

Germany

VET in Europe - Country Report

2011

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Abstract:

This is an overview of the VET system in Germany. Information is presented according to the following themes:

1. General context - framework for the knowledge society
2. Modernising VET to support LLL, internationalisation and mobility
3. VET to support recovery from crisis
4. Historical background, Legislative and Institutional framework
5. Initial vocational education and training
6. Continuing vocational education and training
7. Training VET teachers and trainers
8. Matching VET provision (skills) with labour market needs (jobs)
9. Lifelong guidance for lifelong learning and sustainable employment
10. Financing - investment in human resources

This overview has been prepared in 2011 and its reference year is 2010. Similar overviews of previous years can be viewed at:

<http://www.cedefop.europa.eu/EN/Information-services/vet-in-europe-country-reports.aspx>

More detailed thematic information on the VET systems of the EU can also be found at:

<http://www.cedefop.europa.eu/EN/Information-services/detailed-thematic-analyses.aspx>

Keywords:

vocational education and training (VET) systems; initial vocational training; continuing vocational training; lifelong learning; VET policy development; financial crisis and VET policies; VET legislative and institutional frameworks; validation of non-formal and informal education; teachers and trainers; anticipation of skill needs; vocational guidance and counselling; VET financing mechanisms; allocation of national VET programmes; national and international qualification systems.

Geographic term:

Germany

Table of Contents

1. General context - framework for the knowledge society.....	6
1.1 Political and socio-economic context	6
1.2 Population and demographics.....	6
1.3 Economy and labour market indicators	8
1.4 Educational attainment of population.....	11
1.5 Definitions	13
2. Modernising VET to support LLL, internationalisation and mobility	17
2.1 VET policy developments and priorities in supporting LLL.....	17
2.2 Implementation of European tools and principles.....	26
2.3 Internationalisation and transnational mobility in VET.....	28
3. VET to support recovery from the crisis	35
3.1 Overview.....	35
3.2. Effects of the crisis on VET and corresponding measures.....	36
4. Historical background, Legislative and Institutional framework	36
4.1 Historical background.....	36
4.2 Legislative Framework for IVET.....	38
4.3 Institutional framework for IVET	41
4.4 Legislative Framework for CVET	43
4.5 Institutional Framework for CVET	45
5. Initial Vocational Education and Training.....	47
5.1 Background to the IVET system and diagram of the education and training system.....	47
5.2 IVET at lower secondary level.....	50
5.3. IVET At upper secondary education	50
5.4 Alternance/Apprenticeship Training	53
5.5 Programmes and Alternative Pathways for young people.....	56
5.6 Vocational Education and Training At Post-Secondary (Non Tertiary) Level	59
5.7 Vocational education and training at tertiary level.....	60
5.8 Language learning in IVET	64
6. Continuing Vocational Education and Training.....	66
6.1 General background	66
6.2 Formal learning in CVET	69
6.3 Non-formal learning in CVET	75
6.4 Language learning in CVET.....	77

6.5 Training programs to help job-seekers and people vulnerable to exclusion from the labour market	77
7. Training VET Teachers and Trainers	78
7.1 Priorities in training VET teachers and trainers	78
7.2. Types of teachers and trainers in IVET	80
7.3 Types of Teachers and Trainers In CVET	85
8. Matching VET Provision (skills) With Labour Market Needs	86
8.1. Systems and mechanisms for the anticipation of skill needs	86
8.2. Practices to match VET provision with skill needs	88
9. Lifelong guidance for lifelong learning and sustainable employment.....	89
9.1. Strategy and Provision.....	89
9.2 Target groups and modes of delivery	93
9.3 Guidance and counselling personnel	96
10. Financing – Investment In Human Resources	98
10.1 Policy background for VET financing	98
10.2 Funding for Initial Vocational Education and Training	99
10.3 Funding for Continuing Vocational Education and Training, and Adult Learning	101
10.4 Funding for Training for Unemployed	105
11. Authors, sources, bibliography, acronyms and abbreviations.....	106
11.1 Authors	106
11.2 Sources, references and websites	106

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1. GENERAL CONTEXT - FRAMEWORK FOR THE KNOWLEDGE SOCIETY

1.1 POLITICAL AND SOCIO-ECONOMIC CONTEXT

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. This central idea is reflected in the conviction that a social market economy is most successful when controlled by market forces, with State intervention only as a corrective or supportive measure.

The Federal President is the Head of State. He is elected by the Federal Convention for a five year term of office, and is essentially responsible for functions involving representation. The Federal Chancellor is the Head of Government. Within the Federal Government, he has the authority to decide on government policy. The *Bundestag* (Lower House of Parliament) and the *Bundesrat* (Upper House) are the two legislative bodies. The *Bundestag* is elected by popular vote every four years.

Germany comprises 16 *Länder*, each having some of the features of a state. Each has its own powers within certain spheres, which it exercises through its own legislature, executive and judiciary. 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 in-company 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 German political system is characterised by this social partnership.

1.2 POPULATION AND DEMOGRAPHICS

Germany comprises an area of 357,093 km². On 3 January 2010, the population was 81 802 million. Since 2003 the population has been decreasing slightly since the immigration surplus now no longer compensates for the drop in the birth rate (ibid.). If the birth rate remains as low, population decline will not only continue, but also accelerate in the longer term.

One of the major challenges in years and decades to come is demographic change, which affects Germany even more severely than many other European countries. Since 2002 the population count has been in slight decline since the migration surplus can no longer compensate for the birth-rate deficit (see *Table 1a*).

geo\time	2002	2003	2006	2009	2010	2011 (forecast)
EU 27	484636747	486647831	493226936	499723520(p)	501101774(p)	502486499
DE	82440309	82536680	82437995	82002356	81802257	81748892

Source: Eurostat, Demographic Statistics; Date of extraction: 11.07.2011.

Link to data:

<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tps00001>

Note: Description: The inhabitants of a given area on 1 January of the year in question (or, in some cases, on 31 December of the previous year). The population is based on data from the most recent census adjusted by the components of population change produced since the last census, or based on population registers.

In comparison to the average of the "EU-27" (see Table 1b 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.

	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
EU (27 COUNTRIES)	25.92	28.48	31.37	34.57	38.33	42.31	45.52	48.00	50.16	51.82	52.55
GERMANY	31.26	32.52	35.78	40.22	47.21	54.20	56.44	56.92	58.11	59.57	59.89

Source: Eurostat; Population aged 65+ divided by population aged 15-64 (projections); Date of data extraction: 11.07.2011.

Link to data:

<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tsdde511>

Note: This indicator is defined as the projected number of persons aged 65 and over expressed as a percentage of the projected number of persons aged between 15 and 64.

In parallel there will be a marked shift in the age structure (see Table 1c). The predicted decrease of young people aged 20-25 might lead to a shortage of people to work in certain regions, sectors and occupations.

TABLE 1C: AGE-SPECIFIC DEMOGRAPHIC TRENDS IN GERMANY				
	2008	2020	2030	2040
0-19	19.0%	17.0%	16.7%	16.1%
20-59	55.4%	52.4%	47.1%	46.6%
60+	25.6%	30.5%	36.2%	37.3%

Source: Federal Statistical Office, 12th Coordinated Population Forecast, 2009.

Link to data:

<http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/EN/Content/Publikationen/SpecializedPublications/Population/GermanyPopulation2060,property=file.pdf>

1.3 ECONOMY AND LABOUR MARKET INDICATORS

In recent decades, there has been a steady decrease in economic growth rates (down from an average of 2.6% across 1981-1991 to 1.7% across 1992-2001) (Konsortium Bildungsberichterstattung, 2006, p. 8). In 2002 and 2003, growth almost completely stagnated. Increased international competition, German reunification (1990) and the introduction of the Euro (2002) have had an impact. Following a slight recovery in 2004 and 2005, in 2006 and 2007 economic growth exceeded 2% (see Table 1d). The global financial crisis has had impacts since 2008 and continues to influence the 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 3.6%, 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 (see Theme 3). The prognoses for German GDP have now declined for the year 2011 and for 2012 (see Table 1d).

TABLE 1D: GROWTH RATE OF GDP IN REAL TERMS - PERCENTAGE CHANGE COMPARED WITH THE PREVIOUS YEAR, 2004-2010 AND THE PROGNOSE FOR 2011 AND 2012									
	2004	2005	2006	2007	2008	2009	2010	2011	2012
EU (27 LÄNDER)	2.5	2.0	3.2	2.9	0.7	-4.2	1.8	1.8f	1.9f
DEUTSCHLAND	1.2	0.8	3.2	2.5	1.3	-4.9	3.6	2.6f	1.9f

Source: Eurostat; GDP

http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/data/main_tables

Date of extraction: 21.07.2011.

f = prognoses

Germany has undergone a substantial shift from an industrial to a service economy. The service sector is the largest sector of the economy (see Table 1e).

TABLE 1E: GROSS VALUE ADDED BY ECONOMIC SECTOR IN CURRENT PRICES, EUR BN.

SECTOR	2008	2009	2010
AGRICULTURE AND FORESTRY; FISHERIES	19,96	17,31	19,48
MANUFACTURING INDUSTRY EXCEPT CONSTRUCTION	569,68	474,38	531,88
INCL: PROCESSING INDUSTRY	504,22	408,80	463,74
CONSTRUCTION	89,83	92,14	92,49
TRADE, HOSPITALITY AND TRANSPORT	396,66	373,65	385,55
FINANCE, LEASING AND BUSINESS SERVICES	655,81	666,69	682,13
PUBLIC AND PRIVATE SERVICES	492,86	516,44	528,02
ALL SECTORS	2 224,80	2 140,61	2 239,55

Source: Federal Statistical Office, Domestic product calculation.

Link to data:

<http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Content/Statistiken/VolkswirtschaftlicheGesamtrechnungen/Inlandsprodukt/Tabellen/Content75/BWSnachBereichen,tempelateld=renderPrint.psm/>

Date of extraction: 14.07.2011.

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 (see Table 1f).

TABLE 1F: EMPLOYED PERSONS AGED 15+ BY ECONOMIC SECTOR OF ACTIVITY (IN THOUSANDS AND AS % OF TOTAL EMPLOYMENT), 2010

geo	Primary sector and utilities		Manufacturing		Construction		Distribution and transport		Business and other services		Non marketed services	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
EU 27	15175.8	7.0	33992.7	15.7	16573.2	7.7	57099.0	26.4	38733.1	17.9	53694.1	24.8
DE	1289.9	3.3	7746.5	20.0	2585.8	6.7	9803.5	25.3	7447.8	19.2	9864.3	25.5

Source: Eurostat; Employment persons aged 15+ by economic sector of activity (NACE rev2) in thousands and as % of total employment.

Link to data:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfsa_eqa2&lang=en

Date of extraction: 19.05.2011.

The employment rate in Germany has remained largely unchanged in the past years and has risen slightly in comparison with 2003 (see Table 1g). This is due, in particular, to the increasing proportion of women in employment.

TABLE 1G: EMPLOYMENT RATES BY AGE GROUPS AND HIGHEST LEVEL OF EDUCATION ATTAINED (%), 2003, 2006 AND 2010

GEO	TIME ISCED / AGE	2003			2006			2010		
		15-24	25-49	50-64	15-24	25-49	50-64	15-24	25-49	50-64
EU 27	0-2	25.1(i)	66.1(i)	41.9 (i)	24.8	66.9	43.5	21.5	62.8	43.1
	3-4	47.2 (i)	79.1 (i)	54.9 (i)	48.1	80.5	57.9	45.0	79.7	59.6
	5-6	62.0 (i)	88.0 (i)	72.4 (i)	60.5	88.5	74.2	57.1	87.4	74.5
	No a.	14.9 (i)	72.6 (i)	39.1 (i)	5.1	76.0	5.6	5.2	72.8	62.2
	Total	36.0 (i)	77.4 (i)	51.5 (i)	36.6	79.1	54.4	34.1	78.1	56.7
DE	0-2	32.4	60.7	36.0	31.7	61.2	43.1	33.2 (i)	60.9 (i)	47.1 (i)
	3-4	62.4	79.2	50.8	61.7	80.6	57.6	62.8 (i)	82.4 (i)	65.4 (i)
	5-6	78.0	89.5	69.7	76.3	90.2	74.3	75.2 (i)	90.5 (i)	80.2 (i)
	No a.	34.8	70.5	43.7	:	:	:	:	67.8 (i)	:
	Total	44.0	78.8	51.5	43.4	79.9	58.7	46.2 (i)	81.7 (i)	66.3 (i)

Source: Eurostat, Date of extraction: 19.05.2011.

(i) See explanatory text; isced 0_2; 3_4; 5_6 refer to the ISCED levels of education; 15_24; 25_49; 50_64 refer to the age.

Link to data:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ifsa_ergaed&lang=en

The labour market situation in Germany has changed for the better in the last years. Nevertheless, the unemployment rate in 2010 (7.1%) was still above the EU average (EU-27: 6.9%). Within this figure, youth unemployment (those aged 15-24) has remained below the EU average (see Table 1h).

TABLE 1H: UNEMPLOYMENT RATES BY AGE GROUPS AND HIGHEST LEVEL OF EDUCATION ATTAINED (%), 2003, 2006 AND 2010

GEO	TIME ISCED / AGE	2003			2006			2010		
		15-24	25-49	50-64	15-24	25-49	50-64	15-24	25-49	50-64
EU 27	0-2	20.2 (i)	11.6 (i)	7.2 (i)	21.2	11.2	7.5	27.4	16.3	10.2
	3-4	17.7 (i)	8.4 (i)	7.7 (i)	15.4	7.3	6.9	18.1	8.2	6.7
	5-6	12.0 (i)	4.8 (i)	3.7 (i)	13.4	4.3	3.6	16.2	5.3	3.6
	No a.	13.9 (i)	7.8 (i)	7.4 (i)	20.1	:	:	:	8.2	:
	Total	18.0 (i)	8.3 (i)	6.6 (i)	17.2	7.3	6.3	20.8	8.9	6.9
DE	0-2	11.8	18.1	16.2	16.7	20.1	18.5	13.4 (i)	17.2 (i)	13.3 (i)
	3-4	10.1	9.2	12.3	10.8	9.0	11.9	7.4 (i)	6.6 (i)	7.7 (i)
	5-6	5.4	4.3	6.8	:	4.1	6.2	:	2.9 (i)	3.6 (i)
	No a.	13.0	10.0	11.4	:	:	:	:	:	:
	Total	10.8	9.0	11.3	13.5	9.2	11.3	9.9 (i)	6.7 (i)	7.1 (i)

Source of information: Eurostat; Date of extraction: 14.07.2011.

(i) See explanatory text; (:) No data available. isced 0_2; 3_4; 5_6 refer to the ISCED levels of education; 15_24; 25_49; 50_64 refer to the age groupings.

Link to data:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ifsa_urgaed&lang=en

Public expenditure on education as a percentage of total public expenditure indicates the value placed on education relative to that of other public investments such as health care, social security, defence and security. This indicator includes direct public expenditure on educational institutions as well as public subsidies to households (e.g. scholarships and loans to students for tuition fees and student living costs) and to other private entities for education (e.g. subsidies to companies or labour organisations that operate apprenticeship programmes). In 2007, Germany spent 2.25% of total public expenditure on education (EU 27 average: 2.20%).

TABLE 1I: EXPENDITURE ON EDUCATION AS % OF GDP OR PUBLIC EXPENDITURE							
GEO	2002	2003	2004	2005	2006	2007	2008
EU27	2.32 (s)	2.35 (s)	2.29 (s)	2.25 (s)	2.23 (s)	2.20 (s)	:
DE	2.38	2.39	2.31	2.27	2.18	2.25	:

Source: Eurostat; Date of extraction: 14.07.2011.

s = eurostat estimate

Link to data:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_figdp&lang=en

1.4 EDUCATIONAL ATTAINMENT OF POPULATION

A high proportion of people in Germany have upper secondary level qualifications (59.1% in 2009 compared to an EU average of 46.8%, see Table 1k). 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 young people aged 15 to 24 with a low level of qualification was constantly below the EU average in the last years (see Table 1j).

TABLE 1J: EDUCATIONAL ATTAINMENT OF THE POPULATION AGED 25-64 BY ISCED LEVEL, % (2009)			
	LEVEL OF EDUCATION		
	ISCED 0-2	ISCED 3-4	ISCED 5-6
EU-27	28,0%	46,8%	25,2%
GERMANY	14,5%	59,1%	26,4%

Source: Eurostat; EU Labour Force Survey, online database; Date of extraction: 18.07.2011.

ISCED 0-2: Pre-primary, primary and lower secondary education

ISCED 3-4: Upper secondary and post-secondary non-tertiary education

ISCED 5-6: Tertiary education

Link to data:

<http://epp.eurostat.ec.europa.eu/portal/page/portal/education/data/database>

The proportion of the population of early school leavers in 2009 is 11.1% (see Table 1k). 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 (see Theme 5.5).

TABLE 1K: EARLY SCHOOL LEAVERS (%), 2002-2009								
GEO/TIME	2002	2003	2004	2005	2006	2007	2008	2009
EU 27	17.0	16.6 (b)	16.1	15.8	15.5	15.1	14.9	14.4
DE	12.5	12.8	12.1	13.5 (b)	13.6	12.5	11.8	11.1

Source: Eurostat; Date of extraction: 19.05.2011.

(b) break in series

Note: Percentage of the population aged 18-24 with at most lower secondary education and not in further education or training

Link to data:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfsl_edu_a&lang=en

In the category "Graduates at ISCED level 3" there is still a higher proportion of men than women. At ISCED levels 5-6 this is not the case.

TABLE 1L: GRADUATES AT ISCED LEVEL 3 AND LEVEL 4 BY LEVEL OF EDUCATION, PROGRAMME ORIENTATION AND SEX (NUMBERS), 2007, 2009											
YEAR		2007					2009				
GEO	S	3 GEN	3 PV	3 VOC	4 GEN	4 VOC	3 GEN	3 PV	3 VOC	4 GEN	4 VOC
EU 27	F	2393291	:	2595569	49493	424537	2319746	:	2480373	:	394682
	M	1022202	:	1400317	23958	194372	995733	:	1344532	:	188195
	T	1371089	:	1195251	25535	230165	1324013	:	1135842	:	206487
DE	F	400824	:	565770	31258	143338	385090	:	441522	46726	126116
	M	179511	:	312082	16372	70594	174202	:	251252	26185	69564
	T	221313	:	253687	14886	72744	210888	:	190270	20541	56552

Source: Eurostat Date of extraction: 19.05.2011.

S= sex; M=males; F=females; T= total; GEN=general; PV=pre-vocational; VOC=vocational

Link to data:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_grad2&lang=en

TABLE 1M: GRADUATES AT ISCED LEVEL 5 AND LEVEL 6 BY LEVEL OF EDUCATION, PROGRAMME DESTINATION, 1ST/2ND STAGE AND SEX (NUMBERS), 2007, 2009													
YEAR		2007						2009					
GEO	S	5 A1	5 A2	5 B1	5 B2	6	5 - 6	5 A1	5 A2	5 B1	5 B2	6	5 - 6
DE	T	233317	20390	99348	:	23843	376898	281136	24995	134981	:	25084	466196
	M	112026	10551	38134	:	13775	174486	135171	12927	42777	:	14017	204892
	F	121291	9839	61214	:	10068	202412	145965	12068	92204	:	11067	261304
EU 27	T	2348435	916150	691661	10355	109512	4076113	2465221	915360	706581	10850	100723	4198735
	M	971270	357768	280571	2703	59335	1671647	1020740	365808	278346	2568	54413	1721875
	F	1377165	558382	411090	7652	50177	2404466	1444481	549552	428235	8282	46310	2476860

Source: Eurostat Date of extraction: 19.05.2011.

S= sex; M=males; F=females; T= total; GEN=general; PV=pre-vocational; VOC=vocational

Level=ISCED 5a first degrees, 5a second degree, 5b first qualification, 5b second qualification, 5-6 combined, sex =Total, male, female, age =total

Link to data:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_grad4&lang=en

TABLE 1N: YOUTH EDUCATION ATTAINMENT LEVEL BY SEX (%), 2002, 2005, 2009									
TIME	2002			2005			2009		
GEO	T	F	M	T	F	M	T	F	M
EU 27	76.7	79.3	74.0	77.5	80.2	74.8	78.6	81.4	75.9
DE	73.3	73.8	72.6	71.5 (b)	72.5 (b)	70.4 (b)	73.7	75.8	71.7

Source: Eurostat Date of extraction: 19.05.2011.

Description: Youth education attainment level - Percentage of the population aged 20 to 24 having completed at least upper secondary education

Link to data:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ifsi_edu_a&lang=en

1.5 DEFINITIONS

TERM: ALTERNANCE TRAINING - ALTERNIERENDE AUSBILDUNG

Training carried out at two places of learning, i.e. at upper secondary education establishments ([Berufsschulen](#)) or institutions at tertiary level ([Berufsakademien](#), [Fachhochschulen](#)) and in companies. Trainees either attend the two places of learning alternately or simultaneously.

(Source: Secretariat of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder.)

TERM: APPRENTICESHIP - LEHRLINGSAUSBILDUNG/LEHRE

Systematic, long-term training alternating periods in a school or training centre and at the workplace; the apprentice is contractually linked to the employer and receives remuneration (wage or allowance). The employer assumes responsibility for providing the trainee with training leading to a specific occupation.

(Source: Cedefop, 2003.)

TERM: COMPETENCE – HANDLUNGSKOMPETENZ

The proven ability to use knowledge, skills and personal, social and/ or methodological abilities, in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy.

(Source: EQF, 2006.)

TERM: CONTINUING VOCATIONAL EDUCATION AND TRAINING (CVET) - BERUFLICHE FORT- UND WEITERBILDUNG

Continuing vocational education and training (CVET) can be broadly defined as professional or vocational development through education and training undertaken typically after one has completed initial vocational education and training (IVET). It can be provided and undertaken at the initiative of public authorities, social partners, sectors, enterprises, individuals as well as a range of voluntary and community organisations. It also includes learning on-the-job not synonyms, much of which can be classified as non-formal or informal learning. It may lead to certification.

Continuing vocational education and training (CVET) thus relates to the further professional, vocational or personal development of people. It can take place in a societal, industrial sector and/or in a specific organisational or company context.

(Source: Glossary of the EknowVET database BIBB-Glossary, 2010.)

TERM: FIRST STAGE OF TERTIARY EDUCATION (ISCED 5) - ERSTE STUFE DES TERTIÄRBEREICHES

This level includes tertiary programmes with: (a) academic orientations (type A) which are largely theoretical; (b) occupation orientation (type B) usually shorter than type A and geared for entry to the labour market. Type A programmes provide access to advanced research studies and professions with high skill requirements. Type B programmes prepare students for direct entry into a specific occupation. Entry to ISCED level 5 normally requires successful completion of ISCED levels 3 or 4.

(Source: Unesco, 1997; Eurydice, 2006.)

TERM: GENERAL EDUCATION - ALLGEMEINBILDUNG

Education which is mainly designed to lead participants to a deeper understanding of a subject or group of subjects, especially, but not necessarily, with a view to preparing participants for further (additional) education at the same or a higher level. Successful completion of these programmes may or may not provide the participants with a labour-market relevant qualification at this level. These programmes are typically school-based. Programmes with a general orientation and not focusing on a particular specialisation should be classified in this category.

(Source: BIBB-Glossar; United Nations Educational, Scientific and Cultural Organization (UNESCO), "International Standard Classification of Education - ISCED 1997", Paris, November, 1997.)

TERM: INITIAL VOCATIONAL EDUCATION AND TRAINING (IVET) - BERUFS-AUSBILDUNG

Initial vocational education and training (IVET) is defined as training undertaken typically after full-time compulsory education to promote the acquisition of the necessary knowledge, skills and competences for entry to an occupation or group of occupation. It can be undertaken purely within a school-based and/or work-based environment. It includes apprenticeship training.

(Source: BBiG.)

TERM: LOWER SECONDARY EDUCATION (ISCED 2) - SEKUNDARBILDUNG/SEKUNDARSTUFE 1

Lower secondary education generally continues the basic programmes of primary, although teaching is typically more subject-focused, often employing more specialised teachers to conduct classes.

(Source: Unesco, 1997; Eurydice, 2006.)

TERM: OCCUPATION – BERUF

Group of activities that necessitate a homogeneous series of techniques and skills within a specific field and speciality.

(Source: Cedefop, working definition.)

TERM: POST-SECONDARY NON-TERTIARY EDUCATION (ISCED 4) - POSTSEKUNDÄRE, NICHT-TERTIÄRE BILDUNG

Programmes that lie between the upper-secondary and tertiary levels of education from an international point of view, even though they might clearly be considered as upper-secondary or tertiary programmes in a national context. They are often not significantly more advanced than programmes at ISCED 3 (upper secondary) but they serve to broaden the knowledge of participants who have already completed a programme at level 3. The students are usually older than those at level 3. ISCED 4 programmes typically last between six months and two years.

In Germany individuals who complete vocational training in the dual system or an equivalent programme at a vocational school (ISCED 3B) and the Abitur or Fachhochschulreife (ISCED 3A)(no matter in which order) are also classified as ISCED 4A. (Source: ISCED, 1997; Cedefop, 2008.)

TERM: PRE-VOCATIONAL OR PRE-TECHNICAL EDUCATION – BERUFSAUSBILDUNGSVORBEREITUNG

Education which is mainly designed to introduce participants to the world of work and to prepare them for entry into vocational or technical education programmes. Successful completion of such programmes does not yet lead to a labour-market relevant vocational or technical qualification. For a programme to be considered as pre-vocational or pre-technical education, at least 25 per cent of its content has to be vocational or technical. (Source: ISCED, 1997.)

TERM: PROFESSION - AUSBILDUNGSBERUF

Professional activity or group of professional activities, access to which, the pursuit of which, or one of the modes of pursuit of which is subject, directly or indirectly, by virtue of legislative, regulatory or administrative provisions to the possession of specific professional qualifications.

(Source: European Parliament and Council of the European Union (2005). directive 2005/36/EC of the European parliament and of the Council of 7 September 2005 on the recognition of professional qualifications. Available from Internet: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:255:0022:0142:en:PDF> [cited 03.05.2011].)

TERM: QUALIFICATION – ABSCHLUB

A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards.

(Source: EQF, 2006.)

TERM: SCHOOL-BASED PROGRAMMES – VOLLZEITSCHULISCHE BERUFSBILDUNG

In school-based programmes instruction takes place (either partly or exclusively) in educational institutions. These include special training centres for vocational education run by public or private authorities or enterprise-based special training centres if these qualify as educational institutions. These programmes can have an on-the-job training component, i.e. a component of some practical experience at the workplace.

(Source: UOE data collection on education systems, Volume 1, Manual, Concepts, definitions and classifications, Montreal/Paris/Luxembourg, 2005.)

TERM: SKILLS - SPEZIFISCHE BZW. BERUFLICHE FÄHIGKEITEN UND FERTIGKEITEN

The ability to apply knowledge and use know-how to complete tasks and solve problems. In the European Qualifications Framework, skills are described as cognitive (use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).

(Source: EQF, 2006.)

TERM: UPPER SECONDARY EDUCATION (ISCED 3) - HÖHERE SEKUNDARBILDUNG/SEKUNDARSTUFE 2

Final stage of secondary education that normally begins at the end of compulsory education. The entrance age is usually 15 or 16 years. Entrance qualifications (completion of compulsory education) and other minimum entry requirements are generally needed. Instruction is often more subject-oriented than lower secondary education (ISCED 2). The typical duration of ISCED level 3 varies from two to five years.

(Source: Unesco, 1997; Eurydice, 2006.)

2. MODERNISING VET TO SUPPORT LLL, INTERNATIONALISATION AND MOBILITY

2.1 VET POLICY DEVELOPMENTS AND PRIORITIES IN SUPPORTING LLL

2.1.1 NATIONAL LLL STRATEGY

In Germany, training under the dual system is a key element of innovative strength, competitiveness and social cohesion. Its relevance to practical work and its closeness to the labour market enable high transfer rates from vocational training to working life and thus ensure that the economy's demand for qualified workers is met. Vocational training gives young people medium- and long-term employability and therefore job and career prospects. These factors are a prerequisite for people's self-determination and participation in society. The structural changes of the economy and of society, current demographic developments, and globalisation make it necessary to adapt the vocational training system to new requirements. In order to tackle future challenges and to improve the VET system's structure and transition opportunities, the Federal Minister of Education and Research appointed two task forces, the "Innovation Circle on Vocational Education" (*Innovationskreis Berufliche Bildung - IKBB*) and the "Innovation Circle on Continuing Education and Training" (*Innovationskreis Weiterbildung - IKWB*), in spring 2006 to lay foundations for new structures in IVET and CVET. Both innovation task forces were recruited from high-level representatives from business, research, industry associations, trade unions and *Länder* administrations.

In July 2007 the *IKBB* set out ten guidelines on the reform of vocational education (BMBF, 2007a). The stated objective of the *IKBB* was to identify the central challenges for innovation in the German vocational education and training system, and to work out concrete options for improving the structures of vocational education and training. The recommendations of the *IKWB* which were published in March 2008 follow on from the "Strategy for Lifelong Learning in the Federal Republic of Germany" agreed in 2004 by the Federal and *Länder* governments as represented by the Bund-*Länder* Commission for Educational Planning and Research Promotion (*BLK*) (BMBF, 2008c). They build on diverse range of previous initiatives and approaches to strengthen lifelong learning and are embedded in current initiatives. The main aim is to increase the number of people who participate in lifelong learning. In view of the fact that the level of participation in continuing education in Germany is too low compared to that of other countries, the experts of the *IKWB* have proposed a new education policy target: increasing the participation of people between the ages of 25 and 64 in lifelong learning to 80% by 2015. As regards formalised continuing education, the experts suggest an increase from 43% to 50%, and from 28% to 40% for low-skilled workers.

In addition, the Federal Government set up a "Qualification Initiative" in January 2008 (BMBF, 2008a). It pools a wide range of different measures in the areas of general education, higher education, and VET, with the aim of giving young people good career and life prospects, regardless of their social background, and opening up new opportunities in the areas of training and qualification. Implementation and further measures are coordinated with the *Länder*, companies and social partners. To bring about a long-term reduction in the percentage of youths and young adults without a vocational qualification, the Federal Ministry of Education and Research initiated the "Vocational qualification prospects" (*Perspektive Berufsabschluss*) structural programme. It aims to integrate existing provision and structures within the regional context, align them better with actual demand, and consequently deploy them more effectively.

The "Vocational qualification prospects" structural programme was launched in 2008 in the form of two support initiatives addressing "Regional transition management" (*Regionales Übergangsmanagement*) and "Qualification-oriented modular second-chance training" (*Abschlussorientierte modulare Nachqualifizierung*). It is intended to help develop the necessary cooperation structures and embed them permanently.

The "Regional transition management" initiative, established in 55 locations, coordinates the various forms of assistance and support already available to ease young people's passage from school into a programme of IVET. Meanwhile the "Qualification-oriented modular second-chance training" initiative consists of 42 projects to create suitable enabling conditions for unskilled young adults to gain a second-chance vocational qualification, whether they are unemployed or in employment.

For the period 2008 to 2013 the programme is being financed by the Federal Ministry of Education and Research out of Federal Government funds and by the European Union out of the European Social Fund, to a total amount of around EUR 67 million.

(see: http://www.bmbf.de/pub/nl_perspektive_berufsabschluss_ausgabe_vier.pdf, cited 10.08.2011).

