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Education Levels of Refugees: Training and Education in the Main Countries of Origin

Understanding Refugees' Educational Backgrounds
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Table of contents

Summary	2
1 Introduction	3
2 Education and qualifications of refugees in Germany	5
2.1 Refugees' level of education	5
2.2 Vocational degrees and work experience of refugees	8
2.3 Recognition of formal vocational degrees in Germany	9
2.4 Educational aspirations of refugees and the use of education programmes in Germany	11
3 At a glance: Vocational training systems in selected main countries of origin	12
3.1 Vocational training in Syria	13
3.2 Vocational training in Iraq	17
3.3 Vocational training in Afghanistan	21
3.4 Vocational training in Eritrea	24
3.5 Vocational training in Iran	27
3.6 Vocational training in Somalia	31
4 Characteristics of vocational training systems and differences from the German vocational training system	34
5 Conclusion and recommendations for action	36
Works cited	40
List of tables	46
List of figures	46

JEL klassifikation:

F22 – International migration

I21 – Analysis of educational system

Summary

By the end of 2016, Germany had registered around 1.6 million persons seeking protection (Federal Statistical Office, 2017a). In order to facilitate their integration into the vocational training and labour market, information on refugees' educational degrees, vocational qualifications and competencies is of central importance. However, indicators of their education, such as the number of years of school completed, can only be understood with in-depth background knowledge of the education systems in their countries of origin. This report by the German Economic Institute (IW) presents the education and vocational systems of the six countries from which the largest number of refugees come (Syria, Iraq, Afghanistan, Eritrea, Iran and Somalia), with a focus on vocational training. It discusses important differences between the vocational training systems in these countries and the German system. An important source of information for this purpose is the BQ-Portal, the information portal for foreign professional qualifications, which has been implemented by the German Economic Institute on behalf of the Federal Ministry of Economics and Energy (Bundesministerium für Wirtschaft und Energie, BMWi).

There are important differences, for example, in the structure of (vocational) training and education systems in the countries where refugees come from. They usually attach quantitatively little importance to formal vocational training and have a lower number of formalised vocational training occupations. In addition, they do not offer dual vocational training in the regular vocational training systems. It should also be emphasized that formal vocational training has a low social standing in comparison to higher education in the main countries of origin.

1 Introduction

Since the rise in the number of immigrating refugees began in 2015, politicians, authorities, the business community and numerous private initiatives and volunteers in Germany have been trying to support refugees on their path to integration into society and the labour market. Successful integration is currently a central humanitarian task and successful entry into the German labour market is the (greatest) wish of many refugees (Federal Office for Migration and Refugees [BAMF], 2016a; SVR, 2017b). Accordingly, it is in the interests of those seeking protection to be able to use their qualifications and competencies expediently on the German labour market.

At the same time, the integration of many refugees into the labour market is also in the interests of the German economy. 43 per cent of companies already see the shortage of skilled workers in various sectors and regions as a risk for their business activities (DIHK, 2016). The latest survey by the German Economic Institute has shown that the lack of skilled workers is increasingly acting as a brake on growth (Research Group on Economy at German Economic Institute, 2017). Many companies are working at their limit, with a good third of them talking about an over-utilisation of their employees¹. In just under half of the companies, the production possibilities are limited due to a lack of skilled workers. In 2016, every second job was posted in an occupation where there are shortages, i.e. in an occupation for which fewer than two suitably qualified unemployed persons per registered job are available nationwide (Burstedde/Risius, 2017). The challenges in filling vacancies are therefore very high in many places, and, as a result, many companies are more and more willing to consider applicants who do not have a "conventional" CV from a German perspective when looking for new future employees.

A major challenge for many refugees on the path to integration in the labour market – in addition to the acquisition of the required linguistic skills – is the extent to which their qualifications and vocational experience match the demands of the German labour market. Previous surveys on refugees' education have concluded that their overall qualification structure is very heterogeneous and also differs substantially from country to country (Federal Office for Migration and Refugees, 2017a, b, c). This finding applies to school diplomas as well as vocational training and university degrees (see Chapter 2). The available indicators on education provide a rough starting point for an assessment of refugees' potential and support needs for their integration into education and vocational training programmes and into the job market.

It is expected now that many of the refugees will require extensive professional and linguistic (re-)qualifications over the next few years (Expert Council of German Foundations on Integration and Migration [SVR], 2017a). It is also clear that a generally low percentage of refugees have (formal) vocational training and higher educational degrees, with only roughly eight and twelve per cent of the adult population, respectively, having such, but they often have many years of vocational experience. The German labour market can make use of the latter (*ibid.*).

¹ In order to improve the readability of the text, the masculine form is used for nouns and pronouns in the following if the plural or a reformulation is not possible. Both genders are always meant.

However, the indicators on formal degrees and the length of vocational experience must be interpreted against the backdrop of the education system in which the refugees grew up, the places where vocational training is offered in their native countries and the conditions for practising a profession there. This knowledge is helpful in identifying challenges in the transition to the German training and labour market and in providing tailor-made (continuing) vocational training opportunities for refugees who have already completed formal or informal vocational training in their native country. This background knowledge also helps companies and counselling centres to better interpret the CVs of refugees and thus, for example, to understand misconceptions or expectations when starting vocational training. This prevents confusion in the application and employment phase at a company and promotes the occupational integration of refugees.

In order to increase the knowledge of vocational training in the six most important countries from which refugees come, information has been compiled for the following vocational training systems: Syria, Iraq, Afghanistan, Iran, Eritrea and Somalia. On the one hand, a large portion of the refugees who have come to Germany since 2015 come from these countries (s. **Table 1-1**). At the same time, these nations – with the exception of Afghanistan and Somalia in 2015 – are countries with a "good prospect of staying" in Germany, i.e. they have a protection rate of more than 50 per cent of asylum seekers and thus privileged access to funding instruments such as language courses and numerous measures and support offers from employment agencies and job centres. Since July 2017, privileged access to funding instruments has also been available for asylum seekers from Afghanistan, although the protection rate is currently (as of November 2017) again below 50 per cent. It can be assumed that many of the refugees from these countries of origin will remain in Germany for the long term. It is therefore of great importance that they are successfully integrated into society and the labour market.

Table 1-1: Asylum applications from 2015 to 2017 and protection rates

Asylum applications from the countries of origin with access to funding instruments

	2015		2016		2017 (January up to and including July)		2015 to 2017
	First applications	Protection rate*	First applications	Protection rate*	First applications	Protection rate*	Asylum applications from 2015 to July 2017
Syria	158,657	96.0%	266,250	98.0%	28,074	93.5%	424,907
Iraq	29,784	88.6%	96,116	70.2%	11,860	57.5%	137,760
Afghanistan	31,382	47.5%	127,012	55.8%	10,878	44.1%	169,272
Eritrea	10,876	92.1%	18,854	92.2%	7,074	78.9%	36,804
Iran	2,664	59.6%	26,426	50.7%	5,312	51.5%	34,402
Somalia	5,126	39.7%	9,851	71.1%	4,614	64.0%	19,591
Total	238,489		544,509		67,812		850,810
Other countries of origin	203,410		177,861		49,501		430,772
Total of all first applications	441,899	49.8%**	722,370	62.4%**	117,313	44.4%**	1,281,582

Sources: Bundesamt für Migration und Flüchtlinge [Federal Office for Migration and Refugees] (BAMF 2016b, 2017d, 2017e); author's own table

* The protection rate shows the percentage of applicants whose application for asylum has been approved.

** Total protection rate of all asylum applications (first and subsequent applications) in the period under consideration.

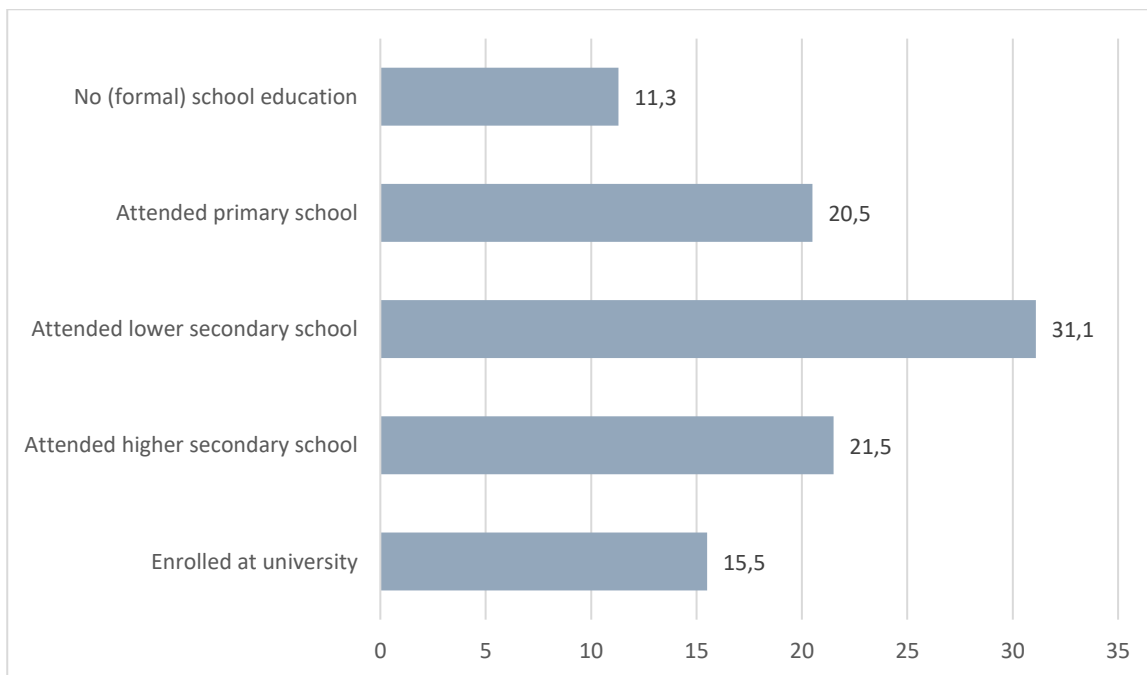
2 Education and qualifications of refugees in Germany

2.1 Refugees' level of education

Previous results from studies and surveys show that the level of qualifications that refugees in Germany have differs widely and is generally centred more strongly in the middle range of education. By contrast, the outer ends of the qualification scale (no formal education – attended [technical] university / PhD) are seen less. The comprehensive "SoKo data" (Social Component) of the Federal Office for Migration and Refugees provides an overview of the level of education that asylum seekers had in 2016, which was collected during the application process for asylum. The data contains voluntary data on the education of over 370,000 adult asylum seekers in 2016. According to it, more than half of the respondents (52.6 per cent) across all the top 10 countries of origin have attended a lower or upper secondary school in their country of origin, while roughly one-fifth (20.5 per cent) have attended only a primary school (s. **Figure 2-1**; Federal Office for Migration and Refugees, 2017b). At the outer ends of the spectrum are those refugees who, according to their own information, either did not have any formal schooling in their homeland at all (11.3 per cent) or, by contrast, were enrolled at a university (15.5 per cent).

The IAB-BAMF-SOEP survey (2017a) of more than 4,600 refugees in Germany provides similar results on the educational institutions attended and also on the educational degrees acquired. According to this survey, 11 per cent of those who provided information on their school education attended primary school as the highest educational institution, 33 per cent attended a secondary school, 40 per cent a continuing education or training school, and 5 per cent another school. A somewhat smaller number, namely 25 per cent, have obtained an intermediate school degree; another 35 per cent have enrolled at a (technical) university, and 4 per cent have obtained another school diploma. 11 per cent of the respondents did not attend any school at all. Another question was asked if the refugees attended a (technical) college/university. Here, 18 per cent stated that they had attended one and 12 per cent had obtained a degree (s. **Figure 2-2**; Federal Office for Migration and Refugees, 2017a).

