both options. In this context, in-company continuing education means programmes that take place in the enterprise or on the job, with more than half the programme taking place within enterprise working hours or at least half of it being financed by the enterprise (Beicht et al., 2006).

School-based continuing vocational education often takes place in trade and technical schools (in full-time or part-time form) and special master's schools. They provide a further intermediate qualification building on the vocational training completed, e.g. master or technician. The aim is for those so qualified to be enabled to take up positions in a company's middle management. Further vocational training for a 'master's' entitles the holder to practise a craft trade independently and to employ and train apprentices, for example, and at the same time opens up access to courses at craft academies and *Fachhochschulen*.

Trade and technical schools offer courses in the fields of agronomy, design, engineering, business and social affairs, with over 160 individual subjects. Like the master's schools, they end with a final state examination under *Land* law. The conditions for entrance vary depending on the subject area. For admission to a trade/technical school, an applicant normally requires

⁽³⁸⁾ <http://infobub.arbeitsagentur.de/kurs/index.jsp>

- a qualification in a recognised training occupation of relevance to the objective of the subject concerned, and relevant work experience of at least one year, or
- a qualification from a full-time vocational school and relevant work experience of at least five years.

The continuing education reporting system is an instrument for continuous monitoring of continuing education developments in Germany. Since 1979, data on the continuing education conduct of the population aged 19-64 have been compiled at three-yearly intervals on behalf of the BMBF. The 2004 survey represents the ninth cross-sectional survey ⁽³⁹⁾. In 2003, a total of 26 % of all persons aged 19-64 participated in continuing vocational education/training.

The second European survey of continuing vocational training (CVTS2), with 1999 as the reference year, provides an overview of quantitative and qualitative in-company continuing training structures. In Germany, the proportion of all companies providing continuing training is 75 % (9th position out of 25 countries). In companies providing in-company continuing training programmes, the range of ‘other’ forms of continuing training has increased (e.g. on-the-job learning, information events such as specialised presentations and conferences, etc.). However, a growing number of companies hesitate to classify all learning processes other than ‘traditional’ continuing training as in-company continuing training.

5.3. Transition from continuing vocational education to higher education

The aim of improving permeability between VET and higher education programmes is to make VET more attractive and to shorten educational pathways. There are a number of research and development projects in this area.

The BMBF programme *Anrechnung beruflicher Kompetenzen auf Hochschulstudiengänge* [Counting vocational competences towards programmes of higher education] (ANKOM) focuses on the development of procedures for identifying and evaluating qualifications and competences acquired in continuing vocational education/training and counting them towards relevant university programmes of education (Mucke and Grunwald, 2005). In summer 2005, within this framework 11 projects began in the fields of industrial technology, commerce and IT, and in healthcare and social affairs. The qualifications of trainees completing further training are compared with the requirements of the relevant courses of study. The aim is to develop transparent and transferable evaluation and offsetting procedures by 2007. In this way, new promotion and career prospects will be opened up to those completing vocational courses.

⁽³⁹⁾ www.bmbf.de/pub/berichtssystem_weiterbildung_neun.pdf

The ‘Lifelong learning’ programme financed to the tune of some 13 million euro by the Federal-*Länder* Commission for Educational Planning and Research (BLK) was successfully completed at the end of 2005. Fifteen *Länder* took part in it, with 22 projects (financed by Federation and *Länder* on a 50/50 basis) and two combined projects (financed by the Federation and the European Social Fund). The programme focused, firstly, on linking the various areas of education by establishing networks and cooperative relationships that can be used independently by those interested in learning. Secondly, it focused on promoting learning itself by reinforcing individual responsibility and promoting self-starting learning activities, including informal activities (‘ProfilPASS’) (see 8.2.1) ⁽⁴⁰⁾.

In the field of continuing training in IT, since 2003 a system of continuing education profiles has been developed under the leadership of the Federal Institute for Vocational Education and Training (BIBB). The aim of this system is to open up to skilled workers in the field of IT product and service providers and IT users career paths and vocational advancement via three levels of qualifications (level 1: specialist level; level 2: operational professionals; level 3: strategic professionals). The subject of level 1 certification is recognition and documentation of professional competences acquired in the individual work process.

There is no statutory regulation of the specialist-level (level 1) qualifications, which operate instead in the private sector. Further training at the levels of operational and strategic professionals (levels 2 and 3) is regulated in a statutory regulation applicable throughout the *Land* concerned.

The system of continuing training in IT demonstrates the entitlement, in the IT field, to extensive comparability of these vocational qualifications at the level of operational and strategic professionals with higher education qualifications such as a Bachelor’s and a Master’s, and to resulting offsetting options.

⁽⁴⁰⁾ Further information will be found at www.blk-lll.de/, www.profilpass-online.de/

5.4. Latest developments

Continuing-training innovation group

The aim of the *Innovationskreis Weiterbildung* [continuing-training innovation group], convened by the BMBF in 2006, is to develop options for action for the future of continuing training by summer 2007 (see 2.2.3). Focal topics include the combining of formally and informally acquired competences via certification and improvement of a second chance for young adults without a vocational qualification.

Stiftung Warentest quality tests

The quality and transparency of continuing training courses are constantly improved by means of independent continuing training tests. The department of continuing training tests of the Stiftung Warentest [goods testing foundation] is conducting up to 20 tests a year between the middle of 2002 and December 2007 in the field of continuing vocational training provision. Further training courses, provision of advice and learning media are currently being tested. The project is being financed by the BMBF and the European Social Fund (ESF).

The aim of the project is to make the market structure, with some 35 000 continuing training providers and around 400 000 different products, more transparent for consumers, and to increase the focus of providers on quality. Reviewing the quality of training media and programmes by means of samples shows those interested in continuing training where the providers have problems, what quality they can expect, and how they can find or recognise good training provision. By seeing the quality from the learner's perspective, providers too obtain important starting points for developing it further. Consumers are informed of their rights and obligations as users of continuing training, so that they can demand appropriate quality of courses, advice, and also training media. In this way, continuing training tests ideally complement other quality assurance instruments, such as quality circles and certification systems ⁽⁴¹⁾.

'Quality in continuing vocational training' checklist

In 2007 the BIBB is updating the 'Quality in continuing vocational training' checklist. This was developed as long ago as 1991 and was last updated in 2001. It is a list of questions that can be used by those seeking advice when deciding whether to take part in a continuing training programme. For example, it clarifies questions as to what continuing training costs, how the provider assures the quality of its continuing training, what qualification the continuing training measure leads to, etc. ⁽⁴²⁾.

⁽⁴¹⁾ www.weiterbildungstests.de/

⁽⁴²⁾ www.bibb.de/dokumente/pdf/checkliste_berufliche_weiterbildung.pdf

5.5. Particular target groups

The *Sozialgesetzbuch* (SGB III) was amended on 1 January 2003 by the First Law on modern services on the labour market, which has led to changes in public funding of continuing education/training. Since then, funding has been linked to the issuing of an education credit voucher (*Bildungsgutschein*). This can be issued by employment agencies to the **unemployed or persons at risk of unemployment** for subsidised continuing vocational training when the need for this has been confirmed in a comprehensive advisory discussion. The education credit voucher shows, among other things, the training objective, the period needed to achieve it, the scope of regional validity, and the duration of validity (three months maximum). The credit voucher can be redeemed by the participant with a body of his choice authorised to finance continuing training. It is a precondition for recognition of continuing training bodies that they have been certified and accredited by 'informed' bodies. To this end, on 1 July 2004 a procedure was established, in the Directive on recognition and licensing of continuing training (AZWV), under which providers must comply with a series of statutory provisions.

In order to improve the qualifications of **older workers**, in 2006 the Federal Agency for Employment launched a new programme in which greater use is to be made of the funding instruments in the *Sozialgesetzbuch* (SGB III) for low-skilled and older workers. Promotion of the employability of older workers via qualification is also at the centre of two Federal Government initiatives, *Perspektive 50Plus* [50+ perspective] ⁽⁴³⁾ and the *Initiative Neue Qualität der Arbeit* (INQA) [New Work Quality Initiative] ⁽⁴⁴⁾.

Between 2003 and 2005 the BIBB carried out a research project on the intercultural competences of **young people with a background of migration**, which recorded the particular competences of this group and determined their vocational value ⁽⁴⁵⁾. Among other things, it became apparent that if the persons concerned make use of their intercultural competences in their occupation, this promotes a positive attitude to their foreign origins, and, on the part of employers, it supports permanent embedding of these competences in the enterprise, in as many areas as possible ⁽⁴⁶⁾.

⁽⁴³⁾ www.perspektive50plus.de/

⁽⁴⁴⁾ www.inqa.de/

⁽⁴⁵⁾ www.bibb.de/de/wlk8601.htm

⁽⁴⁶⁾ http://www2.bibb.de/tools/fodb/pdf/eb_24102.pdf

6. Training of VET teachers and trainers

6.1. Overview

The education personnel involved in the German VET system can be broadly categorised as ‘teachers’ and ‘trainers’. Teachers are employed in the various vocational schools, while trainers are skilled workers in enterprises, who provide trainees above all with the practical vocational knowledge and practical skills of a training occupation. In addition to teachers and trainers, the staff of VET workshops for the disabled also include psychologists, doctors and social education workers.

In Germany, the *Land* Ministries of Education are responsible for teacher training. The relevant legal standards include the laws and regulations on teacher training, the study directives on study programmes for the teaching profession, the training directives on teaching practice and the examination directives for the first and second state examinations. The examinations are the responsibility of state examination offices or *Land* examination commissions.

The requirements for in-company trainers in initial training are governed by the Vocational Education and Training Act (Sections 28-30 BBiG) and the Regulation on Trainer Aptitude (AEVO); there are no explicitly formulated training provisions for staff working in continuing vocational training.

6.2. Teachers in vocational schools

Vocational schools take many forms, sometimes with differing designations in the individual *Länder* (vocational school, foundation vocational training year or pre-vocational training year, full-time vocational school, vocational extension school, trade/technical school, vocational academy, *Fachoberschule*, *Berufsoberschule*, vocational grammar school [*Fachgymnasium* or *berufliches Gymnasium*]). They are, in turn, subdivided into many training programmes within the various occupational fields or vocational orientations. The teaching staff working in these schools can be divided into two groups:

1. **Teachers for classes in vocational schools/vocational schoolteachers:** these teachers provide young people with the necessary subject-specific theoretical knowledge and with in-depth and extended general education in the context of the future occupation. They teach both vocational subjects (e.g. metalworking techniques, electrical engineering, home economics, healthcare) and general subjects (e.g. German, English, mathematics, politics, physics).

2. **Teachers teaching vocational practice** ('works' teachers, also known as 'technical' teachers or simply 'vocational' teachers [*Fachlehrer*] in some *Länder*): their task is to provide young people undergoing in-company training with supporting subject-specific practical teaching. They teach in industrial/technical and home economics schools and, in some *Länder*, also in business schools. In vocational schools (industrial/technical schools), state-examined technicians or certified masters are used to teach vocational practice. In home economics schools, specialised teachers teach home economics and crafts. In business schools, specialised teachers are trained to teach word processing and office management.