2.1.2 POLICY DEVELOPMENT IN THE MAIN VET POLICY AREAS

POLICY PRIORITY	POLICY APPROACH / MEASURES
<p>1. TRAINING PLACES FOR ALL</p>	<ul style="list-style-type: none"> ➤ Continuation of the National Pact for Career Training and Skilled Manpower Development in Germany (<i>Nationaler Pakt für Ausbildung und Fachkräftenachwuchs in Deutschland</i>), originally concluded in June 2004 between the Federal Government and the top-level organisations of German industry. ➤ Improvement of regional IVET structures: BMBF "JOBSTARTER" and "JOBSTARTER CONNECT" and "VerA" programmes <ul style="list-style-type: none"> ➤ Introduction of a training bonus (<i>Ausbildungsbonus</i>) <ul style="list-style-type: none"> ➤ Training module programme ➤ Use of extra- and inter-company training capacities for unplaced applicants (<i>Altbewerber/innen</i>) <ul style="list-style-type: none"> ➤ Expansion of practical classes ➤ "Vocational qualification prospects" (<i>Perspektive Berufsabschluss</i>) programme ➤ Recruitment of companies in innovative and research-based sectors and in growth sectors for IVET, e. g. targeted sector campaigns <ul style="list-style-type: none"> ➤ Alliance for education (<i>Allianz für Bildung</i>) to prepare local educational alliances and to support educational-underprivileged children and youngsters <ul style="list-style-type: none"> ➤ Germany bursary (<i>Deutschlandstipendium</i>) programme ➤ Education chains initiative (<i>Abschluss und Anschluss - Bildungsketten bis zum Ausbildungsabschluss</i>)
<p>2. CHAINS OF EDUCATIONAL PROGRESSION UP TO INITIAL VOCATIONAL QUALIFICATION</p>	<ul style="list-style-type: none"> ➤ Reassessment of the "Transition System" (intended to help young people needing extra support with the transition from school into initial vocational training). ➤ Expansion of early, practice-based vocational orientation and individual mentoring of educationally vulnerable young people, from the 7th grade until they gain an initial vocational qualification. <ul style="list-style-type: none"> ➤ Initiative for the training of young people from migrant backgrounds

POLICY PRIORITY	POLICY APPROACH / MEASURES
<p>3. IMPROVING PERMEABILITY AND INTEGRATION BETWEEN EDUCATION SECTORS, ESPECIALLY SMOOTHING THE TRANSITION FROM SCHOOL TO UNIVERSITY</p>	<ul style="list-style-type: none"> ➤ Award of an advancement bursary to talented completers of dual-system apprenticeships wishing to proceed directly into higher education study <ul style="list-style-type: none"> ➤ Raised level of grant support for upgrading training <ul style="list-style-type: none"> ➤ Higher Education Pact 2020 ➤ Stepping up information campaigns, e.g. through the German international schools and the "Routes into study" (<i>Wege ins Studium</i>) network in which the Federal and <i>Länder</i> governments support academic counselling jointly with other partners <ul style="list-style-type: none"> ➤ Stepping up promotion of study at German universities via the German international schools ➤ Development of additional qualifications at the interfaces between initial and continuing vocational education and training ➤ "Higher education entrance for vocationally qualified applicants without a school-leaving certificate conferring university entrance entitlement" (KMK 2009) ➤ Creation of additional, differentiated options for crediting prior qualifications towards a higher education degree ➤ ANKOM - Credit for professionally acquired VET competence for university courses (<i>Anrechnung beruflich erworbener Kompetenzen auf Hochschulstudiengänge</i>) ➤ DECEVET - Developing a German credit system in vocational education (<i>Entwicklung eines Leistungspunktesystems in der beruflichen Bildung</i>) <ul style="list-style-type: none"> ➤ Advancement grant programme <ul style="list-style-type: none"> ➤ 23rd Act to amend the Federal Education and Training Assistance Act (<i>23. Gesetz zur Änderung des Bundesausbildungsförderungsgesetzes</i>)
<p>4. RECOGNITION OF QUALIFICATIONS GAINED IN OTHER COUNTRIES</p>	<ul style="list-style-type: none"> ➤ The goal is to establish a right to a procedure for validating and assessing the degree of equivalency between foreign qualifications and German initial vocational training programmes. <ul style="list-style-type: none"> ➤ Act to improve the assessment and recognition of foreign vocational and professional qualification (<i>Anerkennungsgesetz</i>)
<p>5. QUALITY ASSURANCE AND MODERNISATION OF VOCATIONAL EDUCATION</p>	<ul style="list-style-type: none"> ➤ Development and strengthening of VET research <ul style="list-style-type: none"> ➤ Development of occupational groups with occupations exhibiting a significant overlap of common specialist qualifications ➤ Internationalisation, e.g. implementation of European instruments like EQF, development of a NQF, quantitative and qualitative and development of cross-border mobility

<p>6. SIGNIFICANT INCREASE IN PARTICIPATION IN CONTINUING EDUCATION, PARTICULARLY THE PARTICIPATION RATE OF LOW-QUALIFIED WORKERS, BY 2015</p>	<ul style="list-style-type: none"> ➤ Strengthening the motivation and responsibility of individuals for their lifelong learning <ul style="list-style-type: none"> ➤ Enhancing recognition and acceptance of lifelong learning ➤ Improving permeability and integration between education sectors ➤ Ensuring transparency and high quality vocational guidance, development of guidance opportunities <ul style="list-style-type: none"> ➤ Improving integration of migrants into the education system ➤ Boosting the appeal of continuing education opportunities for older people, e. g. the Federal Employment Agency's special programme "Continuing vocational education and training for low-qualified and older workers in companies" (<i>Weiterbildung Geringqualifizierter und beschäftigter Älterer in Unternehmen - WeGebAU</i>) ➤ Assistance by means of a continuing education grant (<i>Bildungsprämie</i>) and saving for continuing education and training (<i>Bildungsgutschein</i>)
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Source: BMBF 2010; Compiled by the authors

DEMOGRAPHIC CHANGE

One of the major challenges in years and decades to come is demographic change, which affects Germany even more severely than many other European countries (See chapter 1.2.).

Demographic change is altering the face of German society and is already, despite the crisis, leading to a shortage of qualified skilled workers in certain segments of the labour market. This particularly applies to mathematical and scientific occupations, engineering occupations, doctors, teaching staff and care workers. In a country such as Germany, which has little in the way of natural resources, the future lies in skilled work. Companies and firms require a constant supply of well qualified workers.

The Federal Ministry of Education and Research (BMBF) has conducted a study which models a range of trends and scenarios to show the effect which demographic development could have on vocational training (BMBF 2009b). The specific recommendations formulated include: stronger interlinking of dual vocational education and training and institutes of higher education, improving integration into vocational training via basic skills and permeability, establishment of national coverage of branch-specific regional initial and continuing training centres etc. (also see 1.2).

SKILL NEEDS STRATEGY

The Federal Government and the federal states held a so-called "educational summit" in Dresden in October 2008, at which educational policy target agreements to secure Germany's requirements for skilled workers were concluded.

The joint aims are to increase investment in education and research to ten percent of gross domestic product by 2015. The objective is to achieve a rise in expenditure on research and development to three percent of GDP by 2010. It was further agreed that the proportion of school leavers without qualifications should be reduced from its present level of 8% to 4% by 2015 and that it should be made easier to resit the lower secondary school leaving certificate. The government is also seeking to reduce the number of young people who have not completed vocational education and training from its current figure of 17% to 8.5% by 2015. The "Dresden Declaration" also contained an agreement to increase the proportion of those entering higher education to 40% of those completing the upper secondary school leaving certificate each year. The federal states, which hold sovereignty over education in Germany, are seeking to put conditions in place by 2010 which will enable those who have completed a master craftsman, certified technician, certified senior clerk or equivalent qualification to be accorded subject-related access to an institute of higher education after three years of occupational experience. The "Dresden Declaration" also included a commitment to increasing participation in continuing training to 50 percent (BMBF 2009, S.5). In North Rhine Westphalia, for instance, these ideas have been transposed into valid law (see 2.1.3).

LIFELONG GUIDANCE AND LIFELONG LEARNING

(see chapter 9)

FORMAL AND NON-FORMAL LEARNING

Recognition and acceptance of lifelong learning is facilitated in the medium term by a reorientation away from formal, certificate-based qualifications and towards competence based learning. In this way new target groups can be attracted to lifelong learning.

The development of both the European Qualification Framework and the German Qualification Framework is intended in the medium term to bring about a paradigm shift from formal certificate-based qualifications towards more competence orientation, to enable optimum utilisation and development of people's competencies and potential, including informally-acquired competencies. The IKWB recommends that recognition should also be given to competencies acquired outside the education and training systems. It points out that this calls for instruments and procedures which simplify the assessment and recognition of competencies, not least as a basis for re-entry to formal education and training. The recognition of competencies also includes the award of credit for other training courses, and must contribute to more effective integration between the educational and training sectors.

2.1.3 CURRENT DEBATES

BRIDGING PATHWAYS

For ageing societies like Germany, it is important for competences to be acquired on a lifelong basis to maintain the population's level of qualification. Education and training policy is therefore geared to increasing permeability by an improved recognition of competences in transferring between fields of education and training. It is important for VET to dovetail not only with general education, but also with institutions of higher education. Two approaches will be cited here, in which transitions are made easier or possible for learners.

INTERFACE BETWEEN SCHOOLS PROVIDING GENERAL EDUCATION AND INITIAL VOCATIONAL TRAINING

The introduction of qualification modules are designed to make it easier for young people to enter training. They are particularly helpful for socially disadvantaged young people and those who find learning difficult. Qualification modules in pre-vocational training (see 5.5) contain vocational elements of recognised training occupations. With the agreement of those involved (trainee, enterprise), qualifications acquired can count towards subsequent vocational training. The provider (e.g. Chambers of Industry and Commerce, Craft Chambers, the *BIBB*) must draw up a description of each module, which must include designation, the training occupation on which it is based, the qualification aimed at, the activities to be provided for this purpose, with reference to the skills and knowledge contained in the framework training plan of the relevant training regulation, the duration of provision and the nature of the performance observed (qualification picture). The *BIBB* maintains a database of qualification modules (www.good-practice.de/bbigbausteine/), which now contains over 534 (as of August 2011).

To meet the needs of the so called "unplaced applicants" (*Altbewerber/innen*) (young people who have been applying for an apprenticeship place for a year or more without success), in 2007 the "Training modules" (*Ausbildungsbausteine*) programme was launched. In 11 (with the addition of the creditable two-year training occupations, 14) significant occupations within the dual system, training modules were developed with a view to helping unplaced applicants to transfer to regular dual training and have their previously acquired learning outcomes credited towards the regular training period or to enable their admission as external candidates to chamber examinations (Frank and Grunwald, 2008). In both cases the aim is the award of full qualifications in the dual system. The testing of the training modules will be conducted in the framework of the new BMBF programme "Jobstarter Connect" (<http://www.jobstarter.de/de/1208.php>), which started at the beginning of 2009.

Preventing young people from dropping out of school and improving transitions from school into dual-system IVET are the aims of the initiative "Completion and transition - education chains leading to vocational qualifications" (*Abschluss und Anschluss - Bildungsketten bis zum Ausbildungsabschluss*) that was launched in summer 2010. Under the auspices of the education chains principle, new support instruments are being merged and integrated with existing Federal Government and Länder support programmes. Attention is focused on preventative assistance along with vocational orientation, both begun at an early stage while pupils are still at school. Young people in need of assistance are supported on their way to gaining an initial vocational qualification so that they could avoid marking time in the transition system. Key components of the chain (of educational progression) are the special programme entitled "Career-start counselling - education chains" (*Berufseinstiegsbegleitung Bildungsketten*), the "Vocational orientation programme" (*Berufsorientierungsprogramm, BOP*) and the JOBSTARTER structural programme for IVET.

INTERFACE BETWEEN VET AND HIGHER EDUCATION (ALSO SEE 5.3)

It is possible to enter higher education without having completed an upper secondary school leaving certificate, although the fact that each federal state has its own regulations means that the rules and procedures relating to this exhibit very little clarity. Those seeking to commence higher education in this way are almost always expected to have completed training in a recognised training occupation and to have a number of years of occupational experience. The number of years of occupational experience required, however, varies widely. Some universities insist on higher education entrance examinations, and other require advanced training examinations (see 5.1.) to be sat after completion of vocational education and training. Other universities make a period of probationary study compulsory.

In order to bring about change in this area, the Deutsche Industrie- und Handelskammertag (DIHK, Association of the Chambers of Industry and Commerce) and the Hochschulrektorenkonferenz (HRK, Association of Universities and other Higher Education Institutions in Germany) came together in October 2008 to call jointly for transparent and nationally standardised higher education access regulations for those with vocational qualifications. They are calling upon the federal states to agree on uniform access pathways enshrined in law. Institutes of higher education will structure access pathways in a more transparent manner and communicate these clearly to those who have obtained a vocational education and training qualification or an advanced training qualification. This should make it possible to credit vocational competences already acquired towards a course of higher education study.

(<http://www.dihk.de/presse/meldungen/meldung011047>, cited: 11.08.2011)

In the Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK) of 06.03.2009 on "Higher education entrance for vocationally qualified applicants without a school-leaving certificate conferring university entrance entitlement", Germany's Länder have now agreed on the standardised implementation of university admission regulations for vocationally qualified applicants without a school-based university entrance entitlement. The standardised implementation of the Resolution is an important contribution to permeability between vocational and higher education, and gives those who hold a vocational qualification but no university entrance entitlement (*Abitur*) clarity about their options for access to higher education.

1. Holders of vocational upgrading training qualifications (see 6.1.2) receive the universal higher education entrance qualification.
The transposition of the KMK resolution into Land law enables this group to gain admission to all courses at universities and universities of applied sciences. It has the further effects that the higher education entrance qualification is no longer linked to the question of subject-affinity between the initial or continuing vocational qualification and degree programme, no examination has to be taken as evidence of qualification for admission, and proof of employment no longer has to be provided.
2. For holders of initial vocational qualifications (see 5.3, dual system IVET, full-time vocational school and health sector schools), the provisions of the KMK Resolution differ dramatically from the previous regulations on one point: a subject-specific higher education entrance entitlement can be acquired in a relevant subject by means of an aptitude test. This opens up access to both the university of applied sciences (*Fachhochschule*) and the university. Until now the vast majority of Länder had restricted this group to examination-based access to the higher education sector.
This subject-specific higher education entrance entitlement can be obtained by anyone who has completed a recognised initial vocational qualification in a field related to the prospective degree programme, can show evidence of at least three years work experience in a related field of specialisation, and has taken and passed aptitude test.

TABLE 2B: UNIVERSITY ENTRANTS WITHOUT A SCHOOL-BASED UNIVERSITY ENTRANCE QUALIFICATION, NOW IN FIRST SEMESTER AT A HIGHER EDUCATION INSTITUTION, ABSOLUTE AND IN % (NATIONAL AVERAGE)			
	WINTER SEMESTER 2005/2006	WINTER SEMESTER 2006/2007	WINTER SEMESTER 2007/2008
IN%	1.09	1.16	1.11
ABSOLUTE	3,258	3,396	3,461

(Source: Freitag 2009, p. 9)

For example, the Land of North Rhine-Westphalia opened up university entry to master craftsmen and others with an equivalent vocational qualification as of the winter semester 2010/2011. This eases the transition from vocational into academic education. Now master craftsmen and other holders of a vocational "upgrading" qualification (representing at least 400 hours of learning) are entitled to access any degree programme, whilst journeymen with three years work experience in a relevant recognised occupation qualify for entry to a programme of studies in a relevant subject. For practically everyone else, and for journeymen wishing to take up a study programme not specifically relevant to their occupation, an entrance examination and a probationary study period are alternative ways of obtaining admission. (see: <http://www.hwk-duesseldorf.de/ablage/bilden/FachhochschulstudiumNRW.pdf>, cited 11.10.2011)

Federal advancement grants give an additional incentive to embark on a degree programme as well as attractive career prospects. The grants are targeted particularly at professionally experienced people who have acquired access to higher education by means of initial vocational training, advanced vocational training or occupational experience. In its 23rd Act to amend the Federal Education and Training Assistance Act of 27.10.2010, the Federal Government announced the introduction of improved student support (BAföG) payments and structures.

It is thus safeguarded for ongoing development as a key element in a triad of need-based forms of access to individual financing for education and training, consisting of the BAföG, education and training loans, and grants. The "Career advancement grant" ("*Aufstiegsstipendium*") programme offers an additional incentive.

2.2 IMPLEMENTATION OF EUROPEAN TOOLS AND PRINCIPLES

As an export-oriented country with nine neighbour countries and located as it is in the heart of Europe, Germany has a special interest in promoting a European education area. In addition to the promotion of mobility and co-operation arrangements in cross-border education projects in the EU, the developing European Education and Employment Area (Lisbon and Copenhagen process) increasingly makes possible structural measures to enhance the recognition, crediting and transparency of qualifications and school leaving certificates.

TOOLS: EQF, ECVET - DQR, DECVET

There is a consensus at the European and at the national level about the goal of sustainably shaping education and training so that it promotes life-long learning and the employability of the men and women citizens. In this connection the Federal Government regards such current European developments as the European Qualification Framework (EQF) and the European Credit System in Vocational Education and Training (ECVET) as a positive challenge at both the European and national level to promote more mobility, transparency and recognition. In Germany the preconditions for mobility and permeability in initial and continuing vocational education and training were already radically improved with the amendment of the Vocational Training Act 69 in 2005. Accordingly, taking the vocational principle into account, parts of the training obtained abroad (BBiG, § 2, Para 3) could more easily be recognised and given credit for in the national course of training. In Paragraph 2, dealing with vocational education and training learning venues, reads in part: "... (3) Parts of vocational training can be taken abroad if this serves the training objective. Its total duration shall not exceed one fourth of the training duration stipulated in the Training Ordinance...".

The European Qualification Framework (EQF) is meant to function as a common frame of reference for learning results and competence levels that should simplify the comparison of competencies and thus contribute to better recognition of existing qualifications. The EQF is conceived as a meta-framework, so that it can function as a translation tool between national frames of reference and the EQF. The learning outcomes acquired through different forms of learning and at different learning venues are to be comparable with one another and credits are to be transferable both nationally and at the European level.

The function of a German Qualification Framework (DQR) is both to take account of and reflect the specific nature of the German system of education and training and to develop a structure of levels of reference that are as compatible as possible with the EQF. In the process the permeability between and within the fields of education and training is to be improved and hence learning time and resources utilised more effectively. This refers to the access of vocationally qualified persons to university, to the transitions between vocational preparation and vocational training and to the interlocking of initial and continuing education and training.

Back in October 2006, the Federal Ministry of Education and Research (BMBF) and the Standing Conference of Ministers of Education and Cultural Affairs of the Länder (KMK) jointly agreed to develop a German Qualification Framework for Lifelong Learning (GQF). In February 2009, a first jointly elaborated discussion proposal for a GQF was put forward.

This served as the basis for comprehensive testing phase across all sectors of education and training. The draft DQR is designed to integrate all existing German qualifications and to be compatible with the EQF. Therefore it describes learning outcomes on eight reference levels which direct the referencing of qualifications obtained in general education, higher education and vocational education and training (<http://www.deutscherqualifikationsrahmen.de>; cited: 11.08.2011). The review was concluded in summer 2010. The findings were evaluated and integrated into the GQF, which does not, however, have the force of law. The assignment of competencies and qualifications to the eight levels of the German Qualification Framework does not supersede the existing system of access entitlements; that is to say, the attainment of a certain level on the German Qualification Framework does not give an automatic right of entry onto courses leading to qualifications at the next level.

The arrangements for the continuing GQF process envisage a consultation period followed by work on the assignment of qualifications to levels. A further point to be clarified is how the outcomes of informal learning can be included. Finally the results will be incorporated into an agreement between the Federal Government and the Länder (BIBB 2011).

The European Credit System in Vocational Education and Training (ECVET) will further promote the recognition of foreign qualifications, since ECVET has the goal of improving the transparency and acceptance of partial qualifications as well and making it possible to distinguish between them in terms of value and weighting. Such a system, properly defined, could in principle enable learners to have more flexible and individual learning and career pathways. Greater efficiency - especially cost efficiency - and attractiveness through avoidance of duplication of training could be the potential advantages for education providers such as schools, enterprises and further education and training establishments. In autumn 2007 the Federal Ministry of Education and Research (*BMBF*) started the pilot initiative "Development of a credit system in vocational education and training" (DECVET, <http://www.decvet.net/>). The initiative focuses on the implementation of pilot projects for the systematic testing of a credit system for recording, transferring and giving credit for learning outcomes and competencies from one sub-area of the vocational education and training system to another. The following interfaces are taken into account in this process:

- vocational training preparation and dual vocational training,
- within the dual system of vocational education and training, at the interface of common vocational education and training-transcending qualifications in a vocational field,
- dual and full-time school vocational education and training,
- interface between dual and vocational further training.

The education policy goal is to develop and test transferable accreditation mechanisms. This is meant to open up education pathways and make them more permeable. Moreover, this initiative is supposed to contribute to better linkage of learning modes and co-operation between educational establishments. At the end of 2007, ten projects in different branches were selected for exemplary testing. They are under the responsibility of the Federal Institute for Vocational Education and Training (*BIBB*) and are being monitored scientifically by a university research group. In addition, the initiative is being counselled by a committee of representatives of the trade union and employer organisations and the state governments.

The results of testing will be available in 2012. On the basis of these, the next step will be to review whether and to what extent the various credit transfer models tailored to specific transition points and sectors can be generalised and standardised for the VET system as a whole.

2.3 INTERNATIONALISATION AND TRANSNATIONAL MOBILITY IN VET

Advancing globalisation and demographic change are transforming the world of work. In this context, periods spent abroad offer a good opportunity to acquire international vocational competencies. To meet the demands of the future, qualifications will need to build on foreign language skills, specialist knowledge with an international dimension, and intercultural skills.

So ever-increasing political significance has continued to be attached to the fostering of cross-border mobility over the course of recent years. The Report on Vocational Education and Training presents this political orientation in the following terms.

"The aim of the Federal Government is to align national vocational education and training along international and European lines and to qualify citizens for the increasingly international nature of work requirements. The reform of the Vocational Training Act with regard to facilitating training abroad represented an initial step in this direction. Further objectives which have been agreed within the Innovation Circle on Vocational Education are a doubling of training courses attended abroad by young people in VET by the year 2015, extending periods of training abroad within the scope of European programmes and additional European Union (EU) designations for national training regulations of international relevance. European educational programmes which facilitate international qualifications in vocational education and training form part of the most important instrument for the implementation of the new EU initiatives which have been agreed. In its capacity as the largest EU member state, Germany is seeking to become actively involved in shaping European educational policy and new EU policy initiatives and use these for its own system development" (cf. BMBF 2009c, p. 45). In addition to this, The Federal Ministry of Education and Research funds cross-border mobility via four further bilateral programmes (France, the Netherlands, the United Kingdom and Norway).

2.3.1 POLICY FRAMEWORK FOR INTERNATIONALIZATION AND TRANSNATIONAL MOBILITY IN VET

Cross-border mobility is essential for intelligent and sustainable growth. Broad consensus on this matter prevails in Germany, so that from the viewpoint of VET policy, promoting mobility makes an especially strong contribution to developing skills and competencies, which in turn guarantee that the workforce will be innovative and competitive by international as well as national standards.

In order to encourage and broaden mobility even further and to establish and recognise the comparability of competencies acquired in other countries, specially developed instruments are necessary. To this end, at the end of March the German Federal Government passed a draft bill for an "Act to improve the assessment and recognition of foreign vocational and professional qualifications" (*Gesetz zur Verbesserung der Feststellung und Anerkennung im Ausland erworbener Berufsqualifikationen*). This law would give all people, regardless of nationality, a legal right to have their vocational qualifications examined for the possibility of recognition in Germany (more on the Recognition Act, see section 4.2).

Furthermore, the Federal Ministry of Education and Research (BMBF) decided to test the European Credit System in Vocational Education and Training (ECVET) in Germany, with regard to cross-border mobility (Hübers 2011). The first mobility projects oriented to key elements of ECVET have been up and running since 2010. The credit points system offers a wealth of opportunities for transnational mobility (see section 2.2).

2.3.2 TRANSNATIONAL MOBILITY PROGRAMMES AND SCHEMES IN VET

Cross-border mobility is enormously important for the acquisition of skills. Thus, within the framework of the European Programme for Lifelong Learning (PLL), the Leonardo da Vinci education programme supports mobility projects offering placements abroad to meet the learning needs of young adults in IVET. It is the largest such assistance programme, accounting for 37% of total transnational mobility in this sector. The bilateral exchange programmes of the Federal Ministry of Education and Research (BMBF) with France, Great Britain, the Netherlands and Norway, and the programmes run by foundations and chambers each account for 8% (Hübers 2011). Another 16% of transnational mobility can be ascribed to programmes offered by various donors and 39% are financed private (Hübers 2011).

In the year 2010, assistance was granted to a total of 14,800 recipients on 590 projects. This year has seen a continued rise in applications and approvals of learning placements abroad. In the period from 2005 to 2010, the number of participants in the IVET sector has doubled.¹ (BIBB 2011)

The European budget was topped up in January 2010 with EUR 3 million of national support funding. As a result, more than 2,000 trainees received additional financial support (BIBB 2011).

Through this comprehensive funding of transnational mobility, the BMBF is supporting the recommendations of the Innovation Circle on Vocational Education (*Innovationskreis Berufliche Bildung*, IKBB), which has been an advocate of opening up the German system to Europe since 2007. Apart from the target of doubling the number of training phases undertaken abroad by 2015, the IKBB has formulated the objective of extending the duration of assisted foreign placements to between six weeks and three months (BIBB 2011). In this context, in 2010 over 3,400 placements abroad of six weeks or longer were supported under the Leonardo da Vinci mobility scheme. In 2008, only 1,800 such placements were undertaken. Thus the number of foreign placements has risen by 1,600 in two years, and over 60% of participants in the target group (IVET participants) are apprentices being trained in the dual system. (BIBB 2011)

A 2011 study entitled "Hidden mobility in vocational education and training" ("*Verdeckte Mobilität in der beruflichen Bildung*") commissioned by the National Agency "Education for Europe" at the Federal Institute for Vocational Education and Training states that 90% of training placements abroad are undertaken in Europe. Mobility outside of Europe thus accounts for 10% of placements. The USA, which accounts for 4%, represents the seventh most important country. (Hübers 2011)

For the documentation of periods spent abroad and the competencies acquired there, the instrument in most common use is the Europass. In the "Hidden mobility in vocational education and training" study, 29% of respondents stated that their placement abroad had been documented by means of the "Europass Mobility", 23% received a work placement certificate, and 21% received no documentation (Hübers 2011).

¹ This notable rise is due in part to the national co-financing of mobility projects by the BMBF within the scope of the supplementary "Leo plus" programme.

GEOGRAPHICAL MOBILITY WITH EUROPASS

The EUROPASS concept went into effect of 1 January 2005. The EUROPASS portfolio currently consists of five documents aimed at boosting transparency: the European Curriculum Vitae, the EUROPASS Language Passport, the EUROPASS Mobility, the EUROPASS Certificate Supplement and the EUROPASS Diploma Supplement. Member States have set up National EUROPASS Centres (NEC) to oversee the implementation of the EUROPASS system.

The NEC in Germany was established in 2005 and since January 2007, the National Agency for Education for Europe at BIBB has been responsible for this function. Since then, over 64,000 learning stays in other European countries have been certified with the *Europass* Mobility document in Germany alone (<http://www.europass-info.de/EN/start.asp>, cited: 16.08.2011).

ONLINE PORTAL FOR VET

The website gives an overview of the range of topics in the European education policy and presents the most important instruments, initiatives and decisions. It provides the latest news and compilations of background information on subjects as varied as school-based education, higher education, vocational education and adult education, but also covers mobility, quality assurance in education, and employability. The most important EU documents on these topics can also be downloaded: <http://www.eu-bildungspolitik.de/> (in German; accessed: 16.08.2011)

The portal was set up by the Federal Ministry of Education and Research (BMBF) with the support of the National Agency "Education for Europe" at the Federal Institute for Vocational Education and Training (BiBB).

OVERVIEW OF VET TRANSNATIONAL MOBILITY PROGRAMMES AND SCHEMES

Title of program/scheme and geographical coverage	Managing authority	Sources of funding ⁽²⁾ and corresponding level of funding for the programming period	Start - end date (programming period)	Target groups ⁽³⁾	Average duration of mobility per target group (in months)	Number of participants ⁽⁴⁾	Implementation mechanisms ⁽⁵⁾	Practices to recognize the KSC acquired abroad	Sources of information (including evaluation reports)
EU programmes									
1. LEONARDO DA VINCI Mobility	National Agency Education at the BIBB	EU-PLL 2011: € 24.6 million	2007 - 2011	IVT PLM (after IVT) VETPRO	IVET Students: 1.5 Apprentices: 1.5 PLM: 4.0 VET Professionals: 0.25	2011 IVET Students : 4,800 Apprentices : 7,200 PLM : 1,800 VET Professionals : 1,250	- annual application round for projects in February - eligible : transnational mobility in VET from Germany to one of the other 33 participating countries	EUROPASS Mobility	www.na-bibb.de
2.									

⁽²⁾ EU programmes, EU Structural Funds (e.g. ESF), National budget, Employer contribution, Individuals' funds/savings, etc.

⁽³⁾ E.g. students, apprentices, VET professionals, etc.

⁽⁴⁾ The number of students who have spent a period abroad in one single year (please specify year). In case statistics are collected differently, please specify.

⁽⁵⁾ Please briefly present the application procedure & the eligibility requirements for the applicants. In case of EU programmes, please indicate if standard procedure is applied. In case of exceptions, please briefly describe.

Multi-country programmes (between several countries, including your country)

1.					IVET Students*.....	IVET Students*.....			
					Apprentices**	Apprentices**			
					VET Professionals*** ...	VET Professionals*** ..			
					Others (please specify).....	Others (please specify).....			
2.									

Bi-lateral programmes (between your country and another country)

1.					IVET Students*.....	IVET Students*.....			
					Apprentices**	Apprentices**			
					VET Professionals*** ...	VET Professionals*** ..			
					Others (please specify).....	Others (please specify).....			
2.									

National programmes/schemes (not targeted at specific countries of destination)									
1.					IVET Students*.....	IVET Students*.....			
					Apprentices**.....	Apprentices**.....			
					VET Professionals***...	VET Professionals***.			
					Others (please specify).....	Others (please specify).....			
2.									
Regional programmes/schemes (between administrative regions in your country and foreign regions and/or countries)									
1.					IVET Students*.....	IVET Students*.....			
					Apprentices**.....	Apprentices**.....			
					VET Professionals***...	VET Professionals***.			
					Others (please specify).....	Others (please specify).....			

* IVET STUDENTS IN SCHOOL-BASED PROGRAMMES;
TRAINERS

** IVET STUDENTS IN APPRENTICESHIP

*** TEACHERS, AND

2.3.3 ARRANGEMENTS TO SECURE WORK PLACEMENTS FOR TRANSNATIONAL MOBILITY IN VET

The "Hidden mobility in vocational education and training" study revealed that around 7% of firms regularly or occasionally send apprentices abroad. Within this figure, the level of transnational mobility among apprentices in small and medium-sized enterprises (SMEs) is surprisingly high. 69% of apprentices engaging in transnational mobility come from companies with 499 or fewer employees (Hübbers 2011). Although these companies seldom carry out projects themselves, their apprentices frequently take up offers made by schools and chambers of industry and commerce. The study also states that the number of placements abroad will rise in future since companies generally exhibit a positive attitude towards transnational mobility.

As a first step towards opening up their initial vocational training to Europe, training firms and establishments can make use of "small-scale projects" under the Leonardo da Vinci programme for a maximum of three apprentices or VET professionals. These "small-scale projects" are not subject to the usual timeframe for European applications and applications are accepted on a continuous basis and with less bureaucratic procedures. To enable individual apprentices to undertake a phase of training abroad without having to involve the company as a project promoter, "pool projects" also exist. These are offered by chambers, education providers or vocational schools, and award individual grants to apprentices or to learners who have already gained an initial vocational qualification. In 2010 around 2,500 grants were available to apprentices and to employees with an initial vocational qualification. (BIBB 2011)

In addition, the Leonardo da Vinci "mobility certificate" was developed in 2009 for experienced project promoters who have already run successful mobility projects, and are combining project-based assistance with strategic internationalisation. It was initiated with a four-year support timeframe and a simplified application and reporting procedure. 100 mobility certificates have been awarded since 2009. (BIBB 2011)

Since 2009, German companies and businesses have also had the benefit of a nationwide advisory service on mobility. The programme "Vocational education without frontiers" (*Berufsbildung ohne Grenzen*) employs 35 mobility advisers, who are supported partly by the Federal Ministry for Labour and Social Affairs and partly out of ESF funding, and are based with the chambers. They provide companies with assistance on all questions concerning transnational mobility. To this end they have local contacts who support them in applying for, preparing and carrying out a transnational mobility project. (BIBB 2011)

3. VET TO SUPPORT RECOVERY FROM THE CRISIS

3.1 OVERVIEW

The German economic trend showed a surprisingly positive upturn in the first quarter of 2011. According to information from the European statistical office Eurostat, Germany as Europe's largest economy led the way to recovery with a plus of 1.5% (<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=de&pcode=tina011&plugin=1>).

