

# World TVET Database Germany

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# Abbreviations

AEV0	Ordinance on Trainer Aptitude (Ausbilder-Eignungsverordnung)				
AFBG	Career Advancement Training Promotion Act				
	(Aufstiegsfortbildungsförderungsgesetz)				
AZWV	Directive on recognition and Licensing of Continuing Training (Anerkennungs und				
	Zulassungsverordnung Weiterbildung)				
BA	Federal Employment Agency (Bundesagentur für Arbeit)				
BIBB	Federal Institute for Vocational Education and Training (Bundesinstitut für				
Berufsbildung)					
BBiG	Vocational Education Training Act (Berufsbildungsgesetz)				
BetrVG	Works Constitution Act (Betriebsverfassungsgesetz)				
BMAS	Federal Ministry of Labour and Social Affairs (Bundesministeriums für Arbeit und				
Soziales)					
BMBF	F Federal Ministry of Education and Research (Bundesministerium für Bildung und				
	Forschung)				
BMWi	Federal Ministry of Economics and Technology (Bundesministeriums für Wirtschaft				
	und Technologie)				
DQR	National Qualifications Framework for Lifelong Learning (Deutscher				
	Qualifikationsrahmen)				
ECVET	European Credit System for Vocational Education and Training				
EQF	European Qualification Framework				
FernUSG	Law on the Protection of Participants in Distance Education				
	(Fernunterrichtsschutzgesetz)				
Hw0	Regulation on Craft Trades (Gesetz zur Ordnung des Handwerks)				
JarbSchG	3 1 1 /				
	(Jugendarbeitsschutzgesetz)				
KMK	Standing Conference of the Ministers of Education and Cultural Affairs of the				
	Länder (Kultusministerkonferenz)				
NQF National Qualification Framework					

# **TVETipedia Glossary**

Below are listed TVET terms mentioned in this report. Click on a term to read its definitions on the UNESCO-UNEVOC TVETipedia glossary.

Accreditation Lifelong Learning

Apprenticeship National Qualifications Framework

Basic skills Non-formal education

Certification Occupation

Competency-based training On-The-Job Training

Continuing Education (training) Prior Learning
Continuing TVET Qualification

Curriculum Quality Assurance

Distance Education Skills
Dual System Teacher

Entry qualification Teacher In Vet

European qualifications framework for lifelong

learning Tertiary Education

Further Training Trainer

General Education Training voucher

Higher Education TVET

In-company training Vocational qualification

Informal Learning Work experience

**Learning Outcomes** 

# Germany

Population:
Youth population<sup>1</sup>:
Median population age:
Annual population growth
(2010–2015)<sup>2</sup>:

80,689,000 (2015) 8,421,000 (2015) 46.2 (2015) 0.06%



Data © OpenStreetMap Design © Mapbox

# 1. TVET mission, strategy and legislation

### **TVET** mission

Germany has a long history of TVET. Demographic changes that became an important issue in the past years have led to a shortage of qualified workers nationwide. In order to overcome this challenge and to increase the supply of skilled labour the country has focused on:

- Establishing stronger links between the dual vocational education and training system and institutes of higher education;
- Improving integration into vocational training through basic skills and permeability;
   and
- Establishing national coverage of branch-specific regional initial and continuing training centres.

### TVET strategy

High investment in and development of lifelong education is a path taken by national authorities in order to overcome the problems of the aging society.

The Government is also broadly involved in developing strategies that would facilitate the transition from school to initial TVET and help unplaced applicants, especially young people from migrant backgrounds, disadvantaged individuals and those with learning difficulties or other disabilities.

Another aspect addressed in national TVET policies is the recognition of non-formal and informal learning. This is planned to be fulfilled by reorientation of formal, certificate-based qualifications to competence based learning. Achievement of this goal is integrated in another important project of setting up National qualifications framework in accordance with the European one.

<sup>&</sup>lt;sup>1</sup> Population aged 14-25

<sup>&</sup>lt;sup>2</sup> All statistics compiled from the United Nation's Population Division's *World Population Prospects, the* 2015 Revision (http://esa.un.org/unpd/wpp/DVD/)

### **TVET** legislation

The most important conditions of TVET are the free choice and practice of an occupation and are provided for in the Constitution (Grundgesetz: Article 12) and Federal Government competence for out-of-school vocational training (Article 72 (1), (2) and Article 74 (1). According to the Constitution the Federation has the right to legislate on vocational education and training.