6.2.1. Initial training

Training of teachers in vocational schools is divided into three stages:

The first stage comprises a course of study at a university or university equivalent. Depending on the *Land* concerned, the course normally lasts eight to ten semesters. It includes:

- an academic component involving at least two subjects – a main vocational subject (with a choice of 16 options, e.g. economics and administration, electrical engineering, textile engineering and clothing, colour techniques and interior design, nutrition and home economics, social education) and a second subject from general education (e.g. German, English, mathematics, politics, physics, sport);
- the relevant specialised teaching methods which, as we understand it today, should be integrated into the subjects, although as yet this is still the exception;
- an educational science component, with obligatory study of pedagogy and psychology;
- supporting periods of teaching practice, in some cases for several weeks.

The requirement for access to higher education is, firstly, the school-leaving certificate proving entitlement to higher education (*Abitur*), or, with restrictions, the subject-based certificate of entitlement to higher education. Secondly, the applicant must either possess a relevant vocational qualification in the occupational field aimed at or, alternatively, demonstrate prior practical vocational training (work experience in an enterprise or work in the relevant occupational field) covering a period of 3-12 months, depending on the *Land* concerned. The course of study ends with the first state examination (teaching posts in upper secondary level vocational subjects or in vocational schools). Under *Land*-specific rules, for certain subject areas a *Diplom* (diploma) (see Glossary) may take the place of the first state examination. This includes qualifications such as *Diplom-Berufspädagoge*, *Diplom-Handelslehrer* and *Diplom-Gewerbelehrer* [diplomas in vocational teaching, teaching of commercial subjects and trade-school teaching]. A start has been made in institutions of higher education on converting diploma courses and teacher training courses to staggered Bachelor's and Master's courses in the wake of the Bologna Process, launched in 1999, for the Europeanisation of higher education, but it is still far from being completed. Cooperation between teacher training colleges and *Fachhochschulen* constitutes a possible model for

staggered teacher training courses at VET schools. This model has already been put into practice at four locations (Pädagogische Hochschule Freiburg, Hochschule Offenburg, Pädagogische Hochschule Schwäbisch Gmünd, Hochschule Technik und Wirtschaft Aalen). In these institutions, courses are divided into a seven-semester BA course and a three-semester MA course.

The first state examination or diploma examination is followed by the second stage of teacher training, namely teaching practice (*Referendariat*). It consists of sitting in on classes, teaching with guidance and independent teaching in designated training schools, and a pedagogic and educational science component in practical seminars (study seminars), in which the experience acquired through practice is reappraised and consolidated. Teaching practice normally lasts two years and ends with the second state examination. Some *Länder* currently shorten the teaching practice to 18 months, and in some cases to 12 months, partly by crediting semesters of practical experience, other practical studies, etc.

The third stage is lifelong ‘on-the-job learning’. It covers the whole of the career, from the initial stage (the first two to four years) to the end of working life. It provides for further development, maintenance, updating and extension of teachers’ vocational competence (see 6.2.2).

No higher education is required to work as a teacher teaching vocational practice in the VET school system. As a rule, such teachers have a vocational background as a foreman or skilled worker (industry) or a qualified craftsman (crafts). Training takes place in teaching practice in a school and in pedagogic vocational seminars (single-stage training). In most *Länder*, the requirement for access is to have passed the master craftsman’s qualifying examination or to have a qualification from a trade/technical school and a number of years of vocational experience.

To address the shortage of teachers with basic training in particular subjects or combinations of subjects (this applies in particular to engineering and natural sciences), the individual *Länder* have promulgated various regulations on the appointment of qualified career changers. In some *Länder*, for example, applicants with a higher education qualification who have undergone no traditional teacher training are allowed to undertake teaching practice. In some cases, applicants are also employed directly as teachers and given continuing training in tandem with work (in addition to a course of higher education, several years of vocational experience in the relevant subject area are normally required). In 2004, 4.4 % of all public-sector teaching appointments involved career changers (Kultusministerkonferenz, 2005, p. 22).

6.2.2. Further and continuing training of teachers

As is the case with training, the individual *Länder* are responsible for the further and continuing training of teachers. Within the *Länder*, as the *Land* education authority the relevant Ministry of Education is responsible for further training of teachers. In most of the

Länder, the objectives of further teacher training are laid down by law. Other details of the bodies responsible for further teacher training, and of registration, authorisation and leave for participation in events are governed by Orders (*Erlasse*). Some *Länder* have also formulated the fundamental objectives and tasks of further teacher training in orders or proclamations instead of laying them down by law. In all the *Länder*, the obligation of teachers to undertake further training is expressly laid down by law or statutory regulation. The employer (usually the Ministry of Education) is in turn obliged to ensure appropriate training measures.

State **further teacher training** serves to maintain and extend teachers' vocational competence. In the *Länder*, its organisation is divided into central, regional and local levels. All the *Länder* have created state institutes of further teacher training subordinate to the Ministries of Education to organise central further teacher training. Depending on the *Land*, regional-level further teacher training is conducted variously by the *Land* institutes and their branches and by the education authorities. Local education authorities are normally responsible for local-level further teacher training. In addition, the schools organise internal further training events on their own account for (elements of) their teaching staff. Further teacher training serves to maintain and extend teachers' vocational competence. The content of further training may relate to school subjects (e.g. introduction to new curricula), types of school, education and teaching objectives or certain key current topics (e.g. intercultural learning or new technologies). Further teacher training events usually take place in the form of seminars. There are also study groups, meetings, study trips and colloquia, as well as distance learning provision.

A distinction needs to be made between further teacher training and **continuing teacher training**, which is designed to enable teachers to teach another subject or in an additional subject area. It also offers the possibility of applying for another teaching post. Some continuing training measures also serve to prepare teachers for particular tasks (e.g. working as a teaching consultant). Continuing training usually extends over a lengthy period and includes individual events lasting several hours a week and, possibly, additional compact events. Participants are given leave of absence, or their weekly teaching commitments are reduced, for the duration of the measure, provided that the education authority has identified a need for the relevant continuing training. Continuing teacher training measures end, particularly if they have taken the form of a course of higher education, with an examination constituting an extension to the first state examination. Below this level, there are continuing training measures leading to a teaching permit, i.e. entitlement to provide teaching in the relevant subject and the relevant type of school.

6.3. In-company trainers

In Germany, the designation 'trainer' is used in association with in-company training as an umbrella term for various tasks and functions that may vary depending on the company's size and organisation. In addition to the function of trainer instructing trainees as his main or secondary job, these include, for example, training foreman, training engineer, training adviser

and training leader. In small or medium-sized enterprises with few trainees, training is often the trainer's secondary job, and he takes on the training task in addition to his main job as an employee. In larger enterprises, training is usually the trainer's main job and, if necessary or appropriate, the trainer works in training departments set up for the purpose, such as training workshops or training offices. In larger enterprises, training departments for industrial/technical training are usually under the aegis of the production or works manager, and for commercial training under that of the office manager.

Those responsible for training are of particular importance. They are skilled workers who, in addition to their specialised tasks, take on training tasks in the enterprise's departments, on assembly lines, in commercial and engineering offices or in the service sector. As trainees pass through the enterprise, trainers provide them with the knowledge and skills required in their job.

In order to assure the quality of in-company training, the Chambers of Industry and Commerce (IHKs) are responsible for monitoring the Regulation on Trainer Aptitude and the occupation's relevant training directive. If it is not possible for all the necessary knowledge and skills to be provided in full, the missing content can be provided or supplemented by training measures outside the place of training, for example via cooperation with other enterprises, intercompany training centres or coherent training structures (*Ausbildungsverbünde*) (see 4.3.1).

6.3.1. Initial training

The training of in-company trainers is governed by Federal law. Under the statutory provisions of the Vocational Education and Training Act (Sections 28-30 BBiG) and the Regulation on Craft Trades (Section 21 HwO), trainers must be suitable both personally and in terms of specialised knowledge to train young people.

Subject aptitude involves, in particular, the specialised vocational skills and knowledge required for the relevant occupation. As a rule, trainers must have a qualification in a subject area appropriate to the training occupation. However, vocational training also includes knowledge of the educational theory of the occupation and job.

Until 31 July 2003, a test of trainer aptitude was required in accordance with the Regulation on Trainer Aptitude (AEVO). On 1 August 2003, for a trial period of five years (until 31 July 2008) this was suspended with the aim of making in-company training easier and promoting the provision of in-company training places. This means that in-company trainers are currently no longer required to confirm their knowledge of the educational theory of the occupation and job by means of separate proof of qualification. The Chambers' responsibility for monitoring training quality remains unaffected by the suspension of the AEVO.

6.3.2. Further and continuing training

In-company trainers are under no statutory obligation to participate in further or continuing training events. In small enterprises in particular, the resources necessary for this are often lacking. Nevertheless, Germany has a large number of in-company continuing training offers for trainers. In large companies, in the context of staff development, for example, further and continuing training is often offered in their own training departments or in external premises and educational establishments, by their own or external personnel. Trainers in SMEs have the option of attending courses of further training organised by Chambers or professional associations.

6.4. Staff in continuing vocational training

The German continuing training market is characterised by a wide range of providers and provision and by considerable competition between them. The most important providers of continuing vocational training are institutions of higher education providing adult education, trade and technical schools, colleges, vocational academies, education centres of the Chambers (e.g. Chambers of Industry and Commerce, Craft Chambers), trade-union and church establishments and private educational establishments. The range of activities covered by the staff working in this field is equally wide. They range, for example, from language teachers via lecturers giving management seminars to teletutors in e-learning provision.

Where continuing vocational training takes place in public-sector establishments (e.g. trade and technical schools, colleges), the training, employment and activities of the staff teaching in them are based on the criteria laid down in the relevant *Land* legislation for teaching staff. Under a 1970 decision by the Standing Conference of Ministers for Education and Cultural Affairs (KMK), the heads and teaching staff of adult education establishments must have a higher education qualification. The requirement for appointment as a teaching assistant is a higher education qualification, a trade/technical school qualification or a completed course of vocational training with several years of work experience. Under a 1981 recommendation by the KMK and the German Association of Cities, adult education establishments must in principle have teaching staff for whom this is their main job.

6.4.1. Initial training

In the early 1970s, courses of study leading to a diploma in educational science with the focus on adult education came into being in 40 German universities. Most of them are incorporated into educational science faculties and some also into philosophy faculties. The courses of study for adult education and continuing training are organised in such a way that four semesters of basic study of educational science (teaching, theory, history, etc.) and an intermediate examination are followed by four semesters studying a main subject, where the students can choose from several subject areas. One of these is adult education. Those

completing the course of study then obtain a diploma in educational sciences with adult education as the main subject.

