



# Apprenticeship Training in Germany

# The Dual VET

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## The institutional framework

## ✓ Main legislative references

In Germany the training in an apprenticeship occupation is open to all young people who have completed their 10 years of compulsory schooling. The legislation differs a bit between the Länder of Germany, subsequently you will find more details. No specific school qualification is required for access to an apprenticeship.

## The distribution of responsibilities in education and training between the State and regions (provinces, federal states) and the related level of autonomy

Germany is a republic and a democracy; it is a federal state based on the rule of constitutional law and social justice. Berlin is both the country's capital city and the seat of government. During its founding phase, the federal republic of Germany chose to adopt a social market economy, combining free enterprise within a competitive economy with social progress.

Germany comprises 16 Länder. There is a distinct cooperative federalism within the State sector, both horizontally between the Länder and between the Länder and the Federal Government.

Unless specified otherwise in the Constitution (Grundgesetz), state responsibilities fall within the sphere of competence of the Länder which also have legislative power in certain areas. Furthermore, through the Bundesrat, the Länder play a part in the Federation's lawmaking and management and in European Union issues.





Educational and cultural legislation and administration is primarily the responsibility of the Länder.

In the field of VET the Federal Government is responsible for incompany vocational training, while the Länder are responsible for vocational training in schools, and hence also for vocational schools.

Vocational training in enterprises has developed a third system situated between market and State, in the form of joint control. The governance of the VET system in Germany is characterised by strong partnership between state employers and trade unions.

The legal basis of VET is the Vocational Training Act (Berufsbildungsgesetz BBiG) and the Trade and Crafts Code (Handwerksordnung HWO).

In detail the roles of the relevant stakeholders:

The Federal Government is responsible for designing the content of training for the occupations (in the dual system) it has recognized unless training is school-based. The nationally binding recognition of the training occupations ensures that the basic principles agreed with industry and the Federal States (Länder) are taken into account and that training for a recognized occupation is only provided in accordance with the training regulations adopted by the Federal Government.

The Federal Government provides funding for special research projects to ensure the constant updating of vocational training. In the German Federal Government, the Federal Ministry of Education and Research (BMBF) is responsible for general policy issues of vocational education and training. These include for example the Vocational Training Act (Berufsbildungsgesetz, BBiG), the drawing up of the Annual Report on Vocational Education and Training, the legal supervision and funding of the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung, BIBB) and the implementation of programmes to improve vocational training.

The recognition of the individual occupations requiring formal training is the task of the federal ministries responsible for the respec-





tive occupational field. In the vast majority of cases, responsibility lies with the Federal Ministry of Economics and Technology (BMWi). But approval by the BMBF is required in all cases. The BMBF thus fulfils a coordinating and steering function in terms of vocational training policy for all training occupations. The core institution at the national level for consensus building between all parties involved in VET is the Federal Institute for Vocational Education and Training (BIBB). BIBB conducts research into in-company vocational training and fulfils service and consultancy functions to the Federal Government and vocational training providers. The fourparty Main Board (Hauptausschuss) advises the Federal Government on fundamental issues of in-company vocational training.

The Constitution (Grundgesetz) provides that competence for school education lies with the Länder Ministries of Education and Cultural Affairs. The Ministers of Education and Culture of the Länder cooperate in a Standing Conference (KMK) to ensure a certain measure of uniformity and comparability, especially in school and higher education policies. Decisions of the KMK are recommendations and only become legally binding when passed by individual Länder parliaments. The Länder have committees for vocational training, with equal representation of employers, employees and the highest Länder authorities. They advise the Länder governments on vocational training issues in schools.

The organisation of dual training requires a complex but clear division of responsibilities. Employers and trade unions play a central role in initiatives for change because the structure of vocational training must meet the demands of industry. If there is a need for changes – in the qualification requirements, for example – the Federal Government, the Länder, the industry and the trade unions agree on the basic principles for adaptation. Then the work on the training regulations and framework curricula is continued and constantly coordinated by the individual partners involved. Without the involvement of the Federal Government, the social partners furthermore agree on details of vocational training, particularly the amount of the allowance paid to trainees, within the framework of free collective bargaining. Some collective agreements also include provisions concerning such points as continued employment of training graduates under a limited contract. As self-governing bod-





ies of industry, the chambers have been assigned public tasks in dual training (competent bodies). These include counselling and monitoring functions with regard to the individual training contracts. Training advisers of the chambers verify the aptitude of companies and instructors for providing training and advise both companies and trainees.

They receive training contracts, check and register them. The chambers take care of the overall organisation of examinations by fixing dates and setting up examination boards which administer the examinations.

## The architecture of the system of initial education and training (is the dual distributed throughout the whole VET offer, or is it implemented only for certain branches?)

Germany has in 2013 approximately 330 recognized VET occupations covering nearly all branches. Most of them are organized as dual system, only a few are fulltime school based (healthcare sector).

Recognized vocational occupations according to §4 Vocational Training Act or § 25 Trade and Crafts Code are the basis for VET within the so called dual system. Training regulations describe contents according to the specific occupational profiles. The profiles are the basis for the in-company training, in other words, they are kind of curriculum for the training company.

The training regulations are complemented by the framework curriculum determined by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany. The duration of the apprenticeships differ between two and 3 ½ years depending on the vocational occupation chosen. The apprenticeship period can be reduced for people who have already completed job-specific training periods or have acquired higher education entrance qualifications. The reduction differs depending on the acquired competences and qualifications. An applicant needs the approval of the company and the vocational school.

A brief overview of the situation in 2013 gives the following table:





Type of Occupation	Number of recognized vocational occupations
Industry, commerce, trade	173
Crafts	51
Industry and crafts	64
Agriculture	12
Civil service	6
Industry and civil service	12
Industry and agriculture	1
Housecraft	1
Liberal Occupations	10
Total	330

Source: BIBB list of recognized training occupations,

http://www.bibb.de/dokumente/pdf/verzeichnis anerk ausbildungsberufe 2013. pdf, accessed: 9.4.2015

## How it happens the matching between "supply and demand"? (availability of apprenticeship places for the various professional demand, requirements for involving companies, candidate assessment and selection, etc)

At least since 2009 there are big efforts in German comprehensive schools to implement concepts of vocational guidance.

In Hamburg it is a broadly conceived concept in collaboration with vocational schools. Classes starting in grade 9 have teaching lessons concerning occupational orientation. Teachers are supported by representatives of the regional employment agency.

And there are lots of service agencies offering consultancy for young people like *Jugenberufsagentur* and *Berufsinformationszen-trum*.

In addition Job Centres (employment agencies) provide information about vocational occupations and vacancies for apprenticeships.

The chambers have the full range of information about training vacancies in the dual system and they also provide consultancy.

Apart from those opportunities training vacancies are published on newspapers and on the internet.





Summarizing that situation it is more a challenge for young people to find the appropriate occupation than to find a training place.

The relation between supply and demand is approximately 90% in other words, the demand for apprenticeships is a bit higher than the offer of training places.

There are big differences among the occupations. As an overall trend the demands of appropriate applicants is very high in crafts occupations. These occupations are not really attractive for young people.

As mentioned before companies have a vested interest in appropriate applicants and thus they take great efforts to find well educated apprentices. As a rule companies publish advertisements of vacancies. They conduct the whole process of applicant selection.

# The socio economic context and labour market overview

✓ If necessary please describe it by geographic region Population as of 1 January 2011 was 81.752 million and has been steadily falling since 2004 (2004: 82,532 / 2006: 82,438 / 2008: 82,218 / 2010: 81,802, 2013: 82020)<sup>1</sup>. The growth in the number of migrants is no longer able to compensate for the low birth rate, which will exert an even stronger effect on society and the world of work in Germany in future. Demographic development, which is currently easing the pressure on the training market, will in particular represent a major challenge for vocational education and training, the future structure of VET and the securing of skilled workers in Germany. The number of deaths is increasingly exceeding the number of births. Net immigration is unable to balance out the birth deficit caused by this circumstance. For this reason, the population in Germany, which has already been declining since 2003, will continue to fall.

The ageing of the middle-aged cohorts within the population, which are currently strongly represented, is leading to serious shifts in the age structure. In the base year of 2008, 19% of the population

<sup>&</sup>lt;sup>1</sup> See Annex A, table 1





were children and young people aged under 20, 61% were aged between 20 and 65 and 20% were 65 or older. By 2060, as many as one in three (32%) will be at least 65 and there will be twice as many 70 year-olds than children born<sup>2</sup>.

The age group of those aged between 17 and 25 will shrink by around a fifth by 2030, and a change in the educational decisions made by young people will also take place. This trend will lead to higher school qualifications, and higher education reforms will increase the attractiveness of academic education resulting in an increase in competition between dual training and higher education. In comparison to the average of the "EU-27" Germany has a higher projected ratio of people older than 65.

In 2011 the percentage of people who are older than 65 will be 5.34% higher in Germany than the average of the other European countries. In 2060 the projected older-than-65 dependency of the "EU-27" is 52.55%. The forecast for Germany for the year 2060 is 7.34% higher than the average.<sup>3</sup>

The decrease in the overall number of those aged between 20 and 65 will produce a shift towards an older working age population. 20% of people of working age currently form part of the younger group of 20 to 30 year-olds, 49% belong to the middle group of those aged between 30 and 50 and 31% to the older group of persons aged between 50 and 65.

(Statistisches Bundesamt 2009).

In 2010, the number of persons from a migrant background in a narrow sense was 15.7 million, 43,000 persons more than in 2009. The overall population declined by 189,000 persons during the same period (from 81.9 million in 2009 to 81.7 million in 2012). The consequence of this is that the proportion of the population from a migrant background in a narrow sense has risen slightly from 19.2% to 19.3% <sup>4</sup>. In 2013 the share was risen to 19.7% (Statistisches Bundesamt 2011 and 2013)

<sup>&</sup>lt;sup>2</sup> See Annex A, table 2

<sup>&</sup>lt;sup>3</sup> See Annex A, table 3

<sup>&</sup>lt;sup>4</sup> See Annex A, table 4





Most persons from a migrant background originate from Turkey (15.8%), followed by Poland (8.3%), the Russian Federation (6.7%) and Italy (4.7%). The only significant non- European country of origin is Kazakhstan, which accounts for 4.7%. Most (late) resettlers, 1.4 million in number, come from the successor states of the former Soviet Union, especially from the Russian Federation (605,000) and Kazakhstan (537,000). Poland (581,000) and Rumania (221,000) are also significant countries of origin. Figures from 2013 are by 1.5 higher each (Statistisches Bundesamt 2011 and 2013).

Persons from a migrant background exhibit considerable differences with regard to participation in education compared with those not from a migrant background. 15.3% of the former have no general school leaving qualifications and 45.0% have no vocational education and training qualification (the corresponding figures for persons not from a migrant background being 2.0% and 19.6% respectively), although in all cases persons still in training are not taken into account.

(Statistisches Bundesamt 2011).

Increased international competition, German reunification (1990) and the introduction of the Euro (2002) have had an impact on the German economy and the labour market. Following a slight recovery in 2004 and 2005, in 2006 and 2007 economic growth exceeded. The global financial crisis has had impacts since 2008 and continues to influence economic growth rates and the labour market indicators in the future. GDP was down in both Germany and Europe in 2009. But in 2010 the gross domestic product rose up to 3.7%, the highest level ever since the German unification. The boom in Germany has several causes. On the one hand it is driven by traditional exports and on the other hand it depends on private consumption by Germans. The prognoses for German GDP have now declined for the year 2012 (0.7%) and for 2013 (0.4%) but is over the EU average (2012: -0.4 / 2013: -0.1)<sup>5</sup>.

Germany has undergone a substantial shift from an industrial to a service economy. The service sector is the largest sector of the

<sup>&</sup>lt;sup>5</sup> See Annex A, table 5





economy <sup>6</sup>. Also the majority of employment in the classification of economic activities by NACE is in the field of non-marketed service next to the distribution and transport sector. In the average of the EU 27, these two sectors are the sectors with the highest employment.

There has been no significant change in the rate of employment in Germany, although there are signs of a slight increase in overall employment relating to the individual age groups which is also discernible with regard to the various educational levels. Germany's employment rate is significantly above the EU average<sup>7</sup>.