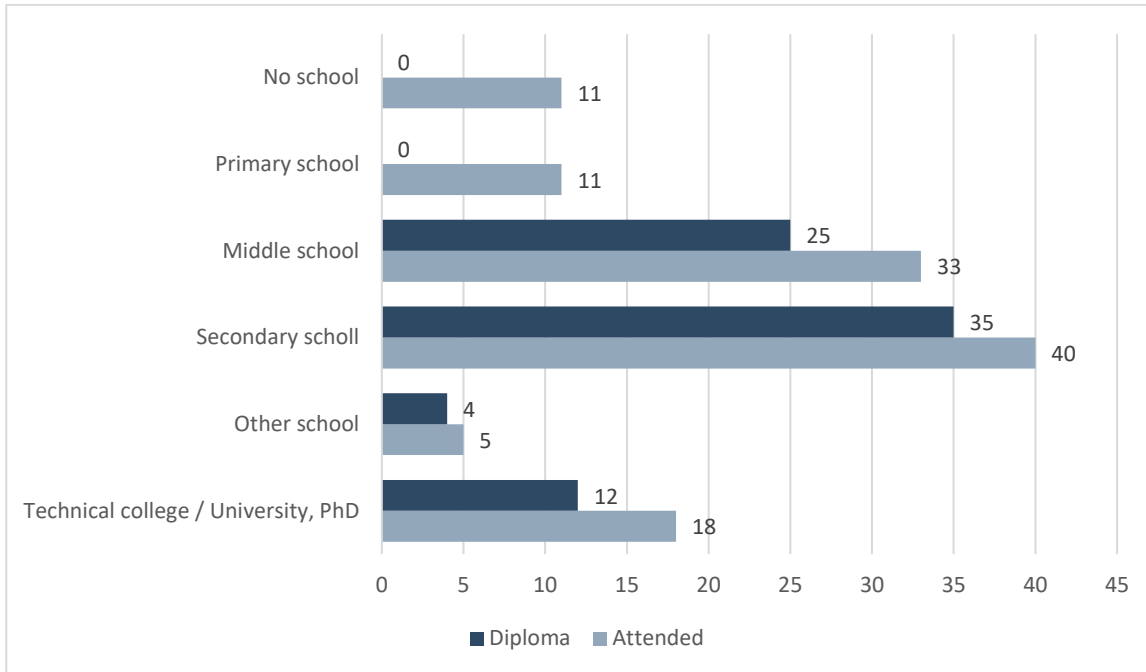
Figure 2-1: Highest educational institution attended by adult asylum seekers from the TOP 10 countries of origin* in 2016, in per cent



Source: Federal Office for Migration and Refugees, 2017b

*In descending order: Syria, Iraq, Afghanistan, undeclared, Iran, Albania, Pakistan, Eritrea, stateless, Serbia

Figure 2-2: Highest attended educational institution and degrees* according to IAB-BAMF-SOEP survey in 2016, in per cent



Sources: Federal Office for Migration and Refugees, 2017a; author's own chart

*The aggregated percentages for school attendance result in an amount of more than 100 per cent, since attendance at a technical college / university was discussed separately.

Background information: Important sources on the education of refugees

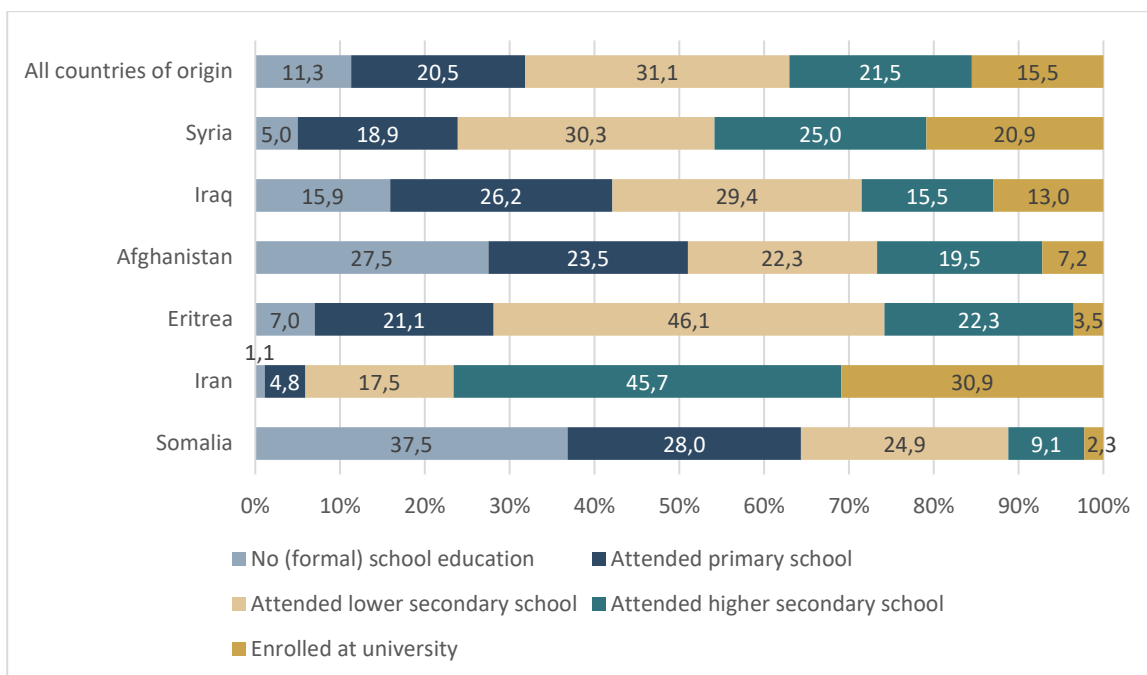
- **"SoKo" data** (Social Component) from the Federal Office for Migration and Refugees: The analyses of the SoKo data contain voluntary information from asylum seekers who are questioned during the application process. The current analyses (as of: November 2017) refer to the year 2016, with data from around 80 per cent of the approximately 460,000 adult asylum seekers in 2016 (Federal Office for Migration and Refugees, 2017b), and the first half of 2017, with data from over 70 per cent of the approximately 57,000 adult asylum seekers. The SoKo data does not claim to be scientific (Federal Office for Migration and Refugees, 2017 b, c).
- The **IAB-BAMF-SOEP survey** of refugees has been carried out annually since 2016 and only includes adults (18 years and older). To date, the results from 2016 have been published in two waves: the first results of the survey with 2,349 respondents (Federal Office for Migration and Refugees, 2016a), and the final results of the survey round with a total of 4,816 adult respondents (Federal Office for Migration and Refugees, 2017a). The sample includes refugees who arrived in Germany between 1 January 2013 and 31 January 2016 and have applied for asylum. As part of the oral survey, detailed information on the educational background and aspirations of the refugees is collected.

The results of the Soko data collected by the Federal Office for Migration and Refugees (2017a) also allow for country-specific statements on the level of qualifications. It becomes clear that the distribution of the education level varies from one country of origin to another (s. **Figure**

2-3): While a particularly large share of applicants from Iran and Syria, according to their own information, attended universities (30.9 per cent and 20.9 per cent, respectively), the highest proportion of refugees without formal schooling comes from Somalia and Afghanistan (35.7 and 27.5 per cent, respectively). In general, the political situation in the country of origin is also reflected in the degrees: The longer a country is affected by civil war and political persecution, the lower the average level of education of those fleeing to Germany (also see Federal Office for Migration and Refugees, 2016a; Federal Office for Migration and Refugees, 2017a).

When interpreting the data, it should be noted that it is difficult to compare education systems in the countries of origin to the education system in Germany, and that degrees cannot always be classified easily (Federal Office for Migration and Refugees, 2017b, c). For example, the Technical Institutes in Syria (see Chapter 3.1) are located at the tertiary level, but at the same time, they impart vocational qualifications that fall within the scope of dual training in Germany. In addition, the qualitative demands for learning and practising professions within the countries of origin, and as compared to the standards customary in Germany, vary considerably (ibid.).

Figure 2-3: Highest educational institution attended by country of origin, in per cent



Sources: Author's own chart on the basis of SoKo analysis for the year 2016; Federal Office for Migration and Refugees, 2017b

2.2 Vocational degrees and work experience of refugees

The current analysis of the IAB-BAMF-SOEP survey of more than 4,600 refugees in 2016 provides information on vocational training degrees. According to the survey, 8 per cent of those who fled received vocational training abroad and 12 per cent obtained a university degree (Federal

Office for Migration and Refugees, 2017a). In comparison, according to data from micro-census (Mikrozensus), almost half of the population aged 15 years and over in Germany in 2015 had received a dual vocational training degree and additionally, a good 8 per cent had obtained a technical school degree or a further training degree such as a master craftsman or technician (Federal Statistical Office, 2017b). Furthermore, 16 per cent had a university degree.

The lower value of vocational degrees in the countries of origin is due on the one hand to the fact that there is no training system comparable to the one in Germany, and informal vocational training plays a major role, especially in the skilled trade sector (Radetzky von/Stoewe, 2016). On the other hand, vocational training generally has a lower social standing in many countries of origin than in Germany, which means that fewer youths opt for the opportunities offered by formal vocational training. In addition, numerous (dual) vocational training occupations such as opticians, dental technicians, IT specialists or office management specialists are found in the university system in refugees' countries of origin.

The comparatively low graduation rates in the area of vocational training are offset by a considerable amount of work experience among the refugees: In the first analysis of the IAB-BAMF-SOEP survey, almost three quarters (73 per cent) of the 2,300 adult refugees interviewed stated that they had already gained work experience in their country of origin, and on average it was 6.4 years (Federal Office for Migration and Refugees, 2016a). According to the SoKo survey by the Federal Office for Migration and Refugees (2017a), 27,910 out of 41,427 applicants, i.e. 67.4 per cent of adult applicants, were recently employed in their country of origin, according to their own data. In contrast, 11.4 per cent of the applicants who answered the question about their last job were "without work" and 21.2 per cent were doing household work, retired, in school or studying. The recently employed persons were most frequently working in skilled trades (9.7 per cent), as industrial, factory and warehousing assistants (6.1 per cent), in service industries (6.0 per cent), construction (5.0 per cent), and agriculture, forestry and fishing (4.3 per cent).

2.3 Recognition of formal vocational degrees in Germany

The field of professional recognition also provides information about the formal qualifications with which refugees have come to Germany. Here, it becomes apparent that over the last few years – parallel to the increase in the number of persons seeking protection in Germany refugees have a growing interest in having their foreign professional qualifications recognised. Between June 2015 and December 2016, for example, some 20,000 refugees visited a counselling centre of the "Integration through Qualification" (IQ) network (Federal Office for Migration and Refugees, 2017). In addition, there are the introductory consultations at the chambers of skilled trades and the chambers of commerce and industry, but there are no separate figures for the group of refugees. While 20 per cent of those seeking advice in the IQ network were persons from current refugee home countries in 2015, their share rose to just under 40 per cent in 2016. Two-thirds of those interested persons from refugee home countries came from Syria, followed by about seven per cent from Iran and a good five per cent from Afghanistan. Just under three-quarters of the consultations related to the academic degrees of refugees, most often engineers, teachers and doctors. Only 17 per cent of the consultations related to dual vocational training occupations. This also reflects the fact that formal vocational training plays

a much smaller role in quantitative terms in refugee home countries than in Germany (see Chapters 3 and 4).

The increase in the number of persons from refugee home countries seeking recognition is therefore not only reflected in the number of consultations, but also in the number of applications submitted for recognition of a degree obtained abroad. However, the increase here has been substantially weaker to date. According to the latest report on the Recognition Act [Anerkennungsgesetz] (Federal Office for Migration and Refugees, 2017), the number of applications from countries of refugees² increased by more than 25 per cent between 2014 and 2015. In 2016, with a total of 1,773 initial applications, applicants from Syria ranked third among the federally regulated occupations in the recognition procedure (cf. Schmitz, 2017). There has also been an overall increase in applications from other refugee home countries from which fewer persons seeking protection in Germany have come (see recognition statistics in the BQ-Portal, 2014 to 2017). However, the number of applications has been significantly lower than the number of asylum seekers who have obtained a vocational or academic degree in their native country so far (see Chapter 2.1).