Virtually all the training programmes for adult education at German institutions of higher education involve an attempt to combine academic training and practice. This is usually done by means of one or two periods of compulsory teaching practice (duration: from six weeks to six months) for the students, which they have to do in the course of the period spent studying their main subject.

6.4.2. Further and continuing training

The majority of the further and continuing training provision for staff working in adult education involves short-term pedagogic measures (lasting up to a maximum of one week) in tandem with work, offered by associations and individual universities and institutes. The content usually comprises additional qualifications (e.g. in guidance and supervision) and basic qualifications tailor-made for people in employment in the fields of methods, management, programme planning, advertising and public relations work. Almost no institutes and associations offer further training that is subject-specific or relates to specialised teaching. Even larger continuing training establishments, such as the vocational academies of the Trade Union Federation, the training workshops of German industry or large higher education institutions providing adult education, offer further training only in special cases, always specific to the relevant establishment, the way in which it sees itself and its image.

7. Skills and competence development

7.1. Developing and modernising the training directives and framework curricula for initial vocational training

For in-company training, the vocational competences to be acquired are laid down in a training directive. For teaching in vocational schools, for every recognised training occupation a framework curriculum is drawn up in line with the training directive. This means that modernisation of training occupations and alignment of them with the new requirements of the world of work is a fundamental element of the further development of vocational training.

In view of the speed of technological and organisational change, many training directives seem to need revision after a few years. The first step towards revising the training directives is often taken by enterprises. In such cases, enterprises notify their associations of the need for modernisation. The latter pass on the wish for modernisation, amendment or rewording of particular qualification profiles to the Federal Institute for Vocational Education and Training (BIBB). The Institute examines the facts of the matter by means of empirical studies and, if necessary, coordinates the rearrangement or amendment of the training directives.

A timeframe of one year is provided for when existing occupations are modernised, and a timeframe of two years for the development of new occupations.

Those involved in vocational training, namely employers, unions, Federation and *Länder*, play a crucial part in this multi-stage procedure.

On 1.10.2006 there were a total of 346 state-recognised training occupations⁽⁴⁷⁾. Between 1996 and 2006 alone, 68 new training occupations were developed and 206 were modernised⁽⁴⁸⁾.

The binding norm of training directives ensures a uniform national standard. Training directives must include, for example, stipulation of the name of the training occupation, the duration of training, the framework training plan (breakdown of subjects and timing) and the examination requirements.

In parallel with the development of training directives, in the KMK *Land* experts draw up the draft of the framework curriculum for the vocational-school aspect of training. The timing and content of this is coordinated with the framework training plan for in-company training.

⁽⁴⁷⁾ See *Liste der staatlich anerkannten Ausbildungsberufe* (BIBB, 2006).

⁽⁴⁸⁾ *Neue und modernisierte Ausbildungsberufe 2006* (BIBB, 2006).

The curricula of the full-time vocational schools are developed by the *Land* Ministries of Education.

7.2. Permeability between fields of training

For ageing societies like Germany in particular, it is crucially important for competences to be acquired in the course of life, to maintain the population's level of qualification. Education and training policy is therefore fundamentally agreed on the need for increased permeability and improved recognition of competences acquired in transferring between fields of education and training. It is particularly important for VET to dovetail with not only general education, but also institutions of higher education. In addition to the possibilities in continuing training in IT (see 5.3.), two approaches in particular will be cited here, in which transitions are made easier or made possible for learners.

7.2.1. Interface between schools providing general education and initial vocational training

Qualification building blocks are to be used to make it easier for young people, particularly socially disadvantaged young people and young people who find learning difficult, to enter training. Gradual, targeted acquisition of subject-based basic qualifications is to be assured. Qualification building blocks in pre-vocational training (see 4.3.3.) contain vocational elements of recognised training occupations. With the agreement of those involved (trainee, enterprise), qualifications acquired can count towards subsequent vocational training.

The provider (e.g. Chambers of Industry and Commerce, Craft Chambers, the BIBB) must draw up a description of each qualification building block, which must include, among other things, the designation of the building block, the training occupation on which it is based, the qualification aimed at, the activities to be provided for this purpose, with reference to the skills and knowledge contained in the framework training plan of the relevant training directive, the duration of provision and the nature of the performance observed (qualification picture). The BIBB maintains a database⁽⁴⁹⁾, which now contains over 450 qualification building blocks (as of December 2006).

The legal basis is the Regulation on Certification of Bases of Vocational Competence in the Context of Pre-Vocational Training (*Berufsausbildungsvorbereitungs-Bescheinigungsverordnung* – BAVBVO).

⁽⁴⁹⁾ Database of qualification building blocks: www.good-practice.de/bbigbausteine/

7.2.2. Interface between VET and higher education

Training in vocational academies takes place partly in accordance with study or training plans drawn up by agreement between academies (*Studienakademien*), enterprises and social facilities, and also partly through vocational-academy training and examination directives in accordance with framework criteria from the relevant ministries (for vocational academies, see 4.5.2). In October 2004, the KMK decided that training programmes at vocational academies leading to Bachelor's qualifications should be accredited. This means that, subject to fulfilment of certain criteria, Bachelor's qualifications from vocational academies are deemed to be equivalent to Bachelor's qualifications from institutions of higher education under the legislation on higher education, thus opening up access to Master's courses at institutions of higher education. The criteria relate, in particular, to teaching staff and to the scope of the theory- and practice-based training elements.

7.3. Procedures for early identification of skill needs

Under the initiative for the early identification of qualification requirements (which began in autumn 1999), various projects focusing on different aspects were funded. The individual projects are linked by the 'FreQueNz' network. Its task is to compile the results of early identification and to support transfer of the outcome (see 11.1) ⁽⁵⁰⁾.

The BIBB is investigating changes in existing fields of activity and the development of new fields of activity and the associated qualitative effects on workers, e.g. with the aid of company surveys, analyses of job advertisements, follow-up surveys of advertisers, employee questionnaire, analyses of continuing training provision (KURS database) ⁽⁵¹⁾ or identification of innovative continuing training measures (prize for innovation in continuing training) ⁽⁵²⁾.

⁽⁵⁰⁾ www.frequenz.net/

⁽⁵¹⁾ <http://infobub.arbeitsagentur.de/kurs/index.jsp>

⁽⁵²⁾ www.bibb.de/de/1898.htm

8. Validation of learning

8.1. Identifying vocational competence in dual vocational training

The primary aim of training is to enable young people to acquire comprehensive vocational competence designed to make them capable of fulfilling their duties as employees efficiently, effectively and innovatively, autonomously, on their own responsibility and in cooperation with others. Vocational competence is based on subject-based and social competence and methodological competence. The capacity to practise an occupation in qualified fashion includes, in particular, autonomous planning, implementation and control.

This bundle of competences must be demonstrated in examinations regulated by law (Vocational Education and Training Act).

Final training examinations are geared to vocational practice, i.e. to the work requirements and processes of the occupation. As a rule, a final examination covers four or five fields based on fields of activity typical of the occupation. Performance in the general subjects, such as languages and mathematics, is evaluated within the framework of school reports.

Before the end of the second year of training, trainees sit an intermediate examination consisting of practical and written elements. The trainee receives a certificate of participation in the intermediate examination, identifying the training stage. The final examination follows at the end of the training period.

Enterprises and vocational schools are responsible for conducting training, but the Chambers (competent bodies) are responsible for conducting the examinations. To this end, the Chambers have to set up their own examination committees for each occupation to be examined. Each examination committee must have at least three members (one representative each of employers and employees and a vocational schoolteacher). The examination certificate is issued by the Chamber.

The specific structure of the examinations is laid down by the individual training directives and the examination requirements they contain (see 7.1). These are applicable to the relevant occupation nationwide and specify a uniform standard for the proof of qualification.

The specified examination method is based on the requirements of the activities being examined. As a result, a very wide range of methods is now used in final examinations.

The duration of the examinations may vary widely depending on the occupation, area to be examined and method adopted. There are particularly large variations in the time allowed for practical examination tasks. This can range from a few hours to many hours spread over

several days or even weeks. For written tasks, a period of two hours is usually allocated for the examination, and oral examinations usually last 30 minutes.

8.2. Validation and recognition of non-formal and informal learning

8.2.1. Recording and documentation of competences acquired non-formally and informally

In the past five or six years, a trend has been apparent in Germany for competences to be recorded and documented with the aid of continuing training passes.

1. A feasibility study commissioned by the Federal-*Länder* Commission for Educational Planning and Research Promotion (BLK) led to the development of the 'ProfilPASS'. It is aimed at 'self-diagnosis' of individual competences and at making them visible, and at identifying the personal location. Users are guided through and supported in this process by a list of questions. The ProfilPASS takes account of all places of learning in which the learner has acquired competences (⁵³). The ProfilPASS has been on the market since 2006.
 - (a) The main thing distinguishing it from Europass is the fact that the ProfilPASS offers systematic assistance with describing informally acquired competences. In contrast, Europass is a tool for describing and structuring knowledge, skills and competences irrespective of whether they have been acquired formally, non-formally or informally. This is designed to promote transparency – and recognition – of qualifications and mobility of citizens within Europe.
2. In the field of 'second-chance' qualification of employees, in a series of experiments (between 1997 and 2001) the Federal Institute for Vocational Training developed a 'qualification pass'. This makes it possible to document and compile vocational qualifications and experience acquired both within and outside the framework of traditional training and continuing training (⁵⁴).

8.2.2. Access to examinations

1. External examinations: in the field of initial vocational training, the main option that allows in principle learning outcomes achieved non-formally and informally to be measured and evaluated is admission to the final examination in a recognised training

(⁵³) www.profilpass-online.de/index.php

(⁵⁴) www.qualifizierungspass.de

occupation (Section 45(2) BBiG), known as the external examination. To be admitted, applicants must prove that they have worked for at least one and a half times the training period in the occupation in which the examination is to be sat, i.e. normally 4½ years. In 2003, external examinations accounted for only 4 % of final Chamber qualifications in initial vocational training ⁽⁵⁵⁾.

2. *Immaturen* examination: in the field of higher education, mention should be made of the *Immaturen* examination, which is regulated in various ways in the different *Länder*. Under certain conditions, entitlement to entrance to higher education can be acquired by this means. This option is usually aimed at persons with many years of relevant vocational experience and with no formal entitlement to enter higher education (e.g. *Abitur*).

An instrument for evaluating vocational IT competences has also been developed in the form of continuing training in IT, with a view to crediting them towards higher education (see 5.3) (Mucke and Grunwald, 2005).

⁽⁵⁵⁾ *Berufsbildungsbericht 2005* (BMBF, 2005).

9. Guidance and counselling

9.1. General background and objectives

In Germany, the employment agencies have a statutory responsibility to provide vocational and careers guidance, but it may also be offered and provided by other players (for example, other public-sector institutions such as schools and Chambers, and also private service providers) (see 9.3).