The labour market situation in Germany has changed for the better in the last years, during which period the unemployment rate has steadily fallen. This is particularly illustrated in the numbers of unemployed persons in the population aged between 50 and 64. Whereas in 2010 the rate of unemployment amongst this group was 7.1% and lies above the EU average of 6.9%, one year later it had decreased to 6.0%. This puts it at 0.9% below the average EU level (6.9%). Youth unemployment in Germany also fell in 2011 by 1.3% to 8.6%. By way of contrast, average youth unemployment in the EU has continuously risen <sup>8</sup>.

## ✓ Educational Attainment

A high proportion of people in Germany have upper secondary level qualifications (58.7% in 2011 compared to an EU average of 46.6%). One reason for this is the longstanding tradition of the dual system of vocational training. For higher education, Germany approximates the EU average. The proportion of people aged 15 to 64 with a low level of qualification was constantly extremely below the EU average in the last years (13.7% in 2011 compared to an EU average of 26.6)<sup>9</sup>. The proportion of the population of early school leavers in 2011 is 11.5% and lies under the EU average (13.5%). Since 2006 the number of early school leavers declined in

<sup>&</sup>lt;sup>6</sup> See Annex A, table 6

<sup>&</sup>lt;sup>7</sup> See Annex A, table 7

<sup>&</sup>lt;sup>8</sup> See Annex A, table 8

<sup>&</sup>lt;sup>9</sup> See Annex A, table 9





Germany steadily (2006: 13.7% / 2007: 12.5% / 2008: 11.8% / 2009: 11.1% / 2010: 11.9%/ 2011: 11.7%). <sup>10</sup>

These young adults experience particular difficulty in finding a training place or job. Various state programmes have been developed to provide this group of persons with support and funding. Nevertheless, Germany's school dropout rate (11.5%) remains below the EU average (13.5%) in overall terms and is at a good level. The same applies to the educational participation of the German population. A particularly high degree of educational participation of 58.7% of 25-64 year olds is revealed at upper secondary level and in the post-secondary non-tertiary sector. This also continues into the tertiary sector, where Germany lies 0.8% above the EU average <sup>11</sup>.

The following descriptions refer to the training occupations that are government-recognized under the Vocational Training Act (BBiG) or the Crafts and Trades Regulation Code (HwO) or are considered to be government-recognized. The number of recognized training occupations according to BBiG and HwO has hardly changed in the last 10 years and oscillates relatively constantly around 350.

The number of newly concluded training contracts by the end of 2013 was 530714, the total supply number was 564248 thus 33534 training places remained unfilled. The corresponding demand for training places was 551748. That means a decrease in the number of contracts by -3.7 percent. The total supply felt by - 3.5 and the total demand by -2.7 percent.

<sup>&</sup>lt;sup>10</sup> See Annex A, table 10

<sup>&</sup>lt;sup>11</sup>See Annex A, table 9, table 10





The situation in Hamburg might be of interest. The number of unfilled training places increased from 1.3% in 2012 to 4.9% in 2013. On the other hand the share of unsuccessful applicants increased also from 11.2% in 2012 to 15.2% in 2013.

The problem is probably caused by the higher demands of companies concerning entry qualifications of the applicants. And it is often influenced by more and more young school leavers having not the required competences.

An indicator for the problem is the share of young people entering the so called transition system with e.g. pre-vocational training. That share is by 257.626 young people entering transition programmes as preparation for vocational training.

			Provisi	on of Trainin	Provision of Training Places - suppl	ypply							Demand of training p	n ing places				
		Total			in-corr	1-company	share of	of	Total	_	share of uns	unsuccessful			Suppl y-Deman d-Rati o	an d-Rati o		
					training	ig places	unfilled training p	ing places			applications	ntions	Total		i n-com pany trai ning		supra-company t	y traini ng
	2012	2013	2012 to 2013	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013	2012	2013
_	14316	14193	-123	-0,90%	13491	13545	1, 3	4,9	15924	15954	11,2	15,2	89,9	89	84,7	84,9	5,2	4,1
 'a																		







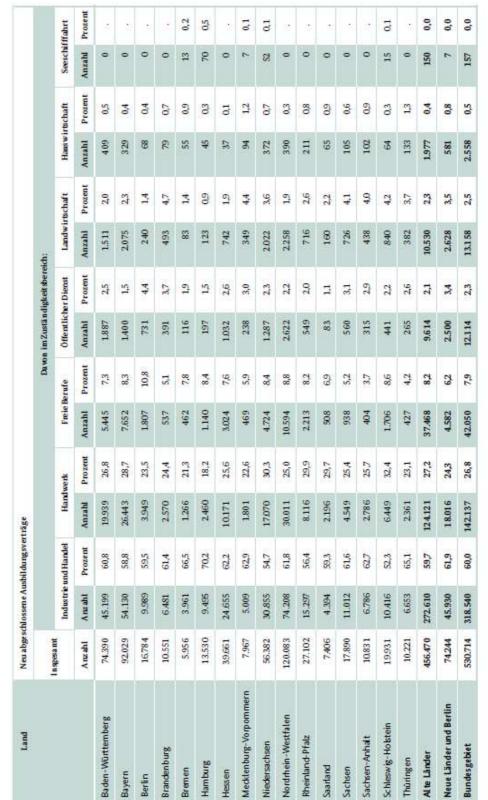
## Number of Contracts according to Länder and Sector in 2011

Land	Newly	Newly concluded tr	training contracts	ntracts												
	1.1.1							0	Of which in the sectors,	te sectors,						
	Iotal		Industry	Industry and Trade	Stilled	Skilledtrades	Liberal professions	ofessions	Publicservice	service	Agric	Agriculture	House	Houseke eping	Ship	Shipping
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Baden-Wurttemberg	4,264	5.7	3,259	7.3	1,059	5.1	208	4.0	-214	-10.5	-32	-22	-16	-3.0	0	00
Bavaria	3,420	3.6	3,157	5.8	159	9.0	243	3.2	-126	-8.1	+19	-0.9	9	1.5	0	0.0
Berlin	222-	-41	-315	-27	-308	-6.6	-140	-7,3	9-	-03	-47	-15.5	39	36.4	0	0.0
Brandenburg	-1,501	-11.0	-810	-9.5	-387	-12.2	-101	-15.1	-113	-226	-87	-14.2	с <sup>-</sup>	-2.4	0	0.0
Bremen	495	8.3	209	5.3	259	20.0	26	5.8	4-	-2.9	9	12.8	1	1.6	-2	-8.3
Hamburg	534	3.7	243	2.4	349	12.9	2	02	-75	-31.4	15	toot	-19	-37.3	19	20.4
Hessen	932	23	975	4.0	S	0.0	87	2.9	-81	-6.2	-31	-4.1	-13	-61.9	0	0.0
Meddlenburg-Western Pomeraria	-970	-9.8	-471	-7.7	-356	-15.0	-19	-3.8	-49	-142	-35	-8.7	-41	-28.9	-	6.7
Lower Saxony	2,529	4.3	2,405	7.6	152	0.8	-105	-2.3	10	0.7	111	5.7	9	-8.9	4-	-5.1
North Rhine-Westphalia	4.243	3.5	4,317	5.9	197	0.6	-98	60-	-209	-7.5	96	4.1	-60	-9.5	0	80
Rhineland-Palatinate	477	1.7	472	3.0	37	0.4	95	4.6	-88	-89	-64	-82	9	-1.8	0	0.0
Saarland	140	1.7	66	2.0	20	0.8	34	5.8	-41	-29.3	31	16.1	-3	-3.8	0	0.0
Sarony	-1,738	-78	-1,048	-7.3	-391	-7.6	35	3.7	8	-10.1	-205	-22.6	-63	-28.6	0	00
Saxony-Anhalt	-1,436	-10.0	-750	-8.5	-455	-11.7	-53	7.6-	-65	-16.8	-113	- 19.9	0	0.0	•	0.0
Schleswig-Holstein	314	1.5	388	3.5	12	0.2	-46	-2.5	6-	-1.5	-9	-1.1	-19	-12.5	-2	-17,9
Thuringia	-746	-6.0	168-	-5.0	-275	-8.6	3	90	-48	-15.0	-34	-7.5	7	-0.5	0	00
Westem Länder	17,348	3.7	15,524	5.7	2,239	1.7	446	1.2	-805	-7.5	104	1.0	-168	-6.3	80	3.6
Eastern Länder and Berlin	-7,168	-7.8	-3,785	-6.6	-2,172	-9.7	-275	-5.5	- 347	-12.1	-521	-16.0	69-	-7.5	1	6.7
Nationally	10,180	1.8	11,739	3.5	67	0.0	171	0.4	-1,152	-8.5	-417	-3.0	-237	9.9	6	3.8

Source: Fe deral Institute for Vocational Education and Training (BIBB), Survey on the 30" of September 201.1

Changes to newly concluded training contracts from 2011 to 2010 according to Länder and sector





#### Number of contracts according to Länder and sector in 2013

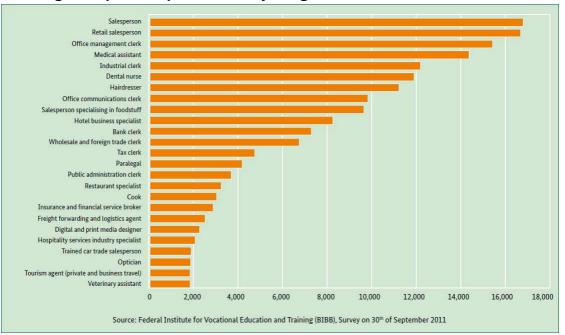
Newly concluded training contracts in 2013 according to Länder and sector

Quelle: Bundesingtur für Berufsbildung Erhebung zum 30. September 2013



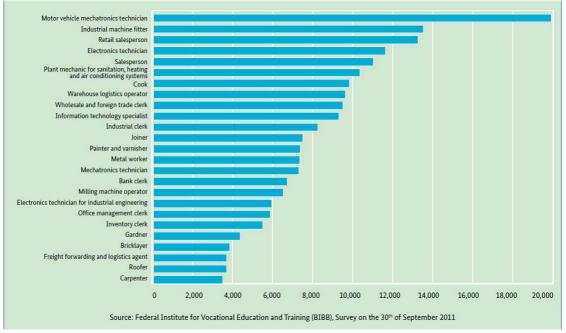






#### Training occupations preferred of young women









#### The provision of training places according to sector and Länder

Overview: Number of training places (supply) according to sector and Länder

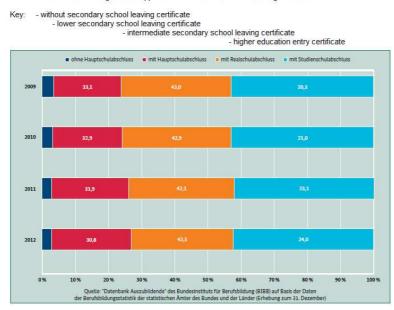
	2009	2010	2011	2012	2013	Entwick 2013 zu 3	
Deutschland	535.761	538.522	568.609	558.628	542.569	-16.059	-2,9%
Industrie- und Handel	318.985	320.342	344.533	338.841	325.777	-13.064	-3,9%
Handwerk	143.719	145.948	151.265	147.036	145.071	-1.965	-1,3%
Öffentlicher Dienst	13.732	13.689	12.460	12.196	12.324	128	1,0%
Landwirtschaft	12.797	12.523	12.628	12.474	12.522	48	0,4%
Sonstige Stellen <sup>1)</sup>	46.528	46.020	47.723	48.081	46.875	-1.206	-2,5%
Alte Länder	456.920	461.649	490.572	481.774	468.899	-12.875	-2,7 %
Industrie- und Handel	269.752	273.034	295.528	290.724	280.472	-10.252	-3,5%
Handwerk	125.091	127.008	132.315	128.547	126.944	-1.603	-1,2%
Öffentlicher Dienst	10.587	10.824	9.962	9.677	9.732	55	0,6%
Landwirtschaft	10.362	10.034	10.353	10.078	10.087	9	0,1%
Sonstige Stellen <sup>1)</sup>	41.128	40.749	42.413	42.748	41.664	-1.084	-2,5%
Neue Länder	78.711	76.758	77.904	76.732	73.598	-3,134	-4,1%
Industrie- und Handel	49.151	47.218	48.912	48.037	45.238	-2.799	-5,8%
Handwerk	18.627	18.936	18.950	18.488	18.126	-362	-2,0%
Öffentlicher Dienst	3.145	2.865	2,498	2.519	2.592	73	2,9%
Landwirtschaft	2.435	2.489	2.275	2.396	2.435	39	1,6%
Sonstige Stellen <sup>1)</sup>	5.353	5.250	5.267	5.292	5.207	-85	-1,6%

<sup>1)</sup>Eine weitere Differenzierung ist an dieser Stelle nicht möglich.