The Vocational Education and Training Act (Berufsbildungsgesetz, BBiG) (reformed in 2005) is another significant legislative document providing for the organisation of out-of-school vocational training. Recent changes of the Act refer to the recognition of the time-limited training periods abroad, the amendment of the Enabling Standard for the promulgation of training regulations by the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung, BIBB) and the amendment of the crediting of the prior TVET to the training period.

Other important legislation in the German TVET system are as follows:

- Regulation on Craft Trades (Gesetz zur Ordnung des Handwerks, HwO) (amended 2006) : regulates vocational training in greater concurrence with BBiG in crafts trades.
- Ordinance on Trainer Aptitude (Ausbilder-Eignungsverordnung, AEVO) (amended 2009): prescribes standards for the occupational and work-related teaching abilities of instructors.
- Protection of Young People in Employment Act (Jugendarbeitsschutzgesetz, JArbSchG) (amended 2006): contains protective regulations for trainees and young employees.
- Works Constitution Act (Betriebsverfassungsgesetz, BetrVG) (amended 2006): prescribes participation rights of work councils in promoting and implementing training measures.
- Social Code, Volume III Employment promotion: among other issues supports occupational further training, occupational retraining and orientation training.
- Career Advancement Training Promotion Act (Aufstiegsfortbildungsförderungsgesetz, AFBG) (amended 2006): confirms the right to State support of skilled workers who have completed ITVET.
- Law on the Protection of Participants in Distance Education (Fernunterrichtsschutzgesetz, FernUSG) (amended 2011): regulates licensing and form of contract of distance learning courses.
- Directive on recognition and Licensing of Continuing Training (Anerkennungs und Zulassungsverordnung Weiterbildung, AZWV) (amended 2007).

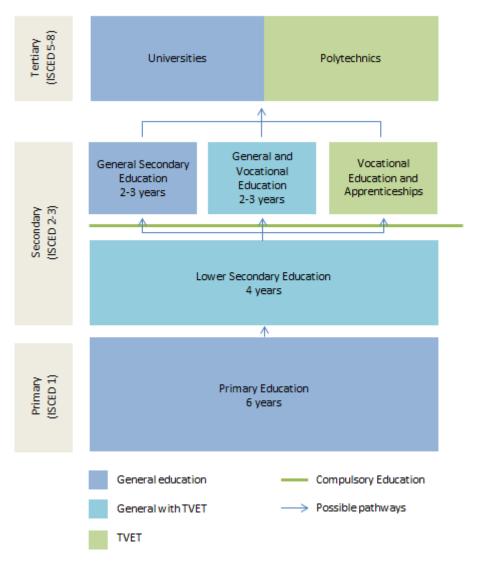
The Federal Government has recently adopted a law on the improvement of the assessment and recognition of foreign professional qualifications, called the Recognition Act. The Act revises 60 relevant laws and ordinances and will enter into force on 1 April 2012.

### Sources:

CEDEFOP Refernet (2011). Germany VET in Europe – Country report. Thessaloniki: Centre for the Development of Vocational Training.

EURYDICE (2010). Organisation of the education system in Germany. Brussels: EACEA.

# 2. TVET formal, non-formal and informal systems



Scheme compiled by UNESCO-UNEVOC from CEDEFOP Refernet (2011). Germany VET in Europe – Country report. Thessaloniki: Centre for the Development of Vocational Training.

# Formal TVET system

At lower secondary level (Hauptschule and Realschule) an introduction to the world of work is compulsory in all courses, either in a separate subject, pre-vocational studies (Arbeitslehre) or as part of the material used in other subjects.

Initial TVET starts at the upper-secondary level when students, having completed compulsory education (generally at the age of 15), may choose from the range of programmes that include full-time general education and vocational schools and vocational training within the dual system.

Vocational training in the dual system is a popular choice for German students. Approximately two-thirds of an age cohort decide to go for vocational training initially (this doesn't preclude their moving on to academic education later on). It is carried out in two places of learning: workplace and vocational school. The programme lasts for 2-3,5 years depending on the occupation chosen.

A student may also follow a 1-year course of basic vocational training that is offered in the form of full-time schooling or a dual system arrangement (Berufsgrundbildungsjahr). This course lays the groundwork for subsequent vocational training. A student may choose one of 13 career areas.

Secondary education is provided by Hauptschule, Realschule, Gymnasium and Gesamtschule.

Higher education is offered by the following institutions:

- Technical Universities of Applied Sciences (Technische Hochschulen);
- Technical Universities (Technische Universitäten);
- Comprehensive Universities (Universitäten Gesamthochschulen); and
- Pedagogical Universities of Applied Sciences (Pädagogische Hochschulen).

