Croatia

VET in Europe – Country report

2014
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CHAPTER 1.
External factors influencing VET

1.1. Demographics

Croatia is a unitary parliamentary constitutional republic since 1991. On 1 July 2013, it entered EU as its 28th Member State. The country consists of two regions (Adriatic and Continental since 2013), 20 counties with 127 towns/cities and Zagreb – the capital.

Croatia has a population of 4,290,612 inhabitants (2011 Census, Popis stanovništva, kućanstava i stanova 2011. godine) and a territory of 56,594 km².

Like many other European countries, Croatia is facing a changing and particularly challenging demographic profile. The Bureau of Statistics (Državni zavod za statistiku, DZS) forecasts a 16% decline of the population by 2050. Approximately 3.9% of people were 80 years old or older in 2012. This is below the EU average of 4.9%, however the population ageing is more rapid than in many European countries due to decreasing birth-rate and emigration for economic and safety (¹) reasons. Many (²) highly skilled people emigrated from Croatia since 1990.

Figure 1. Average age of population, 1953-11


By 2050, the share of older people (64 years or more) will increase from 17% (in 2005) to 27%. At the same time, share of young people (15-24 years) will decrease from

(²) Approximately 140 000 between 1997 and 2007.
13% to 10%. The working age population (15-64 years) will also decrease. In order to sustain the social security and healthcare systems a significant employment growth will be required.

In 2013/14 the total number of persons who were enrolled in the education (excluding tertiary and pre-primary education) (\(^\text{3}\)) was:

- 327 204 (7.6% of total population) between the age of 6 and 15 were in primary education (ISCED 1 & 2 level)
- 182 878 secondary school students (4.3% of total population) between the age of 15 and 19 in secondary education (ISCED 3 level). Approximately 67% of secondary school students were enrolled in VET schools.

1.2. **Economic background**

The economy size is small with GDP of EUR 45 billion (\(^\text{4}\)) (Gotovac, V. 2011; World Bank 2013; World Bank 2014).

**Figure 2. GDP change compared to previous year (market prices)**

![GDP change compared to previous year (market prices)](image)

Source of Data: Eurostat, Date of extraction: 17.11. 2014

In 2000-08, there was an average annual growth of 4.2% and low inflation. In 2008, the country has been strongly affected by the economic crisis/recession with cumulative GDP decline of 12% between 2008 and 2013. Economy is yet to show signs of the sustainable recovery from the economic crisis. The privatisation of big state-owned enterprises and the availability of EU funds (in net terms about 2% of GDP per year) will help to ensure growth in the medium term. The structural reforms that the Government launched in labour, pension,

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\(^\text{3}\) DZS, Statistical Yearbook of the Republic of Croatia, Section 26-1.: Children, pupils and students enrolled, by level of education, beginning of school year.

\(^\text{4}\) In 2014 prices.
and social benefits as well as investment climate areas will help stimulate job creation, productivity, and social cohesion. However, the outlook for the short term remains ‘difficult’.

According to the total revenues, the leading industrial branches are the production of food, drinks and tobacco, followed by the chemical and oil industries. Tourism is an important driver of the economy and generates strong multiplying effects spilling over to other economic fields. In 2013, the share of tourism in the overall economy GDP was estimated at 16.5% or EUR 7.2 billion. It accounts for a third of a national export (two thirds of services export) and for 6.3% of total employment. Construction, up until the beginning of the recession, was one of the most propulsive sectors, especially in road building, housing and commercial construction. Since 2008, construction projects were reduced significantly.

Small and medium entrepreneurship (SME) are core drivers of the economy, playing an important role in industrial restructuring, competitiveness and innovation, as well as in generating new employment. The total number of SMEs increases slowly, and in 2011, it reached 99.76% (in EU-15 99.8%) of all registered enterprises. The sector employs 68.3% of all job-holders that is more than in the EU-28, generating EUR 20.5 billion of value added (59%) and 51% of GDP. The most active sectors are wholesale and retail trade (24.35% of enterprises), with real estate and manufacturing (13.27%) trailing behind. SMEs are concentrated in a few major urban centres (Zagreb, Split, Rijeka, Osijek and the surrounding areas). Despite the progress that has been demonstrated in the SME sector over the last years, there are a number of challenges in terms of performance in the global market.