The applications for recognition involve overall the same occupations as in the initial consultations: Roughly three-quarters of the applications are for regulated occupations in which the recognition of the vocational degree is a prerequisite for practising the occupation. Applications from doctors from all major countries of origin except for Eritrea rank first. Other recognition procedures in regulated professions were initiated primarily for dentists, pharmacists, health workers and nurses. In 2016, recognition procedures in non-regulated occupations in which recognition is not mandatory for vocational practice included, among others, office management clerks, IT specialists and hairdressers (see recognition statistics in the BQ-Portal, 2017).

Background information: Recognition of Syrian vocational qualifications

In 2016, the most recognition procedures were undertaken in the tertiary area for vocational training received in Syria, and they concerned doctors (633 applications), dentists (96 applications) and pharmacists (57 applications). Slightly more than half of all procedures (52 per cent) ended with full equivalence to the German reference occupation. 13 per cent achieved partial equivalence. In 31 per cent of the cases a compensatory measure such as an adaptation course or an examination was required, but this had not yet been completed by the end of 2016. If the applicant successfully completes the compensation measure, they will receive full equivalence with the German reference occupation.

A good 65 per cent of all vocational qualifications ended in 2016 with full equivalence to the German reference occupation. This means that the content of the courses taught abroad is essentially the same as the content of German courses, or that possible differences between the vocational training programmes could be compensated for by practical experience and additional qualifications (compensation measures). Of the refugee home countries in question to date, there are only analyses for vocational training in Syria (see info box).

In summary, it can be said that the instrument of vocational recognition facilitates successful job

² In addition to asylum seekers, the analysis also includes highly qualified immigrants from these countries who came to Germany through the EU Blue Card scheme.

placement and thus offers refugees with vocational degrees opportunities for transition to the labour market (see Körbel/Stoewe, 2016). However, the instrument is only gradually gaining importance for refugees, especially in the non-regulated occupations.

2.4 Educational aspirations of refugees and the use of education programmes in Germany

In the long term, it is not only the educational background of the refugees that will influence their successful integration into the German labour market, but increasingly the question of how much use they make of the (vocational) training and continuing education programmes available in Germany. The IAB-BAMF-SOEP survey (2017a) also provides initial findings in this respect. Accordingly, at the time of the survey in 2016, around seven per cent of male and three per cent of female refugees had already taken part in a school or vocational training programme in Germany (Federal Office for Migration and Refugees, 2017a). Formal education programmes include vocational training and continuing education, college or university studies/doctoral degree programmes. Other programmes outside the formal education system are used by a total of 27 per cent of the men and 17 per cent of the women for "at least one hour of their daily lives" (ibid., 45). They mostly make use of language courses and internships for career orientation.

This educational participation is to be viewed in the context of the relatively short length of stay for the respondents at the time of the survey (under three years). In the first few years after arrival, the focus is often on general orientation in the new system, attending integration courses and language acquisition. The waiting period during the asylum procedure, which lasted an average of 7.1 months in 2016 (German Parliament [Bundestag, 2017]), has also meant that a great deal of time has been lost in recent years.

Then there are also the educational aspirations of the refugees. They reveal that planned educational activities significantly outnumber the current activities: In total, 44 per cent of refugees are striving perhaps or definitely to obtain a school diploma, and two-thirds of them want a vocational degree, with 34 per cent aiming for an academic degree (Federal Office for Migration and Refugees, 2017a). These percentages in connection with the previously existing school education make it clear that many of them still prefer to study and that it will be crucial to convincingly convey the significance and prospects of (dual) vocational training in Germany.

3 At a glance: Vocational training systems in selected main countries of origin

The education systems in refugees' countries of origin are as heterogeneous as the education level of refugees in Germany. The only comprehensive source of information in Germany on foreign vocational education systems is the BQ-Portal, the information portal for foreign vocational qualifications, which was set up by the German Economic Institute on behalf of the Federal Ministry of Economics and Energy (Bundesministerium für Wirtschaft und Energie, BMWi). It contains information on more than 80 vocational education and training systems worldwide and roughly 3,000 job profiles that provide insight into the scope, content and learning locations of formal vocational training programmes.

Indicators and information on vocational training in Syria, Iraq, Afghanistan, Eritrea, Iran and Somalia are summarised below. Since higher education is more important in these countries and some vocational qualifications, which in Germany constitute a dual vocational training profession, are taught at universities – such as opticians – higher education is also taken into account in some cases.

When interpreting the indicators on education in the countries of origin, it must be considered that persons seeking protection in Germany do not normally represent a cross section of the population from their country of origin. As with other migrant movements, it can be assumed that a positive self-selection usually takes place during migration. This means that the average income and education of emigrants is usually higher than the average for the population in their native country (Borjas, 1988). Self-selection is primarily determined by the level of migration costs, and is related to relative income disparities based on education and other individual factors such as willingness to take risks (see Brücker, 2016). Since migration costs and risks associated with flight migration are particularly high, a positive self-selection is all the more likely (ibid.).

The described indicators of education and vocational training in the countries of origin refer to different dates and come from different sources, depending on the availability of the data for the individual countries. The main sources of data are the UNESCO Institute for Statistics and the World Bank. They provide a rough overview of the distribution of persons born in a certain year across different formal education programmes and are to be considered in the context of the respective education systems and labour markets in the countries of origin. The information on education and vocational training in the countries of origin was carefully researched and, in some cases, validated by interviewing local and country experts. However, no claim is made to the completeness of the descriptions.

3.1 Vocational training in Syria

Indicators of education in Syria (2011)*	
School enrolment rate	97 per cent of persons born in a year
Compulsory schooling	Nine years (six years of primary school and three years of lower secondary school)
Languages	<i>Official language:</i> Arabic <i>Languages of instruction:</i> Arabic; English, French and Russian (since 2014) as foreign languages
Transition to upper secondary school	70 per cent of persons born in a year
Participation in state-run vocational training (upper secondary school)	16 per cent of persons born in a year
Percentage of university graduates	15 to 20 per cent of persons born in a year
Illiteracy rate	15 per cent of persons above the age of 15

Sources: BQ-Portal, 2017; UNESCO Institute for Statistics (UIS, 2017)

*Due to the current civil war in Syria, the indicators from 2011 are used as a reference.

General information on education and vocational training

The Syrian education system was regarded as one of the best systems in the Middle East until the outbreak of the civil war in 2011 (Al Hessian, 2016). Among other things, it was characterised by a very high school enrolment rate of almost 100 per cent and a secondary school participation rate (from 10th grade onwards) of 70 per cent for persons born in a year (UIS, 2017). Men and women were more or less equally involved in the education system at all levels (ibid.). In the labour market, however, women accounted for only a small share, 15%, of the working population in 2011 (World Bank, 2017).

In 2001, the policy objective was to make formal vocational training more popular and to distribute secondary school students evenly (50:50) between university education and vocational training (ETF, 2003). The aim was to achieve a better fit between formal educational degrees and the needs of the labour market. In 2011, however, despite efforts by the government, only 22 per cent of secondary school students attended a vocational school (UIS, 2017). This is also due to the fact that access to vocational school is determined by the final marks in lower secondary school and that higher grades are a prerequisite for the university education path (Fayek, 2017). Accordingly, vocational training is systematically made the second choice for many pupils. In addition, universities rarely enrol graduates from vocational schools, even if they graduated with very good marks, which blocks the return to highly respected academic education (Al Hessian, 2016).

Like the entire education system, formal vocational training in Syria is characterised by strong centralisation. Accordingly, the curricula of technical secondary schools and technical institutes are enacted by the eleven ministries in charge and implemented nationwide.

Due to the civil war in Syria, which has been going on since 2011 and caused millions of people to leave the country, the education system is currently very limited in many regions. Many educational institutions were destroyed or occupied and converted for military purposes (Fayek, 2017). Various media and international organisations fear a "lost generation" of children and adolescents who have dropped out or never attended school (UNICEF, 2013, 2). However, the school and university system in some regions of Syria continues to operate to a lesser extent, especially in state-controlled areas such as the capital of Damascus (as of November 2017).

Classes in Syria are taught in Arabic. Due to the historical origins of the education system, the two foreign languages, English and French, are still taught to this day. In 2014, Russian was also introduced as another foreign language (Al Hessian, 2016).

Structure and places of learning in vocational training

The official vocational training system in Syria (s. **Figure 3-1**; BQ-Portal, 2014) comprises school training programmes in the secondary and tertiary area. After nine years of compulsory schooling, students can continue their education at a three-year state-run technical secondary school – and in fact, 22 per cent of secondary school students did this in 2011, i.e. 16 per cent of students born in a year chose this path. The technical secondary schools offer degrees in three areas – "trade," "industry" and "agriculture" – with roughly 20 specialisations that complement the general curriculum with vocational content. Examples of specialisations are electronics, electrical engineering, refrigeration and air conditioning technology, computer technologies, the textile industry, agricultural machinery and equipment. Depending on the field, the percentage of content in the occupation is between 30 and 40 per cent of all courses. Classes are traditionally held as frontal lessons in the classroom, but practical parts are also offered in workshops and laboratories, depending on the specialisation and the resources of the school.

Following the technical secondary school, successful graduates have the opportunity to continue their education at a technical institute and complete a two-year training programme at post-secondary level. The training often ties in with the field that the student had already chosen at the technical secondary school. However, graduates of general education schools can also attend a technical institute. Training at technical institutes consists largely of subject-related and general education courses, and practical exercises in laboratories and workshops are also part of the curriculum.

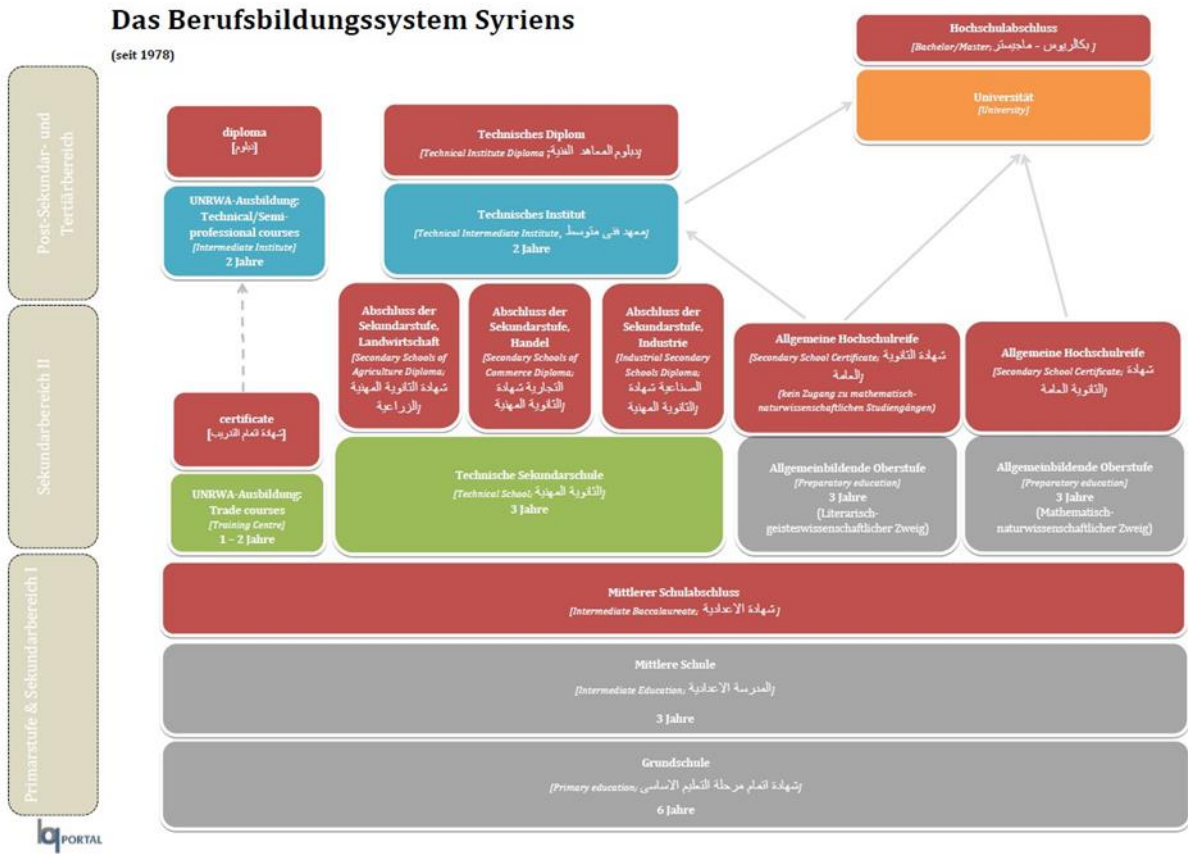
The technical institutes are often affiliated with universities, but are not part of the academic education sector. For example, a degree in electrical engineering at a two-year technical institute can be compared with the theoretical part of a dual vocational training programme, but not with a German engineering degree (see Fakha, 2017).