So in Germany there has been economic growth after the financial crisis in 2009. The economy had shrunk in 2009 by -4.7%, according to the German Federal Statistical Office. But in 2010 gross domestic product rose to 3.6%, the highest level ever since German unification.

The boom in Germany has several causes: in part it is driven by traditional exports, but also by private consumption by Germans, which had been weak for a number of years. In 2010 exports rose to 14.2%, while imports increased to 13.0%. So the growth share of gross domestic product was 1.1% (see www.destatis.de).

Furthermore, according to the statisticians, the state stimulus programmes are having a positive impact. In 2010 Germany spend 2.4% of the gross domestic product for stimulus programmes. Companies are also investing more again. Other contributory factors to this trend are Germany's extraordinarily high proportion of industry and strong global market orientation. In 2010, processing industries contributed almost 10.3% to the gross value.

Traditionally, Germany's economic trend is closely intertwined with the apprenticeship-place market, which is crucial to the functioning of the large dual-system initial vocational training sector. The surprisingly rapid economic recovery seems to be averting an outright crisis in the apprenticeship-place market.

It has also been possible to maintain a relatively stable situation in the labour market. In 2010 the number of employees increased, as did working hours. But in the manufacturing sector there was a significant cutback in staff (-1.7%). Even in the trade and transport sector the employment rate was declining (-0.2%). In contrast, in the other service sectors (financing, leasing, corporate service providers (+2.4%), public and private services (+1.5%)) high growth in personnel can be noticed (www.destatis.de, 2011).

Nevertheless, in macroeconomic terms, the working hours per employee increased to 2.0% compared to the previous year (-6.8%), and the increase is particularly noticeable in the manufacturing sector. On average in 2010 every employee worked 5.7% more than in 2009. One reason for the high increase in working hours in the manufacturing sector is the economic upturn. In this regard, the short-time working initiative which played an important role in 2009 and secured jobs was scaled down (www.destatis.de, 2011). In spring 2010, only half the numbers of employees were drawing short-time working benefits compared to the previous year.

Alongside short-time working initiative, the government was also helping to fund continuing training courses and was seeking to encourage employers to support their employees in pursuing such continuing training. The crisis could have been seen as an opportunity to counter the shortage of skilled workers and to use continuing training as a vehicle for emerging in a stronger position.

Applications could have been submitted for short-time work for trainees, although in the interests of protecting such trainees all other possibilities needed to be explored beforehand. Before apprentices are permitted to begin short-time work, attempts should be undertaken to transfer them to other departments not affected by short-time working or to transfer them to the training workshop.

Adjusting the curriculum or staging special training events are further ways of continuing to guarantee training. If all these possibilities fail and training cannot be continued, the Vocational Education and Training Act accords trainees a right to remuneration for a period of up to 6 weeks and further requires the company providing training to undertake timely endeavours to find another company to provide training to the apprentice (BMAS 2009).

3.2. EFFECTS OF THE CRISIS ON VET AND CORRESPONDING MEASURES

Accordingly, the situation in the apprenticeship-places market is not bad. Young people's chances of finding an apprenticeship place are better this year than in previous years. Recovery in the labour market and the decline in applicant numbers for demographic reasons are having noticeable positive repercussions on the apprenticeship-place market. The 2011 Annual Vocational Training Report shows that the apprenticeship-places market has remained relatively stable. Although in 2010 the number of new apprenticeship contracts declined by only 0.75% to 560,073 contracts in comparison to the previous year, demographic change caused the number of young people interested in initial vocational training to fall by 2.27% to 844,452 young people. In 2010 the number of young people without any apprenticeship training position decreased to 12,300 compared to the previous year's 15,700. (BIBB 2011, p.12)

To come up against the crisis Life-Long-Learning becomes more and more important. Therefore instruments for continuing education and training are essential. In 2010 45% of the companies engage in financing vocational training (BIBB 2011, p. 285). Participation in training depends on the company size and is higher in large companies than in small and medium-sized enterprises. According to the results of the IAB- Study the training activity increased slightly (see 2.1).

The majority of recorded continuing education activities, i.e. 60%, come into the category of in-company CVET. Individual CVET accounts for the minority share, although only about half of this is undertaken for professional reasons.

4. HISTORICAL BACKGROUND, LEGISLATIVE AND INSTITUTIONAL FRAMEWORK

4.1 HISTORICAL BACKGROUND

Skilled work has traditionally played a major role in Germany. For over a century, the most important German export industries - mechanical engineering, chemistry, vehicles and electrical technology - have derived the majority of their added value from high quality work of a post-industrial nature. Herein lies the central importance of "dual system initial vocational training" for the entire organisation of the economy: initial vocational training is something in which both the state, which provides the vocational schools, as well as companies make an investment. The resulting system allows them largely to determine the contents of training (together with the trade unions) and to rely on it to meet the technological needs of the their own branch of industry.

1870-1920

Germany's reaction to the decline of the pre-modern production model and its specific pattern of vocational education differed from that of Britain or France. Rather than developing a new, modern form of VET appropriate to a society undergoing intense industrialisation, Germany largely re-established the traditional form of class-based craft education that had evolved in the High Middle Ages (Greinert 2007).

The aim of this policy was to protect what remained of the former petty bourgeoisie - the craft sector, small shopkeepers and small-scale farmers - against further proletarianisation.

The majority in the Reichstag, the elected chamber of the German parliament, passed a number of Bills reforming both the retail and the craft sectors. Alongside the re-establishment of the principle of self-governance in the craft sector, the 1897 reform established a completely new structure. Its key concept is that the legislator handed over the power to supervise and administer craft apprenticeships (including the key power to control examinations) to trade corporations or guilds, as appropriate. This "corporatist" solution remains to this day a central plank in Germany's dual system of VET.

At the same time, to some extent as a liberal variant of *Mittelstand* (small and medium-sized business) policy, the attempt was made to establish the school of further education (*Fortbildungsschule*) as the second pillar of dual system initial vocational training. Influenced by Georg Kerschensteiner, an education reformer, the schools developed as places in which proletarian and lower middle-class youth could be integrated into the bourgeois national state by undertaking vocational education and learning a recognised occupation. This key educational concept, "civic education" through VET provision is still the core of the German philosophy of vocational education.

1920-1970

The next phase in the development of the dual VET system in Germany was typified by an attempt to impose clearer and more modern structures on a sector that was still pre-industrial in its fundamental orientation, still largely unharmonised and offering a seemingly random combination of academic and industrial learning. For in the course of industrialisation, a new type of industrial worker emerged, in contrast to the "artisan-craftworker" model. The developing new VET model had three main aspects:

- an institutional aspect, with facilities on the shop floor and a school within factories,
- a methodological approach, including the use of psychological aptitude testing, standardised training courses and materials and
- a *Beruf*-system approach, with provisions laid down in relation to profile, VET scheme and examination requirements. (Greinert 1998)

Those who emerged from this development embodied an entirely new type of qualified worker and, indeed, represented a new "social player", one that had been moving towards a leading role in German VET since the 1930s. With the *Beruf* principle adopted in industry's education and employment regulations, the orientation around *Beruf* came to dominate Germany in both company recruitment and employment policy practice and in the state's and trade unions' social and labour market policy.

During the Nazi regime, all metalworking companies and construction industry firms with 10 or more employees were obliged in 1936 to establish a number of apprenticeship places proportionate to the size of their staff and to organise initial vocational training programmes. The Reich School Law of 1938 finally enacted the introduction of a complete system of industrial vocational training, which compelled all school-leavers to enter some form of initial vocational training.

In the post-war period, the attractiveness of vocational training initially declined. More and more firms were mass-producing using the production-line techniques originally invented by Henry Ford. This type of production was geared towards unskilled workers. They were relatively scarce and therefore well-paid. For this reason, more and more young people preferred to enter the workforce as unskilled labour rather than completing a proper apprenticeship. Additional unskilled workers were systematically recruited from abroad. It seemed as if standardised mass production and the automated factory were the

future of production, and that it was only a matter of time before it displaced the German vocational training model of custom-made quality production.

From 1970

Nevertheless, at the beginning of the 1970s, the profile of the labour market changed dramatically. Fordist mass production was no longer competitive in the German market, and more and more of the unqualified jobs fell away. Now, once again, skilled workers were in demand.

At the same time, the Vocational Training Act of 1969 entered force. Not only did this Act pull together the previously fragmented law on initial vocational training; it was also the state's way of securing a certain influence over initial vocational training, after decades in which it was considered essentially a "matter for industry" - i.e., for business owners. Since 1973, the Federal Ministry of Education and Research has been responsible for coordinating the regulation of in-company initial vocational training. The Annual Vocational Training Report has been published since 1977; the Vocational Training Act was reformed in 2005. (see 4.2 ff)

4.2 LEGISLATIVE FRAMEWORK FOR IVET

The system of VET in Germany is founded on a legal system with differing levels and specifications of regulations. Initial training in enterprises is regulated by a series of federal Laws and regulations. The most significant framework conditions are the free choice and practice of an occupation, as provided for in the Constitution (*Grundgesetz*: Article 12 (1)) and Federal Government competence for legislation for out-of-school vocational training (Article 72 (1), (2) and Article 74 (1)).

Of crucial importance for the organisation of out-of-school vocational training is the Vocational Education and Training Act (*Berufsbildungsgesetz - BBiG*). It was reformed in 2005 to improve training opportunities for young people regardless of their social or regional origin. Major innovations were the recognition of time-limited training periods abroad, the amendment of the Enabling Standard for the promulgation of training regulations by the Federal Institute for Vocational Education and Training (*BIBB*), and the amendment of the crediting of prior VET to the training period. Other important legislation for the organisation of out-of-school vocational training includes the Regulation on Craft Trades (*Handwerksordnung - HwO*), the Ordinance on Trainer Aptitude (*Ausbildereignungsverordnung - AEVO*), and the Protection of Young People in Employment Act (*Jugendarbeitsschutzgesetz - JArbSchG*). (For AEVO see Theme 7.1)

Länder legislation forms the legal basis for school education, including vocational schools and the few private schools. Article 7 (1) in conjunction with Article 30 and Articles 70 to 75 of the Constitution confers legislative competence in these areas on the *Länder*.

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

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

The Standing Conference of Ministers for Education and Cultural Affairs (*Ständige Konferenz der Kultusminister der Länder - KMK*) issues framework curricula for vocational

education at vocational schools. These framework curricula are harmonised with the Federal Government's training regulations.

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

The training bonus and other measures have become enshrined as a new funding opportunity in law within German Social Security Code Volume Three via the enactment of the *Fünftes Gesetz zur Änderung des Dritten Buches Sozialgesetzbuch - Verbesserung der Ausbildungschancen förderungsbedürftiger junger Menschen* (Fifth Law for the Amendment of German Social Security Code Volume Three - Improvement of Training Opportunities for Disadvantaged Young People) on 30 August 2008. The primary aim of the training bonus is to reduce the high number of unplaced applicants from previous years. The plan is to create additional vocational training capacities within the dual system for unplaced applicants from previous years by obtaining employers to provide such training. This is an exceptional regulation which runs for a limited term until the end of 2010 .

In order to improve the recognition of vocational qualifications acquired abroad, the German Federal Government decided to introduce an "Act to improve the assessment and recognition of foreign vocational and professional qualifications" (*Gesetz zur Verbesserung der Feststellung und Anerkennung im Ausland erworbener Berufsqualifikationen*). This new legislation will ensure that in future, comprehensible and nationally standardised assessments of foreign vocational qualifications will be available, both to applicants seeking recognition and to employers and companies.

The draft bill consists of a new Federal law, on the one hand, which is known as the "Recognition Act", along with amendments to existing provisions on recognition of occupational qualifications in around 60 other federal-level occupational regulations and ordinances governing state-regulated occupations. Similarly, the German *Länder* wish to amend occupational rules within their sphere of competence in order to improve the recognition procedures for these occupations.

According to the BMBF, it is estimated that around 300,000 people could make use of the new legislation, particularly the unemployed and holders of foreign vocational qualifications who are employed below their actual level of qualification. For example, according to a study from the year 2009 commissioned by the Federal Ministry of Labour and Social Affairs (BMAS), out of all people with a migrant background who are fit for work but claiming unemployment benefit "Hartz IV" (income support for jobseekers), 30.2% of men and 27.7% of women over 25 hold certification from another country which is not recognised in Germany. This group of individuals is recorded in the Federal Employment Agency's statistics as having "no vocational qualification".

The Bundesrat gave an opinion on the draft bill on May 27, 2011; both Federal Government and Bundesrat agree on the fundamental principles of the Recognition Act. It was given its first reading in the Bundestag on 1 July 2011 and passed to the competent committees. Depending on the duration of the legislative process, it is possible that the law could take force in the spring of 2012. Evaluation of the applications and impacts of the Recognition Act is scheduled for four years after its entry into force. A joint Federal-Länder working group was established to monitor the implementation of the Recognition Act.

Please find a complete list and some more details below:

INITIAL TRAINING AND CONTINUING VOCATIONAL TRAINING

Federal law (enterprise training)

1. Article 12 (1) of the Grundgesetz (GG; Basic Law, i.e. Constitution) of 23.5.1949, which prescribes free choice and practice of occupations.
2. Article 72 (2) of the Grundgesetz, as amended on 23.11.1994, which confers on the Federation the right to legislate on vocational education and training.
3. Article 74 (1) No 11 of the Grundgesetz of 23.5.1949, under which the concurrent legislative powers of the Federation extend to economic matters and to labour law.
4. Berufsbildungsgesetz (BBiG; Vocational Education and Training Act) of 23.3.2005, (BGBl. I p. 931), as most recently amended by Article 232 of the Order of 31.10.2006 (BGBl. I p. 2407). It establishes the framework conditions for vocational training, which come under economy and labour laws. The Law of 1.4.2005 reforming vocational education and training comprehensively amended and combined the 1969 Vocational Education and Training Act and the 1981 Promotion of Vocational Education and Training Act (*Berufsbildungsförderungsgesetz* - BerBiFG) which regulated vocational education and training planning, reporting and statistical documentation, and the work of the Federal Institute for Vocational Education and Training (BIBB). The aim of the reform was to safeguard and improve youth training opportunities and high-quality vocational training for all young people, irrespective of their social or regional origin. Major innovations were the recognition of time-limited training periods completed outside Germany, the amendment of the Enabling Standard for the promulgation of training directives by BIBB, and the amendment of the crediting of prior VET to the training period.
www.gesetze-im-internet.de/bbig_2005/BJNR093110005.html [cited 20.8.2007]
5. Betriebsverfassungsgesetz (BetrVG; Works Constitution Act) of 15.1.1972, as amended by the Proclamation of 26.9.2001 (BGBl. I p. 2518), most recently amended by Article 221 of the Order of 31.10.2006 (BGBl. I p. 2407). It prescribes the participation rights of works councils in promoting and implementing training measures.
www.gesetze-im-internet.de/betrvg/BJNR000130972.html [cited 20.8.2007]
6. Gesetz zur Ordnung des Handwerks (Handwerksordnung - HwO; Crafts Code) of 17.9.1953, as amended by the Proclamation of 24.9.1998 (BGBl. I p. 3074; 2006 I p. 2095), most recently amended by Article 146 of the Order of 31.10.2006 (BGBl. I p. 2407). It regulates vocational training in greater concurrence with the Vocational Education and Training Act in crafts trades.
www.gesetze-im-internet.de/hwo/BJNR014110953.html [cited 20.8.2007]
7. Gesetz zum Schutz der arbeitenden Jugend (Jugendarbeitsschutzgesetz - JArbSchG; Protection of Young People in Employment Act) of 12.4.1976, (BGBl. I p. 965), as most recently amended by Article 230 of the Order of 31 October 2006 (BGBl. I p. 2407). It contains particular protective regulations for trainees and young employees.
www.gesetze-im-internet.de/jarbschg/BJNR009650976.html [cited 20.8.2007]
8. Ausbilder-Eignungsverordnung (AEVO; Ordinance on Trainer Aptitude) of 16.2.1999 (BGBl. I p. 157, 700), as amended by the Order of 28.5.2003 (BGBl. I p. 783). It prescribes standards for the occupational and work-related teaching abilities of instructors. On 1.8.2003, for a trial period of five years (until 31.7.2008), the AEVO was suspended with the aim of making in-company training easier and promoting the provision of in-company training places. The Chambers' responsibility for monitoring training quality remains unaffected by the suspension of the AEVO.
9. Sozialgesetzbuch III - Arbeitsförderung (SGB III; Social Code, Volume III - Employment Promotion) of 24.3.1997 (BGBl. I p. 594), as most recently amended by Article 7 of the Law of 7.12.2006 (BGBl. I p. 2814 with future effect, indirectly

amended by Article 3 of the Law of 21.12.2006 (BGBl. I p. 3286). It regulates institutional and individual support for the unemployed and of those threatened with unemployment.

www.gesetze-im-internet.de/sgb_9/BJNR104700001.html [cited 20.8.2007]

10. Verordnung über die Bescheinigung von Grundlagen beruflicher Handlungsfähigkeit im Rahmen der Berufsausbildungsvorbereitung (Berufsausbildungsvorbereitungs-Bescheinigungsverordnung - BAVBVO; Directive on Certification of Bases of Vocational Competence in the Context of Pre-Vocational Training) of 16.7.2003 (BGBl. p. 1472)
www.gesetze-im-internet.de/bavbvo/BJNR147200003.html [cited 20.8.2007]

LÄNDER LAW (VOCATIONAL SCHOOLS)

1. Article 7 (1) of the Grundgesetz of 23.5.1949, under which the entire educational system is under the supervision of the State.
2. Article 30 of the Grundgesetz of 23.5.1949, which prescribes that the exercise of governmental powers and the discharge of governmental functions be incumbent on the *Länder* because of the Federal structure.
3. Articles 70, 71, 72, 73, 74 and 75 of the Grundgesetz of 23.5.1949, which confer the right to legislate on educational matters on the *Länder*.

4.3 INSTITUTIONAL FRAMEWORK FOR IVET

ROLE OF THE EUROPEAN UNION

EU involvement in VET in Germany is mainly in the context of the European Commission's Leonardo da Vinci programme (part of the Lifelong Learning Programme 2007-2013). Leonardo da Vinci focuses on raising the quality and relevance of VET, and provides an opportunity for organisations to build European partnerships, exchange best practice, increase the expertise of their staff and develop the skills of learners. In Germany, the National Agency Education for Europe at the Federal Institute for Vocational Education and Training (*Bundesinstitut für Berufsbildung - BIBB*) is in charge of conducting the programme.

The European Social Fund (ESF) is the EU's main financial instrument for investing in people. Since 2000, the ESF has been a key part of the EU's Lisbon strategy for growth and jobs. It supports the EU's goal of increasing employment by giving unemployed and disadvantaged people the training and support they need to enter jobs. Member States and regions devise their own ESF Operational Programmes in order to respond to the real needs "on the ground". In Germany, the Federal Ministry of Labour and Social Affairs (*Bundesministerium für Arbeit und Soziales - BMAS*) is responsible for implementing measures under the ESF. For 2007-2013, ESF priorities are:

- investing in the future: improving the level of basic competences;
- transformation of systems to make Lifelong Learning (LLL) a reality for all;
- increasing the quality and attractiveness of VET.

ROLE OF CENTRAL GOVERNMENT

Within the Federal Government, the Federal Ministry of Education and Research (*Bundesministerium für Bildung und Forschung - BMBF*) is responsible for policy, coordination and legislation for: out-of-school vocational training and continuing

education; training assistance; the general principles of the higher education system; as well as the expansion and construction of institutions of higher education. The Federal Ministry of Economics and Technology (*Bundesministerium für Wirtschaft und Technologie - BMWi*) or the otherwise competent ministry may publicly recognise training occupations via statutory instrument and may issue training regulations for training occupations by agreement with the *BMBF*.

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 four-party Main Board (*Hauptausschuss*) advises the Federal Government on fundamental issues of in-company vocational training.

ROLE OF REGIONAL/LOCAL GOVERNMENT

The Constitution (*Grundgesetz*) provides that competence for school education lies with the *Länder* Ministries of Education and Cultural Affairs. This responsibility both entitles and obliges them to cooperate with one another and to work together with the Federal Government. 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 SOCIAL PARTNERS

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.

At national level social partner involvement is established with the Main Board (*Hauptausschuss*) of the Federal Institute for Vocational Education and Training (*Bundesinstitut für Berufsbildung - BIBB*) on a four-party basis (Federal Government, *Länder*, employers, employees). As stated in the Vocational Education and Training Act (*Berufsbildungsgesetz*) the Main Board has to advise the Federal Government on all VET issues. One task is the involvement in standard setting and designing training regulations.

At *Länder* level there are committees for vocational training, with equal representation of employers, employees and *Länder* authorities. They advise *Länder* governments on vocational training issues and also influence concepts and schemes, for example those for providing support for disadvantaged youths, and opportunities for additional qualifications requiring school training.

At regional level, the Competent Bodies (*Zuständige Stellen*) play a crucial role. They include the chambers of industry and commerce for the industrial sector, the chambers of crafts, the appropriate professional boards for the liberal professions as well as various federal and *Land* authorities. Their tasks are: to ensure the suitability of training centres; monitor training in enterprises; support vocational training with advice to training enterprises, instructors and trainees; to establish and maintain a list of training contracts; and to institute the system of examinations and hold final examinations. In every

Competent Body there is a vocational training committee with tripartite representation from employers, trade unions, and teachers. It has to be informed and consulted on all important VET issues. Moreover, the committee decides which legal regulations are passed for implementing VET.

At sectoral/enterprise level, the Works Constitution Act (*Betriebsverfassungsgesetz - BetrVG*) applicable to the private sector and the Staff Representation Acts (*Personalvertretungsgesetze - PersVG*) of the *Länder* for the public service grant works councils or staff councils numerous co-determination and involvement rights both in initial and continuing training. These rights are exerted within collective bargaining on the remuneration of trainees, planning and implementing in-company training, appointing instructors, realising special in-company education and training measures, concluding employment contracts upon completion of training, and educational leave.

ROLE OF OTHER NON-GOVERNMENTAL ORGANISATIONS (NGOs)

Although the majority of vocational schools are State regulated and publicly funded schools a growing proportion is privately maintained, e.g. church-run (notably the Catholic Church). During the 2009/2010 school year 22.4% of all vocational schools were private schools, which would not necessarily preclude the possibility that they also receive government assistance (cf. *Statistisches Bundesamt, Bildung und Kultur - Private Schulen, Schuljahr 2009/2010*, p. 151). The right to establish private schools is expressly guaranteed by the *Grundgesetz* and, to some extent, by provisions in the constitutions of the individual *Länder*. Generally, private schools are subject to state supervision.

4.4 LEGISLATIVE FRAMEWORK FOR CVET

Continuing vocational training is legally regulated on both federal and *Länder* levels. Among the federal laws the following, in addition to those mentioned above in the context of initial training, are also relevant: the Social Code III (*Sozialgesetzbuch III - SGB III*), the Career Advancement Training Promotion Act (*Aufstiegsfortbildungsförderungsgesetz - AFBG*) and the Distance Learning Protection Act (*Fernunterrichtsschutzgesetz - FernUSG*). The Works Constitution Act (*BetrVG*) plays a complementary role. In 14 of the 16 *Länder*, Laws on continuing and adult education, passed between 1974 and 1995, regulate primarily general education and - more marginally - CVET. 12 *Länder* have passed Laws on educational leave (*Bildungsurlaub*) that provide for the short-term release of employees to attend continuing training courses.

When the First and Second Acts on Modern Services in the Labour Market (known as the Hartz reforms) came into force, the promotion of continuing education under the Third Book of the Social Code (SGB III) was reformed: the task of accrediting providers and programmes of continuing education to confirm eligibility for assistance pursuant to SGB III was transferred from the Federal Employment Agency to private certification bodies (*fachkundige Stellen, FKS*).

The legal basis for the criteria to be met by providers and programmes and for the certification procedure is the Accreditation and Certification in Further Training Ordinance (*Anerkennungs- und Zulassungsverordnung - Weiterbildung, AZWV*) issued by the Federal Ministry of Economics (BMWi), which took force on 1st July 2004. Furthermore, since 1st January 2003, support for CVET programmes pursuant to Social Code III has been coupled with the provision of education vouchers. These can be issued by the employment agencies to people who are unemployed or at risk of unemployment, to finance a CVET course if this is determined to be necessary during an in-depth consultation. The education voucher states the educational objective, the maximum length of time allocated to achieve the objective, and the region and duration of validity (max. three months). The recipient can

spend the voucher with any provider accredited under the continuing education assistance scheme. (For the voucher see 10.2)

CONTINUING VOCATIONAL TRAINING

FEDERAL LAW

1. Berufsbildungsgesetz (BBiG; Vocational Education and Training Act) of 23.3.2005, (BGBl. I p. 931), as most recently amended by Article 232 of the Order of 31.10.2006 (BGBl. I p. 2407). Under BBiG vocational further training is structured and organised in further training and chamber regulations, and retraining in retraining regulations.
www.gesetze-im-internet.de/bbig_2005/BJNR093110005.html [cited 20.8.2007]
2. Betriebsverfassungsgesetz (BetrVerfG; Works Constitution Act) of 15.1.1972, as amended by the Proclamation of 26.9.2001 (BGBl. I p. 2518), most recently amended by Article 221 of the Order of 31.10.2006 (BGBl. I p. 2407). It confers on the works councils the right of consultation, participation and co-determination in continuing training issues.
www.gesetze-im-internet.de/betrvg/BJNR000130972.html [cited 20.8.2007]
3. Gesetz zur Ordnung des Handwerks (Handwerksordnung - HwO; Crafts Code) of 17.9.1953, as amended by the Proclamation of 24.9.1998 (BGBl. I p. 3074; 2006 I p. 2095), most recently amended by Article 146 of the Order of 31.10.2006 (BGBl. I p. 2407). It controls continuing training in crafts trades in conjunction with the Vocational Education and Training Act.
www.gesetze-im-internet.de/hwo/BJNR014110953.html [cited 20.8.2007]
4. Sozialgesetzbuch III - Arbeitsförderung (SGB III; Social Code, Volume III - Employment Promotion) of 24.3.1997 (BGBl. I p. 594), as most recently amended by Article 7 of the Law of 7.12.2006 (BGBl. I p. 2814 with future effect, indirectly amended by Article 3 of the Law of 21.12.2006 (BGBl. I p. 3286). Given the priority of integrating the unemployed into the primary labour market, it prescribes the priority of placement for the unemployed over recourse to labour promotion benefits and defines individual and institutional eligibility for support of occupational further training, occupational retraining and orientation training.
www.gesetze-im-internet.de/sgb_9/BJNR104700001.html [cited 20.8.2007]
5. Gesetz zur Förderung der beruflichen Aufstiegsfortbildung (Aufstiegsfortbildungsförderungsgesetz - AFBG; Career Advancement Training Promotion Act) of 1.1.1996, as amended by the Proclamation of 10.1.2002 (BGBl. I p. 402), most recently amended by Article 84 of the Order of 31.10.2006 (BGBl. I p. 2407). It confirms the right to State support for skilled workers who have completed initial vocational training.
www.gesetze-im-internet.de/afbg/BJNR062300996.html [cited 20.8.2007]
6. Gesetz zum Schutz der Teilnehmer am Fernunterricht (Fernunterrichtsschutzgesetz - FernUSG; Distance Learning Protection Act) of 24.8.1976, as amended by the Proclamation of 4.12.2000 (BGBl. I p. 1670), most recently amended by Article 4(3) of the Law of 23.3.2005 (BGBl. I p. 9331). It regulates the licensing and form of contract of correspondence courses.
www.gesetze-im-internet.de/fernusg/BJNR025250976.html [cited 20.8.2007]
7. Verordnung über das Verfahren zur Anerkennung von fachkundigen Stellen sowie zur Zulassung von Trägern und Maßnahmen der beruflichen Weiterbildung nach dem Dritten Buch Sozialgesetzbuch (Anerkennungs- und Zulassungsverordnung - Weiterbildung - AZWV; Directive on Recognition and Licensing of Continuing Training) of 16.6.2004 (BGBl. I p. 1100), as amended by Article 453 of the Order of 31.10.2006 (BGBl. I p. 2407)
www.gesetze-im-internet.de/azwv/BJNR110000004.html [cited 20.8.2007]

LÄNDER LAW

1. Continuing training and adult education laws, some of which control the subsidisation of general, political and vocational continuing education and training events.
2. The Länder education laws and framework agreements of the Standing Conference of Länder Ministers of Education and Cultural Affairs, which regulate continuing education and training in specialised schools.
3. Bildungsurlaubsgesetze (Educational Leave laws), which are in effect in 12 Länder at present. They guarantee employees' entitlement to limited release from work to participate in continuing education and training and ensure uninterrupted wage or salary.

4.5 INSTITUTIONAL FRAMEWORK FOR CVET

ROLE OF THE EUROPEAN UNION

See 4.3.

ROLE OF CENTRAL GOVERNMENT

Responsibilities refer to CVET outside the school sector and regulated further vocational training. The promotion of vocational further education under the Federal Government's Social Security Code III (*Sozialgesetzbuch III*) is the responsibility of the Federal Employment Agency (*Bundesagentur für Arbeit - BA*). The Career Advancement Training Promotion Act (*Aufstiegsfortbildungsförderungsgesetz - AFBG*) provides a comprehensive nationwide means for financing vocational career advancement training. The joint responsibilities of the Federation and the *Länder* include research and pilot schemes in all sectors of continuing education as well as for preparing statistics and reports in their respective areas of responsibility.

ROLE OF REGIONAL/LOCAL GOVERNMENT

The prerequisites and principles for the promotion and funding of continuing education are laid down in continuing education and employment legislation of the *Länder*. Legislation describes continuing education as an independent education sector which incorporates continuing general and political education and continuing vocational training and the development of which is the responsibility of the public sector. Continuing education legislation guarantees a diverse range of institutions maintained by a variety of organisations and lays down a state approval procedure for them. All *Land* legislation includes regulations which recognise their freedom in the preparation of curricula and independence in staff selection. Furthermore, specific issues relating to continuing education were regulated in collective bargaining contracts, company agreements and contracts of employment.

In addition to continuing education legislation, school legislation at *Land* level contains regulations on continuing education within the school system (e.g. the attainment of school-leaving qualifications). For example, regulation regarding continuing education provision at vocational academies (*Berufsakademien*) is contained in the *Berufsakademie* legislation.

In 12 of the 16 *Länder*, legislation allows employees to attend continuing education courses (paid educational leave - *Bildungsurlaub*) for several working days per year (usually five) with no loss in earnings, provided that certain conditions are fulfilled.

ROLE OF SOCIAL PARTNERS

Examinations in further training courses are covered by the Vocational Education and Training Act (*Berufsbildungsgesetz - BBiG*) and the Regulation on Craft Trades (*Handwerksordnung - HwO*), which place the responsibility to the Competent Bodies (*Zuständige Stellen*), usually the chambers (e.g. chambers of handicrafts, chambers of industry and commerce) which define examination content. They deliver, amongst other things, the vocational knowledge, skills and competences that enable individuals to assume middle and sometimes also higher management responsibilities within companies.

ROLE OF OTHER NON-GOVERNMENTAL ORGANISATIONS (NGOs)

In CVET, the private sector is more significant than in IVET due to its market character. In 2007, 41.3% of the some 17,000 CVET providers in Germany were private-sector establishments (*Dietrich/Schade/Behrensdoerf*, 2008, p. 26).