The statutory bases for careers guidance are laid down in Volume III of the *Sozialgesetzbuch* (Sections 29-33 of SGB III). The main aim of careers guidance is to support young people in making the transition from school to training, higher education and an occupation, and hence to help in realisation of the individual's education and training prospects.

Careers guidance is designed to motivate and enable the individual to plan a precisely targeted path through work and life. The aim is to develop and consolidate the ability to choose an occupation as early as possible via careers guidance measures.

In order for these aims to be achieved, there is a need not only for general and vocational schools and the Federal Agency for Employment (BA) to work together in coordinated fashion, but also for them to cooperate with other players such as parents, youth welfare, business (companies, associations, Chambers), unions and institutions of higher education.

An example of such cooperation is the joint recommendation of 20 February 1992 by the Standing Conference of Ministers for Education and Cultural Affairs (KMK), the Federal Agency (BA, at the time the Federal Institute) for Employment and the Conference of Rectors of Institutions of Higher Education (HRK) on the cooperation of schools, careers guidance and higher education guidance at upper secondary level. Today this still constitutes the framework within which the three players work together and establish cooperative structures.

In order to be able to provide all students in the transition from school to training, higher education and an occupation with even more specifically targeted guidance, on 15 October 2004 the KMK and the BA signed a new general bilateral framework agreement on cooperation between schools and careers guidance⁽⁵⁶⁾, superseding the previous agreements dating from 1971. In it, both sides reaffirm their shared obligation to offer all young people guidance on choosing an occupation. At the same time, it also specifies the principles and objectives of and relevant contributions of schools and careers guidance to cooperation in the process of preparing young people to choose an occupation and in the transition from school to working life.

⁽⁵⁶⁾ www.kmk.org/aktuell/RV_Schule_Berufsberatung.pdf

9.2. Current initiatives

Current projects are focusing on increased involvement of schools and business in the careers guidance stage.

The Federal Institute for Vocational Education and Training (BIBB) investigated the possibilities and limits of periods of work experience in enterprises in the *Beruf fängt in der Schule an – Die Bedeutung von Schülerbetriebspraktika* [A career begins at school – the importance of work experience in enterprises for students] research project (2003-2005). In this project, students in classes 9 and 10 of secondary general and intermediate schools completed a written questionnaire on preparation for, implementation and follow-up evaluation of work experience in enterprises for students. Structured interviews were also conducted with vocational teachers, young people and training staff in enterprises in the areas of the schools visited. The results show that some 40 % of all young people leave school with no wish to take up a specific occupation. It is therefore recommended that careers guidance should be more strongly embedded in an overall plan, in which careers guidance begins as early as possible. On the basis of the project results, the BIBB is currently designing a Web platform on the subject of careers guidance and, in particular, work experience in enterprises for students, in order to promote the flow of information between schools (⁵⁷).

The *Schule – Wirtschaft/Arbeitsleben* [School – business/working life] programme (⁵⁸), which was launched by the Federal Ministry of Education and Research (BMBF) in 1999 (to run until 2007), is aimed at developing innovative, transferable and lastingly effective measures promoting and improving careers guidance for young people. To this end, funding is being given in particular (planned funding from BMBF and ESF resources: approx. 30 million euro) to projects that:

- eradicate the information deficits experienced by teachers, students, parents and enterprises in respect of new occupations and training opportunities;
- develop and consolidate new forms of cooperation between schools and partners in training enterprises, trade associations, institutions of higher education and/or vocational schools;
- involve highly innovative fields of industry with a promising future;
- make students aware of alternative training pathways, including in areas with weak infrastructure;
- can provide disadvantaged student populations with particular assistance in order to improve their prospects of obtaining training;
- employ new media and computer technologies for work-related and independent learning at school; and

(⁵⁷) Working title of the project: *Informations- und Transferplattform Schülerbetriebspraktika und Berufsorientierung im BIBB*, see text of application at http://www2.bibb.de/tools/fodb/pdf/at_20535.pdf

(⁵⁸) www.swa-programm.de/

- improve the qualifications of trainers and teachers in the careers guidance field.

Since the programme began in autumn 1999, a total of 46 projects have been funded in all the Länder and with the social partners (as of November 2006).

9.3. Target groups and forms of provision

9.3.1. Employment agencies

As a core function of employment agencies, careers guidance is aimed, irrespective of age, training status and personal working and living situation, at all persons (young people and adults) participating or desirous of participating in working life who need guidance in making career decisions – on entering training or an occupation, on changing vocational orientation, deciding on continuing vocational training or a change of occupation, or when they are unemployed or looking for a job.

The employment agencies provide information and guidance on all questions of choosing an occupation or course of study and all labour market questions. This also includes further development of diagnostic tools for assessing readiness for training and vocational aptitude. The careers guidance of the Federal Agency for Employment (BA) is based on the introduction provided by the school to the world of business and work, and in turn supports schools with its competence in issues of personal careers guidance and of the training and labour markets, including finding of training places.

In order to make an even greater contribution to overcoming obstacles to mobility and to realisation of training opportunities in Europe, at the beginning of 2005 the BA set up the ‘Europaservice’⁽⁵⁹⁾, which bundles together all the services provided by the BA vis-à-vis Europe in a network of 15 regional centres (supplemented by employment agencies near the borders). This meant the merger of the previous service units of the EUROpean Employment Services (EURES), the European careers guidance centres (EBZ) and the facilities advising on mobility, which became a single uniform service structure. Each regional centre consists of a team of advisers and mediators, who provide information on training, studying and working in other European countries and negotiate employment (including work experience).

Another focal point of the guidance provided by the employment agencies is information on labour market and employment prospects following higher education. The Federal Agency for Employment maintains special higher education teams on the sites of larger institutions of higher education, to provide guidance for students and those obtaining higher education qualifications and to help them to find work. In addition to individual guidance, these teams also offer presentations, workshops and seminars on many subjects associated with higher

⁽⁵⁹⁾ www.europaserviceba.de

education, careers and the labour market – often in cooperation with the institutions' own course guidance services.

9.3.2. Schools

Course and careers guidance has become an established element of school curricula in all the *Länder*. Most vocational schools teach preparation for working life (*Arbeitslehre*) as a subject in its own right, but in schools providing general education this subject area tends to be incorporated into other subjects such as economics, engineering or home economics (in grammar schools it is also incorporated into teaching of social sciences). Careers guidance in class is often supplemented, in classes 9 or 10, by visits to enterprises and periods of work experience in enterprises lasting from one to three weeks.

9.3.3. Institutions of higher education

Under the Framework Law on institutions of higher education (Section 14(4) HRG), institutions of higher education are obliged to teach students and course applicants about the course options, and to provide them with support throughout their courses in the form of complementary specialised guidance. The institutions are also required to cooperate with the bodies responsible for careers guidance and state examinations. Most universities and some *Fachhochschulen* have set up course guidance centres.

9.3.4. The social partners and enterprises

Employers' organisations, Chambers, unions and individual enterprises have been involved in certain forms of vocational and careers guidance for a very long time, such as careers fairs, exchange programmes or continuing training fairs. For some years, they have also been increasingly involving themselves in school careers guidance provision.

9.3.5. Private suppliers

With the replacement of the Employment Promotion Act (AFG) by Volume III of the *Sozialgesetzbuch* (SGB III) on 1 January 1998, the BA's monopoly of careers guidance was abolished and the market was also opened up to private suppliers of guidance services on the subject of work and careers. This has led to the establishment of a somewhat opaque market of private service providers that is becoming ever more confused, with major variations as regards quality and the range of provision. Here, the careers guidance register (BBR) ⁽⁶⁰⁾ created in 1998, produced by the German Association for Educational and Careers Guidance (dvb), ensures a degree of transparency. Careers advisers and institutions offering careers

⁽⁶⁰⁾ www.bbregister.de/pracambel.htm

guidance can apply to be included in this register. Among other things, they must be able to prove that they have completed a relevant course of higher education, have extensive practical experience in careers guidance, and regularly undergo continuing training and supervision themselves. They submit themselves to both national and international quality standards, including for example the ethical standards of the International Association for Educational and Vocational Guidance (IAEVG/AIOSP). Every four years the register is reviewed to determine who fulfils these criteria and can continue to be recommended.

9.4. Guidance and counselling personnel

Since September 2006, two courses of study leading to a Bachelor's degree have been open to staff working in the employment agencies or in the BA itself, 'labour market management' and 'employment-oriented guidance and case management', at the higher education institution of the Federal Agency for Employment (BA), a state-recognised *Fachhochschule* for labour market management. The 'labour market management' course qualifies participants for the tasks of mediation and integration, service provision and resource management in the employment agencies. The 'employment-oriented guidance and case management' course qualifies participants to perform vocational and careers guidance tasks and the tasks involved in employment-oriented case management.

The full-time course takes three years and ends with a recognised higher education qualification, Bachelor of Arts (B.A.). During the course, students are employed by an employment agency. Four periods of work experience of relevance to the examination are spent in various parts of the BA and form an integral element of the course.

10. Financing vocational training

In Germany, financing of vocational training and continuing training is based on a system of mixed financing with a variety of different backers, both public and private. They include the Federal Ministry of Education and Research (BMBF), the Federal Ministry of Economics (BMWi), the Federal Agency for Employment (BA), The *Land* Ministries of Employment, Economics, Education or Cultural Affairs, the European Union, local authorities, companies, unions, Chambers, associations, private institutions and, lastly, the individuals themselves.

10.1. Financing initial vocational training

The school-based element of dual vocational training is financed by *Land* and local authority public funds. The *Länder* bear the costs of internal school affairs (e.g. supervision of schools, laying down of curricula, teacher training, teachers' pay), and the local authorities are responsible for financing external school affairs (e.g. construction, maintenance and renovation of school buildings, ongoing management, procurement of teaching and learning resources).

Enterprises are responsible for financing the in-company training element – the individual enterprises decide independently whether and in what training occupations they will provide training, how many trainees they will take within the framework of the statutory provisions, and how much they will spend on this. In addition to this financing by individual enterprises, in some sectors (e.g. the construction industry, the roofing trade), financing regulations have been collectively agreed. In these cases, all enterprises pay into a joint fund on a particular assessment basis (e.g. the amount of the total wage bill) (wages fund financing). The expenditure of training enterprises is partially or wholly reimbursed from this fund.

Training in a full-time vocational school outside the dual system and special measures to promote VET, such as 'instant' *Land* programmes ⁽⁶¹⁾ to create additional training places, are financed out of *Land* budgets.

Intercompany vocational training facilities (ÜBS), in which supplementary instruction of trainees takes place on behalf of SMEs, are funded by mixed financing (see 4.3.1) – subsidies from the Federal Agency for Employment, the Federation and the *Länder* are added to the resources of the body responsible. The Federation subsidises the ÜBS with capital grants from BMBF resources, and the BIBB is responsible for implementing the subsidy.