For some of the approximately 527,000 Palestinian refugees in Syria, the United Nations Relief and Work Agency (UNRWA) at the Damascus Training Centre also offers training programmes at secondary and post-secondary level. The programmes are recognised by the state and comprise about 50 different training programmes in the areas of trade, industry, pharmacy and computer science. Compared to the state vocational training at school, they are characterised by a higher percentage of practical experience.

In addition to official vocational training programmes, the traditional, deeply rooted informal apprenticeship based on the principle of "learning by doing" continues to play a major role in Syria, especially in skilled trade occupations. There are also a number of state-authorized private institutions, where occupations such as hairdressing, automotive mechatronics or electronics are taught as short-term courses and completed with an official examination. Attending such a course is often preceded by several years of experience in the respective field. When the examination is passed, participants receive an official vocational license and thus also the opportunity to become self-employed.

In the higher education sector, 27 universities in Syria (including 20 state and 7 private universities) had offered, until recently, numerous courses of study leading to a bachelor's degree in four to six years and a master's degree in two to three years. The range of post-secondary and tertiary education is supplemented by the Syrian Virtual University, which offers nine bachelor's and five master's degree courses in various fields. There has also been a growing number of private technical institutes with state authorisation since 2001.

Figure 3-1: The vocational training system in Syria



3.2 Vocational training in Iraq

Indicators of education in Iraq	
Enrolment rate (2013)	92 per cent of persons born in a year
Compulsory schooling	Nine years (six years of primary school and three years of lower secondary school)
Languages	Official language: Arabic Languages of instruction: Arabic; English as a foreign language
Transition to upper secondary school (2007)	45 per cent of persons born in a year
Participation in state-run vocational training (upper secondary school) (2007)	5 per cent of persons born in a year
Percentage of university graduates (2013)	Roughly 16 per cent of persons born in a year
Illiteracy rate (2016)	20 per cent of persons above the age of 15

Sources: BQ-Portal, 2017; UNESCO Institute for Statistics (UIS, 2017)

General information on education and vocational training

The Iraqi education system experienced its "golden years" in the 1970s (Shadbash/Albakaa, 2017). At that time, it was considered one of the best systems in the Middle East. This changed in the 1980s as a result of the first Gulf War (1980 to 1988) and the subsequent wars and economic blockades that weakened the country more than just economically. The education system also suffered from the political situation, and the education situation in the country steadily deteriorated. Accordingly, in the 2002/2003 school year, shortly before the fall of Saddam Hussein, only between 20.5 and 63.0 per cent of youths born in a year attended secondary school, depending on the region. The national average attendance rate from 10th grade onwards was 40.5 per cent (UNESCO, 2004). This figure rose slightly in the following years to 45 per cent in 2007 (UIS, 2017). Particularly in rural areas, access to formal, continuing education has been and still is significantly worse than in cities and urban catchment areas. The school attendance rate in urban regions is correspondingly higher than in rural areas. While formal education in cities has higher significance and value in the labour market, many rural regions are still defined by cultural and economic commitments that prevent the acquisition of formal qualifications (UNESCO, 2004).

There are no current and comprehensive figures on the participation of women in education in Iraq. In 2007, however, women's participation in education was significantly lower than that of men (UIS, 2017). In the labour market, women accounted for a small percentage of just under 18 per cent of the working population in 2016, with an increase being seen here since the 1990s (World Bank, 2017).

The Iraqi education system is divided organisationally into two parts, since the three provinces in the Autonomous Region of Kurdistan have their own school system and ministries. However, the structure of the school and vocational training system is similar, and the state's education programmes are organised centrally within the two systems.

As in most Arab countries, the importance of vocational training in secondary school in Iraq is low on the whole, and few pupils opt for this type of education as compared to general education for university (UNESCO, 2011). Many curricula, teaching methods and equipment used in vocational schools are no longer up to date, lag behind in terms of technical and didactic developments and do not meet the needs of the labour market (UNDP, 2014). However, insufficient teacher training and limited financial resources are also an obstacle to the quality of vocational training (ibid.).

Against this backdrop, despite political instability, there have been increasing efforts in Iraq in recent years to modernise vocational training and bring it more in line with the labour market. The reform efforts are supported and promoted by international partners such as UNESCO, ILO, GIZ (Society for International Cooperation), USAID, the British Council and other organisations from the United States and Europe. The "TVET programme" – a partnership between UNESCO, ILO, UN-HABITAT and various Iraqi ministries – should be mentioned in particular. It develops standardised framework curricula for vocational schools and should make them sustainable.

The higher education sector in Iraq has expanded in recent years as a result of rising oil prices (Shadbash/Albakaa, 2017). Accordingly, 10 new universities and 69 colleges were founded between 2011 and 2014 (ibid.). However, the quality of higher education cannot keep up with the rapid increase in students (UNICEF, 2017).

(Vocational) School lessons in Iraq are taught in Arabic or Kurdish, and English is also taught as a foreign language.

Structure and places of learning in vocational training

The basic structure of the vocational training system in Iraq (s. **Figure 3-2**; BQ-Portal, 2015) is fundamentally similar to Syria's vocational training system. Initial vocational training follows nine years of compulsory schooling. It takes place at medium vocational schools with 21 specialisations in the three areas of "trade", "industry" and "agriculture", and comprises the grades 10 to 12. Here, theoretical instruction takes place in the classroom, although there is also a relatively high percentage of practice-oriented subjects in workshops and laboratories (approximately 55 to 60 per cent), depending on the school's resources and the focus of training. Post-secondary vocational training takes place at technical institutes over a training period of two years, as well as at technical colleges where attendance for four years leads to a technical bachelor's degree.

In comparison to Syria, the school vocational training programmes in Iraq are used to a much lesser extent: After nine years of compulsory schooling, only five per cent of an age group, or

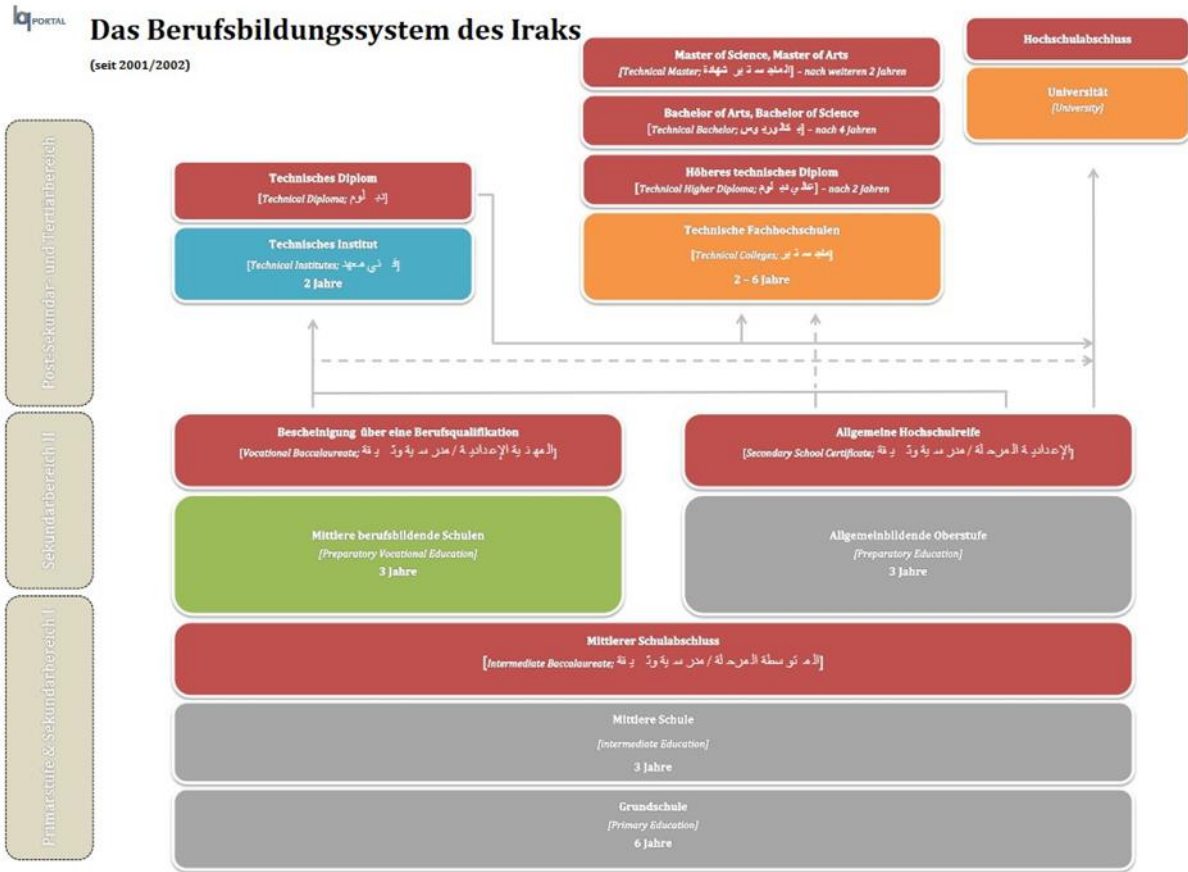
ten per cent of secondary school students, chose this option in 2007.³ Vocational training has suffered for years from a low social standing and relatively high drop-out rates (UNDP, 2014). Between the 2008/2009 and 2012/2013 school years, secondary vocational training continued to lose attractiveness: Although the number of vocational secondary schools increased to just under 300 nationwide and the number of teachers increased during this time, the number of vocational pupils fell slightly (ibid.).

In the area of tertiary education, there are state and private universities. While private universities also accept vocational education graduates, state universities mainly accept general education students. In some fields, such as medicine or architecture, there are also performance-based admission requirements. The difficulty of transferring from vocational training to university education is one of the reasons for the low participation of young people in formal vocational training (UNDP, 2014).

Informal vocational training based on the principle of "learning by doing" plays a much larger role in Iraq. This applies in particular to rural areas where, on the one hand, an above-average number of young people live and, on the other hand, there are fewer opportunities for vocational training (BQ-Portal, 2016).

³ More recent data is not available in this regard.

Figure 3-2: Iraq's vocational training system



Source: BQ-Portal

3.3 Vocational training in Afghanistan

Indicators of education in Afghanistan	
Enrolment rate (2013)	72 per cent of persons born in a year
Compulsory schooling	Nine years (six years of primary school and three years of lower secondary school)
Languages	<i>Official languages:</i> Persian (Dari), Pashto <i>Languages of instruction:</i> Dari; Pashto (in the southern provinces); English as a foreign language
Transition to upper secondary school (2014)	49 per cent of persons born in a year
Participation in state-run vocational training (upper secondary school) (2014)	1.3 per cent of persons born in a year
Percentage of university graduates (2013)	Roughly 5 to 10 per cent of persons born in a year
Illiteracy rate (2015)	62 per cent of persons above the age of 15

Sources: BQ-Portal, 2017; UNESCO Institute for Statistics (UIS, 2017); CIA, 2016

General information on education and vocational training

After the education system in Afghanistan almost completely collapsed during the years of the civil war (1989 to 2001), the sector was gradually rebuilt as of 2001. International support has played a major role here. Accordingly, school participation rates rose steadily between 2001 and 2012 despite large population growth, and did so by an average of nine per cent annually (UNESCO, 2016). While there were fewer than one million first-year pupils in 2001, 8.2 million children were already being schooled in 2012, of which 39 per cent were girls. Participation in education also increased overall through the construction of new schools, increases in teacher training and new curricula, especially for girls and in remote areas ("community-based classes") (ibid.).