5. INITIAL VOCATIONAL EDUCATION AND TRAINING

5.1 BACKGROUND TO THE IVET SYSTEM AND DIAGRAM OF THE EDUCATION AND TRAINING SYSTEM

In Germany children enter compulsory full-time schooling aged 6. This schooling period lasts 9 years (10 years in 5 *Länder*). On completion, young people who do not attend any full-time-school are required to attend part-time (vocational) school for 3 years. This means in practice that young people are required to attend school from the ages of 6 to 18. Trainees in the dual system (even those older than 18) are also subject to compulsory schooling.

After 4 years of primary school (6 years in Berlin and Brandenburg), pupils move into different educational branches either: secondary general school (*Hauptschule*), intermediate school (*Realschule*) or grammar school (*Gymnasium*). Often these different pathways merge through the dual system.

The dual system is the largest provider of education at upper secondary level. On 1.8.2010 there were a total of 348 state-recognised training occupations (<http://www.bibb.de/de/wlk26560.htm>, cited 16.08.2011). After completing their training in the dual system, the majority of participants then take up employment as a skilled worker - later on, many of them make use of the opportunities for continuing vocational training. Under certain conditions, however, those who have qualified may also obtain the academic standard required for entrance to a *Fachhochschule* in one year at school full-time, and go on to higher education. Successful participants in continuing vocational training are also increasingly permitted to study at colleges.

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

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

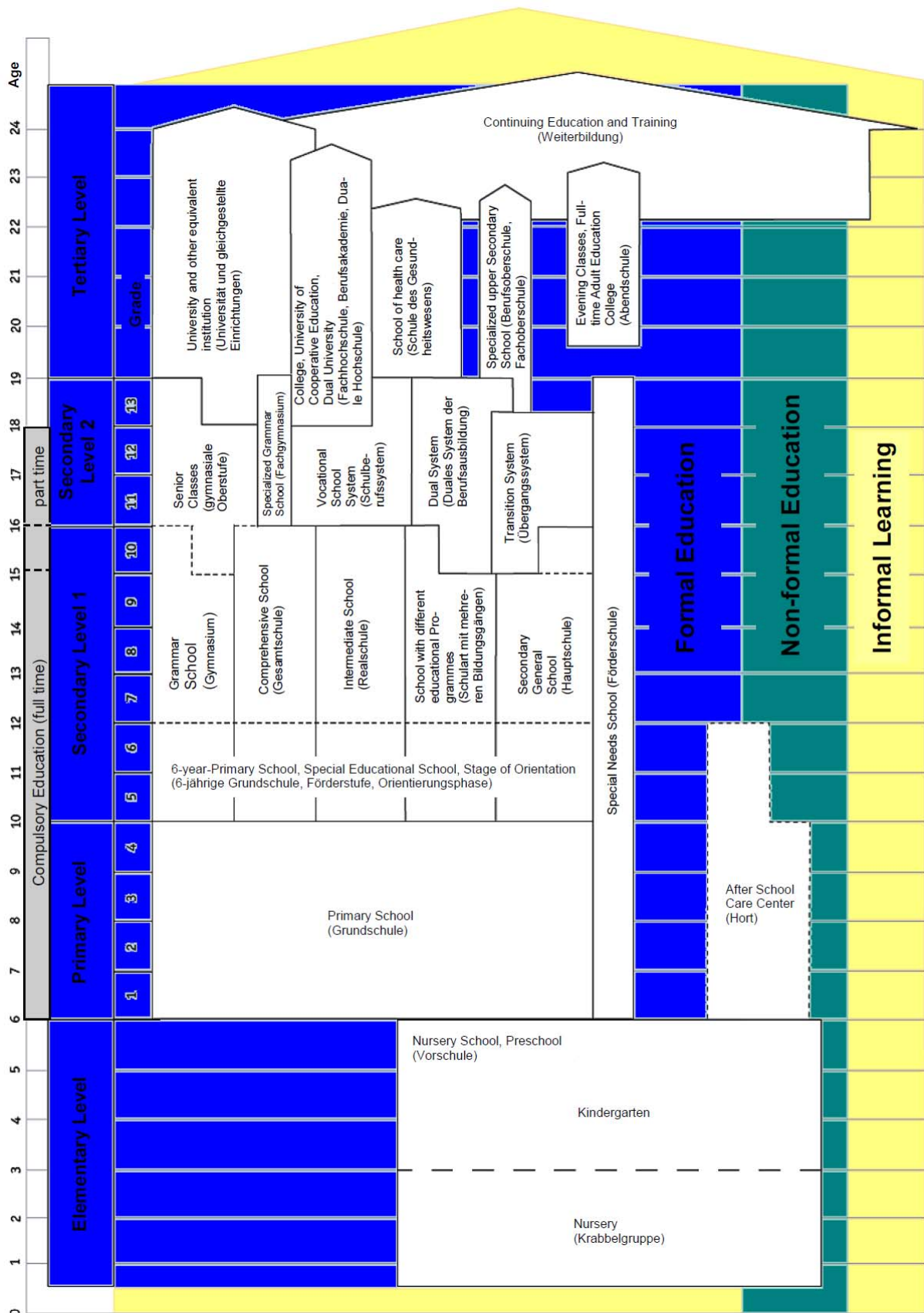
Senior technical schools (*Fachoberschulen*) and senior vocational schools (*Berufsoberschulen*) normally build on vocational training in the dual system, consolidate vocational knowledge and lead to the academic standard required for entrance to a college. Overall, there are many points of transition between school-based 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. They usually lead up to the university entrance examination (duration: 3-4 years).

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

The various qualifications and the competences in which these will result have not yet been aligned to the levels of a National Qualifications Framework. The German Qualifications Framework is still under development (see Theme 2.2). A further issue that remains to be clarified is how the outcomes of informal learning can be included.

BASIC STRUCTURE OF THE EDUCATION SYSTEM OF THE FEDERAL REPUBLIC OF GERMANY



(Source: Own illustration according to BMBF/Autorengruppe Bildungsberichterstattung, 2010d, 18.03.2011.)

5.2 IVET AT LOWER SECONDARY LEVEL

Lower secondary education comprises grades 5 to 10 or 7 to 10 of school (pupils are aged 10-15). Its function is to prepare pupils for upper secondary level. Accordingly, lower secondary education is predominantly of a general nature. Lower secondary education is public and free of charge.

At secondary general school (*Hauptschule*) and intermediate school (*Realschule*) an introduction to the working world is a compulsory component of all courses. Instruction is given either in a separate subject (pre-vocational studies - *Arbeitslehre*) or as part of the material used in other subjects. Work experience placements, especially for pupils in the two last grades provide first-hand insight into the working world and guidance in choosing an occupation. The *Länder* have continuously developed their activities in order to communicate a basic knowledge of the world of business and commerce. This has also taken place outside of lessons, for example, via model businesses set up by pupils (*Schülerfirmen*) or cooperation projects between the schools and the world of business and commerce.

After finishing lower secondary level education and completing compulsory schooling, pupils may enter into vocational training in full time schools or within the framework of the dual system (see 5.4) or seek employment.

For those who do not start a regular vocational course there is compulsory vocationally oriented schooling in a pre-vocational training year (*Berufsvorbereitungsjahr - BVJ*) their typical age would be 15 or 16. Participants are with social disadvantages or learning difficulties and migrants with an inadequate command of German who need special assistance to begin and complete a course of training. Young people who are not yet ready to enter vocational training have to participate in a full time pre-vocational training year, which serves as vocational orientation and as an introduction to one, two or three occupational fields.

In line with the EU-27-average, in Germany the most students choose the general education pathway (98,8%) than pre-vocational and vocational programmes (see Table 5a).

GEO	TOTAL ISCED2	ISCED2GEN (NUM)	ISCE2 GEN (%)	ISCED2PV (NUM)	ISCE2PV (%)	ISCED2VOC (NUM)	ISCED2 VOC (%)
EU 27	22 193 607	21 673 215	97.7	:	:	242 435	10.9
DE	5 008 352	4 946 275	98.8	62 077	1.2	:	:

Source: Eurostat; (Unesco-Eurostat-OECD Data collection on education and training systems) Date of extraction: 16.08.2011.

Description: GEN = general; PV = prevocational

Students at ISCED level 2 by programme orientation (values and share of the total)

Link to data: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_enr1ad&lang=en

5.3. IVET AT UPPER SECONDARY EDUCATION

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 system (see 5.4), or seek employment.

School-based IVET (*vollzeitschulische Berufsausbildung*) at upper secondary level includes the *Berufsfachschule*, the *Fachoberschule*, the *Berufliches Gymnasium* or *Fachgymnasium* and other types of school that exist only in individual *Länder* or only on a very small scale.

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 pre-vocational training (*Berufsausbildungsvorbereitung* - see 5.5).

FULL-TIME VOCATIONAL SCHOOL (*BERUFSSACHSCHULE*)

These introduce students to one or more occupations, provide them with partial vocational training in one or more training occupations, or take them through to a vocational training qualification in one occupation. The range of training provision in schools of this type is extremely diverse. There are full-time vocational schools for, for example, commercial occupations, occupations involving foreign languages, craft occupations, household and caring occupations, healthcare occupations and artistic occupations. Depending on the training goal being pursued, access requirements are either a lower secondary school or intermediate secondary school leaving certificate. These correspond to ISCED Level 2. No occupational experience of any kind is required. Most pupils are aged 15 when they commence full-time vocational school. Pupils who complete full-time vocational school attain ISCED Level 3. Part-time teaching is offered at some full-time vocational schools.

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

SENIOR TECHNICAL SCHOOL (*FACHOBERSCHULE*)

Fachoberschulen cover classes 11 and 12 and build on the final certificate from intermediate school (*Mittlerer Schulabschluss*) or a qualification recognised 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. It leads to the academic standard required for entrance to a *Fachhochschule*. *Fachoberschulen* are subdivided into the following specialisations: business and administration, technical skills, healthcare and welfare, design, nutrition and home economics, and the agronomy. Teaching takes place in the following subjects: German, foreign languages, mathematics, natural sciences, economics and social science, and in a specialised subject. Students who have completed a course of vocational training, e.g. dual training, can enter class 12 of a *Fachoberschule* direct.

UPPER LEVEL OF THE GYMNASIUM WITH A VOCATIONAL BIAS (*BERUFLICHES GYMNASIUM/FACHGYMNASIUM*)

Schools of this type are known as vocational grammar schools (*Berufliches Gymnasium*) in some *Länder* and trade and technical grammar schools (*Fachgymnasium*) in others. Unlike grammar schools, vocational or trade and technical grammar schools have no lower or intermediate level (classes 5-10). They normally lead to the general higher education entrance qualification (*Allgemeine Hochschulreife* - *Abitur*).

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

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

TABLE 5B: IVET AT UPPER SECONDARY 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, <i>trade and technical school</i> ,	lower secondary school or intermediate secondary school leaving certificate
SENIOR TECHNICAL SCHOOL	Welfare sector, commercial and finance sector, technical,	3A	Year 1: work-based practical training as well as school-based teaching	At least 1 year mostly 2 years	University of applied science, <i>University of Cooperative Education</i> ,	certificate from intermediate school
UPPER LEVEL OF THE GYMNASIUM WITH A VOCATIONAL BIAS	Business, technical, nutrition, agronomy, healthcare and welfare information and communication technology,	3A	School based	3 or 4 years	University, University of applied science	certificate from intermediate school

Source: compiled by the authors

STUDENTS IN UPPER SECONDARY EDUCATION BY PROGRAMME ORIENTATION (GENERAL/VOCATIONAL)

Compared to the EU-27-average, in Germany more students choose the vocational secondary education pathway (57.5%) than general (*see Table 5c*). This is mainly due to the importance of the dual system that is still pursued by the majority of young people after leaving the general education system (*see 5.4*).

G EO	TOTAL ISCED3	ISCED3GEN (NUM)	ISCE3 GEN (%)	ISCED3PV (NUM)	ISCE3PV (%)	ISCED3VOC (NUM)	ISCED3 VOC (%)
EU 27	22 002 375	10 936 441	49.7	:	:	9 965 341	45.3
DE	2 921 267	1 242 102	42.5	:	:	1 679 166	57.5

Source: Eurostat, Date of data extraction: 16.08.2011.

Link to data: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_enr1ad&lang=en

5.4 ALTERNANCE/APPRENTICESHIP TRAINING

The system is described as dual because training is conducted in two places of learning: companies and vocational schools. It normally lasts three years (some occupations only require two years and there are also regulations allowing a reduction in the training period for trainees with an *Abitur* - the school leaving certificate allowing entry to higher education). The trainees are in the average between 16 and 18 years old at the beginning of the education and training.

The aim of training in the dual system is to provide, in a well-ordered training programme, broad-based basic vocational training and the qualifications and competences required to practise an occupation as a skilled worker in one of the 348 currently recognised training occupations. In the period from 2001 to 2010, new regulations were drafted for a total of 208 training occupations. 163 of these training occupations underwent updating while 45 were newly introduced (BIBB 2011, p. 109). Compulsory full-time education must have been completed by the time of commencing vocational training. There are no further requirements for access to training in the dual system; it is essentially open to all although the majority of trainees hold either the intermediate certificate or the *Abitur*.

Training takes place on the basis of a private-law vocational training contract between a training enterprise and a young person. The apprentice is trained in an enterprise for three to four days a week and in the vocational school for up to two days a week. Enterprises bear the costs of the in-company training and pay the trainee remuneration as regulated by collective agreement which increases with every year of training, and averages about one third of the starting pay for a trained skilled worker.

The professional competences in occupations to be acquired in in-company training are specified in a training regulation and included by the training enterprise in an individual training plan. For the teaching in the vocational school, a framework curriculum, harmonised with the training regulations, is drawn up for every recognised training occupation.

ENTERPRISES AS PLACE OF LEARNING

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

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

The training enterprise draws up an in-company training plan for trainees, which must correspond to the training regulation in terms of its practical and time structure, but may deviate from it if particular features of company practice require it.

Small and medium-sized enterprises are often unable to provide all the learning content: they may lack suitable training personnel, or, owing to their particular specialisation, they do not cover all the training content themselves. There are various ways of overcoming these problems:

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

VOCATIONAL SCHOOL AS PLACE OF LEARNING

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

Under a *KMK* decision (*KMK* 1991), vocational schools must provide at least 12 hours' teaching a week, normally eight hours for vocational subjects and four hours to general subjects such as German, social studies/business studies, religious education and sport. Appropriate account is also to be taken of foreign language teaching, depending on its importance to the training occupation concerned. Vocational schools decide on how to allocate teaching in consultation with training enterprises, the schools inspectorate and the competent industrial bodies. The aim of the various organisational forms is to ensure that trainees spend as much time in the enterprise as possible while, at the same time, allocating teaching in a way that is tenable in terms of both pedagogy and the psychology of learning.

EXAMINATION

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. Vocational competence is based on subject-based, social and methodological competences. The capacity to practise an occupation in a qualified fashion includes, in particular, autonomous planning, implementation and control. This bundle of competences must be demonstrated in examinations regulated by law (Vocational Education and Training Act).

Final training examinations are geared to vocational practice, i.e. to the work requirements and processes of the occupation. As a rule, a final examination covers four or five fields typical of the occupation. Performance in general subjects, such as languages and mathematics, is evaluated within the framework of school reports. Various methods are used in examinations depending on the occupation and duration may vary especially in practical examination tasks. For written tasks, a period of two hours is usually allocated for the examination, and oral examinations usually last 30 minutes.

Enterprises and vocational schools conduct training, but the Chambers (Competent Bodies) are responsible for holding examinations. To this end, the Chambers have to set up examination committees for each occupation which comprise at least three members (one representative each of employers and employees and a vocational schoolteacher). The examination certificate is issued by the Chamber. The structure of examinations is laid down by individual training regulations which are applicable nationwide and specify a uniform standard.

Theme 8 will explain how qualifications fulfil the requirements of the labour market and how this enhances the opportunities of those who have completed training.

STATISTICAL DATA

After registering a constant increase in new training place contracts since 2005, a decline was noted in 2008, the year of the crisis, and another in 2009 and 2010 as a consequence. At the same time, the number of school leavers is decreasing considerably, with the net result that the training-place situation in the three years 2008 till 2010 is essentially no more strained than in past years.

	NEW APPRENTICESHIP CONTRACTS	SCHOOL LEAVERS*	RELATION: NEW CONTRACTS / SCHOOL LEAVERS
2005	550,180	939,279	58.6%
2006	576,153	946,766	60.9%
2007	625,885	942,129	66.4%
2008	616,342	907,083	67.9
2009	564,307	870,745	64.8%
2010	560,073	847,726	66.1%

Source: BIBB 2011, p. 12ff; *= school leavers from the general school system; **= estimated

TABLE 5E: APPRENTICESHIP CONTRACTS SUPPLY / DEMAND

	NEW APPRENTICE CONTRACTS	VACANT POSITIONS	UNSUCCESSFUL APPLICANT	SUPPLY	DEMAND	SUPPLY / DEMAND APPRENTICESHIP IN RELATION
2005	550,180	12,636	40,504	562,816	590,684	95.3 %
2006	576,153	15,401	49,487	591,554	625,640	94.6 %
2007	625,885	18,359	32,660	644,244	658,545	97.8 %
2008	616,342	19,507	14,515	635,849	630,857	100.8 %
2009	564,307	17,255	15,608	581,562	579,987	100.3%
2010	560,073	19,605	12,255	579,678	572,328	101.3 %

Source: BMBF 2011; p. 22.

Most training places are located in the industry and trade sector, where 331,043 new contracts were signed in 2010. 155,178 young people began training in the craft trades sector. TABLE: 5F: VOCATIONAL TRAINING BODIES 2010

TRAINING AREA	ABSOLUTE NUMBER	2010 vs. 2009 %
INDUSTRY AND TRADE	331,043	-0.7
CRAFTS	155,178	-0.3
PUBLIC SERVICE	13,609	-0.8
AGRICULTURE	13,922	-4.9
FREE PROFESSIONS	42,500	-0.4
HOME ECONOMICS	3,582	-10.4
SHIPPING	239	-14.3
TOTALS	560,073	-0.8

Source: BIBB 2011; p. 33

TABLE 5G: APPRENTICESHIP

TYPE OF EDUCATIONAL PROGRAMME	MAIN ECONOMIC SECTORS	CORRESPONDING ISCED LEVEL AND ORIENTATION	BALANCE BETWEEN SCHOOL- AND WORK-BASED TRAINING	AVERAGE DURATION OF STUDIES	TRANSFER TO OTHER PATHWAYS	ADMISSION REQUIREMENT
VOCATIONAL TRAINING	In every sector	3B	School and Practice Based	Mostly 3 years	Full-Time Vocational school, Vocational Extension School	Finished compulsory full-time education, but no further requirements for access

Source: Compiled by the authors

5.5 PROGRAMMES AND ALTERNATIVE PATHWAYS FOR YOUNG PEOPLE

According to a micro census of 2007 11.5% of all young people aged 20-35 had no vocational qualification: 59.4% of this young people without vocational qualification are men (BIBB 2010 p. 276). For certain groups of young people, it is extremely difficult to

participate e.g. for young people not (yet) in possession of an entitlement to training or with learning difficulties or with disabilities, unskilled and semi-skilled young people, socially disadvantaged, and young immigrants. Specific support is required to enable these people to access training or work.

For people with learning difficulties or social disadvantages who would find it difficult to participate in a recognised training occupation or equivalent vocational training, there is the option of pre-vocational training (*Berufsausbildungsvorbereitung*). Pre-vocational training provision in schools includes:

- 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 full-time 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).

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 1st 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 (*Einstiegsqualifizierung - EQ*) consists of a prevocational work experience placement in a company lasting 6 to 12 months.

Young people have the opportunity to obtain partial qualifications in a training occupation via qualification modules (*Qualifizierungsbausteine*) and specific vocational modules (*berufsfeldspezifische Module*). On the basis of a testimonial from the enterprise, the successfully acquired entry-level qualification is certified by the Competent Body (e.g. Chambers of Industry and Commerce, Craft Chambers). Six months' training can then be credited to subsequent training. 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.

A further example is the "Vocational qualification prospects" (*Perspektive Berufsabschluss*) programme of the Federal Ministry of Education and Research (*BMBF*), which was launched at the beginning of 2008 to improve vocational training opportunities for disadvantaged young people and to offer second-chance qualifications for young adults.

The intention of the programme is to optimise the regional transition management system to support young people requiring special support (e.g. young people with learning difficulties, at a social disadvantage or without a lower secondary school-leaving certificate, and young migrants) and to make more use of the possibility of second-chance training for a qualification for semi-skilled and unskilled young adults from German as well as migrant backgrounds. The two funding priorities of "Regional transition management"

and "Qualification-oriented modular second-chance training" acknowledge the fact that two types of measures are necessary to help disadvantaged young people access training and ensure their long-term integration into the employment system: preventative measures to assist them in gaining educational and occupational certificates, and reintegrative measures to enable second-chance training and retaking of vocational qualifications. The programme is supported with funding from the Federal Government and from the European Social Fund (ESF). For the period from 2008 to 2012 a total of EUR 35 million will be made available.

In addition, the Federal Employment Agency (*Bundesagentur für Arbeit - BA*) provides prevocational training measures (*berufsvorbereitende Bildungsmaßnahmen - BvB*) under Section 61 of the *Sozialgesetzbuch (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 in-company training relationship;
- vocational training in non-company establishments (*BaE*) in a training occupation recognised under the Vocational Education and Training Act (*BBiG*) and the Regulation on Craft Trades (*HwO*), with a qualification on completion;
- transitional support (continuation of training support following completion or discontinuation of training);
- support for integration into employment, in the form of remedial tuition and socio-pedagogic support within the framework of an in-company training relationship.

TABLE 5H: STUDENTS IN OTHER YOUTH PROGRAMMES						
TYPE OF EDUCATIONAL PROGRAMME	MAIN ECONOMIC SECTORS	CORRESPONDING 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	3B	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

Source: compiled by the authors

5.6 VOCATIONAL EDUCATION AND TRAINING AT POST-SECONDARY (NON TERTIARY) LEVEL

There are many ways in which school-leavers can enter working life: options to combine work and study are becoming more prevalent.

SENIOR VOCATIONAL SCHOOL (*BERUFSOBERSCHULE*)

In connection with the deliberations of the Standing Conference of Ministers for Education and Cultural Affairs *Länder* (*Ständige Konferenz der Kultusminister der Länder - KMK*) on the equivalence of general and vocational education, *Berufsoberschulen* have increased in importance. In some *Länder* (e.g. Bavaria, Baden-Württemberg, Berlin), they have been established to enable those completing vocational training in the dual system to obtain a higher education entrance qualification. In two years of full-time education, *Berufsoberschulen* lead to the subject-restricted higher education entrance qualification (*fachgebundene Hochschulreife*) and, with a second foreign language, to the general higher education entrance qualification (*Allgemeine Hochschulreife*). *Berufsoberschulen* may also operate on a part-time basis, with a correspondingly longer duration. Admission to the vocational secondary school requires the final certificate from intermediate school (*Mittlerer Schulabschluss*) and at least two years' successful vocational training or at least five years' relevant practical experience.

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

ADDITIONAL QUALIFICATIONS (*ZUSATZQUALIFIKATIONEN*)

Additional qualifications (*Zusatzqualifizierung*) were introduced to ensure that learning in formal, non-formal or informal contexts is complementary to state-recognised qualifications. Thus any one of the standard national qualifications can be brought up to date and tailored more closely to requirements. Additional qualifications can serve the purpose of rounding off an initial vocational training programme, substantially extend an initial training profile, or even anticipating elements of a formal advanced training occupation.

Additional qualifications to supplement initial vocational training open up the possibility of acquiring additional competences, such as foreign-language classes or particular engineering courses. Since 2009 there is a new possibility to get an additional qualification during the training in the dual system. They can be certified by the company, vocational school or chamber (www.ausbildungplus.de/).

In 2010, around 41,000 offers of training from companies involving additional qualifications or a dual study programme were entered in the AusbildungPlus (TrainingPlus) database. This represents an increase of around 9% since 2009. Numbers of participants have also reached a new high. More than 80,000 trainees are taking additional qualification alongside their initial vocational training programme, and almost 51,000 students are enrolled on a dual study course (see section 5.7). Particularly for the dual study courses, further growth in company cooperation arrangements and participant numbers is anticipated (BMBF/BIBB 2010).

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

TYPE OF EDUCATIONAL PROGRAMME	MAIN ECONOMIC SECTORS	CORRESPONDING SCED LEVEL AND ORIENTATION	BALANCE BETWEEN SCHOOL- AND WORK-BASED TRAINING	AVERAGE DURATION OF STUDIES	TRANSFER TO OTHER PATHWAYS	ADMISSION REQUIREMENT
Senior vocational school	In particular: economic sciences, social affairs, Art, technology Science, healthcare/nursing	4A	School based	2 Years	Universities of applied science University (with a second language)	Final certificate from intermediate school and at least two years' successful vocational training or five years' practical experience

Source: compiled by the authors

GEO	Total isced4	iscd4gen (num)	isce4 gen (%)	iscd4voc (num)	iscd4gen (%)
EU 27	1,513,010	167,008	11.0	1,340,866 (s)	88.6
DE	580,689	81,162	14.0	499,527	86.0

Source: Eurostat; Extracted on: 18.08.2011. 30.04.2010

s = eurostat estimate

Link to data: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_enr1ad&lang=en

5.7 VOCATIONAL EDUCATION AND TRAINING AT TERTIARY LEVEL

The higher education sector comprises various types of institutions of higher education and, to a limited extent, some Länder have vocational academies or universities (*Berufsakademien, Duale Hochschulen*) offering courses leading to vocational qualifications for those who have completed upper secondary education with at least a qualification entitling them to attend a university of applied sciences (*Fachhochschule*).

DUAL STUDY PROGRAMMES

Dual study programmes combine in-company vocational training with a course of study at a *Fachhochschule*, university, Cooperative State Universities (Baden-Württemberg) vocational academy (*Berufsakademie*) or administration and business academy. In recent years there has been a steady increase in provision of such dual study programmes. Enterprises obtain highly qualified and motivated young workers and institutions of higher education benefit from the extensive contact with the world of work and create a distinctive image for themselves by offering demand-based courses of study. Students obtain high-quality training that improves their labour market and career prospects and benefits them both financially and in terms of time. Dual study programmes integrated with training have the following characteristics:

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

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

UNIVERSITIES OF APPLIED SCIENCES (*FACHHOCHSCHULEN*)

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

Of 381 institutions of higher education, 217 are Fachhochschulen or other colleges without the right to award doctorates (www.hochschulkompass.de/; status: 18.08.2011). The numbers of students and the programmes of study offered vary widely with these variations contributing to particular subject and regional profiles for individual Fachhochschulen.

Entitlement to study in Fachhochschulen is provided by a certificate confirming the academic standard required for admission to higher education (Hochschulreife), a subject-based certificate confirming such a standard, or a certificate confirming the academic standard required for entrance to a Fachhochschule. Courses normally run for a Bachelor degree 6 semesters and for a Master degree additionally 4 Semester. Fachhochschulen offer, in particular, courses of study in the following fields: engineering sciences, economic sciences/commercial law, social affairs, administration and administration of justice, computer science, design, mathematics, information and communication technology, healthcare/nursing.

VOCATIONAL UNIVERSITIES AND ACADEMIES (*DUALE HOCHSCHULEN, BERUFSAKADEMIEN*)

These are higher education establishments providing academically based VET that is at the same time geared to practice through a dual training system. They exist in Baden-Württemberg, Bavaria, Saxony, Thuringia and Berlin. Enterprises bear the costs of the in-company training and pay the trainee remuneration for training, including for theoretical training in the vocational academy. Depending on the law of the Land concerned, to enter a vocational academy, applicants must have a certificate confirming the academic standard required for admission to higher education (Hochschulreife), a subject-based certificate confirming such a standard, or a certificate confirming the academic standard required for entrance to a Fachhochschule, and also a training contract. Again depending on the law of the Land, applicants without one of the above certificates but with a vocational qualification may be able to sit an entrance examination. Once they have concluded a training contract, applicants are registered with the vocational academy by their training enterprise. Training leads to bachelor qualifications. Courses of study are offered in the fields of economics, engineering and social affairs in particular. The relevant Land law normally lays down a period of study of three years.

Training in vocational academies (*Berufsakademien*) takes place partly in accordance with study or training plans drawn up by agreement (*Studienakademien*) between academies,

enterprises and social facilities, and also partly through vocational-academy training and examination directives in accordance with framework criteria from the relevant ministries (for vocational academies, see 5.7.). In October 2004, the Standing Conference of Ministers for Education and Cultural Affairs of the Länder (KMK) decided that training programmes at vocational academies leading to Bachelor's qualifications should be accredited as equivalent to Bachelor's qualifications from institutions of higher education, thus opening up access to Master's courses. Equivalence criteria relate to teaching staff and to the scope of the theory- and practice-based training elements.

The German state of Baden-Wuerttemberg has changed the legal status on March 1st, 2009. The institution now is called Baden-Wuerttemberg **Cooperative State University** (Duale Hochschule Baden-Württemberg). The Baden-Wuerttemberg Cooperative State University with its main seat in Stuttgart is the first university in Germany to integrate academic studies and work experience. Like the other universities, it is a legal entity of public law and simultaneously a state institution. Its trademarks are the structural characteristics of the University of Cooperative Education, in particular, the participation of training companies and institutions and the dual learning principle of studies. The conversion to dual university status means the new institution can grant **academic degrees**. One of the main innovations is the brief to realize cooperative research projects. That means that collaboration with partner enterprises and institutions can be intensified, and steps can be taken to make academic studies more up-to-date.

HEALTH SECTOR SCHOOLS (*SCHULEN DES GESUNDHEITSWESENS*)

Furthermore the two-to three-year health sector schools are nationally considered to be tertiary, and by state regulation approximately two thirds of their contents are theoretical, while the other third is devoted to practical training in hospitals and other health care institutions. The reason for their assignment to ISCED level 5B is that ISCED 2 is not the only entrance requirement, but work experience and/or preceding vocational qualification is required, both of which are currently classified at level 3B.

TABLE 5K: STUDENTS IN VOCATIONAL EDUCATION AND TRAINING AT TERTIARY 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
DUAL STUDY PROGRAMMES	Economic sciences, Technology,	5B	Partly School and Practical based	3 or up to 5 Years	University	Training contract and a certificate confirming higher education entrance qualification (subject-specific or general)
UNIVERSITIES OF APPLIED SCIENCES	In particular: engineering sciences, economic sciences/ commercial law, social affairs, administration and administration of justice, computer science, design, mathematics, information and communication technology, healthcare/nursing.	5A	Partly school and practical based	3 or up to 5 Years	University	Certificate confirming higher education entrance qualification (subject-specific or general)
VOCATIONAL ACADEMIES	Social affairs, technology, Economic sciences	5A	Partly school and practical based	3 or up to 5 Years	University	Depending on the law of the Land see below
HEALTH SECTOR SCHOOLS	Healthcare sector	3B	Schools attached to hospitals, theoretical and practical training	2 or 3 Years	Vocational Extension School	Secondary education first stage certification and work experience/or preceding vocational qualification
UNIVERSITIES	Every subject	5A	Only school based	3 or up to 5 Years	Doctoral Studies	Certificate confirming higher education entrance qualification (Abitur)

Source: compiled by the authors

G EO	Total isced5	iscd5a (num)	iscd 5a (%)	iscd5b (num)	iscd 5b (%)	total isced 6
EU 27	19,037,163	16,067,395	84.4	2,471,162	13.0	499,259
DE	2,245,138	1,915,088	85.3	330,050	14.7	:

Source: Eurostat (UOE); Extracted on: 18.08.2011.

Description: Students at ISCED level 5 by programme destination (values and share of the total) and at ISCED level 6

Link to data: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_enr1ad&lang=en

5.8 LANGUAGE LEARNING IN IVET

In a Europe of open borders, ever-increasing importance is attached to foreign language skills. This applies not only in the academic sector but also in VET, where interest is growing steadily. Foreign language skills are also prerequisites for Europe-wide and international mobility and flexibility, and for successful cooperation and interaction between partners with different native languages. They not only foster mutual understanding but promote better communication.