Quellen: Statistik der Bundesagentur für Arbeit (BA), Bundesinstitut für Berufsbildung, Erhebung zum 30. September; Berechnungen des BIBB.

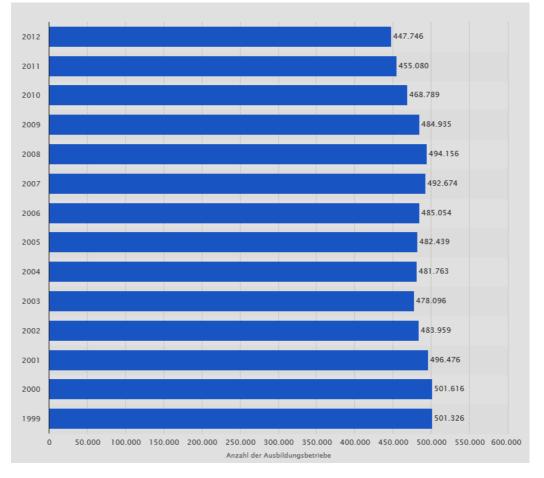
### Educational background of apprentices

Overview: Educational background of apprentices with new concluded training contracts









#### Number of training provider (1999-2012)

# The connection between VET and dual System in the whole education system

(apprentices, alternance training and work-based learning, rules and governance, labour market)

#### ✓ VET pathways at the upper secondary level

Upper secondary education leads either to a higher education entrance qualification or a vocational qualification for skilled work.

The vocational track means that pupils may enter into vocational training in full time schools or within the framework of the dual

Source: <u>http://de.statista.com/statistik/daten/studie/36316/umfrage/anzahl-der-ausbildungsbetriebe-in-den-deutschland-seit-1999/</u> accessed 8.4.2015



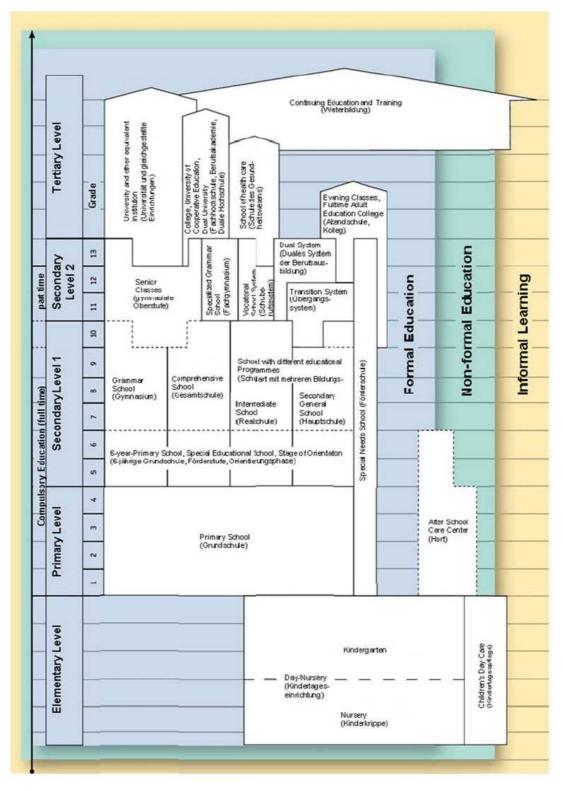


system (see diagram next page ), or seek employment. Compulsory full-time education must have been completed by the time of commencing vocational training. There are no further requirements for access to training in the dual system; it is essentially open to everybody although the majority of trainees hold either the intermediate certificate or the Abitur (higher education entrance certificate). The requirement for entrance to fulltime vocational schools is normally the secondary general school certificate or the final certificate from intermediate school. 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, and in cooperation with others. This bundle of competences must be demonstrated in examinations regulated by law (Vocational Training Act).

The following diagram of the national education and training system gives an overview the different pathways learners can chose.







Source: Own illustration according to BMBF, 2012, 03.09.2012.

Source: CEDEFOP Country Report 2012





In the general dual system trainees attend part-time vocational school on one or two days per week, where they are mainly taught theoretical and practical knowledge related to their occupation; in addition they attend classes on general subjects such as economic and social studies and foreign languages. Systematic teaching at vocational school is a necessary supplement to process-oriented training in the company which is rather more based on specific inhouse requirements. Moreover, there are full-time vocational schools (Berufsfachschulen), for which the Länder are responsible. The training may include company placements, and covers a period of two or three years depending on the respective occupation. Final qualifications are awarded on passing a school examination which is supervised by the education authority and governed by the training regulations of the respective occupation (see table 2A, CEDEFOP Country Report 2013).

Table 2A: S	chool-based I	/ET at upper se	econdary level			
Type of educational programme	Main economic sectors	Corresponding ISCED level and orientation	Balance between school-based and work- based training	Average duration of studies	Transfer to other pathways	Admission requirement
full-time vocational school	Commercial, languages, craft, household and caring, artistic,	3B	School based	At least 1 year at most 3 years	vocational extension school, trade and technical school,	lower secondary school,intermediate secondary school leaving certificate
Senior Technical School	Welfare sector, commercial and finance sector, technical,	3A	Year 1: work- based practical training,school- based teaching	At least 1 year mostly 2 years	University of applied science, University of Co- operative Education,	certificate from intermediate school
Upper Level of the Gymnasium with a Vocational Bias	Business,tech- nical, nutrition, agronomy, health-care and welfare, IKT technology,	3A	School based	3 or 4 years	University, University of applied science	certificate from intermediate school

Full-time vocational schools (Berufsfachschulen) have the highest number of students. These schools prepare students for an occupation (i.e. in the areas of commerce, engineering, health and welfare, design etc., which are generally regulated by Länder legislation, with the exception of health care, which is subject to federal





law or for vocational training. In such cases, the schools' final examinations may be given parity with examinations in the dual system by means of Federal statutory instruments. The access requirements are a secondary general school certificate or a final certificate from intermediate school. Most pupils are aged 15 when they commence full-time vocational school. 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.

Large numbers of students also attend the schools for nurses, midwives, etc. (Schulen des Gesundheitswesens), 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. Senior technical schools (Fachoberschulen) and senior vocational schools (Berufsoberschulen) normally build on vocational training in the dual system, consolidate vocational knowledge and lead to the academic standard required for entrance to a college. Fachoberschulen cover classes 11 and 12 and build on the final certificate from intermediate school (Mittlerer Schulabschluss) or a qualification recognized as equivalent. The students are mostly 19-20 years old. The first year comprises in-company specialised practical training and teaching, while the second year involves general and specialised teaching. Overall, there are many points of transition between schoolbased and dual vocational training and from vocational training to colleges. Vocational grammar schools/specialised grammar schools (berufliche Gymnasien/Fachgymnasien) provide, in addition to general grammar school education, specialised knowledge in various areas such as economics, technology, nutrition, agriculture, information and communication technologies. Some vocational/trade and technical grammar schools also offer the opportunity to acquire more than one qualification (educational programmes leading to dual gualifications): an academic gualification (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. They usually lead up to the university entrance examination.

Young people with social disadvantages, learning difficulties or handicaps and young people with migrant backgrounds with an inadequate command of German have different possibilities for prevocational training (Berufsausbildungsvorbereitung) (see table 2B, CEDEFOP Country Report 2013)

Table 2B: Stu	dents in oth	er youth pro	grams			
Type of education al programm e	Main economic sectors	Correspon ding ISCED level and orientation	Balance between school- and work-based training	Average duration of studies	Transfer to other pathways	Admission requirement
Pre- vocational training year	For orientation	2A	totally school based	1 or 2 Year	Vocational training	No requirements for access
basic vocational training year	For orientation i.e. Economic and technical sector	3В	Partly school and practical based	1 Year	Vocational Training, Full-Time Vocational School	Completion of the general full-time compulsory education (9 years of compulsory schooling) and transfer to Class 9

Pre-vocational training year (Berufsvorbereitungsjahr - BVJ): The BVJ is a one-year course of training usually offered by schools 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. Basic vocational training year (Berufsgrundbildungsjahr - BGJ): Basic vocational education can be completed either in the form of a year at school fulltime or in cooperative form in an enterprise and a school. 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).





Compared to the EU-27-average, in Germany more students choose the general educational pathway (51.41%) than vocational education (48.59%) in 2011 (see Table 2C). But this shows only a small picture. In 2010 more students took part in the VET (51.49%) than in general education (48.51%) (Hippach-Schneider/Hensen 2012). This was mainly due to the importance of the dual system that was pursued by the majority of young people after leaving the general education system. There is still overall consensus in Germany about the importance of the dual system. Particularly on the basis of the way in which it links learning and work and schools and companies, the dual training system in Germany appears to be a successful model for the structuring of the transition from school to working life.

	2C: Students	s enrolled in up otal), 2011	per secondar	y education by	, programme	e orientation	(values
	Total isced3	isced3gen (num)	isced3gen (%)	isced3pv (num)	isced3pv (%)	isced3voc (num)	isced3voc (%)
EU 27	21,759,780	10,819,086	49.72	145,323	0.67	10,795,371	49.61
DE	2,725,758	1,401,481	51.41	:	:	1,324,277	48.59
(Source	e: Eurostat; Unes	sco-Eurostat-OECD	Data collection on	education and train	ing systems) Da	te of extraction:	14.10.2013.
Descript	ion: GEN	= gen	eral; PV	= prevoc	ational; V	/OC =	vocational

Students at ISCED level 3 by programme orientation

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ\_enrl1ad&lang=en)

## ✓ What is "dual", and who makes what

The name Dual System results from the different partners and from the different learning venues involved in the education and training system.

Apprenticeship training takes place at two places of learning: in the training company (time share: 70%) and in the vocational school (time share 30%). Due to the fact that the legal basis for an individual apprenticeship is the contract between apprentice and company schools are service providers for the companies. The basis for in-company training is the training regulation (general training plan). The training manager of the company generates an individual training plan for each apprentice.





Before going into details the following table shows a brief overview of the meaning of "dual"

Vocational Education and Training	Company	Vocational School
State regulated by	Federal Government	Länder
Legal Basis	Contract	Compulsary Voca- tional Education
Determination of Contents	Training Regulations	Framework Curricu- lum
Monitored by	Competent Bodies Chambers etc.	Supervision of Schools
Funded by	Company	Länder

### Role of the Federal Government

The Federal Government is responsible for designing the content of training for the occupations (in the dual system) it has recognized unless training is school-based. The nationally binding recognition of the training occupations ensures that the basic principles agreed with industry and the Federal States (Länder) are taken into account and that training for a recognized occupation is only provided in accordance with the training regulations adopted by the Federal Government. The Federal Government's responsibilities are not limited to implementing what was jointly agreed. It also takes measures to promote dual training. These measures include not only individual support programmes like those stipulated in the Federal Training Assistance Act (BAföG) but also special funding programmes which aim, for example, at creating additional training places in less favoured regions. The Federal Government provides funding for special research projects to ensure the constant updating of vocational training. In the German Federal Government, the Federal Ministry of Education and Research (BMBF) is responsible for general policy issues of vocational education and training. These include for example the Vocational Training Act (Berufsbildungsgesetz, BBiG), the drawing up of the Annual Report on Vocational Education and Training, the legal supervision and





funding of the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsbildung, BIBB) and the implementation of programmes to improve vocational training.

The recognition of the individual occupations requiring formal training is the task of the federal ministries responsible for the respective occupational field. In the vast majority of cases, responsibility lies with the Federal Ministry of Economics and Technology (BMWi). But approval by the BMBF is required in all cases. The BMBF thus fulfils a coordinating and steering function in terms of vocational training policy for all training occupations. The core institution at the national level for consensus building between all parties involved in VET is the Federal Institute for Vocational Education and Training (BIBB). BIBB conducts research into in-company vocational training and fulfils service and consultancy functions to the Federal Government and vocational training providers. The fourparty Main Board (Hauptausschuss) advises the Federal Government on fundamental issues of in-company vocational training.