Nevertheless, Afghanistan is still one of the least-educated countries in the world. To date, the unstable situation in the country has not yet made it possible to build up a functioning education infrastructure: In many areas there is still a lack of educational institutions, training and study places, (adequate) resources and teaching materials, as well as qualified staff (BQ-Portal, 2016). In 2015, almost two-thirds of persons over the age of 15 in Afghanistan – 48 per cent of men and 76 per cent of women – had no literacy skills (CIA, 2016). The country has one of the highest illiteracy rates in the world. In terms of access to education, there are still large differences between women and men, depending on family income and urban-rural disparities, to the detriment of rural areas. During the Taliban regime from 1996 to 2001, girls and women had no access to education at all, and to date their participation in education at all levels is lower than

that of men (UNESCO, 2016). According to World Bank data, they account for 19 per cent of the formal labour market (World Bank, 2017).

In the area of formal vocational training, Afghanistan has made great progress in recent years, both in terms of availability and quality. The number of state schools and institutes has risen sharply since the end of the Taliban regime, from 41 centres in 2002, to 250 in 2013 (UNESCO, 2016). In addition, there is a growing number of private institutions. The majority of vocational training institutions are located in urban centres.

The development of vocational training is supported by international organisations such as the World Bank, UNESCO, the Gesellschaft für internationale Zusammenarbeit (GIZ; Society for International Cooperation) and the United States government (USAID). For example, the first vocational training centres for vocational school teachers were opened in Kabul (2011) and Mazar-e-Sharif (2012) with the aid of the Gesellschaft für internationale Zusammenarbeit – there was no special vocational school teacher training prior to that.

Providing high-quality vocational training can help to reduce youth unemployment in Afghanistan and make a major contribution to the country's long-term rebuilding. The government is therefore very interested in focusing on this area of education.

Dari is the language used at school in Afghanistan. In the southern provinces, classes are taught in Pashtu (Nuffic, 2015). The foreign language taught at school is usually English.

Structure and places of learning in vocational training

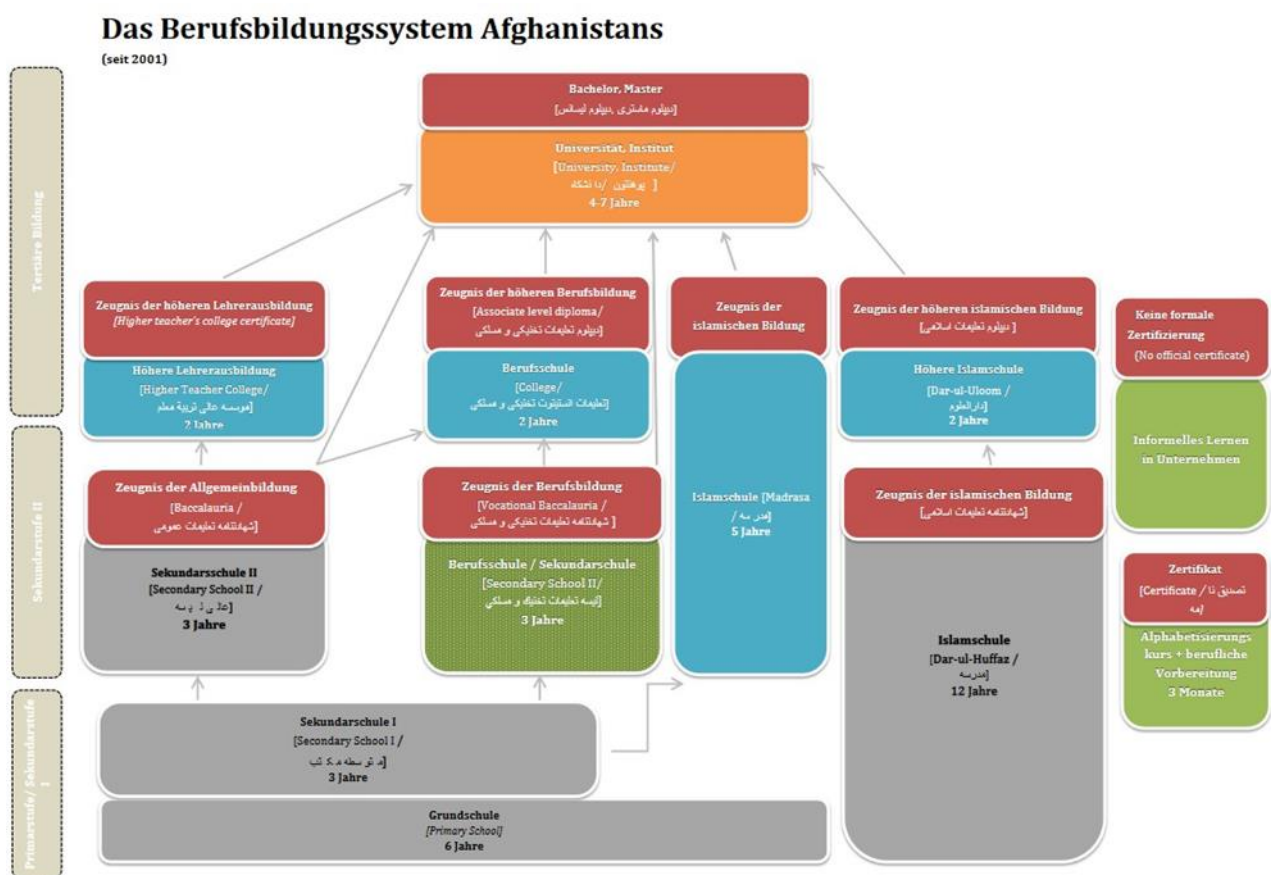
Initial vocational training in Afghanistan (s. **Figure 3-3**; BQ-Portal, 2016) follows the nine years of official compulsory schooling and lasts three years. Afterwards, or alternatively after attending general upper secondary school (classes 10 to 12), training in some occupations can be continued at a two-year higher vocational school (BQ-Portal, 2016). The places of learning are state schools and an increasing number of private, state-accredited vocational schools. According to the official standards, a practical portion of at least 60 per cent is required. However, this requirement is often not adhered to due to the lack of resources and the teachers' lack of specialist experience. In addition to the several years of vocational training, there are also three to nine months of informal short-term training. These are carried out by the Ministry of Labour, Social Affairs, Martyrs and People with Disabilities (MoLSAMD) in cooperation with aid organisations. Examples of specialisations at public and private vocational schools are automotive mechanics, machinery and electrical engineering, information technology (IT), agriculture and veterinary medicine, commerce as well as management and accounting.

In 2015, there were 310 vocational schools nationwide, with about 90,000 pupils and about 3,100 teachers (KfW Development Bank, 2015). In addition, it is estimated that up to one million young people learn occupations by traditional and informal means (ibid.). This demonstrates the immense importance of traditional teaching – especially in the country's largest and most important sector, agriculture – in comparison to school-based vocational training. In 2014, such vocational training programmes were attended by only about one per cent of young people

born in a given year (UIS, 2017). The reasons for this are the low school attendance rate and the high early drop-out rates, but also economic constraints and a lack of understanding of the added value of formalised vocational training (GIZ, 2014).

In the tertiary sector, Afghanistan has a growing number of state and private universities, especially in the Kabul region. In order to be admitted to a state university, students must pass an aptitude test (Kankur).

Figure 3-3: The vocational training system in Afghanistan



Source: BQ-Portal

3.4 Vocational training in Eritrea

Indicators of education in Eritrea	
Enrolment rate (2015)	39 per cent of persons born in a year
Compulsory schooling	Eight years (five years of primary school and three years of lower secondary school)
Languages	<i>Official languages:</i> Tigrinya, Arabic, English <i>Languages of instruction:</i> Tigrinya or regional language (grades 1 to 5), English (starting in 6th grade)
Transition to upper secondary school (2015)	36 per cent of persons born in a year
Participation in state-run vocational training (upper secondary school) (2015)	0.6 per cent of persons born in a year
Percentage of university graduates (2015)	Roughly 2.6 per cent of persons born in a year
Illiteracy rate (2016)	35 per cent of persons above the age of 15

Sources: BQ-Portal, 2017; UNESCO Institute for Statistics (UIS, 2017)

General information on education and vocational training

Eritrea achieved its official independence from Ethiopia in 1993. The ruling "Popular Front for Democracy and Justice" (PFDJ), the Eritrean "Peoples Liberation Front" (EPLF) until February 1994, pushed ahead with the replacement of Ethiopia's education system and the implementation of its own education system (BQ-Portal, 2016). The reforms focused, among other things, on comprehensive literacy and the systematic promotion of girls and women (ibid.). According to UNESCO, the school enrolment rate in 2015 was just under 39 per cent, with boys being enrolled somewhat more frequently than girls (41 or 37 per cent; UIS, 2017). The illiteracy rate has fallen in recent years and reached 35 per cent of those over the age of 15 in 2015. According to the most recent data from 2008, young Eritreans between the ages of 15 and 24 can read and write much more frequently than older generations, and men are more likely to be literate than women (UIS, 2017).

The education system in Eritrea is closely linked to the state apparatus and compulsory military service. In 2003, the government decided to extend the existing military service and to impose an indefinite period of time for military and civilian service on all citizens between the ages of 18 and at least 50 (Mohammad, 2017). The education system is used as a means to an end: Since 2003, all Eritrean youths have been obliged to attend twelfth grade at Warsay-Yikalo High School, at the military camp in Sawa, after completing upper secondary school. Many young people have to do their military or civilian service afterwards. According to the Eritrean government, half a million young Eritreans will have completed their training at the military camp in Sawa by 2015. Only a few groups, such as pregnant and married women, are exempt from this

rule. The government's action has resulted in a sharp increase in the number of refugees, especially to the surrounding countries of Sudan and Ethiopia (ibid.). In addition, it leads to a high drop-out rate before 12th grade, since young people can thus temporarily escape military service (Landinfo, 2015).

The labour market participation of men and women is about the same in Eritrea – due in part to the obligation to do public service: In 2011, women accounted for around 47 per cent of the working population (World Bank, 2017).

Existing figures on participation in vocational training show that this has had little practical relevance for a long time. Between the 1991/1992 and 2004/2005 school years, only about 4,300 pupils achieved an intermediate vocational degree and 1,000 pupils attained a higher vocational degree (Ravinder/Kashu, 2005).

Primary school lessons in Eritrea take place in Tigrinya or in the respective regional language. From sixth grade onwards, English is supposed to be taught throughout the country.

Structure and places of learning in vocational training

Formal vocational training in Eritrea takes place in three stages (s. **Figure 3-4**; BQ-Portal, 2016). After sixth grade there is already a basic vocational training that lasts from four months to two years. The target groups for this education path are young people who have enrolled in school late and are less able to perform. This will enable them to enter the labour market quicker (BQ-Portal, 2016). Adults, especially women, with a completed primary education of five years, are also a target group of these programmes (ibid.). However, no information could be researched on its practical relevance and content.

At the next higher level, there is a vocational secondary school from ninth to eleventh grade. It offers two to three year vocational training courses for technical, industrial, skilled trade, office management, agricultural and medical occupations. According to UNESCO data, less than one per cent of persons born in a given year attended such a school in 2015 (UIS, 2017).

The twelfth grade at the Sawa military camp consists of an educational part in which pupils prepare for the final examination, and four to five months of military training (Amnesty International, 2015). Only if a pupil has very good grades in the nationwide final examination after 12th grade, the "Eritrean Secondary Education Certificate Examination" (ESECE), can Eritrean youths continue their education in higher education at one of eight technical colleges (Landinfo, 2015). Since 2007, all other school leavers must compete a two-year training course at the National Centre for Vocational Training (CEVOT) in Sava, which is affiliated with the Eritrean military. Here, the extensive influence of the state on individuals' education and life becomes very clear.