Tertiary – level education outside the higher education system is offered by:

- Universities of Applied Sciences (Fachhochschulen); and
- Professional Academies (Berufsakademien).

Integral part of a study programme in Universities of Applied Sciences is two semesters of work experience. Programmes generally last 8 semesters. Courses offered by Professional Academies last 3 years.

# Non-formal and informal TVET systems

Continuing education is offered by municipal institutions, especially by Adult Education centres (Volkshochschulen), as well as by private institutions, trade unions, various chambers of industry and commerce, political parties and associations, companies and public authorities, family education centres, academies, Technical colleges (Fachschule), Professional Academies, institutions of higher education and distance learning institutions.

Subjects taught in continuing education comprise social sciences, education and psychology, humanities, languages, business and commerce, mathematics, natural sciences and technology, leisure, health and housekeeping, etc.

### Sources:

CEDEFOP Refernet (2011). Germany VET in Europe – Country report. Thessaloniki: Centre for the Development of Vocational Training.

EURYDICE (2010). Organisation of the education system in Germany. Brussels: EACEA. UNESCO-IBE (2007). World Data on Education VI Ed. 2006/7. Germany. Geneva: UNESCO-IBE.

# 3. Governance and financing

### Governance

There two main authorities governing the educational system in Germany, including all levels of TVET: the Federal government and the Länder (States).

Within the Federal government, the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF) is the one responsible for policy, coordination and legislation for: out-of-school vocational training and continuing education; training assistance; general principles of the higher education system, etc.

The Federal Ministry of Economics and Technology (Bundesministeriums für Wirtschaft und Technologie, BMWi) or any other competent ministry may officially recognise training occupations by adopting legislative acts and issuing training regulations for training occupations by agreement with BMBF.

The Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung, BIBB) provides consultancy to the Federal Government and vocational training providers together with conducting research in in-company vocational training. It also moderates the dialogue among social partners regarding innovations in vocational training.

At a regional level Länder Ministries of Education and Cultural Affairs are competent authorities for school education as provided for by the Constitution. The Ministries are obliged to cooperate with each other and with the Federal Government. The cooperation platform is called a Standing Conference (Kultusministerkonferenz, KMK). Its aim is to ensure uniformity and comparability in school and higher education policies. Until resolutions of KMK are approved by individual Länder parliaments, they remain recommendations and are not legally binding.

The Länder have committees for vocational training where employers, employee and the highest Länder authorities are equally represented.

Employers, trade unions and the government all play an important role in the decision-making process with regard to education. Their close partnership has great influence on the content and form of TVET where requirements and interests of the parties involved are taken into account.

Federal and Länder authorities work together on framework curricula for the dual training system. Their collaboration concerns vocational instruction and training regulations for on-the-job training.

The principles for the promotion and funding of continuing education are set out in the continuing education and employment legislation of the Länder. The latter recognises the freedom in the preparation of curricula and independence in staff selection of continuing TVET providers.

Collective bargaining contracts, company agreements and contract employment are all continuing education-related issues regulated by Länder.

### **Financing**

The funding system of the German TVET is quite complex and includes various participants such as BMBF, the Federal Ministry of Economics and Technology BMWi, the Federal Ministry of Labour and Social Affairs (Bundesministeriums für Arbeit und Soziales, BMAS), the Federal Employment Agency (Bundesagentur für Arbeit, BA), and the Länder.

Dual vocational training is financed by the Länder and local authority public funds, whereas training in full-time vocational schools is solely under the Länder budget. The out-of-school part of vocational training is funded entirely by the enterprises, which also pay a training allowance to their trainees.

Continuing TVET is financed by enterprises, the State, the Federal Employment Agency and private individuals. The Career Advancement Training Promotion Act provides for nationwide means for financing vocational career advancement training.

Federation and Länder are jointly responsible for research and pilot schemes in all sectors of continuing education.

### Sources:

CEDEFOP Refernet (2011). Germany VET in Europe – Country report. Thessaloniki: Centre for the Development of Vocational Training.

EURYDICE (2010). Organisation of the education system in Germany. Brussels: EACEA.

### 4. TVET teachers and trainers

Teachers and trainers in Germany differ with respect to the education they provide as well as to their qualification. Teachers are involved in the theory-based part of TVET, generally taught in schools, whereas trainers are responsible for the practical component in companies.