The financing of coherent training structures (*Ausbildungsverbünde*) depends on their organisational form (see 4.3.1). In the 'lead enterprise with partner enterprises' model, the lead enterprise normally finances remuneration of training, while the partner enterprises bear

⁽⁶¹⁾ These are often co-financed by ESF funds.

the personnel, plant and equipment costs that arise in their area of responsibility. In the 'training to order' model, in principle each party to the contract can provide training services against reimbursement of costs, but in practice SMEs usually finance the training services contracted out to a large enterprise with a training workshop.

In view of the current difficult situation on the market for training places (see 1.4), the Federation is also financing various programmes designed to create additional training places and to improve in-company training conditions. An example of this is the programme 'JOBSTARTER – Für die Zukunft ausbilden' [training for the future], which was developed by the BMBF in 2005 to promote innovation and structural development in VET (see 2.1.1). The programme is aimed at improving regional provision of in-company training places for young people by increasing the number of training enterprises. The BMBF is making a subsidy of 125 million euro available to JOBSTARTER for the period from 2005 to 2010, and the programme is being co-financed with ESF funding.

Another important programme that is being implemented within the framework of the apprenticeship pact is the special programme for entry-level qualification of young people (EQJ programme), designed to create 25 000 'enterprise entry-level qualifications' a year (see 4.3.3). In 2005/2006 this figure was considerably exceeded, with 31 718 admissions. Moreover, the results of the supporting research show that enterprises and young people are responding positively to the EQJ programme. For example, following entry-level qualification, 62.7 % of those participating in the second year of the programme completed a programme of vocational training in the same enterprise (Becker and Ekert, 2006, p. 5). Owing to its success, the programme has been extended by a year until the end of 2008, and as of 1 October 2006 the number of places was increased to 40 000.

The BA is also involved in financing training. In certain cases it gives young people a grant for vocational training or for pre-vocational training measures. In addition, the vocational training of disadvantaged young people and the training and vocational rehabilitation of disabled persons are also subsidised from BA funds (see 10.3).

Table 5: *Financing of vocational training by financing bodies, 2005*

Financing bodies	Expenditure (in € billions)
Enterprises	27.7*
Federation and <i>Länder</i>	
Part-time vocational schools (dual system)	2.8
Full-time vocational schools	2.2
Other school types providing VET (e.g. specialised grammar schools, <i>Fachoberschulen</i>)	1.5
Intercompany VET facilities (ÜBS)	0.03
Teaching courses and programmes	0.28
Federal Agency for Employment (BA)	4.5

* Gross costs, i.e. training costs without allowing for training income. The information is based on a representative survey of enterprise training costs, last conducted by the BIBB for 2000.

Source: *Berufsbildungsbericht 2006*, p. 176 ff.

10.2. Financing continuing vocational training

Enterprises, the state, the Federal Agency for Employment and private individuals themselves are involved in financing continuing vocational training:

- Enterprises bear the overwhelming majority of the costs of in-company continuing training measures for their employees. However, the results of the BIBB research project on the costs and benefits of continuing vocational training for individuals show that enterprises are increasingly expecting their employees also to undertake continuing training outside the enterprise of their own accord, at their own expense and in their free time, to safeguard their employability. With regard to the individual costs of continuing vocational training (both within and outside the enterprise), the project found that the average amount in 2002 was 502 euro (⁶²) per participant.
- Federation, *Länder* and local authorities make funding available from their budgets primarily for continuing training of public sector employees.
- The Federal Agency for Employment supports continuing training measures for the unemployed and for people at risk of unemployment (see 10.3). The BA's budget is made

(⁶²) On average, direct costs account for about three quarters of the costs (participant fees, learning and work resources, travel costs, costs of accommodation and meals away from home, and childcare costs), and indirect costs for one quarter, these being costs ensuing from loss of income owing to participation in continuing training (e.g. through unpaid leave or reduced working hours). It is notable that 45 % of continuing training participants do not have to pay any of their own costs, while at the same time 5 % of participants bear very high costs of 2500 euro or more.

up of employers' and employees' unemployment insurance contributions, grants from the Federal budget and other income.

In addition, there are various state-subsidised continuing training programmes, e.g.

- Special programme promoting VET for gifted persons (⁶³): in this programme, since 1991 the BMBF has been offering particularly gifted young workers a grant for individual continuing training. The programme is regarded as the counterpart of promoting academic education for gifted persons (support for higher education) and is designed to help to ensure that general and vocational education are seen as being of equal value. It is also aimed at making the recipients aware right at the beginning of their working life that successful completion of vocational training does not mean the end of vocational qualification, but that extension of competences via regular continuing training should be an essential element of future career planning. In 2005, a total of 14.6 million euro was given in subsidies.
- Meister-BAföG (⁶⁴): since 1 January 2002, the Support for Further Training for Advancement Act (AFBG, known as Meister-BaföG), jointly financed by the Federation and the *Länder*, has given craftsmen and other skilled workers a statutory individual entitlement to financial assistance with further training for advancement. The financial assistance essentially comprises subsidies (or, as from a certain amount, bank loans at favourable rates) for the course and examination fees of master's courses or other courses leading to a comparable further training qualification. As an incentive to set up a business, recipients can also be released from a certain percentage (currently 66 %) of the balance of the loan taken out to cover course and examination fees if, within three years of successfully completing the course, they set up a company or become self-employed. In 2005, a total of 141 000 people took up this offer, 5 % more than in 2004. In the same period, the proportion of women receiving assistance under 'Meister-BaföG' increased by 10 % to 32 %.

10.3. Financing training measures for the unemployed and other groups at risk

Active labour market policy involves many state measures to prevent unemployment and promote employment. In 2005, the overall expenditure of the Federal Agency for Employment (BA) and the Federation was above the previous year's level, at 82.9 billion euro, but at the same time the proportion devoted to active employment promotion fell from 19.52 billion euro (26.2 %) to 16.85 billion euro (20.3 %) (Federal Agency for Employment, 2006, p. 124).

(⁶³) www.begabtenfoerderung.de/

(⁶⁴) www.meister-bafog.info/

However, the BA's expenditure on support for continuing vocational training (FbW) for the unemployed and for persons at risk of unemployment has dropped substantially – between 2002 and 2005 the budget in this segment shrank from 6.7 billion euro to 1.8 billion euro. The main reason for this is that with the entry into force of the First Law on modern services on the labour market on 1 January 2003, funding has been linked to the issuing of an education credit voucher (*Bildungsgutschein*) (see 5.5).

Particular attention is merited by support for disadvantaged young people and young adults who, at the end of their compulsory education, are unlikely to find training places or jobs without specific help (see 4.4).

There is still a statutory duty to provide individual and institutional support for the participation of disabled persons in working life. Disabled persons within the meaning of the *Sozialgesetzbuch* (SGB III) are persons whose prospects of participating or continuing to participate in working life are fundamentally reduced on a non-temporary basis owing to the nature or severity of their disability, and who therefore need help to participate in working life. In 2001, a volume specifically covering the rehabilitation and participation of disabled persons was created in the shape of Volume 9 of the *Sozialgesetzbuch* (SGB IX). This summarises the statutory rules governing the provision of benefits for participation in working life and in life in society. It regulates, for example, benefits for medical rehabilitation, participation in working life and assurance of livelihood, and other supplementary benefits. The Support for the Training and Employment of Seriously Disabled Persons Act, which entered into force in April 2004, was aimed above all at improving training opportunities, among other things by improved dovetailing of training within and outside the enterprise⁽⁶⁵⁾.

10.4. Outlook

The further development of vocational schools is aimed above all at improving training quality, although it is increasingly realised that schools need greater autonomy. One element of these efforts at reform is an increase in the financial autonomy of vocational schools via budgeting, i.e. global allocation of budgetary resources (ongoing non-monetary resources, but also increasingly staff funding and funding for investment) to the individual schools. This path is being followed with widely varying degrees of intensity in the individual *Länder*, depending not only on the issues to which the school administration attaches importance and the *Land's* VET policy, but also not least on particular regional features and the demands made on vocational schools.

⁽⁶⁵⁾ This takes place primarily in VET workshops. These are facilities specially designed to meet the needs of disabled young people. They are characterised by their integrated concept of training workshop, school, boarding school, leisure activities and specialised care.

In the area of in-company training, against the background of the difficult situation on the market for training places in recent years, the burden has increasingly shifted from enterprise to public-sector financing. Here, how the situation develops will be crucially dependent on the extent to which in future the gap between supply and demand in this market is successfully closed.

Proposals for a radical reform of funding of vocational training have been drawn up by an expert commission “Funding Lifelong Learning” convened by the Federal Ministry of Education and Research which submitted its report in July 2004. The report recommends a standard law on the promotion of learning which covers all the provisions for adult learners, with the exception of those covered by the *Sozialgesetzbuch* (SGB III). Another proposal by the committee of experts provides for adding the possibility of educational savings to the state assistance in the Wealth Creation Act. The aim is to give groups of people with low incomes who have hitherto stayed away from education special incentives to invest part of their income in lifelong learning.

11. European and international dimension

11.1. National strategies related to EU policies and programmes

It is becoming ever more important to cooperate at European and international level in the field of VET. Germany attaches particular importance to cooperation in VET policy within the European Union.

1. 2002 work programme of EU Ministers for Education

In the detailed work programme for general and vocational education systems in Europe, it was agreed to intensify cooperation at European level with regard to the jointly determined education-policy objectives. Indicators are to be used to make advances and developments transparent (benchmarking). The programme is currently being implemented in ten thematic working groups and in peer learning groups on selected topics. Germany is involved in almost all the peer learning groups.

The expert working group set up by the European Commission to draft the concept for a European Qualifications Framework (EQF) submitted a draft EQF to the Commission in the middle of 2005. On the basis of this draft, the Commission launched an EU-wide consultation process. Consequently the structure of this consultation process was one of the focal points of implementation of the work programme for Germany in 2005. The development of a European Qualifications Framework was welcomed in principle in an initial national opinion ⁽⁶⁶⁾.

2. Maastricht/Copenhagen

To put the process into action, in addition to a steering coordination committee, three working groups were established on the subjects of transparency, quality assurance and the credit transfer system, and they began work at the beginning of 2003. Germany had an active co-steering role in the Copenhagen Process from the outset, and is represented in all the working groups.

Work has now begun on a process of developing a National Qualifications Framework (NQF), designed to improve further permeability and interlinking between the various fields of education, and also on the creation of a European Credit System for Vocational Education and Training (ECVET).

⁽⁶⁶⁾ See *Erste deutsche Stellungnahme zu einem 'Europäischen Qualifikationsrahmen (EQF)'*. (BMBF/KMK, 2005, p. 1).