Foreign language provision in schools is predominantly offered as a voluntary or compulsory option choice, but only rarely integrated into the curriculum as a compulsory subject. Foreign language classes in vocational schools take place as part of the general educational or non-occupation-specific teaching, and sometimes also feature in occupation-specific instruction.

In 2009, every pupil at lower secondary level (ISCED 2) was learning an average of 1.2 foreign languages. Since 2005, except in the years 2007 and 2008 this figure has not grown, and Germany is slightly below average in comparison with other European countries (see Table 5m).

G EO	2005	2006	2007	2008	2009
EU 27	1.4	1.4	1.5	1.4 (i)	1.4 (i)
DE	1.2	1.2	1.3	1.3	1.2

Source: Eurostat (UOE); Extracted on: 08.09.2011.

Description: The average number of foreign languages learned in secondary schools (ISCED 2 and 3) is calculated by dividing the total number of people who are learning foreign languages by the number of pupils at this level of education. A language is counted as a foreign language if it is classified as such in the curricular or other educational documents of the country in question. Irish-Gaelic, Luxembourgish (Letzeburgisch) and other regional languages are not taken into account, even if they are taught in some Member States. Where an official language is taught which is not the language of instruction, then with a few exceptions this is not classified as a foreign language.

Link to data:

<http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tps00056&language=de>

Considering the average number of foreign languages learned per pupil at upper secondary level (ISCED 3), it is striking that even here Germany fares comparatively badly by European comparison, with 0.9 foreign languages being learned in 2009 (see Table 5n). Moreover, no increase took place over the years 2005 to 2009; in fact, the number of foreign languages being learned stagnated despite the constant emphasis on their importance in the policy sphere and in the media.

TABLE 5N: AVERAGE NUMBER OF FOREIGN LANGUAGES LEARNED PER PUPIL IN ISCED LEVEL 3					
G EO	2005	2006	2007	2008	2009
EU 27	1.3	1.3	1.4	1.4 (i)	1.4 (i)
DE	0.9	0.9	0.9	0.9	0.9

Source: Eurostat (UOE); Extracted on: 08.09.2011.

Description: The average number of foreign languages learned in secondary schools (ISCED 2 and 3) is calculated by dividing the total number of people who are learning foreign languages by the number of pupils at this level of education.

Link to data:

<http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tps00056&language=de>

The AusbildungPlus (TrainingPlus) database contains numerous offers which deliver a comprehensive international qualification by combining international business skills with foreign language tuition and a period spent abroad, and by incorporating transnational relevance into IVET. Particularly for pupils who begin their IVET programme in the areas of electronics or mechatronics, there are special English courses to build up the necessary specific technical vocabulary (see: <http://www.ausbildungplus.de/html/131.php>, cited: 19.09.2011).

In order to be able to determine the foreign language skills of individuals in VET, in November 1998 the Standing Conference of Ministers of Education and Cultural Affairs of the Länder (KMK) reached a framework agreement on the certification of foreign language skills. This framework agreement was definitively revised in June 2008.

This KMK foreign languages certificate provides detailed certification of occupation-specific skills in foreign languages. Thus, it is a more accurate source of information for future employers than the school-report grade. The foreign languages certificate is addressed to all pupils on vocational training courses. The examination is taken at one of four levels. These are based on the levels set out in the Council of Europe's "Common European Reference Framework for Languages: Learning, Teaching, Assessment" and recognised throughout Europe. Today almost all German Länder offer the foreign languages certificate. (Source: <http://www.sachsen-macht-schule.de/schule/5246.htm>, 01.09.2011)

6. CONTINUING VOCATIONAL EDUCATION AND TRAINING

6.1 GENERAL BACKGROUND

Continuing education and training is understood to be the continuation or resumption of organised learning following completion of an initial phase of education of varying scope (Deutscher Bildungsrat, 1970, p. 197). In addition to continuing "vocational" education/training, this includes continuing general and political education, which is subsumed under the heading of "adult education". The field of CVET in Germany is characterised by: a pluralism of providers, a largely market character, and a comparatively minimal degree of regulation by the state. Only a small part of provision leads to a formal vocational qualification.

A distinction must be made between two kinds of regulated continuing training, namely **further vocational training** and **vocational retraining** (defined in the Vocational Education and Training Act). Another distinction can be made between further training making advancement in the occupation possible (further training for advancement) and further training aimed at maintaining or extending vocational knowledge, skills and competences, or updating them in line with technical or economic developments (adaptive further training). To participate, a completed course of vocational training or appropriate vocational experience, or both, is normally required.

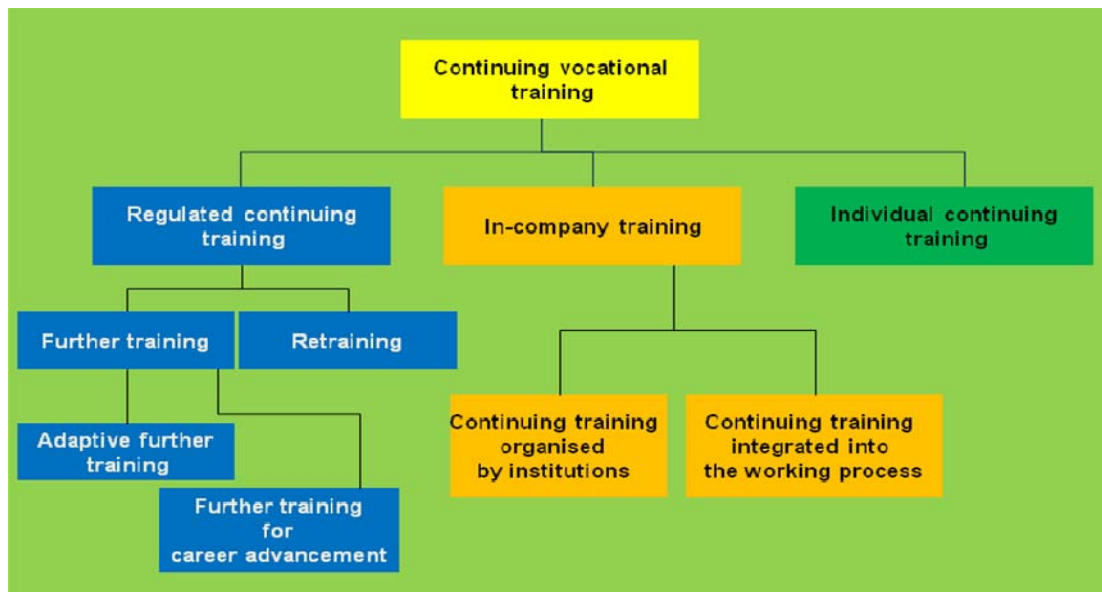
National standardised further vocational training and retraining is based on statutory regulations which specify content, objective, examination requirements and conduct, conditions for authorisation and designation of the qualification (master, business administrator, graduate in business administration, skilled worker). These regulations are laid down by the Federal Ministry of Education and Research (*BMBF*) by agreement with the competent ministries and following consultation with the Main Board (*Hauptausschuss*) of the Federal Institute for Vocational Education and Training (*BIBB*).

According to section 54 of the Vocational Education and Training Act (BBiG) and section 42a of the Crafts Code (HwO), the bodies responsible for training, known as **competent bodies** can pass **regulations on advanced vocational training examinations**. These are known as **chamber regulations**. Examples of competent bodies are the chambers of industry and commerce (IHK), the chambers of crafts and trades (HWK), sections 71 ff. BBiG. They make vigorous use of this provision. In 2010, 3,112 legal regulations were issued by individual chambers on 731 advanced training occupations which they were responsible for regulating (BIBB 2011a, p. 174). These examination regulations are valid only in the issuing chamber's particular district.

In contrast, in 2010 regulations on a total of 212 advanced training regulations were issued at federal level. These advanced training regulations are recognised nationwide and the examination regulations are also standardised throughout Germany.

Many bodies undertake further vocational training measures, including enterprises, Chambers, employers' and trade associations, employee organisations and vocational schools (for legislations see 4.3. and for financing see 10).

Legally, the acceptance of competences acquired from non-formal and informal learning is not recognised. Moreover, the issue is widely viewed as less important by those involved in policy and practice.



(Source: Based on Bernien 1997.)

The acceptance of competences acquired from non-formal and informal learning is not recognised. Moreover, the issue is widely viewed as less important by those involved in policy and practice

INITIATIVES AND PROGRAMMES

LIFELONG LEARNING

The government wants to establish individual and company commitment towards training, lifelong learning and continuing education throughout working life and has to this effect drawn up a plan to increase participation in continuing training to 43 percent of all workers in 2006 to 50 percent by the year 2015 (BMBF 2010 S.46).

Since 2004, the "Strategy for Lifelong Learning in the Federal Republic of Germany", jointly developed by the Federal and *Länder* governments, has set out an education policy approach for Germany in which substantial significance is attached to the validation of non-formally and informally acquired skills and competencies as a development focus within the promotion of lifelong learning for all (cf. BLK, 2004). In relation to VET, the "Innovation Circle on Vocational Education and Training" (*Innovationskreis Berufliche Bildung - IKBB*) appointed by the Federal Minister of Education issued recommendations in 2007 which included improving transfer opportunities and credit for prior learning to increase permeability between education and training sectors.

Furthermore, a variety of research projects and pilot experiments have been introduced supported by the Federation and the European Union. One example is the programme "Learning Regions - Providing Support for Networks" (*Lernende Regionen - Förderung von Netzwerken*). In this programme, the Federal Ministry of Education and Research (BMBF) supported the establishment and development of networks at regional level across different institutions and areas of the education and training system, in order to develop, test and put into practice innovative and integrated services for lifelong learning. The programme, for which a total of EUR 135 million was available for the full term from 2001 to 2008 - about 50% of which came from the European Social Fund (ESF) - involved the relevant actors both in the regions and at national level (including Competent Bodies, social partners, training establishments, schools, businesses, local authorities and the labour administration).

CVET AND THE LABOUR MARKET

The aim of the "Potential areas of flexibility in initial and continuing training" programme, which is funded by the Federal Ministry of Education and Research (BMBF) and implemented by the Federal Institute for Vocational Education and Training (BIBB), is to achieve a more flexible structuring of continuing training provision in line with the requirements of the labour market. Structural change, globalisation and other factors may very rapidly bring about a change in the requirement for certain continuing training provision. The opportunity to react flexibly to changing conditions is becoming more and more important. During the period from 2002 to 2008, 28 pilot projects were conducted in small and medium-sized companies to serve as the basis for the development of continuing training concepts in order to improve the German initial and continuing training system in terms of quality and its scope of effectiveness and in order to adapt the system to the requirements of the labour market. Most of the educational services developed within these pilot projects have been established within the educational landscape in a sustainable manner and have been integrated into new networks such as Jobstarter projects. (BMBF, http://www.bmbf.de/pub/bbb_09.pdf, http://www.bmbf.de/pub/bbb_2011.pdf cited 15.09.2011).

BRINGING LEARNING CLOSER TO LEARNERS

The focus of the "Local learning" programme ("Lernen vor Ort") is on strengthening regional continuing learning structures.

"Local learning" forms an integral part of the Federal Ministry of Education and Research (BMBF) "Advancement through education" ("Aufstieg durch Bildung") training initiative and is financed via funds from the Federal Government and from the European Social Fund (ESF) as part of the 2007-2013 funding programme as well as being jointly funded by a number of German foundations. The objective is to bring various educational competencies together and place the main focus on holistic consideration of individual educational biographies. Further aims are to strengthen regional continuing learning structures and develop a holistic management approach to lifelong learning. The funded projects was launched in the autumn of 2009, the aim of these being to bring education closer to citizens. (BMBF, 2009, p. 41, BMBF 2010, p. 47)

DISTANCE LEARNING

Distance learning provides working adults the opportunity to take up continuing education on a flexible basis while remaining in employment. Courses offered by private organisations must be approved under the Distance Learning Protection Act (*Fernunterrichtsschutzgesetz - FernUSG*). Approval is given by the Central Office for Distance Learning (*Staatliche Zentralstelle für Fernunterricht - ZFU*) of the *Länder*. The approval procedure includes checks on the factual and didactic quality of the teaching material in relation to the course objective, as well as on advertising and on the form and content of the distance learning agreement to be concluded between the student and the distance learning institute. The range of subjects is wide and comprises social sciences, education and psychology, humanities, languages, business and commerce, mathematics, natural sciences and technology, leisure, health and housekeeping, school leaving qualifications - e.g. *Hauptschulabschluss*, *Realschulabschluss*, *Abitur* -, qualifications for state-certified business manager, engineer and translator, computer courses.

In 2010, there were a total of 2,470 licensed distance-learning programmes (2009: 2,264 and 2008: 2,087). Of the 2,470 distance-learning programmes, 59.4% are in preparation for an examination while 40.6% are non-examined programmes. Of all final assessments, 13.4% are examinations regulated by public law, 5.7% are state examinations, and 42.8% are the institutes' own internal examinations. In 2009 1,470 (64.9%) of the total distance-learning programmes (2,262) relate to VET.

In 2010, there were 331 institutes offering distance-learning programmes (2009: 356 and; a 7.0% decrease). (BIBB 2011, p. 339ff/BIBB 2010, p. 316ff)

The degree by distance learning (*Fernstudium*) must be differentiated from other distance-learning programmes. Distance-learning degrees are run by higher education institutions and geared towards a recognised academic degree. The applicable regulations are the universities' degree and exam regulations. The number of participants in degrees by distance learning has shown significant growth. In the winter semester of 2009/2010, 22.5% more students were enrolled than one year earlier.

E-LEARNING

The e-learning continuing training database *ELDOC* (www.eldoc.info/), operated by the Federal Institute for Vocational Education and Training (*BIBB*), lends support to those planning their continuing training and interested in finding suitable e-learning or blended learning provision. Those searching the database, which currently contains 1,925 (1,757: 2009) continuing training offers from 160 (153: 2009) providers (status: 13.09.2011), receive a transparent and comparable presentation of the relevant providers and the courses they offer. The main focuses of the *ELDOC* database are the areas of computers/IT, economics and law, cross-curricular qualifications, languages, technology and the natural sciences. There are also useful links to other continuing training databases, checklists and general information on topics related to continuing training and e-learning.

6.2 FORMAL LEARNING IN CVET

Cases with advanced vocational qualifications, i.e. a *Meisterbrief* or some other diploma from a *Fachschule* (trade and technical schools and master's schools) are classified as ISCED 5B.

Publicly promoted CVET is targeted at various groups, from unemployed people with no school-leaving or vocational qualifications to executives. The aims, content and duration of courses vary accordingly. Only some of these courses are designed to lead to qualifications which are recognised by law or awarded by industry's self-governing organisations (Chambers).

PROVIDERS AND TYPES OF COURSE/QUALIFICATION AND PARTICIPATION

The most important providers/types of CVET courses/programmes are:

- For further vocational training (also see 6.1)

Trade and technical schools (in full-time or part-time form) and master's schools (*Fachschulen*) provide a further intermediate qualification building on the vocational training completed, e.g. to become master, technician. Further vocational training as a "Meister" entitles the holder to practise a craft trade independently and to employ and train apprentices and opens up access to courses at craft academies and *Fachhochschulen* or even *Hochschulen*, see 2.1.3.

Trade and technical schools offer courses in agronomy, design, engineering, business and social affairs, with over 160 subjects. Like master's schools, they end with a final state examination under *Land* law. The conditions for entrance vary depending on the subject area, for trade/technical school an applicant normally requires a qualification in a recognised training occupation of relevance to the objective of the subject concerned, and relevant work experience of at least one year, or a qualification from a full-time vocational school and relevant work experience of at least five years. During the 2009/2010 school year, 167,554 people attended a trade or technical school. This is an increase of 10% to 2008/2009 (Statistisches Bundesamt: <http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Content/Statistiken/BildungForschungKultur/Schulen/Tabellen/Content75/BeruflicheSchulenSchulartSchueler,templateld=renderPrint.psm>, cited: 15.09.2011).

After obtaining a vocational qualification and gaining work experience, it is possible to take an **upgrading qualification** (e.g. as a technical engineer, master craftsman, business specialist or certified senior clerk - *BBiG* Sections 53 ff). At Federal level there are currently around 200 such qualifications, of which master craftsman qualifications account for 170. This **formal advanced training** must be distinguished from **continuing vocational training**.

- **For continuing vocational training**

Private providers form the largest group of CVET providers; of these 33% are commercial operators and 15% non-profit organisations. Community adult education centres account for 14%. Business and industry establishments as well as establishments run by other major societal groupings (churches, parties, trade unions, associations, clubs, foundations) represent 12% each. Vocational schools and higher education establishments (including *Fachhochschulen*) account for 10% while other types of providers make up the last 5%. These differ from 2009 by no more than two percentage points (BIBB 2011, p. 316).

Continuing education providers include vocational schools, community adult education centres, universities (of applied sciences), academies, chambers, professional associations, etc.

Accreditations are highly significant in the continuing education sector. 85% of providers in Germany hold at least one formal accreditation by a public body or private organisation. 43% are accredited according to the Accreditation and Certification in Further Training Ordinance (*Anerkennungs- und Zulassungsverordnung Weiterbildung, AZWV*) of the Federal Employment Agency, making the AZWV the most prevalent form of accreditation, followed by accreditations under adult education or continuing education laws of the German Länder (39%) and occupational or industry associations (35%) (BIBB 2011). (see also www.wbmonitor.de and below)

In 2007, more than a quarter (26%) of all 19 to 64-year-olds participated in continuing vocational education, which reflects stagnation since 2003.

Women's participation in continuing vocational education is lower than men's. However, compared to 1991 this disparity was reduced to 5% in the year 2007. The disparity between women and men is primarily explained by their differential participation in the labour market.

If we consider only people in employment, the participation rates have moved closer together over the years, reaching 34% (women) and 35% (men) in 2007 (von Rosenbladt/Bilger 2008, p. 229). According to the 10th BSW survey conducted in 2007, roughly 68% of salaried employees in Germany participated in one or more forms of informal learning in 2006 (cf. *ibid.*, p. 16). The two most frequently selected forms were "self-learning through experimentation and observation" (49%) and "study of occupation-related literature" (43%) respectively. 27% received instruction from co-workers and from superiors (cf. *ibid.*, p. 17).

The survey results also show that 39% of the respondents had learnt something on their own off the job, non-formally, at least once during 2006 (ibid., p. 18).

As in past years, in 2007 participation in organised continuing education was significantly less frequent in the over-50s. Although the disparity to the detriment of younger age groups is reducing, their share still remains below the 20% mark. The 35 to 49-year-old age-group are the most frequent participants in continuing vocational education and training. (All data based on the Continuing Education Reporting System: *Berichtssystem Weiterbildung*, BSW)

STATISTICAL TOOLS FOR CVET

By setting up its Continuing Education Reporting System (*Berichtssystem Weiterbildung*, BSW) in 1979, Germany made an early move to establish the statistical basis for continuous and differentiated reporting on continuing education. Since then, surveys have been carried out on a 3-year cycle. Statistical data is collected on training courses attended in the category of "continuing vocational education and training" which are "directly related to work", e.g. retraining, professional upgrading, induction and adaptation to new occupational demands (cf. von Rosenblatt/Bilger 2008, p. 10). Since the end of the 1980s the BSW has been progressively extended to cover new aspects, particularly in the area of informal learning. A similar reporting scheme is now being introduced for European training statistics in the form of the Adult Education Survey (AES).

The Federal Institute for Vocational Education and Training (BIBB) has been drawing up the "Continuing training monitor" or "wbmonitor" as mentioned above since 2001 in order to monitor developments in continuing training and make such developments transparent to continuing training providers and the general public. Since 2006, the responsibility for wbmonitor has resided with BIBB and the German Institute for Adult Education (DIE) - Leibniz Centre for Lifelong Learning. A wbmonitor survey conducted at the end of 2007 showed that there were a total of 17,000 continuing training institutions. The largest group of providers (56%) comprises private sector commercial organisations. A rough estimate carried out by the wbmonitor revealed that approximately 119 million hours of continuing training were conducted in the year 2007 (BIBB/DIE, wbmonitor).

STATE SUPPORT FOR CONTINUING VOCATIONAL EDUCATION AND TRAINING

- **Career Advancement Training Promotion Act (AFBG, known as "Meister-BaföG"):** This law, jointly financed by the Federation and the *Länder*, gives craftsmen and other skilled workers a statutory individual entitlement to financial assistance with further training. The financial assistance comprises subsidies (or, as from a certain amount, bank loans at favourable rates) for the course and examination fees of master's courses or other courses leading to a comparable further training qualification. In the 23rd Act amending the BAföG (*23. Gesetz zur Änderung des Bundesausbildungsförderungsgesetzes, BAföGÄndG*) which entered force on 01.10.2010, improvements were also made to the grant support available for career advancement training (the "Meister-BAföG"). Both the cost of living allowances and offset amounts for participants in full-time programmes were raised, with retroactive effect as from 01.10.2010. In 2009, the number of individuals assisted was approx. 158,000, an increase of 12.9% from the year 2008. The proportion of women under "Meister-BaföG" in 2009 was 31%. (BMBF, <http://www.bmbf.de/press/2911.php> cited: 18.08.10)

- **Vocational Training Programme for the Highly Talented (*Begabtenförderung Berufliche Bildung*):** Since 1991 the Federal Ministry has offered particularly gifted young workers a grant for individual CVET (a similar programme exists in academic education). One of its aims is to underline the importance of continuing training throughout working life rather than to view training as being finished on achievement of an initial qualification. In 2009 6,111 (2008: 5,991) new persons were selected for promotion. Women have been overrepresented until now as recipients of support for the gifted. Of the 2009 entrants, 52% in total were female, whereas women accounted for only 45.6% of the 2008 cohort of completers. This ratio varies among IVET sectors. For instance, in trade and industry, 49.9% or half of new entrants are female, but they made up only 41.4% of successful examination candidates in 2008. In the skilled crafts, women made up 32.9% of first-time support recipients in 2009, but only 24.5% of the cohort that completed training the previous year (BIBB 2011, p. 353)

CVET AT THE INITIATIVE OF ENTERPRISES OR IN-COMPANY CVET (SOCIAL PARTNERS)

In-company CVET may take place in the company or outside but it is usually the company that pays for provision and it usually takes place during regular working hours. A decline was observed once again in 2009. Thus the figure of 45% of companies in Germany actively involved in CVET drops back to the 2007 level (BiBB 2011).

COLLECTIVE AGREEMENTS

There are a large number of collective agreements that contain training provisions (often in conjunction with other issues requiring regulation such as industrial safety and environmental protection, personnel and skills development, company and work organisation, remuneration arrangements, working hours etc.) (Faulstich, 2003, p. 46). The Collective Agreement on Training (*Tarifvertrag zur Qualifizierung - TVQ*) in the metal and electricity industry of 2001 has led the way. In that agreement, continuing in-company training is defined as qualification measures which serve to enable employees to:

- understand the constant development of specialised, methodological and social knowledge in the context of one's own field of work (maintenance qualification);
- to meet the new requirements in one's own field of work (adaptation qualification);
- to assume another, equally skilled or higher skilled task.

In addition to the collective agreements on sectoral/regional level there are more than 200 agreements at company level (Busse and Heidemann, 2005).

STATISTICS IN THE FIELD OF IN-COMPANY TRAINING

The definition of CVET plays a central role when calculating the percentage of employees taking part in in-company provision. The main question is whether the definition should be restricted to formal courses and seminars or whether it should also include non-formal and/or informal forms, e.g. information events, on-the-job-learning, job rotation and self-regulated learning.

The following three studies can be used for analysing the structure of participation in in-company CVET:

- Company Panel conducted by the Institute for Employment Research (*Institut für Arbeitsmarkt- und Berufsforschung - IAB*) which is a survey of employers. It was first carried out in 1993. The basic set includes companies with at least one employee subject to social insurance contributions. The questionnaire combines standard topics with *ad hoc* issues (in-company CVET was a focal point in the 1997, 1999 and 2003 surveys);
- Surveys of the Institute for Business Research Cologne (*Institut der deutschen Wirtschaft Köln - IW*) carried out every three years since 1992. It is based on a representative sample of enterprises in the chambers of industry and commerce, the chambers of crafts and the chambers of agriculture. The sample is drawn anew for each survey;
- German survey in the context of the EU Continuing Vocational Training Surveys CVTS I, II and III (1994, 2000 and 2006).

The IW survey uses a broad concept of CVET that encompasses not only internal and external courses but also participation in information events and retraining measures, learning in the work situation and self-regulated learning using media. According to the recent 2008 study of the Institute for Business Research, 84% of companies invested in CVET activities of their employees (Lenske, Werner; Werner, Dirk (2009) in: "Umfang, Kosten und Trends der betrieblichen Weiterbildung - Ergebnisse der IW-Weiterbildungserhebung 2008" http://www.iwkoeln.de/Portals/0/pdf/trends01_09_3.pdf, cited: 27.08.2010)).

In CVTS other types of CVET (e.g. information events, job rotation and quality circles) are considered. According to the CVTS III of 2006, 69.5% of enterprises offered some kind of CVET in 2005. Germany is thus above the EU 25 average (i.e. not yet considering Bulgaria and Romania) of 61%, and is ranked in 10th place. (Behringer Friederike; Schönfeld, Gudrun in: <http://www.bibb.de/de/55365.htm>, cited: 27.08.2010).

In terms of industry branches, participation rates vary: While in the insurance and loans industry nearly every company (99%) made available CVET for its staff, this share was only 52.7% in the hotel and restaurant sector (cf. *Schmidt*, 2007, p. 705).

Both, the IW survey and CVTS III underline the increasing importance of less formal and more open forms of learning. But also the content of in-company CVET has changed. While in the past imparting qualifications related to a specific subject field was one of the most important areas, now key competences, particularly methodical and personal competences (self-dependent action, capacity for teamwork, customer orientation) come to the fore (Busse and Heidemann, 2005).

This is also shown in the following tables:

WSTATUS / GEO	Employment	Inactive population	Total	Unemployment
EU 27	6.6	6.3	6.6	7.1
DE	4.2	8.6	5.2	5.6

Source of data: Eurostat (AES); extracted on: 24-05-2011; last update: 13-04-2011.

Description: The indicator represent the share of people (aged 25-64) that participated in formal education and training in the 12 months prior to the survey. Specific rates are calculated by labour status

Eurostat original label: *trng_aes_103-Participation rate in education and training by labour status*

Link to data: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=trng_aes_103&lang=en

Further selections: *typetrai=formal, wstatus=employed, inactive, unemployed, total*

Link to metadata: http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/trng_aes_esms.htm

TYPTRAI= Formal education and training; INDICATORS=OBS_FLAG; UNIT=Percentage of total

TABLE 6C: PARTICIPATION RATE IN FORMAL EDUCATION AND TRAINING BY HIGHEST LEVEL OF EDUCATION ATTAINED (%), 2007

ISCED97/ GEO	0-2	3-4	5-6	Total
EU 27	2.7	6	12.7	6.6
DE	2.5	5.2	7.1	5.2

Source of data: Eurostat (AES); extracted on: 24-05-2011; last update: 30-03-2011. Description: The indicator represents the share of people (aged 25-64) that participated in formal education and training in the 12 months prior to the survey. Specific rates are calculated by highest level of education attained. Eurostat original label: *trng_aes_102-Participation rate in education and training by highest level of education attained*. Link to data:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=trng_aes_102&lang=en

Further selections: *typetra1 = formal, ISCED = 0-2, 3-5, 5-6, total*

Link to metadata: http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/trng_aes_esms.htm

PLANNING AND FORECASTING MECHANISMS

Germany's CVET needs are not determined on a continual, nationwide or systematic basis, which is partly due to the diversity and plurality of providers. A number of projections regarding jobs and qualification levels have been made to help assess how the labour market will develop in the face of globalisation and technical progress (cf. inter alia Dostal/Reinberg/Schnur, 2002). (See Theme 8.1.; for Impact of financial and economic crisis see 3.).

QUALITY ASSURANCE MECHANISMS

Since 2001 BIBB has conducted regular surveys of CVET providers to gather information on practitioners' views of current topics and problems in CVET (see above, *wbmonitor*).

The survey of 2009 inquired into the influence of the macro-economic climate on market retention by continuing education providers. One-quarter of continuing education providers assess the influence of the economic crisis on market retention positively, e.g. due to an increase in training inquiries; one-third negatively. A large proportion (41%) however sees neither positive nor negative impacts (BIBB 2010, p. 295). On analysis of the provider spectrum by the main financing sources of establishments, considerable differences are noticeable. Those able to profit from the situation were overwhelmingly providers financed by employment offices (42% record a positive influence), which have provided extensive CVET funding based on the counter-cyclical economic stimulus package. Company-financed providers are feeling the impacts of companies' pro-cyclical behaviour, which led to cutbacks in CVET for employees during the 2009 crisis: 44% consider themselves adversely affected.

Stiftung Warentest, an independent foundation for testing product quality, has established a separate department for carrying out CVET tests. The aim is to develop comparative training tests that can complement existing quality assurance systems. Publication of test results enhances awareness, on the part of providers that accept vouchers of credit for education/training, of the importance of quality in the measures they provide. From July 2002 to December 2007, *Stiftung Warentest* carried out around 100 tests of CVET courses as part of a project funded by the Federal Ministry of Education and Research (*BMBF*). Since 2008, CVET tests have been allocated routine funding by the *BMBF*.

In 2004, a Directive on Recognition and Licensing of Continuing Training (*Anerkennungs- und Zulassungsverordnung - Weiterbildung - AZWV*) was introduced to improve competition and transparency in vocational continuing education as promoted by the Federal Employment Agency (*Bundesagentur für Arbeit - BA*).

The employment agencies entrusted external certification bodies to inspect continuing education providers. Certification is necessary to offer courses and participants can only receive support if they attend approved providers in accordance with the Social Security

Code III (*Sozialgesetzbuch III*). Amongst other things, providers must prove that they apply a recognised quality assurance system.

6.3 NON-FORMAL LEARNING IN CVET

Legally, the acceptance of competences acquired from non-formal and informal learning is not recognised. Moreover, the issue is widely viewed as less important by those involved in policy and practice. Little use is made of competencies acquired informally (including commitment to social and community service) for the purposes of the formal education system (admission procedures, training and study programmes, certification at upper secondary level and in higher education). The various qualitative and quantitative certification procedures (examination boards, assessments etc.) are not used to recognise competences acquired outside the formal system.

MAJOR CHARACTERISTICS OF NON-FORMAL CVET

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

The "*ProfilPASS*", introduced in 2006, aimed at "self-diagnosis" of individual competences and at making them visible (www.profilpass-online.de/index.php). Users are guided through and supported in this process by a list of questions. The *ProfilPASS* takes account of all places of learning in which the learner has acquired competences.

The "qualification pass" designed for the second-chance qualification of adult employees. This makes it possible to document and compile vocational qualifications and experience acquired both within and outside the framework of traditional training and continuing training (www.qualifizierungspass.de).

In continuing education and training, the Federal Institute for Vocational Education and Training (*BIBB*) supervises the development of a system of continuing training profiles (cf. *Mucke/Grunwald, 2005*). The objective is to provide skilled workers in the information technology sector with career paths and career progression via three qualification levels (Level 1: Specialist, Level 2: Operative Professional and Level 3: Strategic Professional). The IT continuing training system requires a high degree of comparability at the level of operational and strategic professionals with higher education qualifications such as Bachelor's and Master's which creates opportunities for credit transfer.

PROVIDERS AND TYPES OF COURSE/QUALIFICATION

Promotion of CVET under the Federal Government's Social Code III (*Sozialgesetzbuch III - SGB III*) includes the following measures:

- further vocational training: schemes to assess, maintain, extend or adapt the vocational knowledge and skills of adults who have a vocational qualification or appropriate work experience;
- vocational retraining leading to a qualification in a recognised occupation requiring formal training (*anerkannter Ausbildungsberuf*): targeted mainly at unemployed people with no vocational qualifications.

The most important providers are private-sector educational/training establishments. Others include public-sector establishments, chambers, establishments of trade and professional associations, social welfare/church establishments and universities/colleges.