#### Role of the regional government

The Constitution (Grundgesetz) provides that competence for school education lies with the Länder Ministries of Education and Cultural Affairs. The Ministers of Education and Culture of the Länder cooperate in a Standing Conference (KMK) to ensure a certain measure of uniformity and comparability, especially in school and higher education policies. Decisions of the KMK are recommendations and only become legally binding when passed by individual Länder parliaments. The Länder have committees for vocational training, with equal representation of employers, employees and the highest Länder authorities. They advise the Länder governments on vocational training issues in schools.

#### Role of the social partners

The organisation of dual training requires a complex but clear division of responsibilities. Employers and trade unions play a central role in initiatives for change because the structure of vocational training must meet the demands of industry. If there is a need for changes – in the qualification requirements, for example – the Federal Government, the Länder, the industry and the trade unions agree on the basic principles for adaptation. Then the work on the training regulations and framework curricula is continued and con-





stantly coordinated by the individual partners involved. Without the involvement of the Federal Government, the social partners furthermore agree on details of vocational training, particularly the amount of the allowance paid to trainees, within the framework of free collective bargaining. Some collective agreements also include provisions concerning such points as continued employment of training graduates under a limited contract.

#### **Role of chambers**

As self-governing bodies of industry, the chambers have been assigned public tasks in dual training (competent bodies). These include counselling and monitoring functions with regard to the individual training contracts. Training advisers of the chambers verify the aptitude of companies and instructors for providing training and advise both companies and trainees. They receive training contracts, check and register them. The chambers take care of the overall organisation of examinations by fixing dates and setting up examination boards which administer the examinations (see 3.3).

In the general dual system trainees attend part-time vocational school on one or two days per week, where they are mainly taught theoretical and practical knowledge related to their occupation; in addition they attend classes on general subjects such as economics and social studies and foreign languages. Systematic teaching at vocational school is a necessary supplement to process-oriented training in the company which is rather more based on specific inhouse requirements. Moreover, there are full-time vocational schools (Berufsfachschulen), for which the Länder are responsible. The training may include company placements, and covers a period of two or three years depending on the respective occupation. Final qualifications are awarded on passing a school examination which is supervised by the education authority and governed by the training regulations of the respective occupation.

#### Role of the company

The company closes a contract with an apprentice for the vocational education and training. The training manager develops an individual training plan (timetable and syllabus). And the company has to announce the apprentice by the competent chamber. Last but not least the company has to finance the apprenticeship.





The main feature of the German VET system is the close partnership between employers, trade unions and the government. Social dialogue and codetermination are important for the acceptance of reforms. Management and labour exert considerable influence on the content and form of VET to ensure that their requirements and interests are taken into account. Responsible action of all participants, over and above each group's particular interests, is a precondition for the efficiency of the dual system.

## Who makes it "dual" (legal basis for training, counseling and monitoring, funding, training personal)

As mentioned above the word "dual" means that there are two places of learning, the in-company training and the vocational school. Taking a closer look at the involved parties leads to the following list of institutions.

### Federal Level

- Federal Ministry of Education and Research
- Federal Ministry of Economics and Technology
- Federal Institute for Vocational Education and Training (BIBB)
- Main board for VET at the BIBB
- Trade Unions, Employer Associations, Vocational Schools
- Standing Conference of the Ministers for Education and Cultural Affairs of the Länder

## **Regional Level**

- Regional boards (committees) for VET
- Chambers of Industry and Trade
- Chambers of Crafts
- Chambers of the liberal occupations
- Ministries for Education and Cultural Affairs of the Land
- Regional authority for VET
- School inspectors
- Training enterprises
- Authorized trainer
- Vocational Schools
- Apprentices

The tasks were pointed out beforehand.





✓ Where it takes place venues and governance system Companies that want to train apprentices have to fulfil several requirements, before they are allowed to recruit new applicants. They have to prove that they have at least one person with the appropriate pedagogical competences or the trainer aptitude examination. In addition they have to prove the suitability of all processes, machines and resources according to the requirements of the training regulations of conceived apprenticeships.

Competent bodies for such inspection are mainly the chamber of commerce and the chamber of crafts depending on the vocational occupations.

After having closed the contract the company has to register the apprentice for the responsible vocational school.

Prerequisite for apprenticeships is the

## ✓ Fulfilment of legal conditions

According to the vocational training act or the crafts code the company must be entitled to carry out all activities in which the apprentices have to be trained. But apprentices cannot only be trained by companies in trade, commerce and industry, but also by members of the so called liberal professions, such as pharmacists, architects, lawyers, civil engineers and so on or by associations, administrative offices and other legal entities.

In detail the company has to be equipped and managed suitable to teach and train all the knowledge and skills included in the underlying occupational profile. The company size is not decisive for apprenticeship training. Every company – also a one person company – can train apprentices if it is guaranteed that they are assisted properly.





Those companies that cannot fulfil the requirements in total have different alternatives.

- Educational institutions offer inter-company training periods *(inter-company vocational training centres ÜBS)*, designed to supplement in-company training. They are often sponsored by autonomous bodies in the relevant sectors of industry. The Federal Ministry for Education supports the sponsors with investment subsidies. The *BIBB* bears statutory responsibility for implementing the sponsorship.
- Enterprises form coherent training structures **(Ausbildungsverbünde)**. There are four traditional models for this:
  - **"Lead enterprise with partner enterprise" model** *(Leitbetrieb mit Partnerbetrieben):* the lead enterprise bears overall responsibility for training, but parts of the training are conducted in various partner enterprises.
  - "Training to order" model (Auftragsausbildung): 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.
  - "Training consortium" model (Ausbildungskonsortium): several small and medium sized enterprises (KMU) work together and take on trainees. If one enterprise cannot obtain a specific content the trainee goes into the other enterprise (rotation principle). The enterprises also sign a cooperation agreement; they work together equally and train their own trainees independently.
  - "Training association" model (Ausbildungsverein): the individual enterprises establish an organisation for the purpose of the training, which takes over the organisational tasks (like contracts etc.), while the master enterprises offer the training. The organs of the association are the general meeting and the honorary committee. A statute regulates rights and obligations of the members.





## When it happen, duration, organizational models for alternance

Vocational education and training of recognized vocational occupations lasts between 2 and 3 ½ years mainly 2 ½ years. There are different models of alternance with 2 days per week at school and 3 days in-company training. Very common is a so called holidayorientated block model. One block lasts e.g. 8 weeks, during the vocational education apprentices have 5 to 6 blocks depending on their capability and their marks at school. It is also possible to reduce the time of the apprenticeship by ½ year assumed the average mark of the apprentice is better than 2.5 and the company gives the approval.

In the IT sector there is another model with blocks of 2-3 weeks. The organizational model has to be agreed a. o. with the companies.

Content specific organizational models are possible too. For example the vocational education of industrial clerks (BA) has a framework curriculum with 12 so called learning fields. The concerned contents are mandatory. The compulsory time at school is 6 lessons per day assuming a block model. Furthermore there are lessons leading for example to additional skills and certificates apprentices have to choose from. E.g. data processing, special production technology, process modelling, Spanish, Business English Certificate Cambridge, project management, labor law etc.

The additional provision in the area of occupational preparation ("Qualifizierungsbausteine" / qualification modules) and modularized vocational education and training based on the so called "Ausbildungsbausteinen" (educational modules) will be pointed out at another point.





## The standard of learning process

## ✓ The design of the path

#### Precedent steps

- research studies concerning needs and demands of the labour market
- identification of new requirements

#### Preparation

- identification of vocational and special prerequisites
- clarification of the key parameters and basic framework
- Elaboration of the training regulations
- preparation of draft regulations
- preparation of draft frame work curricula for vocational schools

#### involvement of all stakeholders in a consultation and review process

#### Issuing of regulations

- issuing of apprenticeship training regulations for the company based part of training by the Federal Ministry of Economic and Technology in consultation with the Federal Ministry of Education and Research
- issuing of framework curricula for vocational schools by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany

#### Follow-up measures

- elaboration of supportive materials and manuals
- provision of information to companies (training enterprises)
   a. o. by the chambers
- training of trainers and teachers for the new occupation
- continuous evaluation

## ✓ The reference standard for the training of apprentices

The apprenticeship certificate is a legally regulated formal qualification. According to the ISCED classification the apprenticeship certificate is ranked as 3B, in the eight-level German Qualification Framework it is assigned to level 4.





(see <a href="http://www.dqr.de/media/content/DQR\_Handbuch.pdf">http://www.dqr.de/media/content/DQR\_Handbuch.pdf</a> , accessed on 27.3.2015)

Since 2014 the level is noted on the apprenticeship certificate.

## The rules of training and standards for enterprise training

Every training regulation lays down the specific job profile and the competence profile of the considered occupation.

Individual training plans (timetable and syllabus) are mandatory for each apprenticeship.

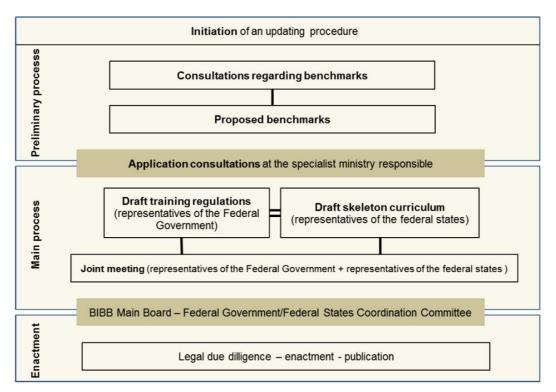
## ✓ Standards for training at vocational schools

The framework curriculum is the supplement to the training regulation. In Germany it is divided into learning fields. Vocational schools work out their didactical annual programme based on the framework curriculum and the government curriculum of the responsible Land.

According to that curriculum general subjects are also part of teaching lessons.

## $\checkmark$ The process of drafting the training regulations

The following diagram gives an overview of the process.







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

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

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

## First step: Defining the parameters of the training regulation

The parameters of the training regulation are defined during an "application meeting" at the responsible ministry (usually the Federal Ministry of Economics and Technology). The following aspects have to be taken into account:

- a) Designation of occupation
- b) Length of training
- c) Structure and organisation of initial vocational training
- d) Form of examination

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

- e) Time allocation structure
- f) Environmental protection
- g) List of skills, knowledge and capabilities





The list of skills and knowledge contains the minimum requirements of the initial vocational training programme

## Second step: Drafting and coordination phase

In this phase, the training regulation for the given training occupation (setting out the company-based elements of initial vocational training) and the corresponding framework curriculum for vocational schools are drafted and coordinated with one another. BIBB asks the top-level employers' and trade union organisations to nominate representatives of company-based training practice who, acting as experts for the Federal Government (since companybased vocational training falls within its purview), work jointly with BIBB to develop new training regulations or revise existing training regulations.

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

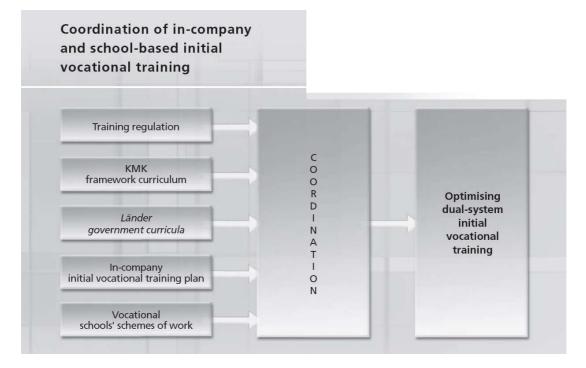
Proceeding in concert with the work done by the Federal Government's experts, the experts delegated by the *Länder* develop a draft curriculum for instruction at part-time vocational schools. At the end of the drafting phase, the two groups of experts meet to discuss the two drafts and bring their respective content and timetables into alignment. After this coordination phase, the finalized draft training regulations are forwarded to the Board of BIBB for its comments. The Board's statement of approval of the draft regulations is a simultaneous recommendation to the Federal Government to "issue" the particular vocational training regulations in the submitted form.