1.3. Labour market

The country is undergoing a restructuring process characterised by sectoral shifts, privatisation, public sector reform and economic adjustment, which are all likely to influence large numbers of employees. In addition, the new economic crisis aggravates the already existing problems in the labour market, such as low and declining labour force participation, high levels of unemployment rate, labour shedding and a large informal sector (29.8%; 19% in EU-27), lack of qualified human capital and skill mismatch (Republic of Croatia, 2014a; Republic of Croatia 2014b). There have been several attempts to tackle the issue of undeclared work and the underground economy. A comprehensive and systematic approach of strategies, measures and policies based on the in-depth analysis of the situation and gathering of relevant data to measure undeclared work more precisely was not yet developed and implemented.

In 2008-13, the employment rate has decreased by 5.7% that is more than in the EU28 (1.9%) (Figure 3).
It has mostly declined in construction, wholesale and retail, manufacturing, publishing and media, which all shed more than one sixth of the workforce. The decline was less severe in transport, hospitality and business services, while some employment growth was evident in knowledge-intensive services, in particular IT, health and education. The tourism development strategy 2020 (Strategija razvoja turizma Republike Hrvatske do 2020. godine, 2013) and the industrial strategy 2014-20 (Industrijska strategija Republike Hrvatske 2014.–2020, 2014) have been adopted to increase the employment rate by five percentage points by 2020, focusing on medium-high tech manufacturing, communication and IT, in line with the smart specialisation framework and demands of the growing ‘green economy’. This requires substantial investment in development of curricula, attractiveness and quality of vocational education and apprenticeships, while retaining the human capital of older workers already in employment, as well as a system of coordination and cooperation between the business, education system and scientific research sector.

The employment rate is different for different age groups. It is lower than EU average for youth below 25 years and for people over 50 years of age. The employment rate for 30-39 year-olds is similar to the EU average. The rate of women in employment in 2013 was 49.7%. This is well below the EU average (62.5%) and considerably lower than 58.3% employment rate of men.

In 2013, the employment rate for people without upper secondary education was only 35.7% (51.4% in EU). Better employment chances have people with upper secondary education (53.8%; 69.3% in EU) and with tertiary education (74.2%; 81.7% in EU).

The unemployment rate increased from 8.4% in 2008 to 17.2% in 2013. Despite some improvements in the second quarter of 2014, a total of 345,112 persons were registered as unemployed. A recent increase in employment has been much smaller than a decrease in unemployment.
As demonstrated in Figure 3, 48.06% of total working age population (15+) was economically inactive (5) in the second quarter of 2014. Conversely, labour force (15+) participation rate was 51.94% with 8.6% of persons not in paid employment or self-employment.

In 2014, two thirds of all unemployed were long term unemployed. Eurostat data show that the long-term unemployment rate was 10.1% (in EU 28 5.1%). Most of the long-term unemployed were without upper secondary education or prior employment experience and older people. Youth unemployment is highly influenced by lack of working experience. Almost 40% of registered unemployed youth in the age of 15-29 have no (formal) working experience. Youth are also more exposed to temporary employment. Eurostat data show that the rate of employees aged 15-24 with temporary contracts was 17% (in EU 28 14%) in 2014.

Table 1. Unemployment by educational attainment, 2011-14

<table>
<thead>
<tr>
<th>Level of education</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without completed primary education</td>
<td>5.7</td>
<td>5.6</td>
<td>5.3</td>
<td>5.4</td>
</tr>
<tr>
<td>Primary education</td>
<td>22.5</td>
<td>21.2</td>
<td>20.7</td>
<td>20.6</td>
</tr>
<tr>
<td>1 to 3-year secondary VET school</td>
<td>34.4</td>
<td>34.2</td>
<td>34.0</td>
<td>32.9</td>
</tr>
<tr>
<td>4-year (or more) secondary VET school and gymnasium</td>
<td>27.6</td>
<td>27.9</td>
<td>28.5</td>
<td>28.8</td>
</tr>
<tr>
<td>Post-secondary non-university education</td>
<td>4.1</td>
<td>4.7</td>
<td>5.1</td>
<td>5.4</td>
</tr>
<tr>
<td>Undergraduate degree, postgraduate degree (MA, PhD)</td>
<td>5.7</td>
<td>6.3</td>
<td>6.4</td>
<td>6.9</td>
</tr>
</tbody>
</table>

Source: Croatian Employment Service, Yearbooks 2011-14

(5) Neither employed nor unemployed, including students, retired, engaged in family duties and other economically inactive persons.
In terms of the enrolments, the value of the VET has not risen against the background of the economic recession and unemployment. In 2011-14, the highest registered unemployment was for people who completed one to three-year VET secondary education. However, the share of unemployment of people with lower levels of education decreases slowly. For higher levels the situation is reverse.