In 2006, the Federal Employment Agency launched the special programme "Continuing vocational education and training for low-qualified and older workers in companies' (*WeGebAU*) which supports training for older employees (over the age of 45 in companies

with fewer than 250 employees) and unskilled workers (cf. BMBF, 2008b, p. 198f.). The programme also targets the unemployed and jobseekers, however, who are either minimally qualified or older. To qualify for support, the continuing education measure must be more than just a refresher course, i.e. it must contribute to the acquisition of an occupational qualification or a module towards such a qualification. Both the training course costs and a wage subsidy can be paid.

The funding for "Continuing vocational education and training for low-qualified and older workers in companies" (WeGebAU) was topped up as part of the second economic stimulus package, with a view to helping to expand the provision of continuing education for those in employment. In 2009, 95,402 (2008: 61,982) claimants were granted a total volume of EUR 332.3 million (2008: EUR 167 m) in assistance (BIBB 2011, p. 347).

One possible reason for the high level of participation in initial and continuing training by the unemployed in Germany is that state benefits are connected to such participation in certain cases. The principle is to improve the skills profile or adapt it to meet changed labour market requirements in order to improve the chances of reintegration into the labour market. This is also shown in the following tables:

TABLE 6B: PARTICIPATION RATE IN NON FORMAL EDUCATION AND TRAINING BY LABOUR STATUS (%), 2007

WSTATUS / GEO	Employment	Inactive population	Total	Unemployment
EU 27	38.8	12.4	31.3	19.5
DE	51.6	21.5	43.1	25.9

Source of data: Eurostat (AES); extracted on: 24-05-2011; last update: 13-04-2011.

Description: The indicator represents the share of people (aged 25-64) that participated in formal education and training in the 12 months prior to the survey. Specific rates are calculated by labour status. Specific rates are calculated by labour status.

Eurostat original label: trng_aes_103-Participation rate in education and training by labour status

Link to data: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=trng_aes_103&lang=en

Further selections: typetra1=formal, wstatus employed, inactive, unemployed, total

Link to metadata: http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/trng_aes_esms.htm

TYPTRAI= Formal education and training; INDICATORS=OBS_FLAG; UNIT=Percentage of total

TABLE 6D: PARTICIPATION RATE IN NON FORMAL EDUCATION AND TRAINING BY HIGHEST LEVEL OF EDUCATION ATTAINED (%), 2007

ISCED97/ GEO	0-2	3-4	5-6	Total
EU 27	15.6	31.4	51.5	31.3
DE	18.5	43.2	60.3	43.1

Source of data: Eurostat (AES); extracted on: 24-05-2011; last update: 30-03-2011.

Description: The indicator represents the share of people (aged 25-64) that participated in non formal education and training in the 12 months prior to the survey. Specific rates are calculated by highest level of education attained

Eurostat original label: trng_aes_102-Participation rate in education and training by highest level of education attained

Link to data: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=trng_aes_102&lang=en

Further selections: typetra1=non formal, ISCED=0-2, 3-5, 5-6, total

Link to metadata: http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/trng_aes_esms.htm

TYPTRAI= Formal education and training; INDICATORS=OBS_FLAG; UNIT=Percentage of total

6.4 LANGUAGE LEARNING IN CVET

Nobody today is unaffected by the interdependencies between the different countries of Europe. Companies and their employees must therefore be prepared to operate in a European market, in future, in order to succeed. To this end, they must recognise the opportunities that such a market offers them.

Any "international competence" in companies presupposes "international competence" in their staff. In this connection, foreign language skills play a significant role in overcoming barriers to communication.

Since the mid-1990s, work has been in progress to implement foreign-language qualifications in initial and continuing vocational education and training. Mandatory foreign-language learning is now standard in many of the more recently revised training occupations.

In the CVET sector, the chambers of industry and commerce (IHKs) offer a variety of examinations at different levels. Their target groups are staff in service establishments, import or export administrators and managers, and translators and interpreters. These offers are based on the Common European Reference Framework for language teaching and learning developed by the Council of Europe. The IHKs conduct examinations in various languages, e.g. English, French, Italian, Greek, Turkish, Russian and German (as a foreign language). Essentially, German is always an element of chamber examinations - either as a source or a target language. Cultural and linguistic customs and conventions, known as intercultural communication competence, also play a role in many qualifications. Preparation for these examinations is generally provided by language schools, vocational colleges, or external tutors offering their services on a freelance basis. (<http://wis.ihk.de/informationen/spezialthemen/ihk-fremdsprachenpruefung.html>, cited: 19.09.2011).

6.5 TRAINING PROGRAMS TO HELP JOB-SEEKERS AND PEOPLE VULNERABLE TO EXCLUSION FROM THE LABOUR MARKET

Promotion of CVET for unemployed people and those at risk of unemployment is the responsibility of the Federal Employment Agency (*Bundesagentur für Arbeit - BA*). The BA is under the jurisdiction of the Federal Ministry of Labour and Social Affairs (*Bundesministerium für Arbeit und Soziales - BMAS*).

In 2003, the first law on modernising labour market services (*Erstes Gesetz für moderne Dienstleistungen am Arbeitsmarkt*) was introduced. The main change was the introduction of an education voucher (*Bildungsgutschein*), (see 10.2.1). This can be issued by employment agencies to unemployed people or somebody at risk of unemployment to access subsidised continuing vocational training after an advisory discussion. The education voucher shows, among other things, the training objective and time needed to achieve it, the scope of regional validity, and the duration of validity (three months maximum). The education voucher can be redeemed by the participant with a provider of his choice authorised to finance continuing training.

Employees in short-time working receive financial support from the government for appropriate continuing training. Policymakers are also appealing to employers to motivate their employees to take part in continuing training. The financial crisis is being viewed as an opportunity to counter the impending shortage of skilled workers (see 3.1).

7. TRAINING VET TEACHERS AND TRAINERS

7.1 PRIORITIES IN TRAINING VET TEACHERS AND TRAINERS

The **Ausbilder-Eignungsverordnung** (Ordinance on Trainer Aptitude, AEVO) was suspended in 2003 (see Pre-service (Initial) training for IVET Trainers and see 7.2). BIBB has evaluated this suspension. The results of this evaluation revealed that although a certain growth in training places had been achieved, negative effects could also be discerned in respect of quality and particularly in respect of the success of training. The Federal Government has reintroduced the duty to provide evidence of trainer aptitude pursuant to the AEVO with effect from the training year 2009/10 (BIBB 2008d).

The new qualification options that entered force on September 2009, to become a **Certified educator/trainer in initial and continuing vocational education** or a **Certified educator/trainer in professional education**, are intended to assure the quality of initial and continuing vocational education and to further professionalise training staff. ("Educator/trainer in initial and continuing vocational education" and "Educator/trainer in professional education" qualifications, see 7.2.1)

7.1.1 TYPES OF TEACHERS AND TRAINERS IN VET

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 include 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 (*Bundesagentur für Arbeit - BA*). The *following table* provides an overview of the types of teachers and trainers in the German VET system.

7.1.2 TEACHING AND TRAINING OCCUPATIONS IN VET

TABLE 7A: TYPES OF TEACHERS AND TRAINERS IN THE GERMAN VET SYSTEM	
TYPE OF TRAINING	TYPE OF STAFF
	IVET
DUAL SYSTEM OF TRAINING	<ul style="list-style-type: none"> ➤ Trainers (instructors) or masters within companies (Certified educators/trainers in professional education, Certified educators/trainers in initial and continuing vocational education) including the responsible VET managers in large companies); ➤ VET teachers in the vocational schools (two categories: 1. university trained teachers for job-related theory and general education subjects; 2. <i>Werklehrer</i> (master craftsmen or technicians with additional further training) imparting practical skills) ➤ Instructors and trainers within inter-company VET centres (<i>ÜBS</i>)
SPECIAL VET FOR DISADVANTAGED LEADING TO DUAL SYSTEM DIPLOMAS	VET teachers/trainers within private institutions
FULL-TIME VOCATIONAL SCHOOLS	VET teachers in vocational schools (<i>see above</i>)

LEARNING FACILITATORS	Youth workers in training schemes for the disadvantaged, training counsellors in the chambers, vocational guidance counsellors employed by the Federal Employment Agencies etc.
CVET	
	<ul style="list-style-type: none"> ➤ VET teachers in vocational schools ➤ VET teachers/trainers of <i>Volkshochschulen</i> (adult education centres) ➤ VET teachers/trainers within CVET institutions (state recognised or not) or freelance individuals ➤ Certified educators/trainers in continuing education ➤ Company employees concerned with CVET

Source: Compiled by the authors

There are differences between the various types of VET personnel in terms of: formal qualification, legislation governing their activities, type of work contract, salary etc.

- Teachers are subject to the non-profit educational world with a lifelong job guarantee and with salaries not based on achievement considerations. The relevant legal standards include the laws and regulations on teacher training, the study directives on study programmes for the teaching profession, the training regulations on teaching practice and the examination directives for the first and second state examinations.
- On-the-job trainers are subject to the industrial world and are vulnerable to economic developments and dismissal. At least one person in the training firm or in the training institution must possess the quality of trainer aptitude as certified according to the AEVO. Alongside this person, many staff trainers are involved in initial vocational training. Since 2009 it has been possible to qualify as a Certified educator/trainer in initial and continuing vocational education or a Certified educator/trainer in professional education (see 7.2.1).

7.1.3 RESPONSIBLE BODIES

In Germany are several bodies responsible for the Regulation of teacher and trainer training arrangements. The Teachers for classes in schools need the Exam. Examinations are the responsibility of state examination offices or *Land* examination commissions. The courses in IVET are based on curricula defined by the Länder authorities.

The requirements for in-company trainers in IVET are governed by the Vocational Education and Training Act (Sections 28-30 *BBiG*) and the Ordinance on Trainer Aptitude (*AEVO*); there are no explicitly formulated training provisions for staff working in continuing vocational training. To assure the quality of in-company training, the Chambers of Industry and Commerce are responsible for monitoring the Regulation on Trainer Aptitude and the occupation's relevant training regulation. Pre-service training for trainers is governed by Federal law.

7.2. TYPES OF TEACHERS AND TRAINERS IN IVET

7.2.1 TEACHERS, TRAINERS AND TRAINING FACILITATORS IN IVET

IVET TEACHERS

Teachers at vocational schools are responsible for the theoretical part of vocational training. They teach part-time courses in their subject fields and assess student (apprentice) performance. Experienced teachers may be promoted to become *Fachleiter* (senior teachers) in their subjects where they can also take part in school management and develop the curriculum within the boundaries provided by the *Länder* authorities. IVET teachers can be divided into two groups:

1. **Teachers for classes in vocational schools/vocational schoolteachers** (teachers giving theory and general job-related lessons): These teachers provide young people with the necessary subject-specific theoretical knowledge and with in-depth and extended general education in the context of their future occupation. They teach both vocational subjects (e.g. metalworking techniques, electrical engineering, home economics, healthcare) and general subjects (e.g. German, English, mathematics, politics, physics).
2. **Teachers teaching vocational practice** (practical skills teachers (*Werklehrer* or *Fachlehrer* in some *Länder*) e.g. in school workshops, builder's training yards, business training offices, school kitchens, laboratories, demonstration workshops): Their task is to provide young people undergoing in-company training with subject-specific practical teaching. They teach in industrial/technical and home economics schools and, in some *Länder*, also in business schools. In vocational schools (industrial/technical schools), state-examined technicians or certified masters are used to teach vocational practice. In home economics schools, specialised teachers teach home economics and crafts. In business schools, specialised teachers are trained to teach word processing and office management.

PLACE OF WORK	TYPE OF OCCUPATION/TRAINING
VOCATIONAL SCHOOL (PART-TIME OR FULL-TIME)	<p>VET teachers with a university diploma (<i>Lehrer an beruflichen Schulen</i>) Among them:</p> <ul style="list-style-type: none"> ➤ VET teachers at industrial VET schools, ➤ VET teachers at commercial VET schools, ➤ VET teachers with other specialisations.
VOCATIONAL SCHOOL (PART-TIME OR FULL-TIME)	<p>Teachers imparting practical skills (<i>Werklehrer, Fachlehrer</i>)</p>

Source: Compiled by the authors

IVET TRAINERS

In Germany, the designation "trainer" is used in association with in-company training as an umbrella term. Trainers instruct trainees as their main or secondary job. In small or medium-sized enterprises with few trainees, training is often the trainer's secondary job. In larger enterprises, training is usually the trainer's main job and they work in training departments.

Those responsible for training are of particular importance as they are skilled workers who, in addition to their specialised tasks, take on training tasks in the enterprise's departments, on assembly lines, in commercial and engineering offices or in the service sector. As trainees pass through the enterprise, trainers provide them with the knowledge and skills required in their job. They are generally supported by skilled workers who are entrusted with elements of initial vocational training - for a limited time - in addition to their occupational duties.

The two new further training qualifications that came into force on 1.09.2009, the **Educator/trainer in initial and continuing vocational education** (Federal Law Gazette 2009a) and **Educator/trainer in professional education** (Federal Law Gazette 2009b) offer training staff the possibility of upgrading their qualifications to meet the demands of their role. The advanced training courses are offered by various training providers.

Thus there are three successive building blocks for the qualification of training staff:

1. The entrance-level qualification for all vocational trainers is the new Ordinance on Trainer Aptitude (*AusbilderEignungsverordnung, AEVO*) (see 7.2.2).

2. The second level is the "Certified educator/trainer in initial and continuing vocational education" (*geprüfte/r Aus- und Weiterbildungspädagoge/in*) qualification.

After taking and passing the examination pursuant to the Ordinance on Trainer Aptitude or acquiring a similar qualification along with a minimum of either one or two years professional experience respectively, candidates meet the admission requirements for advanced vocational training as a **Certified educator/trainer in initial and continuing vocational education**. The aim of the advanced training is the qualification to plan and implement training processes in initial vocational training and in company continuing education, and to put into practice the training regulations. The advanced vocational training course develops professional skills in recruiting and selecting apprentices, and in advising and supporting both apprentices and employees in their vocational learning. The training content also covers assuring the quality of teaching and learning processes and implementing education and training measures.

3. This lays the foundation for the third level, that of the "Certified educator/trainer in professional education" (*geprüfte/r Berufspädagoge/-in*) qualification.

This higher qualification is suitable for full-time vocational trainers who would like to develop and consolidate their educational and methodological expertise. Key points in addition to the contents of the certified initial and continuing vocational educator include management processes in vocational education as well as personnel development and counselling. The goal of the examination is the demonstration of the necessary qualifications to take independent responsibility for the organisation and planning of vocational education processes, learner and learning support, educational marketing, controlling, quality management and leadership functions in institutions of in-company and extra-company training.

Those employed in the field of vocational education and training now have, for the first time, a systematic career progression chain. Stage 3 ultimately establishes permeability from the training course to defined Bachelor's degree courses.

If it is not possible for all the necessary knowledge and skills to be provided in full, the missing content can be provided or supplemented by training measures outside the place of training, for example via cooperation with other enterprises, inter-company vocational training centres (*überbetriebliche Berufsbildungsstätten - ÜBS*) or coherent training structures (*Ausbildungsverbünde*).

TABLE 7c: IVET TRAINERS		
TYPE OF TRAINING	TYPE OF STAFF	WORK PLACE
DUAL SYSTEM	Trainers (instructors) or masters within companies (including in big companies the responsible VET managers). Certified educators/trainers in initial and continuing vocational education, and in professional education	Companies
DUAL SYSTEM	Instructors and trainers within inter-company VET centres (<i>ÜBS</i>).	Training centres usually run by the chambers.
DUAL SYSTEM	VET teachers in the vocational schools, two categories: university trained teachers for job-related theory and general education subjects; master craftsmen or technicians with additional further training (<i>Werklehrer</i>) imparting practical skills.	Part-time vocational schools (<i>Berufsschule</i>)
SPECIAL VET FOR DISADVANTAGED (AND DISABLED) LEADING TO DUAL SYSTEM DIPLOMAS	VET teachers/trainers (<i>see above</i>)	(Private) training institutions offering special training courses for disadvantaged or disabled youngsters

Source: Compiled by the authors

7.2.2 PRE-SERVICE AND IN-SERVICE TRAINING OF IVET TEACHERS AND TRAINERS

PRE-SERVICE TRAINING FOR IVET TEACHERS

Pre-service training for all teachers comprises two phases:

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

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

Candidates for teaching courses must have their *Abitur*, or, with restrictions, the subject-based certificate of entitlement to higher education. Secondly, the applicant must either possess a relevant vocational qualification in the occupational field or demonstrate prior

practical vocational training for 3-12 months (work experience in an enterprise or work in the relevant occupational field), depending on the *Land* concerned. The course of study ends with the first state examination (teaching posts in upper secondary level vocational subjects or in vocational schools).

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

The **third phase** is lifelong "on-the-job learning". It covers the whole of the career and provides for further development, maintenance, updating and extension of teachers' vocational competence.

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

IN-SERVICE (CONTINUING) TRAINING FOR IVET TEACHERS

The goals are laid down by most *Länder* in their teacher training legislation or school legislation. Other details about organisations which provide further teacher training and about applications, admission and release from teaching duties for attendance of courses are regulated by directives. In all the *Länder*, the obligation of teachers to undertake further training is expressly laid down by law or statutory regulation. The employer (usually the Ministry of Education) is in turn obliged to ensure appropriate training measures.

State further teacher training (*staatliche Lehrerfortbildung*) serves to maintain and extend teachers' vocational competence. The content may relate to school subjects (e.g. introduction to new curricula), types of school, education and teaching objectives or certain key current topics (e.g. intercultural learning or new technologies). The courses usually take place in the form of seminars. There are also study groups, conferences, study trips and colloquia, as well as distance learning provision. It is not the same as continuing teacher training (*Lehrerweiterbildung*), which enables teachers to teach another subject or in an additional special field. Courses for further teacher training culminate in a supplementary examination (*Erweiterungsprüfung*) to the first state examination. Below this level there are continuing training courses leading to a teaching, e.g. entitlement to provide teaching a certain subject or at a certain type of school. Many continuing training courses serve to prepare teachers for special responsibilities (for example, work as a counselling teacher). Continuing teacher training usually lasts for a longer period.

PRE-SERVICE TRAINING FOR IVET TRAINERS

Under the statutory provisions of the Vocational Education and Training Act (Sections 28-30 *BBiG*) and the Regulation on Craft Trades (Section 21 *HwO*), trainers must be suitable both personally and in terms of specialised knowledge to train young people. Subject aptitude involves, in particular, the specialised vocational skills and knowledge required for the relevant occupation. As a rule, trainers must have a qualification in a subject area appropriate to the training occupation. However, vocational training also includes knowledge of the educational theory of the occupation and job. Until 31 July 2003, a test of trainer aptitude was required in accordance with the Ordinance on Trainer Aptitude (*Ausbilder-Eignungsverordnung - AEVO*).

The knowledge, skills and abilities to provide vocational and industrial training must be certified - normally by taking an examination - according to the Ordinance on Trainer Aptitude (*Ausbilder-Eignungsverordnung, AEVO*) which was passed in 1972. In the reformed version of the AEVO dating from 2009, the requirements concerning the aptitude of instructors for vocational and industrial education are described in terms of four fields of activity: "checking the prerequisites for and planning initial vocational training", "preparing initial vocational training and assisting with trainee recruitment", "delivering initial vocational training" and "bringing the apprenticeship to a conclusion". According to the Vocational Education and Training Act, the competent bodies (normally the chambers) are responsible for ensuring that instructors have the necessary personal and technical qualifications and that training premises are suitable. If these conditions are not satisfied, the competent bodies must intervene. They are required to take steps to remedy shortcomings in initial vocational training, to the extent of prohibiting companies, if need be, from recruiting apprentices or engaging in training (see 7.2.1).

IN-SERVICE (CONTINUING) TRAINING FOR IVET TRAINERS

There is no obligation for IVET trainers to participate in CVET. There are, however a number of in-service courses on offer. In large companies, in the context of staff development, for example, further and continuing training is often offered in their own training departments or in external premises and educational establishments, by their own or external personnel. Trainers in SMEs have the option of attending courses of further training organised by Chambers or professional associations (see 7.2.1).

7.3 TYPES OF TEACHERS AND TRAINERS IN CVET

7.3.1 TEACHERS, TRAINERS AND TRAINING FACILITATORS IN CVET

TABLE 7D: CVET TEACHERS AND TRAINERS	
PLACE OF WORK (MOST IMPORTANT PROVIDERS OF CVET)	TYPE OF OCCUPATION
Private or public VET schools.	Teachers (<i>see IVET</i>)
State CVET institutions, i.e., colleges of continuing education sponsored directly by the state, which offer provision for public employees. The most significant of these are the in-service training courses for teachers run by the <i>Länder</i> .	Teachers
Community adult education centres (<i>Volkshochschulen</i>): these exist throughout the country.	<ul style="list-style-type: none"> ➤ Unpaid volunteers, ➤ People that teach a few hours aside from their normal job (often school teachers), ➤ Freelance workers that sell their courses on a commercial basis.
Chambers of industry and commerce, and of craft trades and agriculture, which offer a broad range of CVET and contribute particularly to the professionalisation and training of the workforce by recognising qualifications.	Subject specialist with varied specific educational qualification (full-time, part-time, freelance)
Company-based CVET. Many large companies have built up their own internal training centres.	Company employees (full-time, part-time or volunteer 1. Certified educators/trainers in initial and continuing vocational education, Certified educators/trainers in professional education
The German Federation of Trade Unions (<i>DGB</i>) maintains the largest institutions of vocational continuing education.	Subject specialists with varied specific educational qualification (full-time, part-time, freelance)
Commercial CVET institutions, whose number and range of provision have grown considerably. They target those who can pay, particularly in the areas of foreign language teaching and data processing, and take an active part in competing for public funds, notably under the Employment Promotion Act.	Employees and freelance subject specialist
Institutes of distance education.	Employees and freelance subject specialist
Training organisations of the various economic sectors, which organise vocational and industrial continuing education, especially in SMEs.	Employees and freelance subject specialist
Higher education institutions, which have an obligation to CVET under the Basic Higher Education Act. Some 30 higher education institutions and vocational higher education institutions have their own CVET centres. Many offer CVET in cooperation with other providers, trade unions and employers.	Teachers

Source: Compiled by the authors

7.3.2 PRE-SERVICE AND IN-SERVICE TRAINING OF CVET TEACHERS AND TRAINERS

In Germany there is a wide variety of staff acting as teachers or trainers in CVET. Their formal qualifications range from none to a university diploma, their occupational status from retired or unemployed to qualified employees in training institutions. No common standard exists of what constitutes a CVET teacher/trainer. Where continuing vocational training takes place in public-sector establishments (e.g. trade and technical schools, colleges), the training, employment and activities of the staff teaching in them are based on the criteria laid down in the relevant *Land* legislation for teaching staff.

8. MATCHING VET PROVISION (SKILLS) WITH LABOUR MARKET NEEDS

8.1. SYSTEMS AND MECHANISMS FOR THE ANTICIPATION OF SKILL NEEDS

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*, <http://www.bmbf.de/pub/buendnar.pdf>) and implemented within the subsequent initiative for the early identification of skills needs launched by the Federal Ministry of Education and Research (*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*). The aim of *FreQueNz* is the timely identification of future skills needs and their evaluation in respect of their impact on VET. The emphasis is on recording changes in the market to enable a more rapid reaction to occupational skills trends. The task is to use these requirements to derive or develop models for future skills and occupational profiles.

At the Federal Institute for Vocational Education and Training (*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.gube-projekt.de; accessed: 19.09.2011)

- 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 non-training 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 database 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 (Scharlowsky, 2007). When renewing training regulations in the dual VET system, due to changed qualification demands, experts from the social partners form working groups. 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.

8.2. PRACTICES TO MATCH VET PROVISION WITH SKILL NEEDS

Close cooperation between the social partners (employers' organisations, trade unions and employee's organisations) and the government is more or less a core element of the German VET system. Social dialogue and co-determination are vitally important means of ensuring the acceptance of reforms in the VET sector.

For in-company training, the vocational competences to be acquired are laid down in a training regulation. For teaching in vocational schools, there is a framework curriculum drawn up in line with the training regulation for every recognised training occupation. In view of the speed of technological and organisational change, many training regulations are revised every few years.

As a rule, the initiative for updating the occupational profile of a training occupation or for developing an entirely new occupation comes from trade associations, employers' associations, trade unions or the Federal Institute for Vocational Education and Training (*BIBB*). As a first step, the parameters of the vocational training regulation (*bildungspolitische Eckwerte*) are defined during an "application meeting" at the competent ministry (usually the Federal Ministry of Economics and Technology).

After hearing from all parties involved, the competent federal ministry decides in consultation with the *Länder* governments whether to proceed. In many cases, the *BIBB* issues an advisory opinion or, particularly when larger-scale revisions are being considered, conducts a research project before the ministry takes its decision. During the drafting and coordination phase, the training regulations (for firms providing in-house vocational training) and framework curriculum (for vocational schools) are drafted for the particular occupational profile and coordinated with one another.

The *BIBB* asks the employers' associations and trade unions to designate experts who, acting as experts on behalf of the Federal Government (representatives of actual in-house vocational training practice), then develop new training regulations or revise existing training regulations together with the Institute. Proceeding in concert with the work done by the Federal Government's experts, the *Länder* experts develop a draft curriculum for instruction held 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 in line with one another.

Once the two have been coordinated with one another, the draft training regulations are forwarded to the Main Board (*Hauptausschuss*) of the *BIBB* for its comments. When the Main Board issues a positive position on the draft regulations, its statement also serves as the recommendation to the Federal Government to "issue" the particular vocational training regulations in the submitted form. The "Federal-*Länder* Coordination Committee for Vocational Training Regulations / Framework Curricula" eventually approves the new vocational training regulations and the framework curriculum that has been coordinated with it.

The competent ministry in conjunction with the Federal Ministry of Education and Research (*BMBF*) subsequently issues the training regulations and publishes them in the Federal Gazette. The date that a new set of regulations goes into force is usually the start of the next training year - in Germany, 1 August. They are also published together with the respective framework curricula and training profiles in the Federal Gazette.

On 2.8.2010 there were a total of 349 state-recognised training occupations (*BIBB* 2010b, p.5). Between 1996 and 2010 alone, 82 new training occupations were developed and 230 were modernised (*BIBB* 2010b, p.5).

The preparation and issuing of advanced training regulations for advanced vocational qualifications is carried out by the Federal Government. The procedure is in principle the same as for initial dual training regulations without the development and co-ordination of the school curriculum.

From the very outset, in the testing of innovative approaches for the continuing development of VET practice, the companies are active partners. **Pilot projects** interact between the three reference systems of VET practice, VET research and VET policy (cf. BMBF 2008b, p. 149). On the one hand this creates a need to balance divergent requirements, but on the other hand, it enables innovative approaches and ideas to be developed cooperatively and structurally embedded in the three reference systems. Pilot projects place value on the organisation of VET practice, meaning that key approaches to content which originate in practice can also be developed and tested. In this way, ideas for innovative pilot project concepts generally come from actors in VET, i.e. from companies, training providers or from regional partners wishing to cooperate in piloting innovative approaches for a region or sector, whether as a contribution to high-quality IVET provision, to attractive careers in recognised occupations, or to other promising developments. For an overview on single pilot projects and pilot project series carried out by the Federal Institute for Vocational Education and Training (BIBB) see <http://www.bibb.de/en/1233.htm> (accessed: 19.09.2010).

9. LIFELONG GUIDANCE FOR LIFELONG LEARNING AND SUSTAINABLE EMPLOYMENT

9.1. STRATEGY AND PROVISION

STRATEGY

Guidance and counselling provision in Germany is embedded both in the overall employment strategy as well as in the educational sector and the lifelong learning strategy. Whereas there is a long tradition of guidance and counselling in German labour market policy as part of the legal responsibility of the Public Employment Service the issue of lifelong learning and lifelong and life wide guidance and counselling has only recently become a high level topic on the political agenda (BLK 2004) enhanced by European Lisbon strategy and its follow-up policy (Council Resolutions in 2004 and 2008, Bordeaux Communiqué 2008). Recent EU 2020 strategy and the Bruges Communiqué endorsed the important role of information, advice and guidance services for the achievement of the EU 2020 and the E&T 2020 goals (Council of Europe 2010).

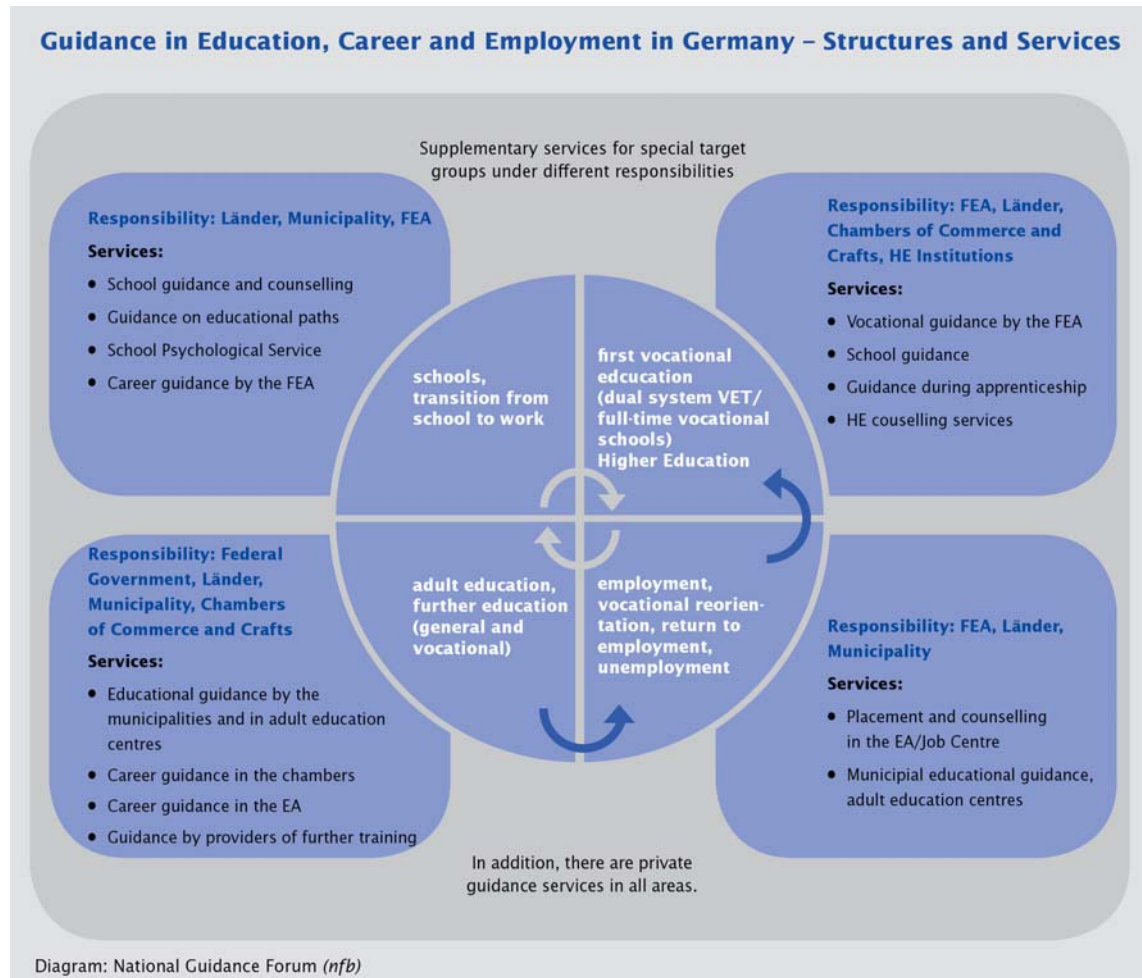
According to Germany's constitution and its federal structure with split up responsibilities between the Federal Government, the regional governments (16 Länder) and the local municipalities and furthermore between education, labour and youth ministries guidance provision and guidance policies is also split up between these sectors. Although there are several institutional links and cooperation agreements between labour market and educational policy with respect to guidance and counselling there is so far no coherent cross-sectoral national lifelong guidance strategy. Länder have responsibility for the educational sector (schools and universities), the Federal Government is responsible for vocational training and continuous vocational education and training (VET and CVET) as well as for labour market policy. Responsibility for youth and social welfare lies with the Federal Youth Ministry and the municipalities. Accordingly the responsibility for career guidance and counselling is also split between Federal Government, Federal Public Employment Service, Länder and municipalities (nfb 2011a). Therefore, coordination and cooperation between guidance sectors and service providers and a coherent and cross sectoral lifelong guidance strategy for a comprehensive, transparent, easily accessible and user friendly service for all citizens remain challenges for future policy development in this area. These issues were endorsed by a high level consulting board of experts to the Federal Minister of Education who submitted recommendations on lifelong learning and related guidance and counselling issues (Empfehlungen des Innovationskreises Weiterbildung; BMBF 2008). The Federal Government's "Concept for Lifelong Learning" includes a number of measures for the enhancement of educational guidance, such as improved transparency, better access to services, improved quality of services and continuous further training for guidance professionals (<http://www.bmbf.de/de/lebenslangeslernen.php>).