In addition, the designated experts drafted a EUROPASS certificate supplement for each occupation to accompany the final certificate. With a view to improving occupational mobility, mainly within Europe, and to increasing the ease of crossborder applications, EU-ROPASS certificate supplements are produced in English, French





and German. They are part of the EUROPASS, a free service provided by the European Commission aimed at helping to present qualifications, capabilities and competences in a way that can be understood throughout Europe. The purpose of the EUROPASS is to document all the qualifications that have been acquired – by whatever route – over the course of a lifetime. It is focused more on learning outcomes and less on particular educational pathways and course lengths.



Dual System: Coordination for agreed training occupations

## Third step: Issuing of the training regulation

The Federal-*Länder* Coordination Committee for Vocational Training Regulations / Framework Curricula (KoA) finally approves the new vocational training regulation and the framework curriculum that has been coordinated with it. The responsible ministry in conjunction with the Federal Ministry of Education and Research subsequently issues the training regulation and publishes it in the Federal Gazette. The date that a new regulation goes into force is usually the start of the next training year – i.e. 1 August in Germany. As a rule, the individual *Länder* adopt the framework curriculum for the particular occupation or incorporate it into their own specific curricula for part-time vocational schools.

Compiled by: Gunnar Binda – AL HH





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

Vocational training regulations are published in Germany's Federal Law Gazette. They are also published together with the respective framework curricula and training profiles in the Federal Gazette. New training regulations are entered in the register of recognized training occupations maintained by the Federal Institute for Vocational Education and Training. The updated register is published once a year. This register lists the names of the recognized training occupations as well as those being piloted and those suspended and modified, and contains information about the duration of initial vocational training programmes and their legal bases (i.e. references to legal sources). It provides information about the Austrian and French equivalents to German examination certificates in the individual occupations. The register also contains federal and Länder regulations pertaining to occupations in the health care sector and social welfare field and provisions governing initial vocational training for people with disabilities. It also includes the provisions regulating continuing vocational training and retraining, a list of competent bodies and a statistics section

The register of recognized training occupations is published annually on 1 October as a supplement to the Federal Gazette.

The printed section of the register can also be ordered in book form from either of the publishers Bundesanzeiger- Verlag or W. Bertelsmann Verlag (wbv), while the online section can be viewed on the BIBB website at:

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

Follow-up measures are provided by the BIBB. There are different support materials and handouts available to help companies to carry out excellent in-company trainings.





## ✓ The company's training program

While any company is free to decide whether or not to take on trainees, the process of training itself is of course governed by certain rules. This is especially true with regard to the scope of individual training.

Section 1 of the Vocational Training Act states as follows: "The object of initial training shall be to provide, through a systematic training programme, a broadly conceived basic preparation for an occupation and the necessary technical abilities and knowledge to engage in a skilled form of occupational activity. Initial training shall also enable a trainee to acquire the necessary occupational experience."

The Act says in another section that as a basis for this system of training and for "the adaptation of that system to technical, economic and social requirements and changes in the same", the responsible federal minister is charged with issuing training regulations specifying the name of the trainee occupation, the period of training (generally between two and three years), and the abilities and knowledge to be imparted in the course of training.

Every training employer is obliged to provide training systematically in accordance with a syllabus and timetable and in a form appropriate to the aim in view. The nature, syllabus, timetable and purpose of the training must be set down in writing in the training contract.

The departments of the company then are responsible for the training in the specified processes.

In addition the apprentice has to write a report on every department he/she was trained.

Furthermore enterprises undertake measures to adapt the vocational training to the very fast technical development.

Technical developments have meant that the training content, particularly in the area of industrial training, has become increasingly complex; so much so, in fact, that in training for a large number of occupations certain specific training content, especially what are termed the basic skills, has to be imparted independent of produc-





tion, in separate training courses. For this purpose, medium- and large-scale enterprises have installed special training workshops.

For those firms that are too small to operate their own facilities, the Chambers and professional associations have established a number of training workshops which are used by a range of firms.

However, such facilities are no substitute for, but only a supplement to, on-the-job training, as they cannot provide the advantages of in-plant training set out earlier: they can, at best, provide only a simulation of practical work.

## The training/apprenticeship process

## The role of schools, entrepreneurs and other organizations (chamber of commerce, work agencies, school ministry etc.)

Training takes place in two venues, the training enterprise and the vocational school. As mentioned before the duration varies between 2 and 3 <sup>1</sup>/<sub>2</sub> years depending on the training occupation and the qualification and competences the apprentice has acquired before starting the apprenticeship.

The process of an apprenticeship starts with vacancies offered by training enterprises. In parallel the competent chamber and the labour agency will be informed.

Interested pupils apply directly at the company for an apprenticeship. The companies carry out the selection of candidates and close contracts. In addition the companies register the apprentices at the vocational school.

The training manager or an authorized trainer develops the individual training plans for apprentices (timetable and syllabus). Support materials for these tasks are available at the BIBB and at the chambers.

The chambers record the contracts. And they are responsible for organizing the interim examination and the final examination.

In-company training makes 70% of the apprenticeship whereas the part of school education is 30 %.





Every trainee must sit an interim examination in the course of his period of training. The examination serves to ascertain the level the trainee has reached. The competent Chamber establishes boards of examiners to hold these examinations. Every trainee may sit a final examination at the end of his period of training in order to show that he has acquired the necessary professional qualifications.

To hold these examinations, the responsible Chamber will establish boards of examiners consisting of at least three members, being employers' and employees' representatives in equal numbers and at least one vocational school teacher. Rules to be observed in connection with final examinations are issued by the Vocational Training Committee of the Chamber, consisting of employers' and employees' representatives in equal numbers and vocational school teachers as consultant members.

These rules set out the entry criteria, the form of the examination, the criteria for marking, the arrangements for issue of examination certificates, the consequences of breaches of the rules and the possibilities for repeating the examination.

The skills to be examined are laid down in the training regulations. According to the occupation, they may provide for a test of practical and/or theoretical skills. The practical examination will call for samples of work and/or test work-pieces. The theoretical test is conducted as a written and/or oral examination.

After having passed the examination, the trainee will receive an examination certificate issued by the responsible Chamber. It shows that the person concerned has acquired the qualifications necessary for a specific occupation. It is also the basis for professional progress and career advancement. Passing the final examination is one of the conditions for admission to the Masters' examination and many other further training examinations, for demonstrating aptitude for training in a number of branches of trade, industry and commerce, and in many cases forms the basis for claiming collectively-agreed benefits in the workplace.





Beyond the normal apprenticeship process the vocational training act offers an opportunity to get an apprenticeship leaving exam based on non-formal learning and work experience:

The external examination regulation draws a distinction between categories of "qualified" and "non-qualified" individuals, thus differentiating between candidates on the basis of their prior learning or prior formal qualification. It differentiates between two forms of evidence:

- The one which can be clearly provided in the form of formal proof (Vocational Training Act, sect. 45, clause 1: "Persons able to demonstrate that they have been working in the occupation forming the object of the examination for a period of time at least equal to one and a half times that the stipulated training time shall also be admitted to the final examination". Training periods spent in another relevant occupation also count as times of occupational activity (sect. 45, paragraph 2, clause 2) and
- The other way of evidence which opens up access to the final examination under the external examination regulation (Clause 1 in Vocational Training Act may also be rescinded in whole or in part "if the applicant credibly demonstrates that he or she has acquired the necessary employment skills by presenting references or by providing evidence in another way" (Vocational Training Act, sect. 45, paragraph 2, clause 4).

## ✓ The regulation of apprenticeships

The main characteristics of state-recognized occupations are the training standards defined for the attainment of the relevant qualifications and for information of the labour market. Their legal basis is the Vocational Training Act, which in its § 1, Section 2, lists the following requirements for in-company occupational training:





- broad basic vocational training and occupation-specific knowledge and skills required to pursue qualified occupational activities,
- a regular training course of 2 to 3 years enabling the acquisition of necessary occupational experience in the workplace.

Furthermore, it lays down the context and time frame for training courses in state-recognized occupations, e. g. the training specifications, the assessment requirements.

Due to rapid change of skills needs of the labour market a flexible early warning system is required.

Systematic recording and research of the development of future skills needs in Germany was initiated in the resolutions passed in 1999 by the "Alliance for Jobs, Training and Competitiveness" (Bündnis für Arbeit, Ausbildung und Wettbewerbsfähigkeit) and implemented within the subsequent initiative for the early identification of skills needs launched by the BMBF. The main part of this initiative is the research network "Early Identification of Skills Needs in the Network" (FreQueNz, www.frequenz.net/). It includes several research institutions, an education organisation, the Federal Institute for Vocational Education and Training (BIBB), the German Confederation of Trade Unions (DGB) and the German Employers' Organisation for Vocational Training (KWB). At the BIBB new skills requirements are being monitored using different and complementary approaches:

Occupational and qualifications projections. The Federal Institute for Vocational Education and Training (BIBB) and the Institute for Employment Research (IAB) work together in order to develop model calculations on the development of the labour market until the year 2025. This study breaks new ground in methodological terms by the way in which it traces the routes between occupations learned and occupations exercised (occupational flexibility). Longer-term occupational field and qualifications developments can now be displayed in a more differentiated manner. This enables attention to be drawn at an early stage to the action required to facilitate greater matching accuracy of supply and demand on the labour market. The projections show such as aspects as the





areas in which a considerable shortage of skilled workers may occur and which skills levels will be under particular threat from unemployment (www.qube-projekt.de; accessed: 7.4.2015).

- Surveys of companies help to build up a comprehensive picture of technological and organisational developments in the companies and the associated skills requirements. Relevant surveys are conducted at regular intervals with the companies on the BIBB panel known as the Reference Company System (Referenz-Betriebs-System, RBS), which encompasses more than 2,000 training and nontraining firms which vary in size, sector (e.g. industry, services, crafts) legal form, length of time in operation and main occupations employed. Furthermore surveys are carried out in selected sectors. These are geared towards particular fields of work, and yield sufficiently differentiated and empirically verified information on the requirements in individual occupations.
- Job advertisement analyses yield empirically verified information on the demand for skilled workers in the job market and the qualification profiles desired by companies (the ideal).
- Surveys of advertisers are conducted to find out whether the advertised vacancies were filled or the reasons why they were not (the reality).
- Surveys of guidance staff generate expertise on in-company strategies for change and skills development.
- Representative surveys of people in employment give indications of their subjective perception of expertise requirements, job profiles, working conditions and continuing education and training needs.
- Regular surveys of continuing education providers gather data on the implementation, reception and any modifications of courses offered, as well as experiences and assessments of trends in training establishments.
- The Prize for Innovation in Continuing Education and Training (WIP) is a direct initiative to seek out innovative approaches to continuing education and to set the tone for new developments and a contemporary style of VET.
- Structural and longitudinal studies of the continuing vocational education and training courses listed in the KURS data-





base yield information on changes and trends in CVET provision.

These early identification activities by BIBB can best be subsumed under the heading of "qualification development research". It homes in on changes in existing fields of work or the emergence of new fields, and the accompanying qualitative development in relation to changing or new qualification requirements faced by employees, including the factors which influence these. In this sense, BIBB's qualification development research apparatus is set up for an anticipative assessment of qualification needs which is also capable of identifying qualitative tendencies or trends.

Furthermore, the BMBF also supports the development of a "Labour market radar" (Arbeitsmarktradar), a system of future-oriented labour market monitoring.

The Länder, and several regions in different Länder, pursue their own region-specific activities for early identification (e.g. regional monitoring of qualification developments, surveys on skill needs).

The social partners are also involved in early identification issues, mainly in the context of modernising initial and further training regulations. All these activities are important contributions to the early identification of qualification needs. At the same time, they contribute to the implementation and transfer of measures to meet qualification needs within the VET system. Besides that, investigations on skill needs and qualification development are carried out by:

- sector-specific associations, such as: the Association of Engineers (VDI) and the German Association of Information Technology, Telecommunications and New Media (BitKom);
- the Institute for Employment Research (IAB);
- several foundations, such as the Hans-Böckler Foundation, Friedrich-Ebert Foundation, Konrad-Adenauer Foundation and the Bertelsmann Foundation;
- other stakeholders.