In general, the persons with the three-year VET qualification are faced with the most profound problems on the labour market (European Training Foundation, 2013). The share of workers with three-year VET education remained relatively high and stable during the periods of growth (32.8% in 2004; 32.7% in 2008). However, this group was struck particularly hard during the recession as its share in total employment fell to 27.9% by 2011. On the flip side, the average number of people with this level of education registered with PES decreased steadily during the economic growth from 124 000 in 2004 to 81 000 in 2008. Research carried out while developing VET sectoral profiles (see Chapter 3 for more general details on the VET sector profiles) indicates that the decrease in labour market entry dynamics during the crisis period was worse for graduates from three-year vocational courses than from other levels of education.

Enrolment in three-year VET programmes has seen a steady decline over the past 15 years. Thus the number of students completing the final year of such programmes declined from 21 000 in 1998 to 16 000 in 2004, less than 13 000 in 2008 and about 11 000 in 2011 – effectively halving in just 13 years and declining as a share of upper secondary education graduates from 40% to 26%. The number of placements in more popular four-year VET programmes and general education programmes (gymnasium) remained steady over the years due to an unchanging bottom-up planning of quotas.

Unfavourable demographic trends combined with obsolete enrolment principles and the deterioration of crafts and industry has led to slow pace of recovery from the economic crisis.

There is no comprehensive analysis that would systematically examine the responsiveness of the education system to the labour market needs; although considerable effort was made to strengthen VET through the development of sector profiles (see Chapter 3 for more general details on the VET sector profiles). It is acknowledged that a mismatch between skills supply and demand exists. Very low levels of provision of adult education and training aggravate the situation.
1.4. Employment policies relevant to VET

The EU (pre-)accession process and funds (6) provided the country with a strong incentive to adopt reforms. The CARDS (Community Assistance for Reconstruction, Development and Stabilisation) programme – the EU’s main instrument of financial assistance to the country in 2007-13. The projects led to establishment of agency for VET (2005), introduction of sector skill councils, labour market analysis, etc. The IPA (The Instrument for Pre-Accession Assistance) programme – the EU’s main instrument of financial assistance to the country in 2007-13. Projects financed through this instrument had significant impact on VET. They supported implementation of the VET strategy 2008-13, supported development of VET qualifications and curricula, quality assurance, bottom-up innovations and CVET.

The main welfare/employment policy relevant to vocational education and training (VET) is active labour market policy (Mjere aktivne politike zapošljavanja, ALMP). The Ministry of Labour and Pension System (Ministarstvo rada i mirovniskog sustava, MRMS) and Croatian Employment Centre (Hrvatski zavod za zapošljavanje, PES) are responsible for implementing ALMP in line with the European employment incentive strategies. The measures of ALMP include:

- promotion of employment and self-employment;
- support for career advancement of new employees;
- job retention subsidies;
- VET/labour-market training for unemployed working without a contract;
- employment in public works and job retention programmes.

In 2013-14, ALMP specifically targeted:

- persons up to 29 years of age;
- long-term unemployed;
- persons aged 50+;
- persons with disabilities;
- unemployed at risk of social exclusion, for example, single parents, orphans, family abuse victims, war veterans, parents of four or more underage children, parents of children with special needs, asylum seekers;
- the Roma; and
- employers facing difficulties in efforts to preserve jobs.

(6) In 2007-13 pre-accession assistance of about EUR 150 million per year.
Since 2013, employers in the field of tourism are eligible for subsidies for employment. Seasonal workers are also eligible for financial support during the low-season.

The country currently faces significant rise of youth not in employment, education or training (NEET). In 2013, 20.9% (15.9% in EU) of youth were NEETs (Ministry of Labour and Pension System of the Republic of Croatia, 2014), especially in the age group of 25-29 (26.3%) rather than in the EU prioritised group of 15-24 (18.6%). If not integrated, NEETs lose competences. Therefore, strong emphasis has been put on youth employment measures since 2012.

The adoption of Employment Promotion Act (Zakon o poticanju zapošljavanja, ZPZ) in 2012 allowed employers in the private sector to train youth in a form of occupational training without commencing employment (Stručno osposobljavanje za rad bez zasnivanja radnog odnosa). Although the initiative existed before within a limited scope (\(^1\)), now anybody with less than 12 months of experience in occupation can enrol. For the period of up to 36 months (often 12) employers are reimbursed taxes paid for trainees who receive state scholarship equivalent to approximately EUR 210 EUR per month. An accompanying ‘work after occupational training’ measure (Rad nakon stručnog osposobljavanja) support employers who hire trainees (15-30 years of age). The traineeship was frowned upon at first, but the overall results look promising: over 50% of trainees found employment within a year after completion of their occupational training.