3. Participation in programmes and networks

Many of the players in German VET have participated actively in the Leonardo da Vinci programme. Close cooperation is in place with Cedefop. Coordination of networks such as ReferNet⁽⁶⁷⁾ and TTnet⁽⁶⁸⁾ and the national reference point for transparency of vocational qualifications⁽⁶⁹⁾ are under the aegis of the Federal Institute for Vocational Training (BIBB). The initiative for early recognition, 'FreQueNz' (see 7.3.), has played a part in the development of a European early recognition network (Skillsnet). Since January 2007, both the National Europass Centre (NEC)⁽⁷⁰⁾ and national coordination of Cedefop's programme of European study visits with the National Agency for Education for Europe have been based at the BIBB⁽⁷¹⁾. InWent (Internationale Weiterbildung und Entwicklung GmbH) was previously responsible for these functions.

11.2. Bi- and multilateral activities

Internationalisation of VET and intensification of international cooperation are still strategic objectives for the Federal Government. For example, cooperation on VET policy takes place within the framework of bilateral working parties with France, the Netherlands, Austria, Turkey, Russia, Poland and Israel⁽⁷²⁾.

In addition to mobility activities under the EU's Leonardo da Vinci programme, the BMBF supports bilateral vocational training and continuing training exchanges with the following countries: France⁽⁷³⁾ the UK⁽⁷⁴⁾, the Netherlands, Norway, Poland, the Czech Republic⁽⁷⁵⁾, Italy⁽⁷⁶⁾ and Israel⁽⁷⁷⁾. The exchange activities are usually based on longer-term partnerships between training enterprises, vocational schools, Chambers and other players in VET. Since October 2004, there has also been a joint declaration between France and Germany on the general comparability of French and German qualifications in vocational training⁽⁷⁸⁾, and

⁽⁶⁷⁾ www.refernet.de/de/index.htm

⁽⁶⁸⁾ www.bibb.de/de/wlk18054.htm

⁽⁶⁹⁾ www.bibb.de/de/wlk18071.htm

⁽⁷⁰⁾ www.europass-info.de/de/europass-mobilitaet.asp

⁽⁷¹⁾ www.na-bibb.de/home/

⁽⁷²⁾ *Berufsbildungsbericht 2006* (BMBF, p. 327 ff.).

⁽⁷³⁾ www.dfs-sfa.org

⁽⁷⁴⁾ www.inwent.org/themen_reg/themen/aussenwirtschaft/mobilitaet/bilaterale_austauschprogramme/index.de.shtml

⁽⁷⁵⁾ www.tandem-org.de/seite_397.html; www.sequa.de/frames/outer.phtml?IDT=4; www.bgz-berlin.de/de/projekte_berufliche-bildung_alle.shtml?pid=3&page=projekte_berufliche-bildung

⁽⁷⁶⁾ www.zdh.de/gewerbefoerderung/denkmalpflege/programme-und-preise.html

⁽⁷⁷⁾ www.inwent.org/israel/home/index.html

⁽⁷⁸⁾ www.bmbf.de/pub/gemeinsame_erklaerung_berufliche_bildung_dt-frz.pdf

also, since August 2005, a joint declaration with Austria on the fundamental comparability of vocational training qualifications (⁷⁹).

The annual OECD publication, *Education at a glance*, always contains a note in a summary to the effect that in an international comparison with reference to the relevant cohort, Germany has relatively few people with higher education qualifications. The same applies to a few other countries that, like Germany, are characterised by a strong VET system, particularly Austria and Switzerland. All three countries are slowly building up their higher education, but they still place emphasis on the non-academic vocational training pathway as an alternative. In the context of the OECD project 'Rethinking Tertiary Education in a Global Economy' (2005-2006), Germany, Austria and Switzerland have joined together to describe the importance and efficiency of their VET systems and substantiate their strategy in a separate contribution to the project (⁸⁰).

In addition to cooperation with Cedefop, the ETF, Unevoc and Unesco, great importance is attached to development cooperation and systems guidance in the field of VET. Many countries have acknowledged the need to develop and modernise VET and are seeking experience and support. In this context, Germany is in demand at international level as a cooperation and advisory partner. Some 500 training cooperation projects in progress worldwide are showing a high level of interest in the German model of dual/cooperative vocational education and training.

(⁷⁹) www.bmbf.de/pub/anerkennung_berufsabschluesse_de-aust.pdf

(⁸⁰) *Berufsbildungsbericht 2006* (BMBF, p. 330).

Annex 1 Acronyms and abbreviations

AFG	<i>Arbeitsförderungsgesetz</i> Employment Promotion Act
BA	<i>Bundesagentur für Arbeit</i> Federal Agency for Employment
BaföG	<i>Bundesausbildungsförderungsgesetz</i> Student Aid Act
BbiG	<i>Berufsbildungsgesetz</i> Vocational Education and Training Act
BGJ	<i>Berufsgrundbildungsjahr</i> Foundation vocational training year
BIBB	<i>Bundesinstitut für Berufsbildung</i> Federal Institute for Vocational Education and Training
BLK	<i>Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung</i> Federal-Länder Commission for Educational Planning and Research
BMAS	<i>Bundesministerium für Arbeit und Sozialordnung</i> Federal Ministry of Labour and Social Affairs
BMBF	<i>Bundesministerium für Bildung und Forschung</i> Federal Ministry of Education and Research
BMWi	<i>Bundesministerium für Wirtschaft und Technologie</i> Federal Ministry of Economics and Technology
BQF	<i>Berufliche Qualifizierung für Zielgruppen mit besonderem Förderbedarf</i> Programme for Vocational Training for Target Groups in Need of Particular Assistance
BVJ	<i>Berufsvorbereitungsjahr</i> Pre-vocational training year
DIE	<i>Deutsches Institut für Erwachsenenbildung e.V.</i> The German Institute for Adult Education
ECVET	European Credit System for Vocational Education and Training
EQJ	<i>Einstiegsqualifizierung Jugendlicher</i> Entry-level vocational qualification for young people
EQF	European Qualifications Framework
ESF	European Social Fund
HRK	<i>Hochschulrektorenkonferenz</i> Conference of Rectors of Institutions of Higher Education

HwO	<i>Handwerksordnung</i> Regulation on Craft Trades
IHK	<i>Industrie- und Handelskammer</i> Chambers of Industry and Commerce
INQA	<i>Initiative Neue Qualität der Arbeit</i> The New Quality of Work Initiative
ISCED	International Standard Classification of Education
KMK	<i>Ständige Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland</i> Standing Conference of Ministers for Education and Cultural Affairs of the <i>Länder</i> in the Federal Republic of Germany
NEC	National Europass Center
NQF	National Qualifications Framework
SGB	<i>Sozialgesetzbuch</i> [Social legislation]
ÜBS	<i>Überbetriebliche Berufsbildungsstätten</i> Intercompany Vocational Training Facilities

Annex 2 Glossary

Careers guidance: this is a fairly lengthy and complex process and calls for learning organisations in various learning venues. It is designed to motivate individuals and enable them to undertake specifically targeted career and life planning.

Comparability of qualifications: this describes the extent to which correspondences can be achieved between the stage of education and the content of formal qualifications (certificate of qualifications, diploma, certificate, report) at sectoral, regional, national and international level.

Competence: the ability to apply knowledge, know-how, specific or vocational skills and/or specialised/subject knowledge and skills.

Competent bodies: implementation of in-company vocational training is always monitored by the competent body. Under the Vocational Education and Training Act, the competent body is usually the Chamber responsible for the training occupation or training enterprise, e.g. Chambers of Handicrafts, Chambers of Industry and Commerce, Chambers of Agriculture, Medical Chambers.

Comprehensive schools (*Gesamtschulen*): schools of this kind combine the various types of secondary school in a range of forms of organisation and content.

Comprehensive universities (*Gesamthochschulen*): comprehensive universities (in Hessen and North Rhine-Westphalia only) combine the research, teaching and study tasks that are otherwise performed by universities, colleges of education, *Fachhochschulen* and, in some cases, also by colleges of art and music. They are characterised by integrated courses of study. The comprehensive universities are known as *Universität-Gesamthochschulen*.

Diploma (*Diplom*): an academic qualification that is still widespread in many subjects, but which is increasingly being replaced by Bachelor's and Master's qualifications. The period of study on diploma courses is normally six to ten semesters. As an academic degree, the diploma may be awarded only by institutions of higher education (universities, colleges of education, *Fachhochschulen*).

Dual system: this is a form of initial vocational training that takes place in two differently regulated, managed and financed fields (school and enterprise).

Educational programmes leading to dual qualifications: the acquisition of more than one qualification, e.g. at vocational grammar schools. Acquisition of an academic qualification (entitlement to enter [subject-based] higher education) and a vocational qualification under *Land* law (e.g. for occupations working as an assistant).

***Fachhochschulen* and colleges of public administration (*Verwaltungsfachhochschulen*):** their task is to provide strongly practice-oriented training to prepare students for vocational activities. They offer courses of study in the fields of business, social affairs, agronomy and design in particular. In the Federal and *Land* colleges of public administration, public servants are trained for an executive-

level career in public administration. A subject-based entitlement to higher education is a requirement for admission.

Formal learning: learning that takes place in an organised and structured context, is explicitly designated as learning and is structured. Generally speaking, formal learning leads to certification.

Foundation vocational training year (*Berufsgrundbildungsjahr, BGJ*): participants are provided with general or occupation-specific basic vocational training through full-time and part-time education.

Framework curriculum: curriculum for vocational teaching in vocational schools (*Berufsschulen*) in the dual system of vocational training.

Full-time vocational schools (*Berufsfachschulen*): these schools build on the final certificate from intermediate school or a qualification recognised as equivalent to this. In the case of full-time education the school is attended for at least one year, and in the case of part-time education for up to three years. The final qualification constitutes an entitlement to access to higher education at a *Fachhochschule*.

Further and continuing vocational training: any form of education and training that is completed following the end of initial training or following transition to working life, and designed to help individuals to improve or update their own knowledge and/or skills, to acquire new competences with a view to occupational advancement or retraining, and to perfect themselves personally or vocationally.

Grammar schools (*Gymnasien*): secondary schools providing general education, which usually have 9 or 8 (classes 5-13 or 5-12) or 7 (classes 7-13) classes. Almost all the *Länder* are offering or planning to offer the option of sitting the *Abitur* (formal entitlement to enter higher education) after only 12 years. There are also ‘extension’ grammar schools, attendance at which is usually subject to possession of the final certificate from intermediate school. The grammar school school-leaving qualification constitutes an entitlement to study at any institution of higher education (general entitlement to higher education).

Hochschulreife: umbrella term for all school-leaving qualifications entitling the holder to study at an institution of higher education (entitlement to access to higher education).

Immaturen examination: this examination leads to subject-based entitlement to access to courses in all institutions of higher education (universities, technical universities and *Fachhochschulen*) in a *Land*. The student is examined in the subject that is to be studied. The conditions for admission vary from *Land* to *Land*. They usually include completion of two years of training in a recognised training occupation followed by at least two years working in this occupation, or at least five years working in a comparable occupation as the main job.