## ✓ The apprenticeship contract

The apprenticeship contract is closed between the enterprise, represented by the authorized training manager and the apprentice. The contract constitutes the legal basis for the apprenticeship within the dual system. It must be concluded in writing.

In case of underage persons the contract must also be signed by his/her legal representative. (§10 Vocational Training Act)

Recording of the contract must be submitted as soon as possible at least within three weeks after the beginning of the training to the competent chamber administering all contracts.

The chamber examines the data of the contact as well as the suitability of the enterprise for training apprentices.

The apprenticeship contract must include at least the following details:

- personal data of all parties concluding the contract (cf. above)
- the specific training occupation
- the apprenticeship period
- the beginning and the end of the training
- training venues
- apprenticeship remuneration
- working hours per day
- vacation entitlement
- probation period
- possibility to quit
- company agreements

## ✓ The different levels of governance

### **Federal Level**

- Federal Ministry of Economic and Technology in consultation with other ministries
- responsible for recognized vocational occupations
- training regulations





- vocational training act
- Standing Conference of the Ministers of Education and Cultural Affairs
- Framework curricula for the school-based part of the apprenticeship training

## **Regional level**

- chambers of commerce and chambers of crafts
- examine new interested training enterprises
- responsible for quality assurance concerning registered training enterprises
- responsible for examining and recording apprenticeship contracts
- organizing interim examination and final examination of apprenticeships
- provide counselling to apprenticeships and training enterprises
- regional advisory boards for IVET and CVET determine the regulations developed by the chambers

## Regional vocational education boards according to §§82,83 Vocational Training Act

provide consultancy services in all issues related to apprenticeships

## Ministry of Education of the Länder

• responsible for all affairs of vocational schools

## **Regional authority for VET**

- implementing the federal framework curricula for VET
- supervising vocational schools in educational and technical matters

## $\checkmark~$ The costs of apprenticeship

Training enterprises bear the costs of apprenticeships. Vocational schools are financed by the Länder and municipalities.

The apprenticeship remuneration constitutes the major part of the costs for apprenticeship training. Its amount is laid down for each individual apprenticeship occupation in collective bargaining





agreements. In addition company agreements concerning the apprenticeship remuneration are possible.

Where no agreement like the above mentioned is available an individual agreement for each contract is necessary. The remuneration differs between apprenticeship occupations. The remuneration increases with every apprenticeship year.

In 2014 costs of one apprenticeship are estimated by 15000 € per year. (cf. GOVET: <u>http://www.bibb.de/de/govet\_2362.php</u>; accessed: 7.4.2015)

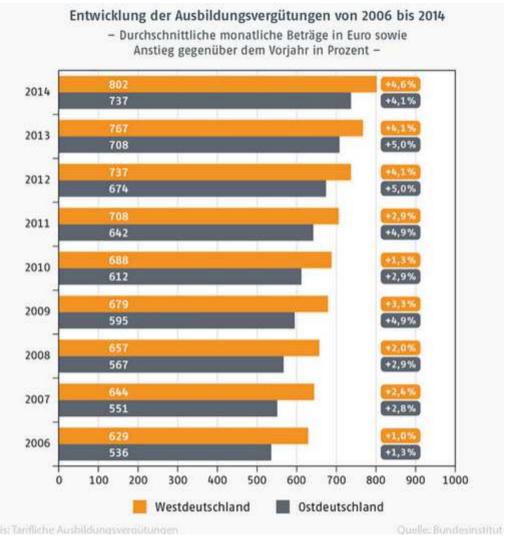
These costs have to be considered in relationship to the productive contribution of the apprentices to the economic results of the enterprise. In addition the costs of apprenticeships reduce the company's taxable profits. That means the state co-finances indirectly the costs of every apprenticeship. In Germany thus the return of apprenticeship costs lays approximately by 76%.

According to surveys of the BIBB the following figures mirror the current situation of training allowances.





## Training allowance on average subdivided into Germany – western Länder and eastern Länder

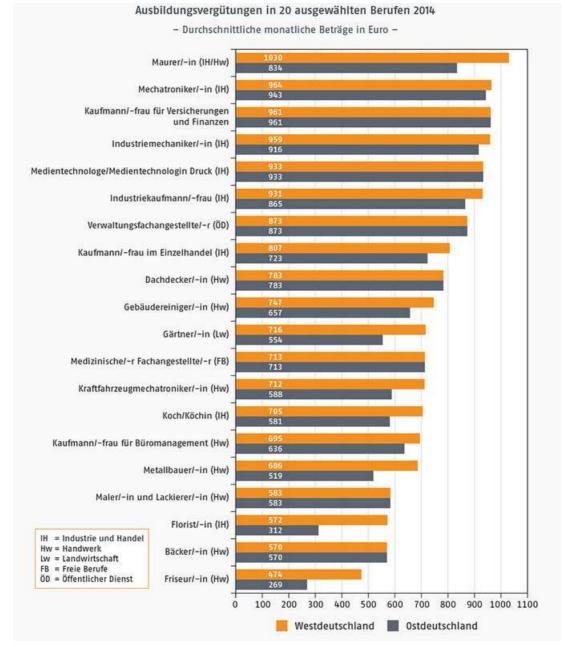


Source: BIBB Training allowances in 2014, http://www.bibb.de/de/23679.php accessed: 9.4.2015





#### Training allowances according to 20 training occupations



Source: BIBB Training allowances in 2014, http://www.bibb.de/de/23679.php accessed: 9.4.2015





✓ Main models of apprenticeship in own region/country The apprenticeships in Hamburg are organized according to the legal conditions mentioned before.

The regional authority is called Hamburg Institute for Vocational Education and Training (Hamburger Institut für die berufliche Bildung).

The school part of the vocational education is organized with currently 44 vocational schools. At the moment there is an ongoing transition process towards a reduced number of vocational competence center.

There is one characteristic of the Hamburg model, the concentration on one or few training occupations at every vocational school.

The educational background has big influence on the chosen training occupation. About 50% of the apprentices in crafts occupations have a general secondary school certificate; apprentices holding the final certificate from intermediate school or equivalent qualifications chose to high shares occupations from public services or so called liberal professions.

Apprentices holding a higher education entry certificate prefer mostly business occupations or occupations of civil services. The share of apprentices in the training occupation Industrial Clerk for example holding a higher education entry certificate is about 90%. The picture of IT and demanding technical occupations is similar.

70% of the apprenticeship duration is carried out as in-company training, a share of 30% takes place at the vocational school.

The organizational models differ between the training occupations. Each model is agreed between the dual partners. The following models show the options:

- part-time vocational school with 2 days per week
- block model with a duration of three weeks each block
- block model with a duration of 6-8 weeks each block





## Monitoring and evaluation system

## ✓ Qualification and final assessment or examination

The apprenticeship leaving examination consists of the following elements

- theoretical exam
- report concerning a subject matter task carried out in the training company
- presentation of the report and oral examination

In addition apprentices get a final certificate from the vocational school.

The following people can be entered for the apprenticeship leaving exam:

- apprentices, who have completed the apprenticeship in accordance with the official regulations
- people who have proofed that they have completed at least 1 <sup>1</sup>/<sub>2</sub> the time employment mandatory for an apprenticeship in the intended occupation.

In that case also periods of work experience are recognized completed in another recognized vocational occupation

 people who can proof occupational competence with certificates or in another appropriate way; qualifications acquired abroad have to be taken into account as well as periods of work experience abroad

## ✓ professional competences

The apprenticeship leaving exam aims to proof whether the candidate has acquired the professional competence required for the respective occupation and is able to carry out the activities particular to the occupation himself or herself in an appropriate manner.





## Achievement in key competencies in reading, math and science literacy as required by European framework

It seems to be appropriate to mention the eight key competences in advance defined by the EU.

- 1. Communication in the mother tongue
- 2. Communication in foreign languages
- 3. Mathematical competence
- 4. Basic competences in science and technology
- 5. Digital competence
- 6. Learning to learn
- 7. Social and civic competence
- 8. Sense of initiative and entrepreneurship
- 9. Cultural awareness and expression

Pursuant to the title of this section the question is what competence is fostered in vocational education.

Communication in the mother tongue is a core subject of comprehensive schools as well as grammar schools. It is not a special part of the framework curriculum for vocational schools.

Regarding vocational school education we take business occupations as example:

Communication in foreign languages is an important subject of vocational school education, because for example English and Spanish are important languages in international trade. Therefore English has a share of 4 lessons per week at least with the opportunity to choose additional 3 lessons per week to acquire the Business English Certificate level B2 or C1.

The importance of mathematics in curricula of vocational schools depends on the training occupation. There are some occupations in technical and IT sectors with high demanding mathematical requirements whereas other occupations have low requirements concerning mathematics.

Basic competences in science and technology are part of the framework curriculum of many training occupations. In commercial occupations they are taught in so called optional courses like pro-





duction technology, energy or process technology. Other training occupations have similar models.

More and more schools try to integrate recognized certificates of companies or universities into curricula. Examples are CISCO certificates, project management, business process modeling, technical certificates, AITTS certificates and so on.

Digital competence is an integrated part of the framework curriculum for vocational schools. In addition vocational schools with a business orientation provide optional courses concerning data processing, mostly leading to the ECDL certificate.

The National Qualification Framework of Germany (DQR) was passed in May 2013. Training occupations lasting 2,5 to 3.5 years are assigned to level 4, those occupations with a duration of two years are assigned to level 3 of the DQR. Since 2014 the level is notated on the school leaving certificate of the apprenticeship and on the apprenticeship leaving certificate.

According to the principles of the EQF and NQF learning outcome orientation is a principle becoming more and more important for curricula and teaching lessons. In Hamburg phases of selforganized and self-controlled learning have been implemented. Learning outcome orientation is a crucial part of those learning processes.

Furthermore there are big efforts to implement effective development of social competences, entrepreneurship and cultural awareness into the programmes of vocational schools.

The development of all mentioned key competences of course is influenced by the in-company training in real work processes with often an international context.





# **Opportunities for inclusion (SEN, ESL, immigrants, gender gap, disabilities, social disadvantages)**

Are there specific training or apprentices paths in this case

The Federal Government promotes the integration of people with disabilities into the world of work. Under the provisions of the German Social Code (Sozialgesetzbücher – SGB) VolumesII, III and IX, these young people are supported by the labour agency (BA), even before they leave school, with a comprehensive range of vocational orientation and counselling services to help them manage the transition from school to work.

According to provisional data, an annual average of 47264 people with disabilities were in pre-vocational training measure as part of an employment promotion scheme with initial integration into an occupation and a vocational qualification (2010: 50900) as its goal in 2011. Another 15215 young people (2010: 16800) were in pre-vocational measures. An annual average of 20446 people (2010: 21262) were funded to take part in admissions procedures and vocational training in a workshop for people with disabilities (WfbM) in 2011. These were people who, due their disability, were not or not yet able to work in accordance with the demands of the ordinary labour market.

The Vocational Training Act and Crafts Code stipulate that disabled people, just as people without disabilities, are to be trained in recognized training occupations. For people whose kind and degree of disability makes vocational training in a recognized training occupation impossible, the relevant authorities should develop training regulations based on recognized training occupations. To ensure the necessary transparency and consistency, the legislation stipulates that such regulations should be based on recommendations made by the BIBB board (§66 Vocational Training Act, § 42 Crafts Code). Based on these regulations 11203 training contracts were concluded nationally in 2011 and 9454 newly concluded contracts in 2013.

In June 2011 the Federal government adopted a national action plan to implement the UN convention on the rights of People with Disabilities to further include people with disabilities in society.





The vocational training is also being tackled in the national action plan for work and Employment. The Federal Government is also restructuring its disability report to develop a major orientation for the Federal Government's future disability policy.

## Job 4000 – Programme for the better occupational integration of severely disabled people

The Federal Ministry of Labour and Social Affairs (BMAS) finances the occupational integration of severely disable persons with the assistance of the European Social Fund (ESF). A further aim is for the Federal Employment Agency to be supported in carrying out its statutory tasks within the scope of the occupational integration of persons with disabilities. Plans include the creation of at least 500 new company-based training places for severely disabled young people by incentivising companies to put such provision in place. The objective of the programme is to achieve occupational integration of severely disabled persons outside workshops specially established for the purpose.