The theoretical part of dual TVET programmes is taught by two types of teachers:

- University trained teachers for job-related theory and general education subject; ands
- Master craftsmen or technicians with additional further training (Werklehrer).

The same teachers are qualified to work in full-time vocational schools (on both initial TVET and continuing TVET programmes).

Continuing TVET programmes are taught by TVET teachers in vocational schools, TVET teachers/trainers of Adult Learning Centres and of state recognised or not CTVET institutions, by freelance teachers, by certified educators/trainers in continuing education and by company employees involved in CTVET.

The examination that teachers of initial TVET have to pass in order to be admitted into the profession is the responsibility of state examination offices or Länder examination commissions.

Requirements for in-company trainers of initial TVET are laid out in the Vocational Education and Training Act (BBiG) and the Ordinance on Trainer Aptitude (AEVO), whereas training provisions for continuing TVET teachers/trainers are not clearly formulated.

Normally teachers of vocational practice in TVET school system have a vocational background as a foreman, skilled worker or a qualified craftsman. Higher education is not compulsory for these teachers. Trainers in TVET are supposed to take an examination in order to become a certified trainer (according to AEVO). They must have a qualification in a subject area adequate to the training occupation.

In September 2009 new qualification options to become certified education/trainer in initial and continuing vocational education and certified educator/trainer in professional education came into force. The Ordinance on Trainer Aptitude (AEVO) is responsible for providing evidence of trainer aptitude.

### Sources:

CEDEFOP Refernet (2011). Germany VET in Europe – Country report. Thessaloniki: Centre for the Development of Vocational Training.

## 5. Qualifications and Qualifications Frameworks

### Secondary vocational education

Programme	Duration	Qualification
Dual system education	2 – 3.5 years	Worker ( <i>Facharbeiterbriet</i> ), commercial assistant ( <i>Kaufmannsgehilfenbriet</i> ), journeyman ( <i>Gesellenbriet</i> )
Vocational education	2 – 3 years	State-certified technical assistant, state-certified business assistant

### Post-secondary vocational education

General higher education entrance qualification may also take the form of College and Technical College entrance examination (Fachhochschulreife and Hochschulreife respectively), or an equivalent qualification.

Completion of Higher education institutions leads to a Bachelor's or Master's degree. Universities of Applied sciences together with Professional academies award a Diplom.

### National Qualifications Framework (NQF)

The process of developing a NQF for Lifelong Learning (Deutscher Qualifikationsrahmen, DQR) started in 2006 by joint initiative of the Federal Ministry of Education and Research (BMBF) and the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (KMK). The idea was to introduce NQF based on learning outcomes in accordance with the

recommendations of the European Parliament and of the Council on European Qualifications Framework (EQF). As a result a Federal Government/Federal States Coordination Group for the DQR was established. Stakeholders from general education, higher education and initial and continuing vocational education and training all took part in drawing up the proposal governed by the Coordination Group. The work on the proposal took place within the German Qualifications Framework Working Group (Arbeitskreis Deutscher Qualifikationsrahmen, AK DQR).

DQR is represented by a matrix for the alignment of qualifications and consists of 8 reference levels each describing the competences required to obtain a qualification. Competences are divided in two sections: Professional and Personal.

The DQR introduces various educational pathways and makes the German education system more flexible and better aligned with the European one.

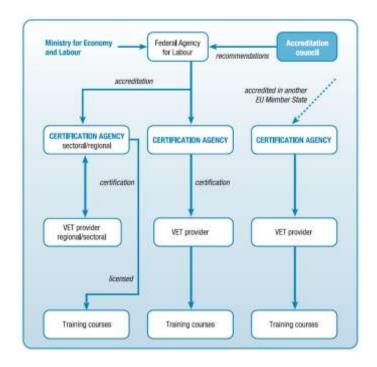
Currently further work is being done on implementing informal and non-formal learning into the DQR.

### Quality assurance

Since 2004, TVET providers are obliged to undergo internal and external quality assurance according to criteria set out by the Federal Ministry for Economy and Labour (Bundesministerium für Wirtschaft und Arbeit). External assessment of TVET institution and their training courses is conducted by certification agencies (Zertifizierungsstellen) or centres of expertise (fachkundige Stellen) which in turn are accredited by the Federal Agency for Labour (Bundesagentur für Arbeit). Certification and licensing is conducted by private certification agencies which are subject to accreditation from a national body. Accreditation of certification agencies is granted for the period of three years and can be national or regional/sectorial. An accreditation council (Anerkennungsbeirat) has been established to advice and support the national accreditation body.