The following programs and activities of the Federal Ministry of Education and Research were launched to meet these issues:

- A program for funding further training of employed persons which includes compulsory provision of information and advice for applicants of this grant (Bildungsprämie). In 2009 and 2010 more than 50.000 employed persons benefited from the program. The grant for participants in the program was raised to 500 €/month.
- A follow-up program to the former “learning regions”- program was initiated to enhance local cooperation and management of educational and training provision: “Lernen vor Ort” (“local learning”). The program includes the development of guidance services and better cooperation of existing services at local levels. So far a total of 40 municipalities are involved in the program.
- The conceptual phase for the development for an “Educational Guidance Service Telephone and Internet Portal”, commissioned by the Federal Ministry of Education and Research, started in 2009. The aim is a nationwide easily accessible service to support citizens looking for further education and training and career guidance.
- The development and later implementation of commonly agreed quality standards for career guidance services including a competence profile for guidance professionals is the aim of a project which is funded by the Federal Ministry of Education and Research. By means of an “open process of coordination” involving guidance and counselling providers, practitioners, users, scientists, policy makers, social partners, and other stakeholders, quality standards and a quality development framework will be defined.
- Since 2007 Germany participates in the European Lifelong Guidance Policy Network (ELGPN 2010; <http://www.elgpn.eu>). (ELGPN 2010). Cooperative work, study visits and peer learning activities are carried out in four major areas: improving career management skills (cms), improving access to guidance services, quality assurance and evidence base for policy and systems development, strengthening coordination and cooperation mechanisms at national, regional, and local level. The tools which are developed and tested in the ELGPN will serve Germany as a blueprint for common quality criteria and for measuring the outcomes and impact of career guidance.

SERVICE PROVISION

The following graph gives an overview of service provision for career guidance in the different sectors: school - transition school to VET - higher education - employment/unemployment/vocational re-orientation - adult education/CVET:



Source: Nationales Forum Beratung in Bildung, Beruf und Beschäftigung, *Career Guidance in the Life Course. Structures and Services in Germany*, Berlin 2011a.

- Since the 1920's vocational guidance and counselling for youth and adults is a legal obligation of the German Public Employment Service and its local employment agencies (Bundesagentur für Arbeit - BA). Until 1998 the state monopoly ensured that no one else except the BA was allowed to provide guidance and counselling for young people in the phase of transition from school to work ("Berufsberatung"). Guidance and counselling for adults is also provided by the BA although in this area multiple providers, in particular further training institutions, some municipalities as well as non-profit organisations, and private career counselling practitioners offer guidance and counselling services. With the abolishment of the state monopoly the private and semi-private market grew considerably - partly because the market was not regulated by requirements concerning the qualification of staff or any other quality standards despite some minor regulations concerning the financial situation and the practical facilities of the provider (Social Code III, § 289).

- The BA however is still the largest and most important provider of guidance and counselling services in Germany (<http://www.arbeitsagentur.de>). It provides service for annually around 2 million students and school leavers and of course for all registered unemployed (2010: 9, 19 million new entrants) including service for long term unemployed by the Job Centers under the legislation of Social Code II).
- Guidance and counselling services in the educational sector mainly focus on career education, advice on educational career paths or individual learning difficulties. The service varies between regions and schools. Following a formal agreement between the Standing Conference of Educational Ministers of the Länder (KMK) and the Public Employment Service (BA) there is a close cooperation between school career education and the career guidance service of the local employment agencies (KMK/BA 2004).
- Very recently career education, work preparation and initiatives to ease the transition from school to work have been paid much attention to due to the high unemployment risk of school drop outs and students with poor performance. Programs like "Educational Chains" ("Bildungsketten") and "Job Start Coaches" ("Berufseinstiegsbegleiter") provide for students at risk individual support for the transition from school to vocational training and work. Another program called "Regional Transition Management" (Regionales Übergangsmanagement) is in particular focused on placement activities for less able school leavers into apprenticeship places matching the demand of enterprises and school leavers in order to provide training opportunities for all school leavers.
- In addition to the regular student counselling services more and more Universities have established career services in order to facilitate the transition from academic education to the labour market.
- Some large municipalities began to establish educational guidance services in the 1980's - independent from the guidance provision of the BA and private training providers to ensure independent and high quality service delivery for citizens who are aiming for further education (Kommunale Bildungsberatung). Due to financial restrictions many of them had to close down so that at the end of the 20th century there was more or less a lack of independent guidance provision especially for adults and employed persons aiming for further education and training.
- In order to implement and support a lifelong learning strategy the Federal Ministry of Education and Research launched a government program in 2001, called "Learning Regions Network" (<http://www.lernende-regionen.info>). With funding from the Ministry local and regional networks were established in order to initiate regional lifelong learning and employment strategies including guidance and counselling provision. Training providers, employment agencies, chambers of commerce, enterprises, local schools and municipalities, trade unions, as well as other local actors and stakeholders participated in the networks, and guidance services were in most cases an integral part of them. The funding period ended in 2007. By that time at least half of the local networks had succeeded in receiving stable funding from either the municipality or from the Federal State (Land).
- The follow-up program "Local Learning" (Lernen vor Ort) is designed to support municipalities in their efforts to establish efficient education management systems including educational monitoring and educational guidance. Under the guidelines and funding of this program many municipal career guidance services could be established or were able to maintain their service.

- In addition to these comprehensive all-age-guidance services there are numerous special services for persons with disabilities, for persons with migrant background, and for disadvantaged youth, but also special guidance services for women entering or reentering the labour market. These services are often carried out by non-profit organizations, funded by either Federal and Länder Ministries or the PES. Many of them work however on a temporary financial basis and they are not always well connected to other main stream guidance services.

A study on guidance provision in Germany commissioned by the Federal Education Ministry confirmed the highly fragmented and heterogeneous structure of guidance provision (BMBF 2007). With the recently taken government initiatives however a new phase of joint action in lifelong learning and lifelong guidance strategy has been started.

9.2 TARGET GROUPS AND MODES OF DELIVERY

EMPLOYMENT AGENCIES (AGENTUREN FÜR ARBEIT)

As a core function of the Federal Public Employment Service (BA) career guidance (Berufsberatung) is available in every local employment agency to all citizens, irrespective of their age, educational status, and personal work-life circumstances (Social Code III §§ 29 pp). Employment agencies provide information and guidance for all issues related to career development, choosing an occupation, training or study course, and related to labour market issues. Career professionals in the BA apply a broad range of guidance and counselling techniques (including face-to-face and group counselling, diagnostic tools, online services, career fairs). Whereas the service for youths is quite comprehensive the service for adults is mainly focused on registered unemployed persons or those at risk of becoming unemployed with the aim of (re-)integrating them into employment. Due to restricted resources there is only a limited service for advice seeking adults who are not unemployed.

- Following the formal agreement between the Standing Conference of the Education Ministers of the Länder (KMK/BA 2004) employment agencies provide special career guidance and counselling for schools and students usually beginning in 8th grade. The guidance counsellors give lectures in schools on vocational choice, training opportunities and labour market perspectives. They offer individual career counselling either on school premises or invite students for more in depth interviews to the employment agency. For students aiming for apprenticeship training they offer individual placement services. For school leavers who do not yet meet the requirements for vocational training employment agencies offer work preparatory courses or other training measures.
- With joint funding from the BA and other institutions career orientation seminars, workshop and camps for school leavers are organized in collaboration with schools ("Vertiefte Berufsorientierung") in order to improve their career management skills.
- Since 2008 a new programme provides BA-funding for special "career start coaches" for students at risk. This programme has been enlarged in 2010 by the Federal Ministry of Education and Research. The aim is to prevent early school dropout and facilitate the transition from school to VET by early intervention (e.g. assessments, portfolios, action plans; BMBF 2010).
- For students in higher education the Federal Employment Agency maintains special "higher education teams" on the sites of larger universities, to provide guidance for students and to support graduates finding their first employment.

- Specialized guidance professionals in the Employment Agencies provide guidance and counselling of customers with disabilities to support their vocational rehabilitation in cooperation with the “Professional Integration Service” (Integrationsfachdienste) which was established under Social Code IX in 2001.
- The Employment Agencies also offer consulting services for employers and enterprises on skills development, recruitment and placement services (Arbeitgeberservice).
- Each local Employment Agency has a Career Information Centre (Berufsinformationszentrum - BIZ) where individuals as well as school classes and other groups can get career information, participate in career fairs and other career related events. A large “Mediothek” including print and digital media, videos, self assessment tools and internet access provides a wide variety of career information for juvenile and adult users.
- The International Placement Service (Zentrale Auslands- und Fachvermittlung - ZAV) of the Federal Employment Agency offers information and advice on training, studying and working abroad, consultancy and placement services in order to facilitate international and European mobility. There are 12 regional teams of EURES and Euroguidance advisors and a centralized European Employers' Service.

SCHOOLS

Career education is an established element of curricula in schools for general education. It is embedded in different school subjects such as “work preparation” (Arbeitslehre), “economic and social affairs” (Wirtschaft und Sozialkunde), home economics, engineering, polytechnic education etc. Career education in class is normally supported by a career counsellor of the local employment Agency and supplemented, in classes 8, 9, or 10 by visits to the Career Information Centre, to enterprises, and by compulsory periods of work experience in enterprises lasting from one to three weeks.

In addition to the mainstream career education in schools the Länder governments have launched special programs and funding for additional efforts to improve career management skills and career development of their students. These however are numerous and cannot be listed here (INBAS/DJI 2010). Additional funding from the Federal Government and/or from the BA as well as from private enterprises, foundations or employers' associations enables schools to carry out multiple guidance activities.

INTER-COMPANY VOCATIONAL TRAINING FACILITIES

Early, practice-oriented, systematic vocational guidance is being provided at inter-company vocational training centres (überbetriebliche Berufsbildungsstätten - ÜBS) and similar vocational training facilities to make the transition from school to 'dual' vocational training easier for pupils at schools offering a general school-leaving certificate. The BMBF is flanking this process within the scope of its public mandate for education by financially supporting these centres to fulfill this new task of occupation-specific vocational guidance. The program is in operation since 2008 and has been enlarged in 2010 from 15 million Euros in 2008 up to 50 million Euros in 2010. So far almost 100.000 secondary school students had the opportunity to participate in the program. These vocational guidance measures give young people the opportunity to spend two weeks at a vocational training facility gaining practical experience in three occupation-specific workshops. A sustainable improvement of school-to-work-transition management should be the outcome (<http://www.bibb.de/berufsorientierung>).

INSTITUTIONS OF HIGHER EDUCATION

Under the different laws of the Länder on Higher Education, Higher Education Institutions (HEI) are obliged to give advice to students and course applicants on course options, and to provide them with support throughout their courses including psycho-therapeutic counselling. The student counselling services are also required to cooperate with other relevant institutions (e.g. local Employment Agency, employers' organisations, state examination offices). Most HEI have set up career service centres on their own or in cooperation with relevant stakeholders. Alongside with the Bologna process guidance and counselling activities are a necessary requirement for accomplishing accreditation.

SOCIAL PARTNERS AND ENTERPRISES

Employers' organisations, chambers, trade unions and individual enterprises have been involved in different forms of vocational and career guidance for a long time. They participate in career and CVET fairs, exchange programmes, internship programs etc. They are increasingly involved in cooperative school projects which aim at improving students' knowledge about the world of work and supporting school-to-work-transition by career guidance (DIHK 2008; DIHK 2009).

Chambers of industry and commerce and chambers of crafts have a legal responsibility to offer guidance services for enterprises, training establishments, apprentices and employees on initial and further training (Ausbildungsberatung, Weiterbildungsberatung; www.dihk-berlin.de; www.zdh.de).

Some trade unions started to train shops stewards as CVET-Coaches or as "learning mentors" for employees - a service designed to motivate employees and employers to get engaged in further training and skill development (<http://www.learningmentor.eu>).

SPECIALISED GUIDANCE AND COUNSELLING SERVICES FOR YOUNG MIGRANTS AND DISADVANTAGED YOUTH

In addition to the service of the employment agencies and schools a variety of specialized services for young people at risk have been established by local authorities financed by the Federal Ministry of Youth:

- Young Migrants Service (Jugendmigrationsdienste; www.jugendmigrationsdienste.de)
- Competence Agencies for disadvantaged youngsters (Kompetenzagenturen; www.kompetenzagenturen.de).

Service providers are either municipalities or non-profit organizations. Guidance and counselling for these specific target groups is part of their responsibility in addition to a comprehensive case management dealing with the multiple problems of youth regarding their social and vocational integration.

PRIVATE SUPPLIERS

The private market has grown since the abolishment of the state monopoly for career guidance in 1998. But there is no information about the number of private service providers. Private providers operate on a commercial basis and offer career guidance and counselling for those customers who can afford the often costly service. Sometimes local Employment Agencies or other public authorities contract private career services for guidance provision.

INTERNET / ONLINE SERVICES

Internet services have increased considerably over the past 15 years and gained importance in providing easy access to career information and guidance. The Federal Employment Agency (BA) is the largest provider of career guidance online portals supplemented by a number of online portals in the educational and HE sector and by a variety of regional and local or private providers. Schools, HEI and Employment Agencies offer free access to internet services.

Selected nationwide online portals for career guidance:

- The German Education Server (Deutscher Bildungsserver) <http://www.bildungsserver.de>
- InfoWeb for Continuing Education (InfoWeb Weiterbildung) <http://www.iwwb.de>
- "Hochschulkompass" provided by the "German Rectors Conference" (Hochschulrektorenkonferenz) - a comprehensive online portal on academic education and university courses: www.hochschulkompass.de.
- For students with entrance certificate for higher education the Federal Employment Agency (BA) provides two online portals: <http://www.studienwahl.de> and <http://www.berufswahl.de> (in cooperation with the Federal States (Länder) and the portal "abi-Magazin": <http://www.abi.de/>
- Online job exchange (Jobbörse) which includes online self assessment tools, online application tools and a matching program for applicants and vacancies (<http://jobboerse.arbeitsagentur.de/>);
- BERUFEnet, a comprehensive database of occupational descriptions, career and labour market information (<http://berufenet.arbeitsagentur.de> and <http://berufe.tv>);
- KURSnet, a comprehensive database on educational and training opportunities (<http://kursnet.arbeitsagentur.de>);
- "planet-beruf", a career choice program for lower secondary school students, teachers and parents including in depth occupational and training information, self assessment tools, portfolios etc. (<http://www.planet-beruf.de/>);

The conceptual phase for a nationwide "Educational Guidance Service Telephone and Internet Portal" has started in 2009 and is still under construction.

9.3 GUIDANCE AND COUNSELLING PERSONNEL

One consequence of the long lasting state monopoly for career guidance is the absence of any legislation or regulations on requirements for the professional qualification of guidance practitioners.

The Federal Employment Agency (BA) defined the qualification requirements for its own staff. Since 1979 the BA runs a University of Applied Labour Studies in Mannheim (Hochschule der Bundesagentur für Arbeit - HdBA), a state recognized HEI which offers two study programs leading to a Bachelor's degree: The "Labor Market Management Program" prepares students for work in Employment Agencies in the areas of placement and integration, maintenance of benefits and management of resources. The "Career Guidance and Case Management Program" prepares students for work in career guidance and orientation, as well as work concerning career related case management.

During their 3 years of studies, students are employees of the Bundesagentur für Arbeit. Four periods of work experience with relevance to the final examination are spent in various parts of the employment Agencies and form an integral element of the program (<http://www.hdba.de>).

The qualification of school teachers with responsibility for guidance varies between the 16 Länder considerably. Teachers responsible for guidance activities usually get additional further training related to guidance and counselling. School psychologists responsible for psychosocial counselling usually have a Master's degree in Psychology - in some of the Länder a teachers exam is required (KMK 2010).

Student counsellors at HEI or in the Career Services of Universities have an academic degree usually on a Master's level but there are no compulsory additional requirements.

Some universities offer a master programme in career guidance and counselling (for example the University of Heidelberg: <http://www.beratungswissenschaft.de>).

Beside these academic courses there are numerous non academic training programs for guidance practitioners. Among these the course program of the "Regional Qualification Centres (RQZ)" is best known and frequently used by practitioners. The program consists of five training modules and leads to a non-state recognized certificate "Educational Guidance and Competence Development" (<http://www.bildungsberatung-verbund.de>).

A career guidance register (BerufsBeratungsRegister - BBR) (<http://www.bbregister.de>) launched in 2001 by the German Association for Educational and Careers Guidance (dvg) is designed to assure transparency over the market and the quality of service provided. Career professionals and providers can apply to be included in this register if they can prove sufficient competences and experience. They submit themselves to both national and international quality standards, including for example the ethical standards of the International Association for Educational and Vocational Guidance (<http://www.iaevg.org>). Every four years the register is reviewed to check if the registered professionals fulfill the criteria and can continue to be recommended. So far the BBRegister seems to have a limited scope regarding the small number (68) of registered persons/institutions.

The improvement of quality and professionalism in career guidance and counselling on the basis of commonly agreed quality standards and a competence profile for guidance practitioners is a major challenge for further development in career guidance. This however needs a broad consensus between all relevant actors and stakeholders, policy makers and practitioners. The German National Guidance Forum and the University of Heidelberg have initiated an "open process of coordination" with funding from the Federal Ministry of Education and Research in order to develop commonly agreed and shared standards for quality and professionalism in career guidance (nfb 2011b) First results will be obtained in 2012.

10. FINANCING - INVESTMENT IN HUMAN RESOURCES

In Germany, financing of vocational training and continuing training is based on a system of mixed financing with a variety of different backers, both public and private. They include the Federal Ministry of Education and Research (*BMBF*), the Federal Ministry of Economics and Technology (*BMWi*), Federal Ministry of Labour and Social Affairs (*BMAS*), the Federal Employment Agency (*BA*), the *Länder*, the *Land* Ministries of Employment, Economics, Education or Cultural Affairs, the European Union, local authorities, companies, unions, Chambers, associations, private institutions and, lastly, individuals themselves. In this respect, the financing system of IVET and continuing general and vocational education differs quite substantially from that of the schools and universities sector, which benefits from relatively comprehensive public funding.

10.1 POLICY BACKGROUND FOR VET FINANCING

Rather than a shortage of apprenticeship places, demographic change is now causing a shortage of applicants in some sectors and regions. At the same time, however, a considerable number of applicants remain who do not immediately succeed in making the transition from school into IVET. These include the group of unplaced applicants from previous years, as well as young people from migrant backgrounds, disadvantaged individuals, and young people with learning difficulties or other disabilities. Accordingly, the German Federal Government has expanded support measures in these areas. Key among these is the new BMBF initiative "Completion and transition - education chains leading to vocational qualifications" (see section 2.1); several programmes promoting vocational orientation at an early stage in general schooling, guidance at the thresholds between school and IVET and between IVET and the labour market, and second-chance qualifications are also being supported.

Measures already introduced in previous years to modernise vocational education were adjusted and taken forward in 2010, and are now more integrated and coordinated. See the relevant sections for details of the individual measures.

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.

CONTINUING EDUCATION GRANT

The continuing training of skilled workers is a further essential component of lifelong learning. To raise participation in lifelong learning, the German Federal Government approved a model for continuing training savings, the "Continuing education grant" (*Bildungsprämie*), in April 2008. The continuing education grant is particularly intended to mobilise participation in CVET by low and middle income groups. The model is scheduled for introduction in October 2008 and will run for an initial three-year period without regional limitation.

10.2 FUNDING FOR INITIAL VOCATIONAL EDUCATION AND TRAINING

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

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

Expenditure on public schools per pupil in 2008 was EUR 5,100 (2007: EUR 5,000) on average. As the Federal Statistical Office (Destatis) also found, spending on pupils in general educational schools was around EUR 5,600 per head compared with EUR 3,500 in vocational schools; for the (part-time) vocational schools in the dual system, the average was EUR 2,200.

(Source: Destatis,

http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Presse/pm/2011/04/PD11_163_211_templateId=renderPrint.psml)

The way in which Tertiary Education and Research Programmes is funded means that the highest pro-capita spend of the federal states is in the tertiary sector. The following table (10a) presents an overall view of annual expenditure on educational institutions per student for all services in 2007. See Table 10B for expenditure on public schools for the budget year 2010, in EUR per student by school type and Land.

Table10a: Annual expenditure on educational institutions per student for all services (2007) In equivalent USD converted using PPPs for GDP, by level of education, based on full-time equivalents.

TABLE10A: ANNUAL EXPENDITURE ON EDUCATIONAL INSTITUTIONS PER STUDENT FOR ALL SERVICES (2007)										
	PRE-PRIMARY EDUCATION (FOR CHILDREN 3 YEARS AND OLDER)	PRIMARY EDUCATION	LOWER SECONDARY EDUCATION	UPPER SECONDARY EDUCATION	ALL SECONDARY EDUCATION	POST-SECONDARY NON-TERTIARY EDUCATION	TERTIARY-TYPE B EDUCATION	TERTIARY-TYPE A & ADVANCED RESEARCH PROGRAMMES	ALL TERTIARY EDUCATION	PRIMARY TO TERTIARY EDUCATION
DE	6,119	5,584	6,851	9,557	7,841	8,600	7,394	14,852	13,823	8,786
OECD AVERAGE	5,260	6,437	7,544	8,486	8,006	4,592		~	12,336	7,840

Source: OECD; Education at a Glance 2010; Date of extraction: 08.09.2011

Link to data: http://www.oecd.org/document/52/0,3746,en_2649_39263238_45897844_1_1_1_1,00.html

Inter-company vocational training centres (*überbetriebliche Berufsbildungsstätten - ÜBS*), in which supplementary instruction of trainees takes place on behalf of SMEs, are funded by mixed financing - subsidies from the Federal Agency for Employment, central government (capital grants from *BMBF* resources) and the *Länder* are added to the resources of the body responsible.

The financing of coherent training structures (*Ausbildungsverbünde*) depends on their organisational form. In the "lead enterprise with partner enterprises" model, the lead enterprise normally finances remuneration of training, while the partner enterprises bear the personnel, plant and equipment costs that arise in their area of responsibility. In the "training to order" model, in principle each party to the contract can provide training services against reimbursement of costs, but in practice SMEs usually finance the training services contracted out to a large enterprise with a training workshop.

The Federal Employment Agency (BA) is also involved in financing training. In certain cases it gives young people a grant for vocational training or for pre-vocational training measures.

TABLE 10B: FINANCING OF VOCATIONAL TRAINING 2010		
FINANCING BODIES	EXPENDITURE (IN EUR BILLIONS)	
	2009	2010
PUBLIC BODIES (FEDERATION, LÄNDER, REGIONS)		
PART-TIME VOCATIONAL SCHOOLS (DUAL SYSTEM)	3,1	3,1
FULL-TIME VOCATIONAL SCHOOLS	2.25	2.27
OTHER SCHOOL TYPES PROVIDING VET (E.G. ONE-YEAR BASIC VOCATIONAL TRAINING, PREVOCATIONAL TRAINING YEAR)	1.76	1.81
INTER-COMPANY VET CENTRES (<i>ÜBS</i>)	0.05	0.04
FEDERAL AGENCY FOR EMPLOYMENT (BA)	4	4

Source: BIBB 2011, p. 257.

The VET-related expenditure of the Federal Employment Agency (BA) applies to prevocational training as well as IVET. The data do not include the sums spent on promoting integration at the second threshold, i.e. the transition from IVET into the labour market, since these are classified as an employment policy measure.

The contribution from public funding is complemented by the contribution of training firms in the private sector and public services. Their expenditures are traditionally estimated by the Federal Institute for Vocational Education and Training (BIBB). According to the newest calculations, which are based on a representative study for the year 2007 (the next it is planned for 2012), the gross costs, i.e. the cost of initial vocational training without regard to the returns from training, amounted to around €23.8 billion. Companies' net costs of IVET in the dual system were around EUR 5.6 billion, which means that net costs have fallen drastically since the last study. This can be attributed to the more productive deployment of apprentices in companies. (Source: BIBB 2011, p. 259)

10.3 FUNDING FOR CONTINUING VOCATIONAL EDUCATION AND TRAINING, AND ADULT LEARNING

Enterprises, the State, the Federal Agency for Employment and private individuals themselves are involved in financing continuing vocational education and training (CVET).

Individuals use mainly direct sources of funding for continuing vocational training such as recourse to current income, advances on future income (credit, loans) and transfer of capital (savings or inheritances). Furthermore, individuals can claim tax relief when they are liable to pay tax on income and are acquiring qualifications for a new occupation (special expenses) or are undergoing further training in their present occupation (income-related expenses).

10.3.1 PUBLIC FUNDING SCHEMES AND MECHANISMS TO FINANCE CVET

According to international comparisons, the rate of participation in continuing education measures in Germany is relatively low. To increase the continuing education participation rate, particularly in occupation-related measures, not only have existing funding instruments been extended in the recent past - for instance the Career Advancement Training Promotion Act (*Aufstiegsfortbildungsförderungsgesetz*, AFBG, also referred to as the "Meister-Bafög") - but new forms of assistance have been introduced. Examples at Federal Government level are the "Continuing education grant" (*Bildungsprämie*) of the BMBF and the "Social partners guideline" (*Sozialpartnerrichtlinie*) of the Federal Ministry of Labour and Social Affairs (BMAS) and, at Land level, North Rhine Westphalia's "Education cheque NRW". With the "Continuing vocational education and training for low-qualified and older workers in companies" (WeGebAU) initiative, the Federal Employment Agency has also expanded its support for people in employment (see 2.1 and 6.3).

TABLE 10C: CONCENTRATION OF RESOURCES FOR THE LARGEST ASSISTANCE PROGRAMMES

Programme title	Responsible:	EUR millions
Support for CVET	BA	2,181.4
Career Advancement Training Promotion Act	BMBF	456.0
CVET for low-qualified and older workers in companies (WeGebAU)	BA	256.0
Occupation-specific language training for people from migrant backgrounds	BMAS	42.0
ESF co-financed training provision for recipients of short-time working benefits	BA	34.7
Training of unemployed individuals without a (recognisable) vocational qualification	SMWA, Saxony	29.0
Vocational training programme for the highly talented	BMBF	28.0
Promotion of inter-company training centres and their further development into competence centres	BMWi	24.5
NRW education cheques	MAGS, NRW	17.5

Explanatory notes: BA - Federal Employment Agency; BMBF - Federal Ministry of Education and Research; BMAS - Federal Ministry of Labour and Social Affairs; SMWA - Saxonian State Ministry for Economics, Labour and Transport; BMWi - Federal Ministry of Economics and Technology; MAGS NRW - Ministry for Labour, Integration and Social Affairs, North Rhine-Westphalia
Source: Koscheck et al. 2011.

In a few cases, the funds made available at national level are co-financed by the European Social Fund (ESF). Depending on the relevant objective area, the rate of co-financing is between 50% and 75%

EXPLANATORY INFORMATION ON SOME OF THE PROGRAMMES:

Vocational Training Programme for the Highly Talented (*Begabtenförderung Berufliche Bildung*) and the Career Advancement Training Promotion Act (AFBG, known as "Meister-Bafög"). Meister-BAföG forms an element of the training initiative to provide support in obtaining a master craftsman qualification. It takes the form of a loan. If the advanced training is passed, a rebate of 25% of this loan is granted.

The government's continuing training support is not restricted to those in short-time work (see Theme 3). It also provides support for those in full-time work who wish to pursue continuing training. The "WeGebAU" Continuing Training Programme, previously only available to the low skilled and to older employees, has now been opened up to all those in employment. The only restriction is that at least four years must have passed since a person's last initial or continuing training course.

The Bundesagentur für Arbeit (Federal Employment Agency) is also making training grants available from its budgets to assist in the re-employment of people in temporary employment. Both employers and employees may approach the Bundesagentur für Arbeit and request payment of costs for training measures. If such an application is justified, the Bundesagentur für Arbeit issues "*Bildungsgutscheine*" (training vouchers). The "*Bildungsgutschein*" is particularly intended to mobilise participation in CVET by unemployed people. It is available from January 2003 as a new form of CVET assistance with flanking guidance services. (See 6.5).

Additionally there are two forms of subsidies implemented in order to enhance the participation rate in CVET and lifelong learning:

In 2008 the Federal Cabinet passed a continuing education and training savings model "*Bildungsprämie*". Its purpose is to make it easier for just about everyone to pay for continuing education and training, and to mobilise groups in the population to take up training opportunities who were otherwise hindered by lack of money from improving their individual labour market prospects.

TABLE 10D: FINANCIAL RESOURCES FOR THE PROMOTION OF CVET

Programme type	Total				Federal Government/EU				German Länder			
	N	in %	EUR mill.	in %	N	in %	EUR mill.	in %	N	in %	EUR mill.	in %
Measures	66	75.9	3,202	97.6	12	57.1	3,026	98.5	54	81.8	176	84.1
Individuals	12	13.8	2,686	81.9	5	23.8	2,676	87.1	7	10.6	9	4.4
Companies	8	9.2	52	1.6	2	9.5	45	1.5	6	9.1	6	3.1
Institutions	33	37.9	161	4.9	4	19.0	48	1.6	29	43.9	113	53.9
Various	13	14.9	303	9.2	1	4.8	256	8.3	12	18.2	47	22.7
Advisory	1	1.1	3	0.1	0	0.0	0	0.0	1	1.5	3	1.6
Infrastructure	3	3.4	25	0.8	1	4.8	25	0.8	2	3.0	0	0.2
Improving structures Professionalisation	9	10.3	20	0.6	4	19.0	15	0.5	5	7.6	5	2.2
Universal programmes	1	1.1	6	0.2	0	0.0	0	0.0	1	1.5	6	3.0
Other	7	8.0	24	0.7	4	19.0	6	0.2	3	4.5	19	8.9
Σ	87	100.0	3,280	100.0	21	100.0	3,071	100.0	66	100.0	209	100.0

Source: Koscheck et al. (2010) p. 27.

10.3.2 PUBLIC-PRIVATE COST-SHARING

In 2009 more or less all German continuing education providers received their revenues from five sources of finance: participants/self-funding learners, companies, employment agencies, public bodies (municipalities, Länder, the Federal Government, EU) or the establishment's private-sector sponsors. Provider funding is frequently drawn from several of these sources.

The most important source of finance for continuing education providers is from participants, or self-funding learners, themselves. 28% of continuing education providers receive over 50% of their revenue from this group, 22% from companies, 18% from employment agencies, 15% from public bodies and 5% from private institutions. (Source: BIBB 2011, p. 317).

The provider structure has remained stable over the last few years. A survey carried out as part of the "continuing training monitor" or *wbmonitor*: <https://www.wbmonitor.de/> (in German; accessed: 21.09.2011) revealed that half of providers are private establishments (33% commercial, 13% public-benefit), 14% are community adult education centres. Business and industry establishments and establishments run by other major societal groupings (churches, parties, trade unions, associations, clubs, foundations) each account for 12%. Vocational schools and higher education establishments (including *Fachhochschulen*) account for 10% while other types of providers make up the last 5%. (Source: BIBB 2011, p. 316)

10.3.3 COLLECTIVE (EMPLOYER, EMPLOYEE) INVESTMENT TO FINANCE VET

Enterprises are responsible for financing the in-company training element - the individual enterprises decide independently whether and in what training occupations they will provide training, how many trainees they will take within the framework of the statutory provisions, and how much they will spend. In some sectors (e.g. the construction industry, the roofing trade), financing regulations have been collectively agreed whereby all enterprises pay into a joint fund (e.g. through giving a percentage of the total wage bill). The fund is used to reimburse enterprise expenditure on training. They finance CVET from sales revenues, interest income, income from leasing and direct State subsidies, from credits and loans in anticipation of future income and from transfer of retained earnings from previous periods. Tax relief in the form of tax reductions or mitigation of tax liabilities for enterprises showing a profit may subsidise in-company continuing training indirectly.