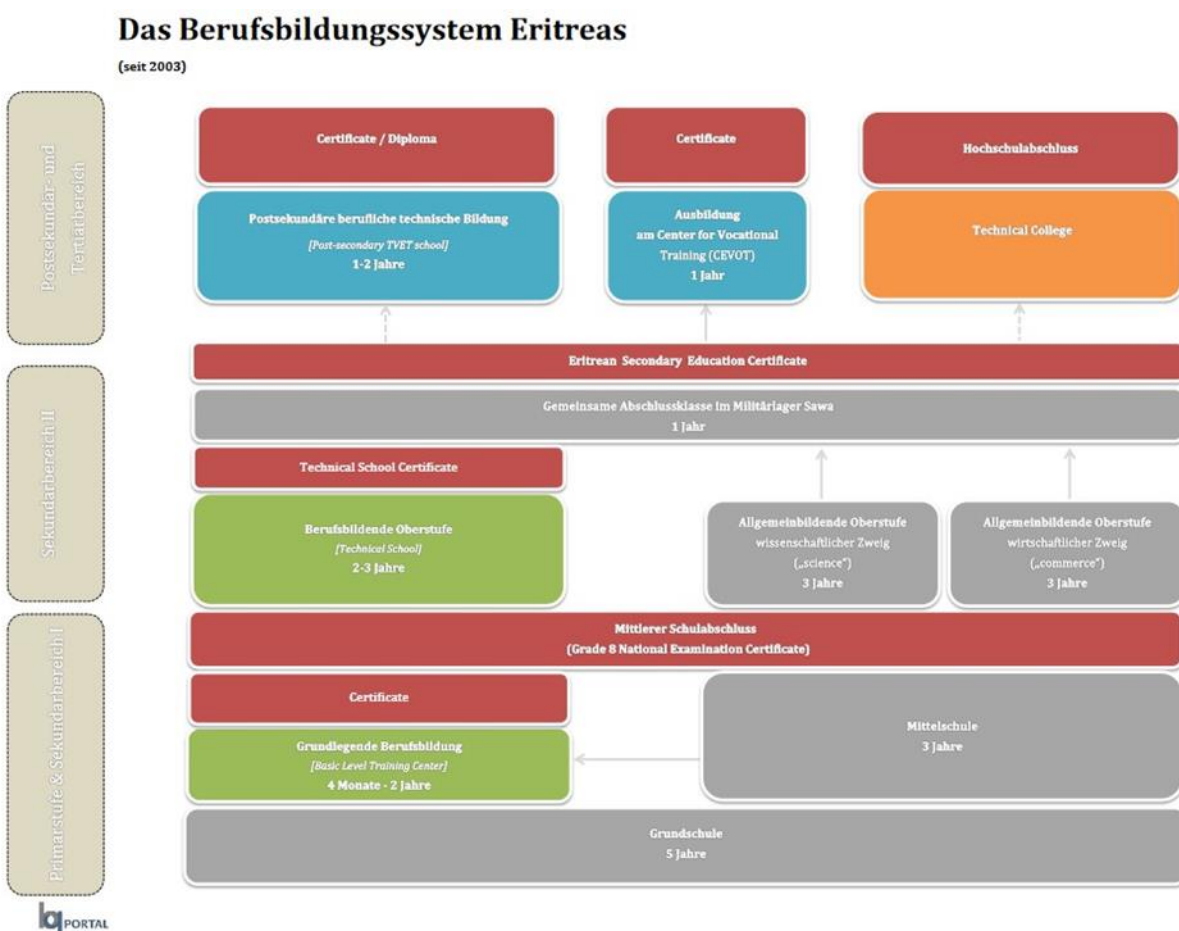
On a practical level, the institution offers vocational courses in 19 areas, such as office management, materials and resources management, animal and plant science, modern agricultural

management and skilled trade such as metalworking and carpentry. According to official information, the courses contain a mixture of about 40 per cent theory and 60 per cent practice in school workshops, and can include company internships (Ghebremedhin, 2015).

In addition, there are eight technical colleges in the tertiary sector where subjects such as accounting, administration and nursing are taught. The one- to two-year training courses primarily provide graduates civil service training in the appropriate ministries (BQ-Portal, 2016). The specialisation is chosen for students, they do not have a say (Amnesty International, 2015). The country's only university in Asmara was closed in 2004 and replaced by the colleges (ibid.).

Beyond the formal education system, informal training based on the principle of "learning by doing" is widespread in Eritrea. This can also be seen in the context that many young people drop out of school before twelfth grade and are responsible for caring for the family (Amnesty International, 2015).

Figure 3-4: The Eritrean vocational training system



Source: BQ-Portal

3.5 Vocational training in Iran

Indicators of education in Iran	
Enrolment rate (2015)	99 per cent of persons born in a year
Compulsory schooling	Nine years (six years of primary school and three years of lower secondary school)
Languages	<i>Official language:</i> Farsi (Persian) <i>Languages of instruction:</i> Farsi (Persian); English, French and German as foreign languages
Transition to upper secondary school (2015)	80 per cent of persons born in a year
Participation in state-run vocational training (upper secondary school) (2015)	19 per cent of persons born in a year
Percentage of university graduates (2015)	52 per cent of persons born in a year
Illiteracy rate (2016)	13 per cent of persons above the age of 15

Sources: BQ-Portal, 2017; UNESCO Institute for Statistics (UIS, 2017)

General information on education and vocational training

The Iranian education system is characterised by high school attendance rates and a low illiteracy rate in regional comparison. The school enrolment rate in 2015 was almost 100 per cent, 80 per cent of persons born in a year continued their education after nine years of compulsory schooling at a secondary school (UIS, 2017). As a result, the illiteracy rate in Iran has also decreased dramatically over the past four decades, from 63 per cent of those over the age of 15 in 1976 (52 per cent of men and 76 per cent of women) to 15 per cent in 2014 (10 and 20 per cent, respectively; *ibid.*). For the younger generation of 15 to 24-year-old men and women, the illiteracy rate in the same year was only two per cent in each case (*ibid.*). The educational participation of men and women is almost equally high at all levels of education, from pre-school to university education (see UIS, 2017). However, women are clearly disadvantaged in the labour market: In 2016, their share of the total workforce was only 18 per cent (World Bank, 2017).

Academic education has traditionally enjoyed a very high social standing in Iran and is coupled with a high participation rate at the tertiary level: In 2015 more than half of all persons born in a year attended a higher education institution, with women doing so almost as frequently as men. Vocational training, particularly within the framework of the practically oriented training courses offered by the Technical and Vocational Training Organisation (TVTO), is perceived by society as less attractive than academic education (Körner et al., 2017). Since the mid-1990s, however, more attention has been paid to vocational training programmes. Since then the offer

has been continuously expanded and improved, so that the vocational school has become a "viable alternative" to prominent higher education (ibid., 25).

In the modernisation and professionalisation of vocational training, greater cooperation between the TVTO and other vocational training institutions and parts of higher education has been sought. The aim is to make vocational training at technical secondary schools more practice-oriented. Furthermore, the introduction of a National Qualifications Framework (NQF) with nationwide, uniform professional standards is also in progress, as the training standards have been very different across the country so far. This positive development in the area of vocational education will also benefit from the end of economic sanctions in January 2016. The sanctions had previously affected the quality of vocational training, since vocational schools were for example unable to import new technology (ibid.). This means that the vocational training system is in great need of modernisation.

In the area of cooperation in international vocational training, the TVTO is particularly active, fostering cooperation with the World Bank, the International Technical and Vocational Training Organisation (I.T.V.T.O), UNESCO, UNHCR and the GIZ [Society for International Cooperation] (TVTO, 2017).

In Iranian schools, classes are taught in Farsi (Persian). At secondary schools, students can also choose between English, French and German as a foreign language.

Structure and places of learning in vocational training

Vocational training takes place in Iran at various institutions and at different levels (s. **Figure 3-5**; BQ-Portal, 2014): Initial vocational training is offered from 10th grade onwards at the Institutes for Technical Education (TVTO) and, in addition to a general education component, at technical and vocational secondary schools. In the area of post-secondary education, there are technical colleges and various vocational training courses at institutes of universities for applied science and technology.

The TVTO offers certified professional qualifications at three levels, leading to initial and continuing vocational training degrees. The courses are conducted by state-run and state-recognised private institutes and last between 1 and 18 months, depending on the orientation and objectives. They always have a practical component and are primarily aimed at training and further training qualified and semi-skilled workers, but university students and graduates as well as managers of business enterprises are also among the target groups (see Körner et al., 2017). Examples of specialisations in the three overarching areas of industry, agriculture and services, are CNC turning and milling, welding, wood industry, electrical installation, IT, industrial automation, food industry and agriculture. TVTO training courses are held at public and private schools, but also at mobile learning centres in rural areas and prisons, garrisons, private educational institutions and industrial enterprises in the context of learning at work (TVTO, 2017). Some TVTO institutions cooperate directly with industrial sectors, such as the fuel, gas and petroleum industries, insurance, agriculture and construction (ibid.).

In practice, TVTO graduates are more attractive for employers because of their practical knowledge and find employment more easily, but receive lower entry-level wages than graduates of technical and vocational secondary schools (Körner et al., 2017).

Technical secondary schools provide vocational qualifications in about 30 specialisations in the three areas of "industry", "services" and "agriculture" (UNESCO, 2012). Vocational secondary schools also impart the basics for artistic professions, and the range of courses offered is much more individual and differentiated due to specialisations in approximately 400 occupations. Examples of specialisations in both schools are trade, production, metal industry, automotive mechanics, electronics and electrical engineering, textile processing (industrial sector), graphic design, architecture, accounting, education (services sector), animal husbandry, horticulture, agricultural machinery (agricultural sector). While training at the technical secondary schools is purely school-based, theoretical training, the curricula at the vocational colleges contain a greater portion of practical experience. If logistically possible, this is implemented in cooperation with a TVTO. Both types of school comprise about two-thirds of general education content (year 1 and 2) and one-third of occupation-specific content (year 3), and lead to a double-qualifying degree.

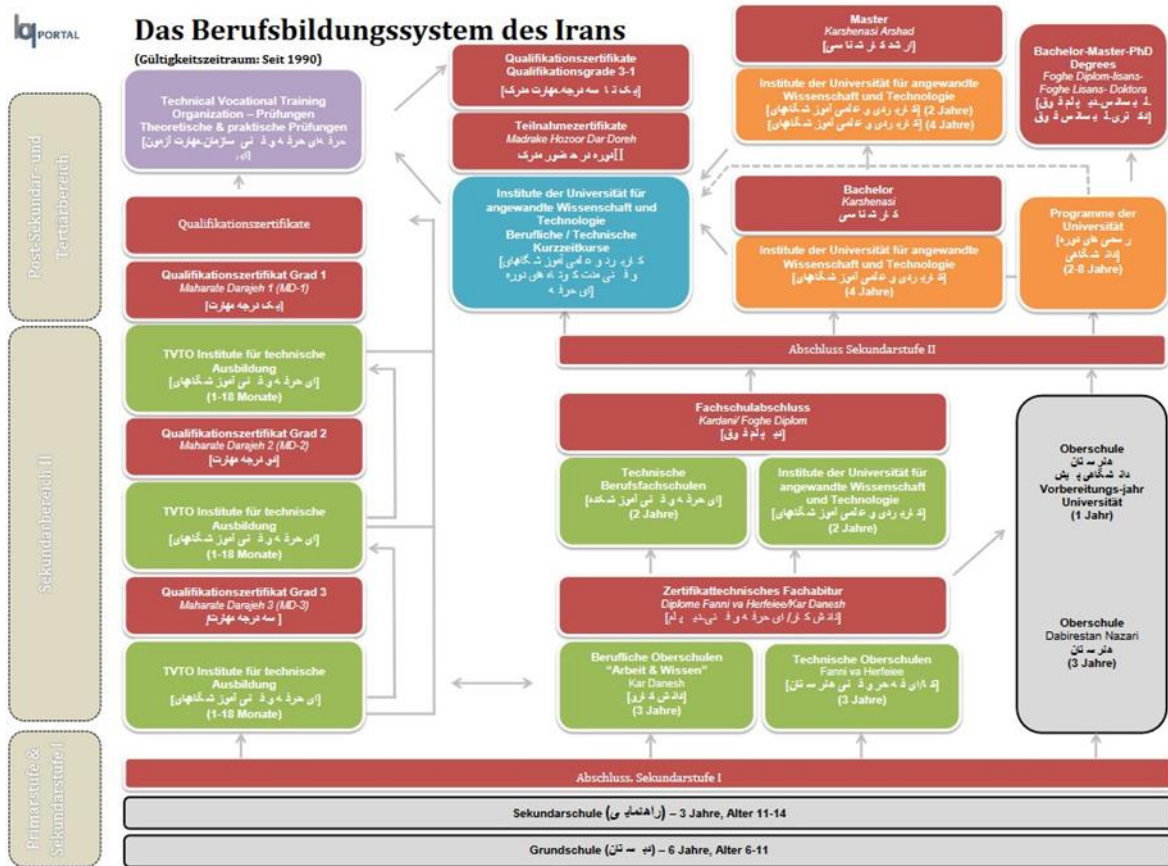
This can be followed by a direct transition to the labour market, a year of preparation for university, or two more years of specialisation at a technical college or an institute at a university of applied sciences and technology. The technical vocational schools teach, for example, administration, fashion design, graphic design, animal husbandry, forestry, electronics, information technology, civil engineering and mechanical engineering. Afterwards, students can continue their education at a general university or a university of applied sciences, complete two- to six-year courses and short-term courses at institutes supervised by a university of applied science and technology (UAST) or directly enter the labour market.