## Prevocational training measures (berufsvorbereitende Bildungsmaßnahmen - BvB)

The *BA* provides prevocational training measures (*berufsvorbere-itende Bildungsmaßnahmen - BvB*) under Section 61 of the *Sozial-gesetzbuch (SGB III)*. 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 incompany training relationship;
- vocational training in non-company establishments (*BaE*) in a training occupation recognized 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 sociopedagogic





• support within the framework of an in-company training relationship.

## Training bonus

The global financial and economic crisis has had repercussions on the apprenticeship market. Under the Employment Opportunities Act of 24 October 2010, the scheme to help apprentices from insolvent companies by means of the "training bonus" was therefore extended by three years until the end of 2013. By the end of November 2010, training bonus assistance had been approved in 5,900 of these cases. The training bonus is a financial subsidy aimed at reducing the costs of initial vocational training. It is intended for employers who offer additional in-company training places for young people, particularly those who may have been seeking a training place for some time without success. Support of up to EUR 6,000 per training place can be applied for.

## **Introductory Training for Young People**

The German Federal Government attaches particular value to support for young people without a vocational qualification. One example of this is the former special programme "Introductory Training for Young People" *(Einstiegsqualifizierung Jugendlicher - EQJ)*. It was launched on 1st October 2004 as a sub-element of the "National Training Pact". From 1<sup>st</sup> October 2006 the capacity of the EQJ programme was expanded from 25,000 to 40,000 places per year. With the publication of the Fourth Act to amend the Third Book of the Social Code *(Sozialgesetzbuch - SGB)* in October 2007, Introductory Training was incorporated into employment promotion law as a routine entitlement (Section 16 (1) SGB II in conjunction with Section 235b SGB III).

Company-based Introductory Training *(EQ)* consists of a prevocational work experience placement in a company lasting 6 to 12 months. Young people have the opportunity to accumulate modular qualifications towards a recognized occupation by completing "qualification modules" in a specific occupational field. The target group for Introductory Training consists primarily of young apprenticeship applicants whose prospects of finding a placement are limited, and young people who have not fully reached the requisite





level of apprenticeship maturity. Since Book III of the Social Code specifies no age limit for support of young people, in a departure from the rules of the previous EQJ Programme, the new statutory provision (Section 235b SGB III) defined no age limit either.

Companies which offer Introductory Training enter into a contract with the young people concerned. Introductory Training programmes are supported by the employment agencies and the unemployment benefit agencies in the form of a non-repayable monthly subsidy towards the allowance paid by the employer. The maximum amount subsidy is € 192 plus a standardised share of the total social insurance contribution. On completion of the work placement, participants receive a certificate issued by the competent body (e. g. chamber of industry and commerce, chamber of skilled crafts). In certain circumstances up to six months credit for the work placement can be offset against the qualifying period of a subsequent apprenticeship.

# Main problems related to the transition from school to work

## ✓ legislative, cultural, business weakness, etc. at national/local level

The main challenges for vocational training in Germany are related to changes in the economic and occupational system as well as to demographic changes: In Germany, the number of employees in the field of personal services as well as knowledge and information professions requiring high and new qualifications is increasing overproportionally while the demand for unqualified labour force is further declining. On the other hand, owing to demographic changes it has become necessary to qualify more people and to recruit them for the labour market. Even if all the members of the current generation now entering the school system were to be employed in twenty years (and not only 60 %, as is now the case for the generation of 25- and 26 years old), this would not suffice to replace the number of workers then reaching the age of retirement (Authoring Group Educational Reporting, 2008).





In addition to the above mentioned points crucial challenges are seen with regard to the transition system: The Authoring Group Educational Reporting 2008 highlights that the transition system has expanded for years and it now bears the brunt in preparing students with low levels of qualification – particularly young people with migrant background – for vocational education and training. In this area in particular, it has markedly revealed its advantages, but also its weaknesses in recent years.

In 2006 the "Innovation Circle on Vocational Education" (Innovationskreis Berufliche Bildung, IKBB) and the "Innovation Circle on Continuing Education and Training" (Innovationskreis Weiterbildung, IKWB) identified the central challenges for innovation in the German vocational education and training system drew up the political priorities for VET.

They mainly emphasised the following topics:

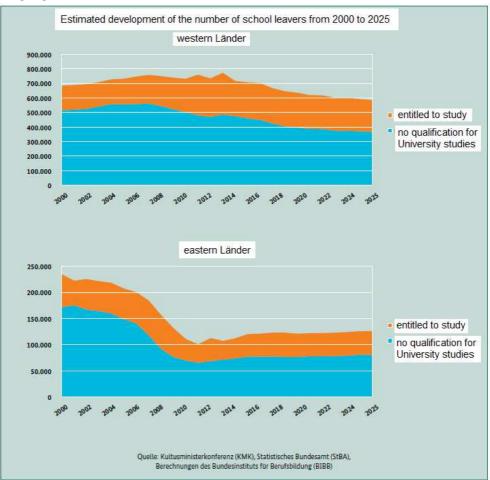
- Modernisation / transition to a more flexible organisation of VET, i.e. the re-defining of training programmes based on a modular approach ("training-bricks" / "Ausbildungsbausteine")
- Improving the so-called "transition management", i.e. by crediting prior learning activities on initial training
- Enhancing permeability and integration between sectors and educational sub-systems
- increasing the attractiveness of vocational training by increasing permeability and interlinking with other areas of education, i.e. Universities;
- increasing training opportunities through initiatives to improve regional training structures and to increase participation of migrant companies in training;
- optimizing and improving transition management through further development of measures promoting the disadvantaged and creating instruments for qualifying young adults without a school or training qualification;
- Opening up Europe by using the Europass instruments, supporting the development of a National Qualifications Framework





## **Key figures**

✓ input rate based on the scholar population and enrolled population



Source: Bildungsbericht 2014, BMBF, http://www.bmbf.de/pub/bbb 2014.pdf

Selected age groups in 2012





Alter von bis Insgesamt		Davon		Bevölkerungs-	
Alter von bis Insge unter Jahren	insgesamt	Männlich	Weiblich	anteil	Abhängigkeits- guotient <sup>1)</sup>
unter mounten		Anzahl in Tsd.		in %	quotient
2012					
Insgesamt	82.021	40.347	41.674	100	
0-20	14.809	7.599	7.209	18,1	
20-61	46.213	23.455	22.758	56,3	
Davon 20-30	9.943	5.087	4.856	12,1	0.77
30-50	22.947	11.689	11.258	28,0	0,77
50-61	13.323	6.679	6.645	16,2	
61 und älter	20.999	9.293	11.706	25,6	

#### Ausgewählte Altersgruppen in der Bevölkerung 2012,

## ✓ rate of SEN, ESL, immigrants, male and female students, disabilities and social disadvantages

not available

## $\checkmark$ age and type of training

According to the school law general education schooling lasts until 10<sup>th</sup> grade or 9<sup>th</sup> grade with a following year in VET.

The age of apprentices in different occupations depends on the selection criteria of companies. In high demanding training occupations the age of apprentices is usually in the range of 18 to 26, because companies select only applicants with higher education entry certificate.

## ✓ apprentices and companies

Motives for companies to offer training places are mentioned before (e.g. see summary).

## ✓ types of companies or SMEs and Micro companies offering the partnership





#### Training provider in proportion to the number of enterprises in total

Number in total:	2.100.000,00
Training provider:	447.746,00
Ratio:	21,3%

Training provider according to the size of enterprises in 2013

Туре	Employees	Change	Ratio	Total
Very small	1-9	-10669	-4,5%	225585
Small	10-49	+2005	+1,3%	154929
Medium	50-249	+1035	+1,9%	55110
Big	250	+295	+2,5%	12122

Contribution of training provider in relation to the total number of enterprises Trend from 2010-2012

Туре	Employees	2010	2011	2012
Very small	1-9	15,1	14,2	13,5
Small	10-49	46,9	45,7	45,5
Medium	50-249	68,3	67,6	68,4
Big	250	85,2	84,8	85,8

Source: Berufsbildungsbericht 2014, BMBF, http://www.bmbf.de/pub/bbb\_2014.pdf accessed: 9.4.2015

## ✓ the required profiles

By and large the recognized training occupations and the related competences cover the requirements of companies. But the change rate of innovation is on the increase and therefore it is needed to react flexibly to the new requirements. Despite all efforts there can be a gap between the requirements and the available training occupations. That is the responsibility of BIBB to initiate a quick response to new requirements.

In addition there are needs to train more abstract competences due to the rapid changes of requirements. That is a challenge at the moment especially for vocational schools.

## ✓ duration

The duration of apprenticeships is as mentioned before 2 to 3 years with exceptions lasting 3  $\frac{1}{2}$  years.

### ✓ success

About 95% of Dual VET apprentices graduate successful





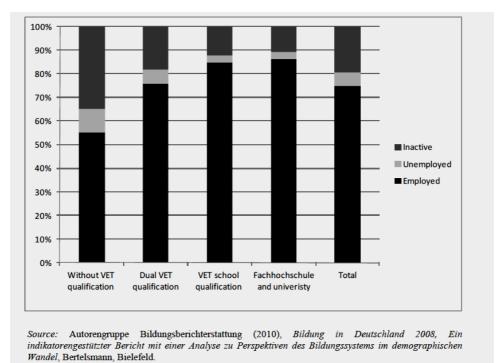
## ✓ employment rates referring to the dual system

The employment rate of Dual VET graduates is 95%, the employment rate of untrained people is only 80%.

(cf. GOVET, Dual VET in Germany) http://www.bibb.de/dokumente/ppt/GOVET\_Praesentation\_November\_2014\_EN.pptx

## unemployment rates for qualifications, costs benefits for companies

For an impression of the ratio between employment and unemployment according to the entry qualifications see the following diagram.



Share of employed, unemployed and inactive in 2008 (25-65 years, in %)

The result is that graduates from Dual VET have low risks of unemployment in long terms.

## ✓ mobility

According to section 2 of the Vocational Training Act a fourth of the duration of a training occupation can be carried out abroad. Mobility during the apprenticeship needs the approval of the company.





Regarding the region of Hamburg nearly 10% of all registered apprentices conduct a work placement abroad, most of them in subsidiaries. During the mobility phase the home company pays salary and social taxes. The apprentices remain in the German insurance system.

The strong participation of apprentices in work placements abroad is a consequence of the regional mobility agency "Arbeit und Leben Hamburg".

## ✓ Outcomes, quality of placements and the potential of learning experience

Work placements abroad bring about great benefits as well for the apprentice as for the employer. According to the feedback of the employer those work placements has at least the following outcomes:

- Personal development by working in an international context
- Strengthened self-confidence
- Increased motivation
- Increased communication skills and intercultural awareness
- Ability to efficiently adopting to new work places

Apart from consideration of mobilities in-company training is crucial for acquiring appropriate competences for the labour market because only in real life settings learn how to cope with time pressure, quality requirements and so on.

## Costs and benefits

## ✓ who finances the apprenticeship

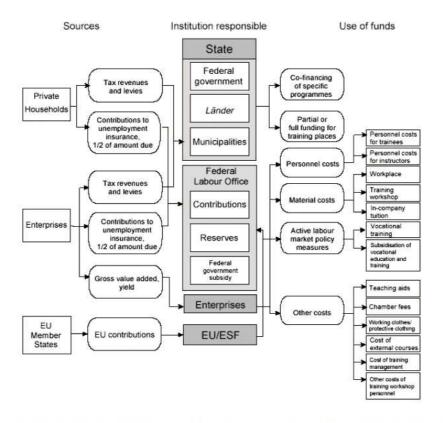
The government shares expenses for VET system with employers. Public expenditure for Dual VET is about 5.9 bn  $\in$ . 3.2 bn  $\in$  are allocated to 1600 public vocational schools providing part-time VET.

2.7 bn € amount cost to steering, monitoring and further supporting measures. 5.6 bn € is the contribution of employers (overall net cost of Dual VET, gross cost amount to 23.82 bn €).





Subsequently an overview is given of the funding structure with a focus on the in-company training.