Informal learning: learning that takes place in everyday life, on the job, in the family circle or in leisure time. It is not organised or structured. In most cases, informal learning is not intentional, and it does not normally lead to certification.

Initial vocational training: this includes all training programmes that immediately follow the stage of school-based general education and lead to a vocational training certificate (dual or from a school).

Intermediate schools (*Realschulen*): secondary schools for classes 5 or 7 to 10. Generally speaking, the final certificate from intermediate school forms the basis for executive occupations of all kinds and entitles the holder to attend a *Fachoberschule* or a specialised grammar school, or to make the transition to an ‘extension’ grammar school.

Module: a module describes the fundamental areas of competence in a job profile and includes both theory and practice of the subject, and is specified within the framework of the vocational plan. Modules are certified following a modular examination or an observation procedure that is modular in structure.

Non-formal learning: this is learning that takes place in planned activities not explicitly described as learning, but containing a substantial element of learning. Non-formal learning is usually intentional on the part of learners and does not usually lead to certification.

Occupation working as an assistant (*Assistentenberuf*): assistants perform auxiliary tasks in a particular field for functions requiring academic training. The various occupational fields can be summarised as follows: technical assistants (e.g. chemical/technical, electrical, technical design assistants), business assistants and service assistants (e.g. healthcare, welfare and care assistants). Assistants are trained in full-time vocational schools. The training leads to a vocation qualification under *Land* law.

Orientation stage: this is a summary of classes 5 and 6 either in relation to secondary schools (school-type orientation stage) or separately from them (non-school-dependent orientation stage). It supports students and orients them towards one of the next stages of education.

Preparation for vocational training/pre-vocational training (*Berufsvorbereitungsjahr, BVJ*): this is aimed at providing a basis for the acquisition of vocational competences in order to lead on to vocational training in a recognised training occupation.

Primary schools (*Grundschulen*): these schools cover the first four years of schooling, except in Berlin and Brandenburg, where there is six years of compulsory attendance at primary school.

ProfilPASS: this is a tool supporting lifelong learning, aimed at boosting the individual. It is integrated into a system of portfolio, guidance and qualification. The status of competences acquired informally and non-formally is enhanced, helping to increase equality of opportunities, participation in education and horizontal and vertical mobility.

Qualification: a) an official document (certificate, report) confirming knowledge acquisition, and certifying successful completion of a course of general or vocational education/training and/or satisfactory examination performance, and/or b) the requirements that must be satisfied by the individual as a condition for access to an occupation or for advancement in a particular occupation.

Qualification building blocks: learning units delimited in terms of content and time, which are developed out of the content of recognised training occupations. They are designed in the context of planning of pre-vocational measures and are not standardised.

Qualification pass: a personal document accompanying the user, which can be used in second-chance qualification and in continuing vocational training. It makes it possible to document and compile vocational qualifications and experience obtained within and outside traditional training and continuing training. It is the basis for gradual acquisition of vocational qualifications in modules.

Recognition: a) formal recognition: the process of formal recognition of the value of competences either by the awarding of certificates or by the awarding of equivalents, credits, or by validation of existing competences, and/or b) social recognition: recognition of the value of competences by players in business and society.

Retraining: training aimed at enabling workers to make the transition to an occupation other than that which they have previously practised or for which they were trained.

Secondary general schools (*Hauptschulen*): attendance at these schools is compulsory for all students who are not going on to another form of secondary school after leaving primary school. They end with class 9, in some *Länder* with class 10. Secondary general schools provide general education as a basis for practical vocational training.

Special schools (*Sonderschulen*): these schools use special educational concepts and supporting measures to meet the particular needs of children and young people with disabilities. In addition to providing educational content, the aim is also to provide practical assistance with integration into life and society.

Specialised grammar schools (*Fachgymnasien*): vocationally oriented grammar schools that build on the final certificate from intermediate school or an equivalent qualification. After three years they provide an entitlement to enter higher education at any institution of higher education (general entitlement to higher education).

Trade and technical schools (*Fachschulen*): they are attended voluntarily following completion of vocational training and practical experience of an occupation, and provide further subject-based training in the occupation (e.g. master's schools, schools for technicians). In the case of full-time education, the course usually lasts between six months and three years, and in the case of part-time education from six to eight semesters.

System of crediting study outcomes/work experience in VET: a system that enables learning acquired in a course, a training programme or through work experience to be validated, recorded and compared within the framework of training programmes on the basis of credits, and transferred between different institutions.

Trainer: any person who, in an educational or training institution or in an enterprise, performs one or more tasks involving a theoretical or practical training function.

Training directive (*Ausbildungsordnung*): in in-company vocational training, there is a binding standard national training directive for every recognised training occupation. The directive lays down, *inter alia*, the designation of the training occupation, the duration of training, the knowledge and skills to be imparted, the framework training plan and the examination requirements.

Training occupation (*Ausbildungsberuf*): a vocational activity or a series of vocational activities, the assumption or practice of which involves, directly or indirectly, through statutory or administrative provisions, the possession of particular vocational qualifications.

Universities and technical universities: this is the traditional form of institutions of higher education in Germany. They offer a wide range of subjects and combine teaching and research. They are entitled to award doctorates.

VET report (*Berufsbildungsbericht*): this is published annually by the Federal Ministry of Education and Research and provides information on the main themes of the Federal Government's VET policy. These reports provide an overview of the German situation as regards training places and indicate trends and the outlook for policy initiatives and projects.

Vocational academies (*Berufsakademien*): the vocational academies are institutions of higher education that provide vocational training that is both academically based and at the same time geared to practice via training in an academy and in an enterprise under the dual system.

Vocational extension schools (*Berufsaufbauschulen*): these schools are attended by young people who are undertaking vocational training or practising an occupation. Successful completion of the course leads to a subject-based qualification equivalent to the final certificate from intermediate school.

Vocational guidance: this is the provision of information and advice on choosing an occupation, on vocational development and on changing occupation, on the labour market and job situation and trends, on VET opportunities, seeking a training place or a job, and on employment promotion benefits.

Vocational schools (*Berufsschulen*): these are upper secondary vocational schools, which usually provide general and vocational education within the framework of vocational training in the dual system.

Annex 3 Legislative provisions

Berufsbildungsgesetz (BBiG) of 23 March 2005 (BGBl. I p. 931), as most recently amended by Article 232 of the Order of 31 October 2006 (BGBl. I p. 2407)
www.gesetze-im-internet.de/bbig_2005/BJNR093110005.html [cited 28.2.2007]

Betriebsverfassungsgesetz (BetrVG) as amended by the Proclamation of 26 September 2001 (BGBl. I p. 2518), most recently amended by Article 221 of the Order of 31 October 2006 (BGBl. I p. 2407)
www.gesetze-im-internet.de/betrvg/BJNR000130972.html [cited 28.2.2007]

Gemeinsame Empfehlung der Kultusministerkonferenz, der Bundesanstalt für Arbeit und der Hochschulrektorenkonferenz über die Zusammenarbeit von Schule, Berufsberatung und Studienberatung im Sekundarbereich II of 20 February 1992
In: *Handbuch zur Berufswahlvorbereitung*. Nürnberg: Bundesanstalt für Arbeit, 1992.

Gesetz zum Schutz der arbeitenden Jugend (Jugendarbeitsschutzgesetz – JArbSchG) of 12 April 1976 (BGBl. I p. 965), as most recently amended by Article 230 of the Order of 31 October 2006 (BGBl. I p. 2407)
www.gesetze-im-internet.de/jarbschg/BJNR009650976.html [cited 28.2.2007]

Gesetz zum Schutz der Teilnehmer am Fernunterricht (Fernunterrichtsschutzgesetz - Fern-USG) as amended by the Proclamation of 4 December 2000 (BGBl. I p. 1670), most recently amended by Article 4(3) of the Law of 23 March 2005 (BGBl. I p. 9331)
www.gesetze-im-internet.de/fernusg/BJNR025250976.html [cited 28.2.2007]

Gesetz zur Förderung der Ausbildung und Beschäftigung schwerbehinderter Menschen of 23 April 2004 (BGBl. I p. 606)
www.sgb-ix-umsetzen.de/pdfuploads/gesetz_beschaefigungsfoerderung_bgbl104s0606-00.pdf [cited 28.2.2007]

Gesetz zur Förderung der beruflichen Aufstiegsfortbildung (Aufstiegsfortbildungsförderungsgesetz – AFBG) as amended by the Proclamation of 10 January 2002 (BGBl. I p. 402), most recently amended by Article 84 of the Order of 31 October 2006 (BGBl. I p. 2407)
www.gesetze-im-internet.de/afbg/BJNR062300996.html [cited 28.2.2007]

Gesetz zur Konsolidierung der Arbeitsförderung (Arbeitsförderungs-Konsolidierungsgesetz – AFBKG) of 22 December 1981 (BGBl. I p. 1497), as most recently amended by the Law of 14 December 1987 (BGBl. I p. 2602)
www.gesetze-im-internet.de/afkg/BJNR014979981.html [cited 28.2.2007]

Gesetz zur Ordnung des Handwerks (Handwerksordnung – HWO) as amended by the Proclamation of 24 September 1998 (BGBl. I p. 3074; 2006 I p. 2095), most recently amended by Article 146 of the Order of 31 October 2006 (BGBl. I p. 2407)
www.gesetze-im-internet.de/hwo/BJNR014110953.html [cited 28.2.2007]

Grundgesetz für die Bundesrepublik Deutschland (GG) as published in revised form in Bundesgesetzblatt Part III, subdivision 100-1, most recently amended by the Law of 28 August 2006 (BGBl. I p. 2034)
www.gesetze-im-internet.de/gg/BJNR000010949.html [cited 28.2.2007]

Hochschulrahmengesetz (HRG) as amended by the Proclamation of 19 January 1999 (BGBl. I p. 18), most recently amended by Article 2(3) of the Law of 5 December 2006 (BGBl. I p. 2748)
<http://bundesrecht.juris.de/hrg/BJNR001850976.html> [cited 28.2.2007]

Rahmenvereinbarung über die Berufsschule (Beschluss der Kultusministerkonferenz) of 15 March 1991
www.kmk.org/doc/beschl/rvbs91-03-15.pdf [cited 28.2.2007]

Rahmenvereinbarung über die Zusammenarbeit von Schule und Berufsberatung zwischen der Kultusministerkonferenz und der Bundesagentur für Arbeit of 15 October 2004
www.kmk.org/aktuell/RV_Schule_Berufsberatung.pdf [cited 28.2.2007]

Schulgesetze der Länder in der Bundesrepublik Deutschland (as of October 2006)
www.kmk.org/doc/beschl/SchulgesetzeInternet.pdf [cited 28.2.2007]

Sozialgesetzbuch (SGB) Drittes Buch (III) – Arbeitsförderung of 24 March 1997 (BGBl. I p. 594), as most recently amended by Article 7 of the Law of 7 December 2006 (BGBl. I p. 2814 with future effect, indirectly amended by Article 3 of the Law of 21 December 2006, BGBl. I p. 3286)
www.gesetze-im-internet.de/sgb_3/BJNR059500997.html [cited 28.2.2007]