Since the 1990s, the proportion and number of boys and girls in Iran who have decided to enrol in technical vocational training after nine years of compulsory schooling has been increasing (see UIS, 2017; UNESCO 2010). Girls are less likely than boys to opt for vocational training and choose other training courses (UNESCO, 2010).

Unlike in most of the main refugee home countries, vocational training in Iran takes place largely in the formal education system. Informal vocational training in Iran only plays a role in rural and remote areas where there is no adequate education infrastructure.

The academic sector in Iran is strongly developed and has expanded enormously in recent years. The transition to university is difficult and can only be achieved by passing the national admission test (Konkûr).

Figure 3-5: Vocational training system in Iran



Source: BQ-Portal

3.6 Vocational training in Somalia

Indicators of education in Somalia	
Enrolment rate (2006)	21 per cent
Compulsory schooling	Eight years (four years of primary school and four years of lower secondary school)
Languages	<i>Official language:</i> Somali (first official language), Arabic (second official language), Italian and English (business languages) <i>Languages of instruction:</i> Somali and English (starting in 9th grade); Arabic and English as foreign languages
Transition to upper secondary school (2006)	5 per cent of persons born in a year
Participation in state-run vocational training (upper secondary school)	n/a
Percentage of university graduates	n/a
Illiteracy rate	n/a

Sources: BQ-Portal, 2017; World Bank, 2006; UNICEF, 2012

*Since no data from the UNESCO Institute for Statistics (UIS) is available for Somalia, UNICEF's data from the Multiple Indicator Cluster Survey (MICS) 2006 is used here.

General information on education and vocational training

When the civil war broke out in 1991, the then already weakened formal education system in Somalia completely collapsed: 90 per cent of the schools were destroyed, and most teachers and pupils had to leave the formal education system (Williams/Cummings, 2015). To date, Somalia's education system is one of the least developed in the world and a significant percentage of children and young people have no access to formal education (Moyi, 2012). The majority of the people in Somalia are illiterate, with a particularly high proportion being women (Williams/Cummings, 2015). At the same time, there are also positive developments: Somalia's education infrastructure has significantly developed in recent years, and numerous institutes, from primary schools to higher education institutions, have opened. The participation rate in formal education has also increased despite population growth (ibid.; The Heritage Institute for Policy Studies, 2013). In 2012, the ministries of education in the country's three regions – Central South Zone (CSZ), Somaliland and Puntland – also adopted ambitious plans to improve education at all levels.

Background information: Somalia

Since the outbreak of the civil war in 1991, Somalia has been marked by political instability, tribal struggles, droughts and the resulting migration movements. There has not been a single functioning government since then. Somalia has therefore been included in the list of "failed states" for years.

The country is divided into three regions, the Central South Zone (CSZ) with the capital Mogadishu, Somaliland and Puntland. Somaliland declared independence back in 1991, but this status has not yet been recognised by the international community. Puntland is an autonomous region of Somalia, but it does not aspire to the status of independent state. Overall, there is little data available on (vocational) training in Somalia, although the level of data varies from region to region

According to data from UNICEF (2012), approximately one in five children of official school age in Somalia attended a general or Koranic school in 2006. The percentages vary from region to region: School attendance rates in the relatively stable regions of Somaliland and Puntland are well above those in the turbulent Central South Zone (CSZ). In addition, educational participation in urban areas is significantly higher than in rural areas, since the education infrastructure in the former is better developed (Moyi, 2012).

Girls and women in Somalia are less likely than boys and men to participate in formal education across all education pathways. According to data from the World Bank (2017), they account for more than 30 per cent of workers in the formal labour market. The indicators on education in Somalia are also to be seen against the backdrop

that about 60 per cent of the entire population lives in semi-nomadic organised clans. This part of the population rarely takes part in formal education (Williams/Cummings, 2015). Many children and adolescents are also enrolled later than at the official schooling age.

Formal and informal vocational training plays only a marginal role in Somalia. Such training courses have been introduced in recent years, mainly in Somaliland and Puntland. In addition, formal vocational training enjoys a low social standing in Somalia too, and many young people associate it with poor employment opportunities. When young people have the choice, they tend to opt for academic education as a result (Dualeh, 2016).

During the eight years of basic education, pupils in Somalia are taught in Somali. English is the official language in the classroom from ninth grade onwards.

Structure and places of learning in vocational training

Formal vocational training is anchored in Somalia's regions from grades nine to twelve and at post-secondary level (s. **Figure 3-6**; BQ-Portal, 2017).

At four-year technical secondary schools, students can learn different occupations in the technical, commercial and agricultural sectors after eight years of basic education. In the past, there were also technical institutes⁴ at post-secondary level where subjects such as computer science, engineering and mechanics were taught.

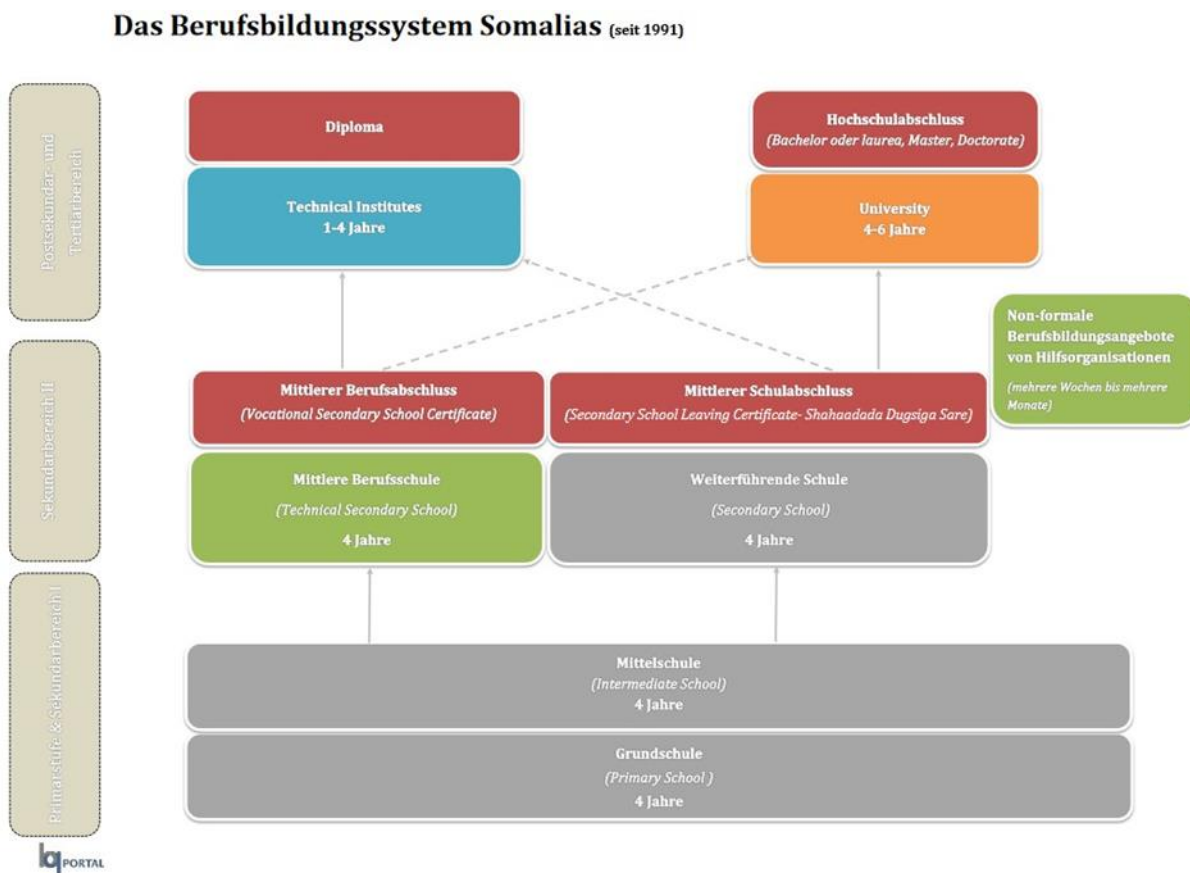
⁴ Since 1991, some of these institutes have been rebuilt with the help of international assistance. It was not possible to find out whether and to what extent technical institutes are currently operating.

In the tertiary sector, there has been a rapidly growing number of educational institutes at universities since the early 1990s. In Mogadishu alone there are over 40 universities, and in Somaliland, the number of universities increased from two in 2004 to 23 in 2013 (The Heritage Institute for Policy Studies, 2013). The quality of teaching varies greatly depending on the institution, as there are no prescribed standards.

In the Somaliland and Puntland regions, various non-government organisations such as Save the Children and Diakonia (Sweden) offer training courses ranging from several weeks to several months in areas such as clothing production, carpentry, IT, bricklaying, electrical engineering, mechanics and water installation (BQ-Portal, 2017). These courses are primarily aimed at preparing various target groups, such as disadvantaged and underperforming young people, for the vocational training market (ibid.).

In practice, formal and informal vocational training plays a minimal role in Somalia on the whole: Learning vocational work outside the higher education system usually takes place directly at the workplace and at an informal level (BQ-Portal, 2017).

Figure 3-6: The Somali vocational training system



Source: BQ-Portal

4 Characteristics of vocational training systems and differences from the German vocational training system

The summaries of vocational training systems in chapter 3 show that refugees from the countries analysed have grown up and learned occupations in very different learning environments. Vocational training takes place at different places of learning, and formal vocational training is not equally widespread in all the countries. The report also shows that the education systems as a whole are developed to differing degrees and strongly influenced by the respective political and economic environment. Nevertheless, some common characteristics can be found in the vocational training systems, especially in comparison to vocational training in Germany. They are summarised in the following table.

Table 4-1: Common characteristics of vocational training in selected main refugee home countries

Criterion	Commonality in the analysed refugee home countries
Dual vocational training	In none of the countries there is an institutionally anchored, dual vocational training that is comparable in terms of the length, places of learning and content of the dual vocational training in Germany.
Social reputation of vocational training	The social status of vocational training is lower overall than academic education in all the countries.
Prerequisite for access to formal vocational training	In all the countries under consideration, access to vocational training is linked to the successful completion of eight to nine years of compulsory schooling (lower secondary school).
Number of occupations that can be learned in the official vocational training system	With the exception of Iran, there are significantly fewer occupations that can be learned in the official formal education system than in Germany. In Syria and Iraq, for example, around 20 occupations can be learned at technical secondary schools. This contrasts with some 330 vocational occupations that are either recognised or deemed as recognised in Germany (Statista, 2017).
Classification of dual vocational training occupations in the education system	Some German vocational training occupations are located at university in some of the countries analysed. In Syria and Iraq, for example, the occupation of optician or dental technician is taught at the technical institutes of universities.
Role of informal vocational training	Traditional vocational training at companies according to the principle of "learning by doing" is still widespread in all the countries surveyed. This applies in particular to agricultural and skilled trade occupations with a long tradition (e.g. bakers, bricklayers, hairdressers) and/or rural regions without sufficient education infrastructure.
Length of vocational training	Formal and informal vocational training takes between a few months and several years, depending on the country and place of learning. Several years of school-based vocational training usually also includes a considerable portion of general education. Traditional, informal vocational training according to the master apprentice principle usually takes several years.