Taking into account the issues mentioned above and exploring the EU initiatives targeting youth, the government (the Ministry of Labour and Pension System) together with 17 different stakeholders has elaborated the Youth Guarantee Implementation Plan 2014-20 (Plan implementacije garancije za mlade, PIGZM) encompassing reforms, initiatives and measures for:

- early intervention and activation – reforms and measures that prevent early leaving from education and support activation of inactive young people;
- labour market integration – reforms and measures aimed at youth activation in the labour market through job creation, strengthening employers capacity to offer high quality work-based learning, encouraging youth entrepreneurship, etc.

The Youth Guarantee implementation plan constitutes a comprehensive scheme of youth directed activities (to be) financed from national, EU and other sources. It focuses on a fast support measures for youth under 30 years of age and relies strongly on the education system, in particular apprenticeships, links between education and employment, and VET curricula.

\(^1\) Training of maximum 12 months in public sector only.
In 2013, in cooperation with social partners, including representatives of youth ALMP measures were aligned to focus on beneficiaries. A well accepted ‘young and creative’ package of 11 new measures (extended to 23 in 2014) provides employment, self-employment, training and specialisation subsidies, occupational training, public works opportunities and supports job preservation.

1.5. Regulation of access to occupations/professions
Croatia's accession to the EU in 2013 enforced the application of the Act on Regulated Professions and Recognition of Foreign Professional Qualifications (Zakon o reguliranim profesijama i priznavanju inozemnih stručnih kvalifikacija). It stipulates that foreign qualifications need to be recognised by a chamber/ministry in order to exercise the regulated profession. The act guarantees that persons who have acquired their professional qualifications in any EU Member State have access to the same profession with the same rights as Croats. Regulated professions are listed in the national register of regulated professions. The national ENIC/NARIC office provides information about recognition of such qualifications.
CHAPTER 2.
Provision of VET

2.1. VET in Croatia's education system

Figure 5. VET in Croatia's education system

NB: ISCED-P 2011.
Source: Cedefop and ReferNet Croatia.
As shown in Figure 5, the education and training system’s main elements are:

- pre-school education (*predškolski odgoj*);
- primary education (*osnovno obrazovanje*);
- secondary education (*srednje obrazovanje*), including:
  - general/specialised gymnasium programmes (*opće ili specijalizirane gimnazije*);
  - art programmes (*umjetničke škole*);
  - initial VET (IVET) programmes (*strukovne škole*);
- post-secondary education (*Programi stručnog obrazovanja i osposobljavanja nakon srednjeg obrazovanja*);
- higher education (*visoko obrazovanje*), including:
  - academic (university) undergraduate (*preddiplomski sveučilišni studij*), graduate (*diplomski sveučilišni studij*) and postgraduate (*poslijediplomski sveučilišni studij*) studies;
  - professional undergraduate (*prediplomski stručni studij*) and graduate specialist (*Specijalistički diplomski stručni studij*) studies.

### 2.2. Government-regulated VET provision

VET develops vocational and key competencies for employment and further education. Secondary VET is regulated by the Vocational Education and Training Act (*Zakon o strukovnom obrazovanju*). It defines quality assurance, stakeholder cooperation, acquisition of qualifications mechanisms and in-company training. Trade and craft qualifications/professions are regulated by the Crafts Act (*Zakon o obrtu, 2013*). The act has also introduced apprenticeships and redefined responsibilities of stakeholders.

Secondary VET can be also provided as adult education/training or as continuous VET in line with the provisions of the Adult Education Act (*Zakon o obrazovanju odraslih*). This act establishes a normative framework and creates legal prerequisites for further development of adult education as an integral part of the education system. Formal adult education standards are defined by one of four by-laws complementing the act.

A VET development strategy 2008-13 (*Strategija razvoja sustava strukovnog obrazovanja u RH 2008.-2013.*) has introduced reforms in order to modernise VET requiring different approaches to learning and new methods/procedures for teaching. The reforms were based on principles of availability, relevance, quality assurance and transparency. The agency for VET and adult education (*Agencija za strukovno obrazovanje i obrazovanje odraslih*) was established to oversee these developments.

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(*) Internationally often referred to as upper secondary education.
odraslih, ASOO) is responsible for modernisation of VET since the mid-2000s. The reforms include (see also Chapter 3) development of the VET information system, reduction of VET sectors from 31 to 13, establishment of VET sectoral councils, introduction of the new methodology for VET curricula based on the labour market needs, introduction of the quality assurance system, including the comprehensive self-assessment process for the secondary VET schools, reinforcement the innovation capacity/culture of the secondary VET schools, and modernisation of the VET teacher in-service training.