TVET providers benefit from public funding if their institution is certified and their courses licensed by an accredited certification agency. The following criteria determine eligibility for funding:

- the capacity to support the integration of their trainees into employment;
- the qualifications, professional experience and participation in further training of teachers and trainers;
- an efficient system for quality assurance and quality development including: (1) customer orientation; (2) continuous evaluation of training courses based on the use of indicators and measurement; (3) continuous improvement of training provision; and (4) cooperation with external experts for quality development.



(Source: Erwin Seyfried in CEDEFOP, 2009)

### Sources:

AK DQR (2011). Germans Qualifications Framework for Lifelong Learning. Accessed: 22 December 2011.

CEDEFOP (2009). Accreditation and quality assurance in vocational education and training—Selected European approaches. Luxembourg: Publications Office of the European Union. EURYDICE (2010). Organisation of the education system in Germany. Brussels: EACEA.

# 6. Current reforms, major projects and challenges

# Current reforms and major projects

Since one of the priorities of TVET is to attract more participants and therefore increase the amount of qualified workforce, Qualification modules were introduced in order to make it easier for young people to enter training. They are mainly aimed at socially disadvantaged young people and those who find learning difficult. The providers are institutions such as the Chamber of Industry and Commerce, the Craft Chamber and BIBB. They are supposed to provide description of each module taught. The BIBB maintains the database of the qualification modules.

Another initiative that was introduced in 2007 is called "Training modules" as part of the BMBF programme "Jobstarter Connect". Its goal is to help young people who have been applying unsuccessfully for an apprenticeship place for a year or more. Training modules were developed in 14 occupations within the dual system. They are supposed to help applicants to transfer to regular dual training with previously acquired learning outcomes accounted for in the regular training period. The final purpose is the award of full qualifications in the dual system.

In order to facilitate transition from school to the dual system and decrease the drop-out rate of young people a programme called "Completion and transition – education chains leading to vocational qualifications" was launched in the summer 2010. There are three main components within the programme:

- Career-start counselling education chains;
- Vocational orientation programme; and
- JobStarter structural programme for initial TVET.

The German Association of the Chambers of Industry and Commerce and the Association of Universities and other Higher Education Institutions in Germany came together in a project aimed at facilitating the access of those holding vocational qualification to Higher Education. As a result of their joint effort the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder issued a Resolution on "Higher education entrance for vocationally qualified applicants without a school-leaving certificate conferring university entrance entitlement". Now the entrance qualifications are more transparent and standardised for Higher Education Institutions.

The Employment Opportunities Act of 2010 introduced Training Bonus, a financial subsidy that decreases the cost of initial vocational training and is provided to employers that offer additional training places for young people.

Other important funding projects are as follows:

- Vocational Training Programme for Highly Talented and the Career Advancement Training Promotion Act: provide financial initiatives for obtaining a master craftsman qualification;
- "WeGebAU" Continuing Training Programme: for those in full-time employment wishing to participate in continuing education;
- Training Vouchers of Federal Employment Agency: re-employment grants provided to both employed and unemployed; and
- Continuing Education and Training Savings Model "Bildungsprämie": subsidies for continuous education and training.

### Challenges

The Federal Ministry of Education and research (BMBF) together with the National Agency "Education for Europe" at the Federal institute for Vocational Education and Training (BIBB) have set up an internet portal where all the issues related to the national integration of European TVET policies are described. The portal contains information on such topics as ECTS, ECVET, EQR and EQAVET.

### Sources:

CEDEFOP Refernet (2011). Germany VET in Europe – Country report. Thessaloniki: Centre for the Development of Vocational Training.

### 7. Links to UNEVOC centres and TVET institutions

### **UNEVOC Centres**

- Federal Institute for Vocational Training (BIBB)
- UNEVOC centre "TVET for Sustainable Development"

### **TVET Institutions**

- Federal Institute for Vocational Training (BIBB)
- Chambers of Commerce and Industry
- Federal Employment Agency
- Federal Ministry of Economics and Technology (BMWi)
- Federal Ministry of Education and Research (BMBF)
- Federal Ministry of Labour and Social Affairs (BMAS)
- Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany
- Trade Unions

# 8. References and further reading

### References

- AK DQR (2011). Germans Qualifications Framework for Lifelong Learning. Accessed: 22 December 2011.
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### Further reading

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Web-portal of the German Qualifications Network for Lifelong Learning. Accessed: 22 December 2011.