Sozialgesetzbuch (SGB) Neuntes Buch (IX) – Rehabilitation und Teilhabe behinderter Menschen of 19 June 2001 (BGBl. I pp. 1046, 1047), as most recently amended by Article 6 of the Law of 2 December 2006 (BGBl. I p. 2742)
www.gesetze-im-internet.de/sgb_9/BJNR104700001.html [cited 28.2.2007]

Sozialgesetzbuch (SGB) Zweites Buch (II) – Grundsicherung für Arbeitsuchende of 24 December 2003 (BGBl. I p. 2954), as most recently amended by Article 10 of the Law of 2 December 2006 (BGBl. I p. 2742)
www.gesetze-im-internet.de/sgb_2/BJNR295500003.html [cited 28.2.2007]

Verordnung über das Verfahren zur Anerkennung von fachkundigen Stellen sowie zur Zulassung von Trägern und Maßnahmen der beruflichen Weiterbildung nach dem Dritten Buch Sozialgesetzbuch (Anerkennungs- und Zulassungsverordnung - Weiterbildung – AZWV) of 16 June 2004 (BGBl. I p. 1100), as amended by Article 453 of the Order of 31 October 2006 (BGBl. I p. 2407)
www.gesetze-im-internet.de/azwv/BJNR110000004.html [cited 28.2.2007]

Verordnung über die Bescheinigung von Grundlagen beruflicher Handlungsfähigkeit im Rahmen der Berufsausbildungsvorbereitung (Berufsausbildungsvorbereitungs-Bescheinigungsverordnung – BAVBVO) of 16 July 2003 (BGBl. p. 1472)
www.gesetze-im-internet.de/bavbvo/BJNR147200003.html [cited 28.2.2007]

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<http://www.bmas.bund.de/BMAS/Redaktion/Pdf/begleitforschung-zum-eqj-programm-4-zwischenbericht,property=pdf,bereich=bmas,sprache=de,rwb=true.pdf> [cited 28.2.2007].

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BIBB – Federal Institute for Vocational Education and Training. *wbmonitor: surveying providers of continuing vocational education and training*. Bonn: BIBB, 2006. Available from Internet: <http://www.bibb.de/en/11920.htm> [cited 28.2.2007].

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Annex 5 Important organisations

Ministries and national bodies

Bundesministerium für Bildung und Forschung
(BMBF)
(Federal Ministry of Education and Research)

Berlin:

Hannoversche Straße 28-30
D-10115 Berlin

Bonn:

Heinemannstr. 2
D-53175 Bonn
information@bmbf.bund.de
www.bmbf.de/

Bundesministerium für Arbeit und Sozialordnung
(BMAS)
(Federal Ministry of Labour and Social Affairs)

Berlin:

Wilhelmstraße 49
D-10117 Berlin

Bonn:

Rochusstraße 1
D-53123 Bonn
info@bmas.bund.de
www.bmas.bund.de

Bundesministerium für Wirtschaft und Technologie
(BMWi)

(Federal Ministry of Economics and Technology)

Scharnhorststraße 34-37

D-10115 Berlin

info@bmwi.bund.de

www.bmwi.de

Bundesministerium des Innern (BMI)

(Federal Ministry of the Interior)

Berlin:

Alt-Moabit 101 D

D-10559 Berlin

Bonn:

Graurheindorfer Str. 198
53117 Bonn
poststelle@bmi.bund.de
www.bmi.bund.de/

Bundesinstitut für Berufsbildung (BIBB)
(Federal Institute for Vocational Education and Training)

Robert-Schuman-Platz 3

D-53175 Bonn

zentrale@bibb.de

www.bibb.de

Nationale Agentur Bildung für Europa beim
Bundesinstitut für Berufsbildung (NA beim BIBB)
(National Agency 'Education for Europe' at the
Federal Institute for Vocational Education and
Training)

Robert-Schuman-Platz 3

D-53175 Bonn

na@bibb.de

www.na-bibb.de

InWEnt - Internationale Weiterbildung und
Entwicklung gGmbH

(InWEnt – Capacity Building International)

Friedrich-Ebert-Allee 40

D-53113 Bonn

info@inwent.org

www.inwent.org/index.de.shtml

Deutscher Akademischer Austauschdienst (DAAD)
(The German Academic Exchange Service)

Kennedyallee 50

D-53175 Bonn

postmaster@daad.de

www.daad.de

Ständige Konferenz der Kultusminister der Länder
(KMK)

(Standing Conference of Ministers for Education and
Cultural Affairs)

Lennéstraße 6

D-53012 Bonn

poststelle@kmk.org

www.kmk.org

Bundesagentur für Arbeit (BA)

(German Federal Employment Agency)

Regensburger Straße 104

D-90478 Nürnberg

zentrale@arbeitsagentur.de

www.arbeitsagentur.de

Social partners

Deutscher Industrie- und Handelskammertag (DIHK)
(The Association of German Chambers of Industry and Commerce)
Breite Straße 29
D-10178 Berlin
infocenter@berlin.dihk.de
www.dihk.de

Zentralverband des Deutschen Handwerks (ZDH)
(The German Confederation of Skilled Crafts)
Mohrenstraße 20/21
D-10117 Berlin
info@zdh.de
http://zdh.de

Bundesvereinigung der Deutschen Arbeitgeberverbände e.V. (BDA)
(Federation of German Employer's Associations)
Breite Straße 29
D-10178 Berlin
info@bda-online.de
www.bda-online.de

Bundesverband der Deutschen Industrie e.V. (BDI)
(Federation of German Industries)
Breite Straße 29
10178 Berlin
www.bdi-online.de/

Bundesverband der Freien Berufe (BFB)
(Federal Association of Liberal Professions)

Berlin Office:
Reinhardstraße 34
D-10117 Berlin
e-mail: info-bfb@freie-berufe.de

Brussels Office:
Rue Montoyer 23
B-1000 Bruxelles
info-bruessel@freie-berufe.de
www.freie-berufe.de/

Deutscher Gewerkschaftsbund (DGB)
(German Confederation of Trade Unions)
Henriette-Herz-Platz 2
D-10178 Berlin
info.bvv@dgb.de
www.dgb.de

dbb beamtenbund und tarifunion
(The German Civil Service Association)
Friedrichstraße 169/170
D-10117 Berlin
www.dbb.de/

Deutscher Städtetag
(German Association of Cities)
Lindenallee 13-17
D-50968 Köln
post@staedtetag.de
www.staedtetag.de/

Deutscher Landkreistag (DLT)
(German County Association)
Lennéstraße 11
D-10785 Berlin
Info@Landkreistag.de
www.kreise.de/landkreistag/

Research institutes

Die Arbeitsgemeinschaft Berufsbildungsforschungsnetz (AG BFN) (The Vocational Education and Training Research Network)

This is the network of German vocational training research which promotes the exchange of research findings and documentation.

www.kibb.de/cps/rde/xchg/SID-2BAB13DE-C1CB63D0/kibb/hs.xsl/138.htm

The following research institutes in the network are part of the ReferNet consortium:

Institut der deutschen Wirtschaft (IW Köln)
(Institute for the German Economy)
Gustav-Heinemann-Ufer 84-88
D-50968 Köln
welcome@iwkoeln.de
www.iwkoeln.de

Deutsches Institut für Erwachsenenbildung e.V. (DIE)
(The German Institute for Adult Education)
Friedrich-Ebert-Allee 38
D-53113 Bonn
info@die-bonn.de
www.die-bonn.de

Deutsches Institut für Wirtschaftsforschung e.V.
(DIW)
(The German Institute for Economic Research)
Königin-Luise-Straße 5
D-14195 Berlin
rbogdanovich@diw.de
<http://diw.de>

Institut für Arbeitsmarkt- und Berufsforschung (IAB)
(Institute for Employment Research)
Regensburger Straße 104
D-90478 Nürnberg
iab.anfragen@iab.de
www.iab.de

Staatsinstitut für Schulqualität und Bildungsforschung
(ISB)
(National Institute for School Quality and Educational Research)
Schellingstraße 115
D-80797 München
kontakt@isb.bayern.de
www.isb.bayern.de

Landesinstitut für Schulentwicklung (LS)
(Federal Institute for School Development)
Rotebühlstraße 131
D-70197 Stuttgart
poststelle@ls.kv.bwl.de
www.ls-bw.de

Landesinstitut für Lehrerfortbildung,
Lehrerweiterbildung und Unterrichtsforschung von
Sachsen-Anhalt (LISA)
(Federal Institute of teacher advanced training teacher
further training and education research of Saxony
Anhalt)
Riebeckplatz 9
D-06110 Halle (Saale)
info@lisa.mk.sachsen-anhalt.de
www.lisa.bildung-lsa.de

Pädagogisches Zentrum Rheinland-Pfalz
(Pedagogical Centre of Rheinland Palatinate)
Europaplatz 7-9
D-55543 Bad Kreuznach
pz@pz.bildung-rp.de
www.pz-rlp.de/neu/pz.php

Landesinstitut für Pädagogik und Medien (LPM)
(State Pedagogy Institute for School and Media)
Beethovenstraße 26
D-66125 Saarbrücken
lpm@lpm.uni-sb.de
www.lpm.uni-sb.de

Vocational Further Training Centres of Bavarian
Industry (bfz)
Infanteriestraße 8
D-80797 München
info@zentrale.bfz.de
www.bfz.de

Berufsförderungszentrum Essen e.V. (Bfz)
(Vocational Advancement Centre –Bfz)
Karolingerstraße 93
D-45141 Essen
www.bfz-essen.de

Sozialforschungsstelle Dortmund (sfs)
(Social Research Centre Dortmund - sfs)
Evinger Platz 17
D-44339 Dortmund
sfs@sfs-dortmund.de
www.sfs-dortmund.de

GAB - Gesellschaft für Ausbildungsforschung und
Berufsentwicklung GbR
(Association for Research and Development in
Vocational Training and Occupations –GAB)
Lindwurmstraße 41/43
D-80337 München
info@gab-muenchen.de
www.gab-muenchen.de

didaktik & diagnostik Gesellschaft für angewandte
Bildungsforschung
(Didactics and Diagnostic Society for Applied
Educational Research)
Oppenhoffstraße 10
D-53111 Bonn
team@didaktik-und-diagnostik.de
www.didaktik-und-diagnostik.de

Sektion Berufs- und Wirtschaftspädagogik (BWP) der
Deutschen Gesellschaft für Erziehungswissenschaft
(DGfE)
(Vocational and Economic Pedagogy Section of the
German Society for Educational Science - DGfE)
www.bwp-dgfe.de

Cedefop (European Centre for the Development of Vocational Training)

Vocational education and training in Germany. Short description

Ute Hippach-Schneider

Martina Krause

Christian Woll

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