According to the findings of the CVTS III study from the year 2005, 54% of companies in Germany offered their employees continuing education courses, and as many as 66% offered other forms of continuing education. While companies in Germany only rank mid-table in Europe for the provision of continuing education courses, when it comes to the offer of other (non-course-based) continuing education, Germany is one of the top-ranking countries (second place in Europe after Austria). (Source: BIBB 2011, p. 302)

The Continuing Vocational Training Surveys (CVTS), referring to 1993 (CVTS I), 1999 (CVTS II) and 2005 (CVTS III), also provide data concerning the enterprises' expenditure on CVT courses for their employees. The *Table* shows the total costs of CVT courses as a proportion of total labour costs. Total expenditure on CVT courses is the sum of direct costs, labour costs of participants and balance of contributions to national or regional training funds and receipts from national or other funding arrangements. As in more than half of the participating countries, so also in Germany, the share of CVT courses in the total labour costs dropped between 1999 and 2005 (from 1.5% to 1.3%). Nevertheless, the gap between the German value and the EU average shrank from 0.8 percentage points in 1999 to 0.3 percentage points in 2005. The *Table* also shows that, as in almost all countries, small enterprises spend a lower proportion of their labour costs on CVT than large ones.

TABLE 10D: COST OF CVT COURSES AS % OF TOTAL LABOUR COST (ALL ENTERPRISES), 1999 AND 2005

staff	10-49	10-49	50 - 249	50 - 249	250 +	250 +	Total	Total
time	2005	1999	2005	1999	2005	1999	2005	1999
EU 27	1.1		1.4		1.9		1.6	
EU 25	1.1	1.5	1.4	2.4	1.9	2.4	1.6	2.2
DE	0.9	0.9	1.1	1.4	1.5	1.7	1.3	1.5

Source: Eurostat (CVTS2 and CVTS3); Date of extraction: 30.04.2010

Description: The indicator represents the cost of CVT courses as % of total labour cost. Calculations are related to all enterprises participating in the survey (staff 10+) regardless of having carried out CVT courses or not.

CVTS 2:

Link to data: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=trng_cost01s&lang=en

CVTS 3:

Link to data: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=trng_cvts3_54&lang=en

10.3.4 REACHING THE GROUPS AT RISK THROUGH FUNDING SCHEMES AND MECHANISMS

See 10.3.1

10.4 FUNDING FOR TRAINING FOR UNEMPLOYED

The Federal Employment Agency supports continuing training measures for unemployed people and for people at risk of unemployment. The budget is made up of employers' and employees' unemployment insurance contributions, grants from the Federal budget and other income.

Active labour market policy involves many state measures to prevent unemployment and promote employment.

In 2009, the overall expenditure of the Federal Employment Agency (BA) was EUR 48.06bn of which EUR 2.297bn was spent on supporting participation in continuing vocational education and training programmes (BA 2010).

Particular attention is given to support disadvantaged young people and young adults who, at the end of their compulsory education, are unlikely to find training places or jobs without specific help (see 6.3.).

There is still a statutory duty to provide individual and institutional support for the participation of disabled persons in working life (defined in the *Sozialgesetzbuch, SGB III*, as people whose prospects of participating in working life are fundamentally reduced on a permanent basis owing to the nature or severity of their disability). In 2001, a volume specifically covering the rehabilitation and participation of disabled persons was created in Volume 9 of the *Sozialgesetzbuch* (SGB IX) which summarises the statutory rules governing their benefit entitlement. The Support for the Training and Employment of Seriously Disabled Persons Act, which entered into force in April 2004, was aimed above all at improving training opportunities.

11. AUTHORS, SOURCES, BIBLIOGRAPHY, ACRONYMS AND ABBREVIATIONS

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11.2 SOURCES, REFERENCES AND WEBSITES

BA (2009) Damit Sie wissen, was wir tun. Die Leistungen der Berufsberatung, Nürnberg

BA (2007), Mit Rückenwind ins Berufsleben - Partner Berufsberatung, Nürnberg, Mai 2007:
http://www.pub.arbeitsagentur.de/hst/services/statistik/000100/html/sonder/schulabgaenger_05_06.pdf

Beicht, U.; Krekel, E.; Walden, G. (2006): *Berufliche Weiterbildung: welche Kosten und welchen Nutzen haben die Teilnehmenden?* Bielefeld: Bertelsmann. (Berichte zur beruflichen Bildung; 274).

Berger, K. (2006): Öffentliche Ausgaben zur Förderung der beruflichen Weiterbildung. In: *Kosten, Nutzen, Finanzierung beruflicher Weiterbildung: Ergebnisse der BIBB-Fachtagung vom 2. und 3. Juni 2005 in Bonn*. Bielefeld: Bertelsmann, p. 167-194.

Bernien, Maritta (1997): Anforderungen an eine qualitative und quantitative Darstellung der beruflichen Kompetenzentwicklung. In: Arbeitsgemeinschaft Qualifikations-Entwicklungs-Management (Hrsg.): *Kompetenzentwicklung '97. Berufliche Weiterbildung in der Transformation - Fakten und Visionen*. Münster, New York, München, Berlin, S. 17-84

BIBB Report 3/07 (2008): *More training companies - More training places - Less quality?*

Available online:

<http://www.bibb.de/en/32006.htm>, [cited 11.05.2009].

BIBB (2011): *Datenreport 2011*. Bonn: BIBB.

BIBB (2011a): *Die Anerkannten Ausbildungsberufe*. Bonn.

BIBB (2010): *Datenreport 2010*. Bonn: BIBB.

Available online: <http://datenreport.bibb.de/> [cited: 29.07.2010]

BIBB (2010b): *Modernisierte Ausbildungsberufe 2010: Kurzbeschreibungen*. Bonn: BIBB.

Available online:

http://www.bibb.de/dokumente/pdf/a41_NMA2010.pdf

BIBB (2009): *Datenreport 2009*. Bonn: BIBB.

Available online:

http://datenreport.bibb.de/media2009/datenreport_bbb_090525_screen.pdf

[cited: 29.05.2009].

BIBB (2009a): *Jahresbericht Projekt AusbildungPlus 2008/2009*. Bonn: BIBB.

Available online:

http://www.ausbildungplus.de/files/AusbPlus_inZahlen09.pdf

BIBB (2008a): *Jahresbericht Projekt AusbildungPlus 2008*. Bonn: BIBB.

BIBB (2008b): *Neue und modernisierte Ausbildungsberufe 2008: Kurzbeschreibungen*. Bonn: BIBB.

Available online:

http://www.bibb.de/dokumente/pdf/a41_neue_modernisierte_ausbildungsberufe-2008.pdf [cited 22.9.2008].

BIBB (2008c): *Schaubilder zur Berufsbildung: Strukturen und Entwicklungen in der dualen Berufsausbildung Deutschlands*. Ausgabe 2008. Bonn: BIBB.

Available online:

http://www.bibb.de/dokumente/pdf/a21_ausweitstat_schaubilder_heft-2008.pdf [cited 22.9.2008].

BIBB (2006): *Vocational training regulations and the process behind them*. 4th rev. ed. Bonn: BIBB.

Available online:

http://www.bibb.de/dokumente/pdf/a45_entstehung-von-ausbildungsordnungen_en.pdf [cited 22.9.2008].

BIBB/DIE, wbmonitor: "Die Landschaft der Weiterbildung 2007: reichliches Angebot in mildem Klima mit kleinen Tiefs", Bonn: BIBB/DIE.

Available online:

http://www.bibb.de/dokumente/pdf/wbmonitor_ergebnisse-anbieterforschung.pdf [cited: 27.04.09].

BLK (2004): *Strategie für Lebenslanges Lernen in der Bundesrepublik Deutschland*. Bonn: BLK. (Materialien zur Bildungsplanung und Forschungsförderung ; 115).

Available online:

<http://www.blk-bonn.de/papers/heft115.pdf> [cited 22.9.2008].

BLK (2004a): *Strategie für lebenslanges Lernen in der Bundesrepublik Deutschland*. Bonn: Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung.

Available online:

<http://www.blk-bonn.de/papers/heft116-II.pdf> [cited: 29.05.2009].

BA (2010): *Geschäftsbericht 2009*. Nürnberg: Bundesagentur für Arbeit.

Available online:

<http://www.arbeitsagentur.de/zentraler-Content/Veroeffentlichungen/Intern/Geschaeftsbericht-2009.pdf> [cited 15.07.2011].

BA (2009): *Geschäftsbericht 2008*. Nürnberg: Bundesagentur für Arbeit.

Available online:

<http://www.arbeitsagentur.de/zentralerContent/Veroeffentlichungen/Intern/Geschaeftsbericht-2008.pdf> [cited: 28.05.2009].

BA (2008a): *Der Ausbildungsmarkt in Deutschland - Jahresbilanz der Berufsberatung 2007/2008* Nürnberg: Bundesagentur für Arbeit.

Available online:

http://www.pub.arbeitsagentur.de/hst/services/statistik/000100/html/sonder/broschuer_e_bilanz_ausbildungsmarkt_2008.pdf [cited: 28.05.2009].

BA (2008b): *Zugänge an Arbeitslosen*. Nürnberg: Bundesagentur für Arbeit.

Available online:

<http://www.pub.arbeitsagentur.de/hst/services/statistik/detail/a.html> [cited: 29.05.2009].

BA (2007): *Arbeitsmarkt 2006*. Nürnberg: Bundesagentur für Arbeit. (Amtliche Nachrichten der Bundesagentur für Arbeit, 55. Jahrgang, Sondernummer 1). Nürnberg: Bundesagentur für Arbeit.

Available online:

http://www.pub.arbeitsamt.de/hst/services/statistik/000100/html/jahr/arbeitsmarkt_2006_gesamt.pdf [cited 22.9.2008].

BA (2007): *Mit Rückenwind ins Berufsleben - Partner Berufsberatung*. Nürnberg: Bundesagentur für Arbeit.

Available online:

http://www.pub.arbeitsagentur.de/hst/services/statistik/000100/html/sonder/schulabgaenger_05_06.pdf [cited: 29.05.2009].

BLK (2004): *Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung*. Strategie für lebenslanges Lernen in der Bundesrepublik Deutschland. Bonn: 2004.

Available online:

<http://www.blk-bonn.de/papers/heft116-II.pdf> [cited 15.07.2011].

BMAS (2009): *Einsatz für Arbeit*. Berlin: Bundesministerium für Arbeit und Soziales.

Available online:

http://www.fuereinlebenswertesland.bmas.de/sites/generator/29824/seitengeruest-infos_arbeitgeber.html#faq_frage_31166 [cited: 20.04.09].

BMBF (2011): *Berufsbildungsbericht 2011*: Bonn, Berlin: Bundesministerium für Bildung und Forschung.

Available online:

http://www.bmbf.de/pub/bbb_2011.pdf [cited 15.07.2011].

BMBF (2010): *Berufsbildungsbericht 2010*: Bonn, Berlin: Bundesministerium für Bildung und Forschung.

Available online:

http://www.bmbf.de/pub/bbb_2010.pdf [cited 29.07.2009].

BMBF (2010b): *Jugendlichen eine Perspektive geben*. Pressemitteilung 103/2010 vom 16. Juni 2010.

BMBF (2010c): *Perspektive Berufsabschluss*, 4. Ausgabe, Bonn.

Available online:

http://www.bmbf.de/pub/nl_perspektive_berufsabschluss_ausgabe_vier.pdf

BMBF/Autorengruppe Bildungsberichterstattung (2010d): Bildung in Deutschland 2010 - Ein indikatorengestützter Bericht mit einer Analyse zu Perspektiven des Bildungswesens im demografischen Wandel. Bielefeld.

BMBF/BIBB (2010): Ausbildung Plus in Zahlen, Trends und Analysen.

Available online:

http://www.ausbildungplus.de/files/aplus_2010_web.pdf [cited 22.08.2011].

BMBF (2009): *Berufsbildungsbericht 2009: Vorversion*. Bonn, Berlin: Bundesministerium für Bildung und Forschung.

Available online:

http://www.bmbf.de/pub/bbb_09.pdf [cited 16.04.2009].

BMBF (2009a): *Pressemitteilung 084/2009*. Bonn, Berlin: Bundesministerium für Bildung und Forschung.

Available online:

http://www.bmbf.de/_media/press/pm_20090423-084.pdf [cited: 27.04.09].

BMBF (2009b): Auswirkungen von demographischen Entwicklungen auf die berufliche Ausbildung. [*Consequences of demographic developments for vocational education and training*] Bonn, Berlin 2009.

Available online at

http://www.bmbf.de/pub/auswirkungen_demografische_entwicklung_berufliche_ausbildung.pdf [cited 16/08/2010].

BMBF (2008a): *Aufstieg durch Bildung: Qualifizierungsinitiative der Bundesregierung*. Bonn, Berlin: Bundesministerium für Bildung und Forschung.

Available online:

http://www.bmbf.de/pub/qualifizierungsinitiative_breg.pdf [cited 22.9.2008].

BMBF (2008b). *Berufsbildungsbericht 2008: Vorversion*. Bonn, Berlin: Bundesministerium für Bildung und Forschung.

Available online:

http://www.bmbf.de/pub/bbb_08.pdf [cited 22.9.2008].

BMBF (2008c): *Empfehlungen des Innovationskreises Weiterbildung für eine Strategie zur Gestaltung des Lernens im Lebenslauf*. Bonn, Berlin: Bundesministerium für Bildung und Forschung.

Available online:

http://www.bmbf.de/pub/empfehlungen_innovationskreis_weiterbildung.pdf [cited 22.9.2008].

BMBF (2008d): *10 Leitlinien zur Modernisierung der beruflichen Bildung - Ergebnisse des Innovationskreises berufliche Bildung*. Bonn, Berlin: Bundesministerium für Bildung und Forschung.

Available online:

http://www.bmbf.de/pub/empfehlungen_innovationskreis_weiterbildung.pdf [cited 22.5.2009].

BMBF (2007a): 10 Leitlinien zur Modernisierung der beruflichen Bildung - Ergebnisse des Innovationskreises berufliche Bildung. Bonn, Berlin: Bundesministerium für Bildung und Forschung/IKBB.

Available online:

http://www.bmbf.de/pub/IKBB-Broschuere-10_Leitlinien.pdf [cited 22.9.2008].

BMBF (2007b): *Berufsbildungsbericht 2007*. Bonn, Berlin: BMBF.

Available online:

www.bmbf.de/pub/bbb_07.pdf [cited 22.9.2008].

BMBF (2007c): *Wachstumspotential der Weiterbildung nutzen: Eckpunktepapier zur Einführung des Weiterbildungssparens*. Bonn, Berlin: BMBF.

Available online:

http://www.bmbf.de/pub/Eckpunktepapier_Weiterbildungssparen.pdf [cited 22.9.2008].

BMBF (2007d): *Bestandsaufnahme der Bildungs-, Berufs- und Beschäftigungsberatung in Deutschland - Abschlussbericht*, Berlin: Bundesministerium für Bildung und Forschung.

BMBF (2005): *Die Reform der beruflichen Bildung: Berufsbildungsgesetz 2005*. Bonn: Bundesministerium für Bildung und Forschung.

Available online:

http://www.bmbf.de/pub/die_reform_beruflichen_bildung.pdf [cited 22.9.2008].

BMBF (2004): *Schlussbericht der unabhängigen Expertenkommission - Finanzierung Lebenslangen Lernens: der Weg in die Zukunft*. 28 July 2004. Bonn: Bundesministerium für Bildung und Forschung.

Available online:

http://www.bmbf.de/pub/schlussbericht_kommission_III.pdf [cited 22.9.2008].

Bundesgesetzblatt (2009a): *Jahrgang 2009 Teil I Nr. 56. Verordnung über die Prüfung zum anerkannten Fortbildungsabschluss Geprüfter Aus- und Weiterbildungspädagoge/Geprüfte Aus- und Weiterbildungspädagogin*. 21. August 2009. Bonn.

Available online:

http://www.bmbf.de/intern/upload/fvo_pdf/aus_und_weiterbildungspaedagoge.pdf

Bundesgesetzblatt (2009b): *Jahrgang 2009 Teil I Nr. 56. Verordnung über die Prüfung zum anerkannten Fortbildungsabschluss Geprüfter Berufspädagoge/Geprüfte Berufspädagogin*. 26. August 2009. Bonn.

Available online:

http://www.bmbf.de/intern/upload/fvo_pdf/berufspaedagoge.pdf

Bundesregierung (2007): *Nationaler Pakt für Ausbildung und Fachkräftenachwuchs in Deutschland 2007-2010*. Berlin: Bundesregierung.

Available online:

<http://www.bmwi.de/BMWi/Redaktion/PDF/M-O/nationaler-pakt-fuer-ausbildung-und-fachkraeftenachwuchs-in-deutschland-2007-2010,property=pdf,bereich=bmwi,sprache=de,rwb=true.pdf> [cited 22.9.2008].

Bundesregierung (2004): *Nationaler Pakt für Ausbildung und Fachkräftenachwuchs in Deutschland*. Berlin: Bundesregierung.

Available online:

http://www.bmbf.de/pub/ausbildungspakt_2004.pdf [cited 20.8.2007].

Busse, G.; Heidemann, W. *Betriebliche Weiterbildung : Betriebs- und Dienstvereinbarungen. Analyse und Handlungsempfehlungen*. Frankfurt/Main: Bund-Verlag.

Council of Europe (2010): The Bruges Communiqué on enhanced European Cooperation in Vocational Education and Training for the period 2011-2020
http://ec.europa.eu/education/lifelong-learning-policy/doc/vocational/bruges_en.pdf

Council of Europe (2004): *Entschließung des Rates und der im Rat vereinigten Vertreter der Regierungen der Mitgliedstaaten über den Ausbau der Politiken, Systeme und Praktiken auf dem Gebiet der lebensbegleitenden Beratung in Europa*, Doc. 9286/04, Brüssel: Rat der Europäischen Union.

Available online:

<http://www.forum-beratung.de/cms/upload/pdf/Beratung09286.de04.pdf> [cited: 28.05.2009].

Council of Europe (2008): *Entschließung des Rates und der im Rat vereinigten Vertreter der Regierungen der Mitgliedstaaten zu einer besseren Integration lebensumspannender Beratung in die Strategien für lebenslanges Lernen*, Doc. 15030/08, Brüssel: Rat der Europäischen Union.

Available online:

<http://register.consilium.europa.eu/pdf/de/08/st15/st15030.de08.pdf> [cited: 28.05.2009].

Council of Europe (2008b): *The Bordeaux Communiqué on enhanced European cooperation in vocational education and training*. Communiqué of the European Ministers for vocational education and training, the European social partners and the European Commission, meeting in Bordeaux on 26 November 2008 to review the priorities and strategies of the Copenhagen process. Bordeaux: Council of Europe.

Available online:

http://www.eua.be/fileadmin/user_upload/files/Newsletter_new/Bordeaux_Communique_EN.pdf [cited: 28.05.2009].

Deutscher Bildungsrat (1970). *Strukturplan für das Bildungswesen*. Stuttgart: Klett-Verlag.

Deutscher Industrie und Handelskammertag (2009): *Ausbildung Ergebnisse einer Online-Unternehmensbefragung*. Berlin: DIHK

Available online:

http://www.dihk.de/inhalt/download/ausbildungsumfrage_09.pdf, [cited: 16.04.2009].

Deutsches Institut für Erwachsenenbildung (2007). *Volkshochschul-Statistik: 45. Folge, Arbeitsjahr 2006*. Bonn: Deutsches Institut für Erwachsenenbildung.

Available online:

<http://www.die-bonn.de/doks/reichart0702.pdf> [cited 22.9.2008].

Dietrich, S.; Schade, H.-J.; Behrendorf, B. (2008): *Ergebnisbericht Projekt Weiterbildungskataster*. 2 June 2008. Bonn: Deutsches Institut für Erwachsenenbildung.

Available online:

<http://www.die-bonn.de/doks/dietrich0803.pdf> [cited 22.9.2008].

DIHK (2009), Berufsorientierung von und mit den IHK

Available online:

<http://www.dihk.de> → Publikationen/Bildungspolitik

DIHK (2008): *Kooperationen zwischen Wirtschaft und Schulen*.

Available online:

<http://www.dihk.de> → Publikationen/Bildungspolitik

DJI/Inbas (2010): *Berufsorientierung*. Programme und Projekte von Bund und Ländern, Kommunen und Stiftungen Überblick, DJI 2010.

Available online:

http://www.dji.de/bibs/9_11672_berufsorientierung.pdf

Dostal, W.; Reinberg, A.; Schnur, P. (2002): Tätigkeits- und Qualifikationsprojektionen: der IAB/Prognos-Ansatz. In: Kleinhenz, G. (Hrsg.): *IAB-Kompodium Arbeitsmarkt- und Berufsforschung*. Nürnberg, p. 547-556.

ELGPN 2010: *Lifelong Guidance Policies - Work in Progress, A report on the work of the European Lifelong Guidance Policy Network 2008-2010*

Available online:

<http://www.elgpn.eu>

Eurydice (2007): *National summary sheets on education systems in Europe and ongoing reforms: 2007 edition* Germany. April 2007. Brussels: Eurydice.

Available online:

http://www.eurydice.org/ressources/eurydice/pdf/047DN/047_DE_EN.pdf [cited 22.9.2008].

Frank, I.; Grunwald, J-G. (2008). Ausbildungsbausteine - ein Beitrag zur Weiterentwicklung der dualen Berufsausbildung. In: *Berufsbildung in Wissenschaft und Praxis*, Vol. 37, No 4, p. 13-17.

Available online:

http://www.bibb.de/dokumente/pdf/bwp_2008_04_frank_ausbildungsbausteine.pdf [cited 22.9.2008].

Faulstich, P. (2003). Staatlicher Politikverzicht oder/und tarifliche und betriebliche Lernzeitpolitik. In: *Report*, No 1, p. 42-52.

Freitag, W. (2009). *Hochschulzugang öffnen - Mehr Chancen für Studierende ohne schulische Hochschulzugangsberechtigung*. HIS: Stellungnahme. HIS.

Greinert, W.-D. (1998). *Das "deutsche System" der Berufsbildung: Tradition, Organisation, Funktion*. Baden-Baden, Nomos.

Greinert, W.-D. (2007). *The German philosophy of vocational education. Vocational education*. L. Clarke and C. Winch. New York, Routledge: 49-61.

Hippach-Schneider, U.; Krause, M.; Woll, C. (2007): *Vocational education and training in Germany: short description*. Luxembourg: Office for Official Publications of the European Communities. (CEDEFOP Panorama series ; 138).

Available online:

http://www.trainingvillage.gr/etv/Upload/Information_resources/Bookshop/465/5173_en.pdf [cited 22.9.2008].

Hübers, Berthold (2011): Lernort Ausland - Aktueller Stand und Perspektiven grenzüberschreitender Mobilität. In: *Berufsbildung in Wissenschaft und Praxis*, 4. Ausgabe, Bonn.

iwd - Informationsdienst des Instituts der deutschen Wirtschaft Köln (2010): Nr. 26, Jg. 36.1. Juli 2010. Köln.

iwd - Informationsdienst des Instituts der deutschen Wirtschaft Köln (2010): Nr. 29, Jg. 36. 22. Juli 2010. Köln.

KMK/BA (2004) Rahmenvereinbarung über die Zusammenarbeit von Schule und Berufsberatung (<http://www.kmk.org>)

KMK (2010): *The Education System in the federal Republic of Germany 2008. A description of the responsibilities, structures and developments in education policy for the exchange of information in Europe*. Bonn 2010 (<http://www.kmk.org>).

KMK (2008): *The Education System in the Federal Republic of Germany 2006: a description of the responsibilities, structures and developments in education policy for the exchange of information in Europe*. Bonn: KMK.

KMK (1991): *Rahmenvereinbarung über die Berufsschule*. Bonn: Kultusministerkonferenz.

Available online:

http://www.kmk.org/fileadmin/veroeffentlichungen_beschluesse/1991/1991_03_15-Rahmenvereinbarung-Berufsschule.pdf [cited: 28.05.2009].

Available online:

http://www.kmk.org/dossier/dossier_en_ebook.pdf [cited 22.9.2008].

Konsortium Bildungsberichterstattung (2006). *Bildung in Deutschland: ein indikatorengestützter Bericht mit einer Analyse zu Bildung und Migration*. Bielefeld: Bertelsmann.

Available online:

<http://www.bildungsbericht.de/daten/gesamtbericht.pdf> [cited 22.9.2008].

Koscheck, Stefan; Müller, Normann; Walter, Marcel (2011): Bestandsaufnahme und Konsistenzprüfung beruflicher Weiterbildungsförderung auf Bundes- und Länderebene. BMBF

Available online:

http://www.bmbf.de/pub/band_zwoelf_berufsbildungsforschung.pdf [cited: 09.09.2011].

Lenke, W.; Werner, D. (2009): Umfang, Kosten und Trends der betrieblichen Weiterbildung - Ergebnisse der IW-Weiterbildungserhebung 2008. Köln: Deutscher Instituts-Verlag.

Available online:

http://www.iwkoeln.de/Portals/0/pdf/trends01_09_3.pdf

Mucke, K.; Grunwald, S. (2005): Hochschulkompatible Leistungspunkte in der beruflichen Bildung: Grundsteinlegung in der IT-Weiterbildung. Bielefeld: Bertelsmann. (Berichte zur beruflichen Bildung; 272).

Nationales Forum Beratung (nfb) (2011a): Career Guidance in the Life Course. Structures and Services in Germany; commissioned by The Federal Ministry of Education and Research, Berlin 2011 (<http://www.forum-beratung.de>).

Nationales Forum Beratung (nfb) ed. (2011b): Qualitätsmerkmale guter Beratung („Quality criteria for good guidance“), Berlin/Heidelberg 2011.

Niedlich, F. et al. (2007): Bestandsaufnahme in der Bildungs-, Berufs- und Beschäftigungsberatung und Entwicklung grundlegender Qualitätsstandards. Final report, May 2007. Hamburg: Ramboll Management.

Available online:

<http://www.bmbf.de/pub/berufsbildungsforschung.pdf> [cited 22.9.2008].

OECD (2009). Education at a Glance: OECD Indicators 2009. Paris: OECD.

Available online:

<http://www.oecd-ilibrary.org/docserver/download/fulltext/9609061ec014.pdf?expires=1281424819&id=0000&accname=ocid47006800&checksum=7584AF776D58203D5442B2E12EE89014>

OECD (2008). Tertiary Education for the Knowledge Society. Paris 2008

Scharlowsky, V. (2007): The system of early identification of skill needs in Germany. In: Strietska-Ilina, O.; Tessaring, M. (eds.). *Systems, institutional frameworks and processes for early identification of skills needs*. Luxembourg: Office for Official Publications of the European Communities. (CEDEFOP Panorama series ; 135).

Available online:

http://www.trainingvillage.gr/etv/Upload/Information_resources/Bookshop/467/5176_en.pdf [cited 22.9.2008].

Schmidt, D. (2007). Berufliche Weiterbildung in Unternehmen 2005: Methodik und erste Ergebnisse. In: Statistisches Bundesamt (ed.). *Wirtschaft und Statistik*, No 7, p. 699-711.

Seidel, S. et al. (2008). *Status of recognition of non-formal and informal learning in Germany within the framework of the OECD activity „Recognition of non-formal and informal Learning“*. Bonn, Berlin: BMBF.

Available online:

http://www.forschung.bmbf.de/pub/non-formal_and_informal_learning_in_germany.pdf [cited 22.9.2008].

Sondermann, T. (2005). Das Berufsbildungsreformgesetz von 2005: was ist neu und anders? In: *Berufsbildung in Wissenschaft und Praxis*, Vol. 34, No 2, p. 5-8.

Available online:

http://www.bibb.de/dokumente/pdf/a1_bwp_02_2005_beitrag-sondermann.pdf [cited 22.9.2008].

Statistische Ämter des Bundes und der Länder (2008): *Internationale Bildungsindikatoren im Ländervergleich*. Wiesbaden: Statistische Ämter des Bundes und der Länder.

Available online:

<https://www-ec.destatis.de/csp/shop/sfg/bpm.html.cms.cBroker.cls?cmspath=struktur,-vollanzeige.csp&ID=1022716> [cited: 28.05.2009].

Statistisches Bundesamt (2010): Pressemitteilung Nr. 145 vom 22.04.2010

Available online:

http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Presse/pm/-2010/04/PD10_145_211,templateld=renderPrint.psm

Statistisches Bundesamt (2010): *Private Schulen, Schuljahr 2009/2010, Fachserie 11, Reihe 1.1.*

Wiesbaden: Statistisches Bundesamt.

Fachserie 11 Reihe 1.1 - Schuljahr 2009/2010

Statistisches Bundesamt (2009a): *Bevölkerungsstand*. Wiesbaden: Statistisches Bundesamt.

Available online:

<http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Navigation/Statistiken/Bevoelkerung/Bevoelkerungsstand/Bevoelkerungsstand.psmi> [cited 11.07.2011].

Statistisches Bundesamt (2009b): *Pressekonferenz „Bevölkerungsentwicklung in Deutschland bis 2060“*. Berlin: *Statement von Präsident Roderich Egele*.

Available online:

http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/DE/Presse/pk/2009/Bevoelkerung/Statement_Egeler_PDF,property=file.pdf

Statistisches Bundesamt (2009c): *Private Schulen, Schuljahr 2007/2008, Fachserie 11, Reihe 1.1*. Wiesbaden: Statistisches Bundesamt.

Statistisches Bundesamt (2009d): *Berufliche Schulen, Schuljahr 2008/2009, Fachserie 11, Reihe 2*. Wiesbaden: Statistisches Bundesamt.

Statistisches Bundesamt (2007a): *Berufliche Schulen, Schuljahr 2006/2007, Fachserie 11, Reihe 2*. Wiesbaden: Statistisches Bundesamt.

Statistisches Bundesamt (2007c): *Statistisches Jahrbuch 2007 für die Bundesrepublik Deutschland*. Wiesbaden: Statistisches Bundesamt.

Statistisches Bundesamt (2006): *Bevölkerung Deutschlands bis 2050 - 11. Koordinierte Bevölkerungsvorausberechnung*. Wiesbaden: Statistisches Bundesamt.

Ulmer, Philipp; Bott, Peter; Kolter, Christa; Kupfer, Franziska; Schade, Hans-Joachim; Schlottau, Walter (2008): *Wirkungsanalyse der Aussetzung der Ausbilder-Eignungsverordnung* - Abschlussbericht. Bonn: BIBB.

Available online:

http://www2.bibb.de/tools/fodb/pdf/eb_30553.pdf [cited 25.05.2009].

von Rosenblatt, B.; Bilger, F. (2008): *Weiterbildungsbeteiligung in Deutschland - Eckdaten zum BSW-AES 2007*. January 2008. Munich: TNS Infratest Sozialforschung.

Available online:

http://www.bmbf.de/pub/weiterbildungsbeteiligung_in_deutschland.pdf [cited 22.9.2008].

Weiss, R. (2003): *Betriebliche Weiterbildung 2001 - Ergebnisse einer IW-Erhebung*. In: *IW-Trends*, No 1, p. 1-17.

Available online:

http://liquide.de/content/infobrief/weiterbildung_2001.pdf [cited 22.9.2008].

Werner, D. (2006): *Trends und Kosten der betrieblichen Weiterbildung - Ergebnisse der IW-Weiterbildungserhebung 2005*. In: *IW-Trends*, No 1.

Available online:

http://www.iwkoeln.de/data/pdf/content/trends01_06_2.pdf [cited 22.9.2008].