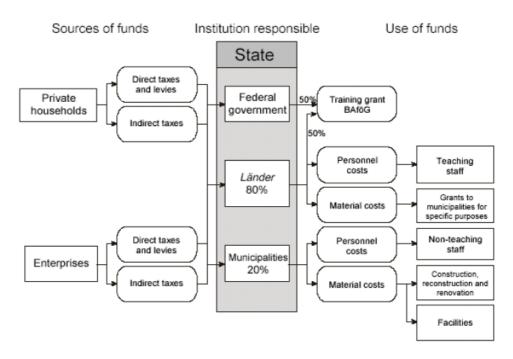


(Source: Hummelsheim, S., Timmermann, D.: The financing of vocational education and training in Germany. Financial portrait. Thessaloniki 2000)

Vocational schools are state funded.







(Source: Hummelsheim, S., Timmermann, D.: The financing of vocational education and training in Germany. Financial portrait. Thessaloniki 2000)

## ✓ Apprenticeship wage

The training allowance is according to information of GOVET on average 700  $\in$  per month, but it differs within a large range (cf. page 47f). It is paid by the employer. The amount of the remuneration increases from year to year of the apprenticeship.

## ✓ Personnel opportunities and benefits

Vocational education and training in the dual system yields benefits for all stakeholder.

Trainees earn money, get professional competences and learn something practical. In addition the apprenticeship leaving exam opens up pathways to further education as well as to tertiary education.

Employers appreciate dual VET graduates because they are familiar with corporate culture, they are loyal to the company and they are productive up from the first moment they are employed after having finished their apprenticeships.

And employers save costs for induction and they minimize the risk of miscast.

Compiled by: Gunnar Binda – AL HH





## ✓ Facilities

Pursuant to the Vocational Training Act appropriate facilities are required for every training place. As mentioned before there are different models to tackle problems SMEs could have.

## ✓ Work dresses

In case work dress is necessary for the in-company training the employer has to provide it. There is no general regulation for work dresses.

## ✓ Administration

Section 71 of the Vocational Training Act points out the competent bodies for VET depending on the training occupations. Chambers are responsible for recording the contracts and monitoring formal requirements concerning training occupations.

## ✓ Returns for apprentice work

Cost of one apprenticeship are estimated on average by 15000 € per year. According to recent research results about 76% of the apprenticeship costs are covered by the productive contribution of apprentices work during the in-company training.

## ✓ Tax reduction

Apprenticeship costs reduce the taxable profit of enterprises as every costs do.

## Overview of the role of other social partners (institutions, training companies & competent bodies)

Co-operation between government and social partners is a constituting element for all standard setting. Employers and trade unions jointly formulate the employment requirements for the standard. In the practice of vocational training, all co-operation is based on consensus, no regulations concerning initial or further vocational training may be issued against the declared will of either of the two so-





cial partners. Thus, initiatives for vocational educational reforms either stem from the social partners or have to meet with their acceptance. The platform for this process provides the BIBB that also is coordinating and moderating it. As a rule, the initiative for updating the content or structure of a training occupation or for developing an entirely new occupation comes from industry associations, from the top-level employers' organisations, from trade unions or the Federal Institute for Vocational Education and Training.

After hearing the views of all the parties concerned, the responsible federal ministry decides in consultation with the Länder governments whether to proceed, since they are responsible for the regulations and curricula of the part-time vocational schools. In many cases, BIBB issues an advisory opinion or, particularly when larger scale revisions are being considered, conducts a research project before the ministry takes its decision.

## Overview of special funding or other special measures for dual system

The following list gives an overview of selected measures to promote Dual VET implemented and mostly finished in the period 2010 to 2015.

- National Pact for Training and Young Skilled Staff
- The initiative: Education chains leading to vocational qualification
- The career start coaches special programme
- The BMBF's Vocational orientation in inter-company vocational training centres and comparable institutions
- Employment Agency careers orientation measures
- Intensive careers orientation under the terms of the German Social Code (SGB III)
- Careers orientation as part of the 'Initiative Inklusion' funding programme
- The Arena4You careers orientation initiative
- Girls' Day
- Boy's Day





- The VerA initiative for preventing premature training termination
- The Vocational Qualification Perspective structural programme
- JOBSTARTER CONNECT nationally consistent, skills-orientated training modules
- New ways into dual training Heterogeneity as a chance to secure a supply of skilled staff funding priority
- The ESF and Federal "Education, Economy and Employment in the local Neighborhood"

## **Competencies of trainers and teachers**

 ✓ need for specific training, requirements or qualifications for personnel involved during apprenticeship period (for main activities: tutoring, teaching, ..)

Teachers are employed in the various vocational schools, while trainers are skilled workers in enterprises, who provide trainees with the knowledge and practical skills required for an occupation. In addition to teachers and trainers, the staff of VET workshops for disabled people also includes psychologists, doctors and social education workers. There are different types of learning facilitators, e.g. the training counsellors of the chambers who advise trainees and employers on all problems connected with training, and the vocational guidance counsellors employed by the Federal Employment Agency

## Types of teachers and trainers in the German VET systemType of trainingType of Staff





Dual system of training	Trainers (instructors) or masters within compa- nies (Certified educators/trainers in professional education, Certified educators/trainers in initial and continuing vocational education) including the responsible VET managers in large compa- nies); VET teachers in vocational schools (two categories: 1. university trained teachers for job-related theory and general education sub- jects; 2. <i>Werklehrer</i> (master craftsmen or technicians with additional further training) imparting practi- cal skills) Instructors and trainers within inter-company VET centres ( <i>ÜBS</i> )
Special VET for disadvan- taged leading to dual system diplomas	VET teachers/trainers within private institutions
Full-time vocational schools	VET teachers in vocational schools (see above)
Learning facilitators	Youth workers in training schemes for the disad- vantaged, training counsellors in the chambers, vocational guidance, counsellors employed by the Federal Employment Agencies etc

## Ways to promote attractiveness of dual learning, and which the direction/trend

## ✓ Factors influencing the choice of dual (counseling, social participation, real opportunities of placement)

The details of the promotion of Dual VET were pointed out before. Every stakeholder is involved in promoting the choice of Dual VET. The aim is to convince companies to offer training places as well as students/pupils to the path of vocational education and training.

For apprentices an important factor for choosing Dual VET is the opportunity to become a skilled worker, earn enough money to raise a family and to get sort of reputation in the society.





During recent years the trend to academic studies has caused problems for Dual VET, but currently there is change on site of employers in assessing academic studies of applicants. More and more employers are dissatisfied with the performance of graduates from universities because they lack of practical skills required for the real tasks in the company.

In addition the DQR passed in 2013 has great impact on the further promotion of Dual VET.

The allocation of qualifications to the eight levels brought about that master craftsmen and technicians are assigned to level 6 equal to bachelor graduates. And pursuant the decision of the Standing Conference of the Mnisters for Education and Cultural Affairs of the Länder (KMK 2009) these VET graduates will get access to higher education. This is a new perspective for VET graduates improving the attractiveness of Dual VET.

# A conclusive chapter with strength, success factors, weakness, opportunities, challenges and threats

see Summary





## References

BIBB 2010, Credit Systems for Lifelong Learning, Background Report Germany <u>http://www.bibb.de/dokumente/pdf/background report germany.pdf</u>, accessed 7.3.2015

BIBB 2012, VET Data Report Germany 2012, <u>http://datenreport.bibb.de/media2012/DR2012\_engl.\_Screen.pdf</u>, accessed 7.3.2015

BIBB 2013, Kosten und Nutzen der betrieblichen Ausbildung 2012/13 http://www.bibb.de/de/11060.php , accessed 7.3.2015

BIBB 2013, VET Data Report Germany 2013 http://datenreport.bibb.de/media2013/DR2013 engl. Screen.pdf accessed 7.3.2015

BIBB 2014, BIBB Datenreport zum Berufsbildungsbericht 2014 http://www.bibb.de/dokumente/pdf/BIBB Datenreport 2014.pdf

BIBB 2014, Verzeichnis anerkannter Ausbildungsberufe https://www.bundesanzeiger.de/ebanzwww/wexsservlet?session.sessionid=7401 f814abe61c00743b4e1b542ce378&page.navid=detailsearchlisttodetailsearchdeta il&fts search list.selected=2c4e1ceb822c0714&fts search list.destHistoryId=67 974, accessed: 17.3.2015

BIBB 2015, Vocational Training Regulations and the Process Behind Them, <a href="http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7324">http://www.bibb.de/veroeffentlichungen/de/publication/download/id/7324</a>, accessed: 20.3.2015

BMBF 2003, Berufsausbildung sichtbar gemacht http://www.bmbf.de/pub/berufsausbildung sichtbar gemacht.pdf accessed 7.3.2015

BMBF 2012, Report on Vocational Education and Training 2012 http://www.bmbf.de/pub/bbb\_2012\_en.pdf , accessed 8.3.2015

BMBF 2013, Report on Vocational Education and Training 2013 http://www.bmbf.de/pub/bbb 2013 en.pdf , accessed 12.3.2015

BMBF 2014 Report on Vocational Education and Training 2014 http://www.bmbf.de/pub/Report on Vocational Education and Training 2014 bf.pdf, accessed: 14.3.2015

BMBF 2014, Berufsbildungsbericht 2014 http://www.bmbf.de/pub/bbb 2014.pdf accessed 27.3.2015





CEDEFOP 2007, Vocational Education and Training in Germany, Short Description www.cedefop.europa.eu/files/5173 en.pdf accessed 16.3.2015

CEDEFOP, Berufsbildung in Deutschland 2007 www.cedefop.europa.eu/files/5173 de.pdf accessed: 17.3.2015

CEDEFOP, Germany – VET in Europe, Country Report 2012 http://www.cedefop.europa.eu/files/2012 cr de.pdf accessed: 19.3.2015

CEDEFOP, Germany – VET in Europe, Country Report 2013 <u>http://www.refernet.de/images\_content/2013\_DE\_CR\_komplett.pdf</u> accessed: 19.3.2015

CEDEFOP, Spotlight in VET Germany 2013/2014 <u>http://www.refernet.de/images\_content/EN\_Spotlight%281%29.pdf</u> accessed: 6.04.2015

Chamber of Industry and Trade Hamburg, Vocational Training in Germany – The Dual System

http://www.hk24.de/en/training/duale\_system/1147578, accessed: 7.4.2015

DQR 2013 , DQR Handbuch, http://www.dqr.de/media/content/DQR Handbuch.pdf , accessed 1.4.2015

Ebersold, S., Accessing to Vocational Training, Trends, issues, challenges <u>https://www.european-agency.org/sites/default/files/Input-S-Ebersold-VET.pdf</u>, accessed: 12.3.2015

GOVET, Dual VET - Vocational Education and Training in Germany, <u>http://www.bibb.de/dokumente/ppt/GOVET Praesentation November 2014 EN.</u> <u>pptx</u> , accessed 4.4.2015

KMK 2009, Beschluss der Kultusministerkonferenz vom 06.03.2009, http://www.kmk.org/fileadmin/veroeffentlichungen\_beschluesse/2009/2009\_03\_06-Hochschulzugang-erful-qualifizierte-Bewerber.pdf, accessed 31.3.2015

OECD 2010, Learning for Jobs OECD Reviews of Vocational Education and Training Germany

http://www.oecd.org/germany/45668296.pdf, accessed: 18.3.2015

REFORM of Vocational Education and Training in Germany. The 2005 Vocational Training Act (Berufsbildungsgesetz – BBIG) (2005). Bonn, Berlin <a href="http://www.bmbf.de/pub/BBiG">http://www.bmbf.de/pub/BBiG</a> englisch 050805.pdf</a> , accessed: 6.4.2015

REULING, JOCHEN (2000): The German "Berufsprinzip" as a Model for Regulating Training Content and Qualification Standards, in: The Federal Institute for Vocational Training (eds.): Vocational Training in Germany. Results, Publications and Materials from BIBB, Bonn, see also:

http://link.springer.com/chapter/10.1007%2F978-94-011-5204-4\_5 , accessed 6.4.2015

Statistisches Bundesamt 2009, Bevölkerungsvorausberechnung bis 2060 <u>https://www.destatis.de/DE/ZahlenFakten/GesellschaftStaat/Bevoelkerung/Bevo</u>





<u>elkerungsvorausberechnung/Bevoelkerungsvorausberechnung.html</u>, accessed 8.4.2015





## ✓ Impressum

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## Annex

The following tables are extracted from CEDEFOP – Country Report Germany 2013.