Certification of vocational degrees	State vocational degrees are confirmed by a certificate signed by the competent ministry and the school. For practical vocational experience, a work certificate ⁵ can be issued by the training company in some countries and occupations. Such a certificate is not a prerequisite for working in the respective occupation.
Quality of vocational training	In all countries, reference is made to qualitative deficiencies in formal vocational training. These relate primarily to inadequate teacher training and a lack of teaching materials and resources in schools. Connected to this, vocational training takes place on a different technological standard than in Germany. At the same time, there are efforts to improve the quality of vocational training in all the countries discussed, often with international support.
Availability of vocational training programmes	The education infrastructure in cities and rural areas differs substantially from one country to another: Vocational training programmes are available in rural areas less often or sometimes not at all.
Selection of occupation	There is not a tradition of individual or interest-based choosing of an occupation in any of the countries analysed. Demand in the labour market, family expectations, but also other relationship structures such as the clan (in Somalia in part) or the state (Eritrea) exert a major influence on the occupation chosen by an individual.
Transferring in the education system	It is difficult to transfer from a vocational school to a university, even if this is theoretically possible (e.g. Syria, Iraq). An exception here is Iran (see Chapter 3.5). Accordingly, the choice for vocational training often becomes a "one-way street" that rules out enrolling in a university degree programme later.
Role of religion in (vocational) school teaching	In all Arab and Muslim countries, the teaching of Islam plays a major role in the entire education system (Kirdar, 2017). This is partly reflected in the vocational school curricula. ⁶
Girls and women in (vocational) training system	With the exception of Syria and Iran, women's educational participation in the formal system overall and in vocational training is lower than men's. On the formal labour market, women are less active than men in all the countries analysed.
Teaching methods and didactics in vocational training	In school-based training courses, the focus is usually on providing information, and the teacher dominates the lessons. Participatory methods such as group work are traditionally not part of classroom teaching (see also Kirdar, 2017).

Source: Author's own chart

⁵ Only information and examples from Syria, Iraq and Afghanistan are available in this regard (Source: BQ-Portal).

⁶ Only information and examples from Syria, Iraq and Iran are available in this regard (Source: BQ-Portal).

5 Conclusion and recommendations for action

This report provides a summary of information on the education levels of refugees in Germany and the education systems in the six most important countries of origin at the present time – Syria, Iraq, Afghanistan, Eritrea, Iran and Somalia. The focus was on vocational training in these countries. The analysis of vocational training systems shows that they are very heterogeneous and very different from the German system. The (formal) vocational education and training is always to be considered in the respective historical, economic and political context and, depending on the country of origin, developed and differentiated to different degrees. Nevertheless, common characteristics can be found in the countries analysed, which contrast with vocational training in Germany. This includes the fact that the way in which occupations are learned in the countries of origin usually differs from German (dual) vocational training in terms of places of learning, length, content, degree of formalisation and classification in the education system. In addition, vocational training, which is primarily defined by school training, has a much lower social standing than academic education in the countries analysed.

Even if only a small percentage of those seeking protection in Germany have obtained formal qualifications in their country of origin, the refugees were nevertheless influenced by the education system in which they grew up. These national education systems provide insight into how and where occupations are best learned, as well as the social significance and career prospects associated with them. Refugees' educational aspirations have been influenced by this, and therefore often differ greatly from German customs and ideas.

The findings in this report suggest the following recommendations for counselling centres and companies as well as for the development of integration tools by public institutions and education providers:

- **Provide culture-sensitive education and career guidance for refugees:** Since refugees have grown up in completely different education systems and working contexts, their educational and vocational orientation in Germany should be given particular attention. The German vocational training system, and the dual training system in particular, must be explained to many refugees (also see Esser et al., 2017, in this regard). The reputation, advantages and career prospects of (dual) vocational training are of equal value to university degree programmes in Germany and can be classified as much higher than in the countries of origin. In addition, they often do not know about the central continuing training opportunities to obtain a degree as a master craftsman, technician or expert, or the possibility to transfer to another education system. The high degree of specialisation in courses of study and vocational training occupations – there are five different specialisations in the vocational occupation of "automotive mechatronics technician" alone – may be unclear to refugees when they are selecting an occupation. In addition, there are culturally conditioned peculiarities, such as the tradition of individual career choice in Germany, which is rather unusual in the countries from which refugees come. Information on the German education system, dual vocational training and the labour market should be embedded as early as possible in the support chains for refugees, for example in vocational language courses, integration courses and welcome classes. These identified aspects should be an integral part of vocational

orientation. Refugees or other migrants who are in, or have completed their own vocational training or a degree programme in Germany, can serve as "career choice advisors" and role models: They can best describe the challenges they initially encountered in vocational orientation and how they chose a certain education path.

- **Strive for perfect placement in training:** As is the case for most Germans and many immigrants, the dual vocational training system is also an opportunity for many young refugees to be integrated into the German labour market long term. It is already becoming apparent that refugees are increasingly opting for dual vocational training: At the end of August 2017, just under 25,000 persons with a refugee background were registered with the employment agencies and job centres as seeking training. By contrast, one year ago, in August 2016, there were only roughly 9,300 persons (Federal Employment Agency, 2016; 2017). This number will increase significantly over the next few years (Winnige et al., 2017). Opportunities vary greatly depending on the vocational training occupation and region, and there is already a matching problem on the vocational training market: On the one hand, almost 49,000 vocational training places remain vacant in 2017, while, on the other, there were almost 24,000 unemployed applicants without an alternative to a training place in the same year (Matthes et al., 2017). For this reason, the vocational orientation of refugees – as well as the vocational orientation of all other youths and young adults – should also take into account the professional prospects that exist with a particular vocational degree. It makes sense to identify and explore alternatives as early as possible.
- **Use existing knowledge of the education system and labour market in the countries of origin:** Knowledge of the education systems and the labour market in the countries of origin is important for understanding systemic differences between Germany and countries from which refugees come. On the one hand, this knowledge is relevant for counselling centres. It can help to provide more systematic support for refugees during career orientation and job placement. On the other hand, it helps companies that hire or have already hired refugees: They can understand the CVs of applicants better, and it is easier to find out about and categorise previous educational and work experience, and thus connect it to vocational training in Germany.

Knowledge of the structure of education systems can also be used as an aid for future scientific surveys on the education of refugees. Researchers and respondents are thus not only able to more easily document foreign educational degrees and classify them in the respective education system, but also to relate them to German degrees. A very good source of information on vocational training is the BQ-Portal, which is the information portal for foreign vocational qualifications. It contains information on vocational training in 84 vocational training systems worldwide at the present time, including all the main countries from which refugees come. Moreover, the BQ-Portal contains detailed information on over 3,000 vocational training and continuing education occupations.

- **Expand alternatives to the standard procedure for the recognition of vocational qualifications:** Around 20 per cent of refugees have already obtained a vocational or academic degree in their native country. So far, however, only a small portion of them have made use of the instrument of vocational recognition. In contrast to other immigrant groups, many of

the refugees no longer have certificates and are often unable to obtain them. The same applies to the curricula on which training is based. The usual procedure for vocational recognition is a document analysis, which compares the foreign and German curriculum and takes account of additional qualifications and vocational experience. This procedure is not applicable to numerous refugees. Therefore, the alternatives to the recognition procedure must be expanded and offered nationwide. The ongoing Prototyping Transfer project, which involves practical qualification analyses and trains responsible bodies, offers a good starting point for expansion to other occupations and federal states. Companies can also get involved by actively supporting and accompanying the recognition procedure (see Körbel/Stoewe, 2016).

- **Further develop competence documentation procedures and use them early on:** Competence documentation measures and potential analyses can be used to determine at an early stage whether post-qualification or retraining makes sense in an individual case. Since significantly more refugees have several years of informal work experience rather than formal degrees, such instruments should be used more extensively for this target group in the future. It is helpful for integration into the labour market if the results of competence documentation measures lead to certificates recognised in the labour market. Instead of a large number of parallel measures with varying degrees of recognition, the focus should therefore be on standardised instruments that are recognised throughout Germany. These should be gradually extended to various occupations and implementing bodies.

An example of an existing instrument is the competence documentation tool check.work developed by the Chamber of Industry and Commerce for Munich and Upper Bavaria. It was developed especially for refugees, and documents vocational experience and potential in two online, multilingual modules. In the Valikom project, various chambers of industry and commerce as well as chambers of skilled trades are developing a procedure for assessing and certifying vocational competencies outside the formal education system. The instrument is aimed at all persons who have developed vocational competencies informally and connects acquired competencies to a recognised German vocational training or continuing education degree. Both procedures result in a certificate issued by a chamber, i.e. a body recognised by the labour market.

- **Use step-by-step solutions:** The qualifications and competencies of refugees are very heterogeneous. Therefore, support measures with individual modules are often the most suitable for employees and employers. Some refugees find it helpful to obtain language learning support parallel to their work, while technical qualification is (also) the focal point for others. By contrast, vocational orientation and help understanding the German vocational training system play a central role for many refugees. Examples of flexible programmes for initial and further qualification are the models "Step by step to occupational vocational training" ("Step by Step in die betriebliche Ausbildung") and "Kommit" developed by the German Federal Employment Agency. Their goal is the gradual integration of refugees into vocational training and work, while simultaneously supporting employers and employees. They also receive part-time language training support. Furthermore, temporary employment can be a good option on the way to permanent employment, with accom-

panying qualification and language support (Jambo et al., 2017). Vocational training also offers flexible opportunities for gradual advancement to a vocational degree such as part-time training, entry-level qualification, vocational training and qualification components, and the later external examination (Externenprüfung).

- **Focus on refugees' resources and potential:** The report shows overall that there are numerous possibilities for helping refugees to enter the labour market. In addition to some existing qualifications, many refugees have practical work experience in their native country and a strong motivation to join the labour market, while the younger generation of 15-24 year-olds have great educational aspirations. Getting to know a new country, a new language and a new work and education system requires a lot of time and energy, however. As refugees move into the labour market, this also places demands on companies and employees: If employers are open to applicants without formal degrees, with gaps in their CV and/or without perfect German language skills, and if they are willing to give new employees time to get oriented, refugees' potential will be realised and developed on the job market all the better and in a more sustainable manner.

The focus of this report by the German Economic Institute is on the description of vocational training in the six countries from which the most persons seeking protection in Germany come. In addition to the vocational training systems in other countries, future analyses could also take a more detailed look at the school system and the higher education system in refugee home countries. Thus, a more comprehensive understanding of the educational backgrounds of refugees can be gradually developed.

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List of tables

Table 1-1: Asylum applications from 2015 to 2017 and protection rates	5
Table 4-1: Common characteristics of vocational training in selected main refugee home countries	34

List of figures

Figure 2-1: Highest educational institution attended by adult asylum seekers from the TOP 10 countries of origin* in 2016, in per cent	6
Figure 2-2: Highest attended educational institution and degrees* according to IAB-BAMF-SOEP survey in 2016, in per cent	7
Figure 2-3: Highest educational institution attended by country of origin, in per cent	8
Figure 3-1: The vocational training system in Syria.....	16
Figure 3-2: Iraq's vocational training system.....	20
Figure 3-3: The vocational training system in Afghanistan	23
Figure 3-4: The Eritrean vocational training system	26
Figure 3-5: Vocational training system in Iran.....	30
Figure 3-6: The Somali vocational training system.....	33