In October 2014, the new education, science and technology strategy (Strategija obrazovanja, znanosti i tehnologije) has been adopted. It includes measures that are aligned with the EU 2020 strategy and national 2025 targets. The strategy underpins lifelong learning, science and innovation and emphasises the importance of better links between VET and the labour market. It also foresees the development of a national curriculum for VET in order to improve educational outcomes and to establish common values, principles and objectives of all forms of VET.

2.2.1. Initial vocational education and training (IVET)

There are approximately 140 000 secondary VET students or 71% of the total secondary school population in 299 schools. The number of schools has increased by four since 2004.

As shown in Figure 6, there has been a slight decrease of VET population since 2007 in Croatia and EU. Most of IVET programmes are one to four years. Five-year programmes are offered for regulated occupations in health sector (Table 2). Students with disabilities may enrol in
adapted one or two-year programmes (posebni ili prilagođeni programi strukovnog obrazovanja).

<table>
<thead>
<tr>
<th>VET programme</th>
<th>ISCED level / sub-categories (2011-P)</th>
<th>CROQF / EQF level</th>
<th>Number of programmes</th>
<th>Primary progression routes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-year VET programmes</td>
<td>3 / 352</td>
<td>2 / 2</td>
<td>49</td>
<td>labour market / master craftsmen exam</td>
</tr>
<tr>
<td>2-year VET programmes</td>
<td>3 / 352</td>
<td>3 / 3</td>
<td>49</td>
<td>labour market / master craftsmen exam</td>
</tr>
<tr>
<td>3-year VET programmes for professions in industry</td>
<td>3 / 353</td>
<td>4.1 / 4</td>
<td>72</td>
<td>labour market</td>
</tr>
<tr>
<td>3-year VET programmes for professions in crafts</td>
<td>3 / 353</td>
<td>4.1 / 4</td>
<td>63</td>
<td>labour market / master craftsmen exam</td>
</tr>
<tr>
<td>4- and 5-year VET programmes</td>
<td>3 / 354</td>
<td>4.2 / 4</td>
<td>95</td>
<td>labour market / higher education (after completion State matura)</td>
</tr>
</tbody>
</table>


2.2.1.1. One-year and two-year programmes

One and two-year VET programmes lead to lower professional qualifications at Croatian Qualification Framework (Hrvatski kvalifikacijski okvir, CROQF) level 2/European Qualification Framework (EQF) level 2 and CROQF level 3/EQF level 3 respectively. There are 49 programmes that are attended by 1-2% of the total number of the secondary VET school students. The entry requirements include certificate of completion of primary education, and good physical and mental health required by curricula. VET students holding a certificate of completion of one or two-year programme can apply for master craftsman exam (majstorski ispit) after 10 years of working experience. Successful candidates can start a business and train apprentices. About 1 000 people per year pass this exam.

2.2.1.2. Three-year programmes

Three-year VET programmes allow acquiring competencies in industry, trades and crafts and lead to qualifications at CROQF level 4.1/EQF level 4. The programmes were significantly reformed since the 1990s. Dual programmes (53, mostly narrow crafts or small business specialisations) were introduced in 1995/96. In order to bring closer dual and school-based pathways a unified model of education (Jedinstveni model obrazovanja, JMO) for crafts and trades has been applied in 2003/04-05. The model combines characteristics of both systems. There are two types of three-year programmes:
(i) predominantly school-based programmes for industrial and trade occupations;
(ii) unified model of education (JMO) programmes, including apprenticeships.

The participation rate in the three-year programmes is 35-36% of the total secondary VET population. It has been declining in industrial and craftsperson programmes. The entry requirements include certificate of completion of primary education, and a good physical and mental health required by curricula. For crafts occupations an apprenticeship contract is also required. There are 72 programmes for industrial occupations and 63 – for trades and crafts.

The programmes prepare graduates for entry into the labour market and do not provide access to the State matura exams (ispiti državne mature). In order to enrol in higher (tertiary) education graduates need to complete a one-year ‘bridge’ programme and pass the State matura exams. Since 2014, graduates of three-year programmes can opt to continue their training in VET or gymnasium programme for two more years after passing supplementary exams (Letica, J., Ištvanić, I., Buić, N., 2014). Graduates can also apply for master craftsperson exam after two to three years of working experience in the field.

2.2.1.3. Four- and five-year programmes

Four- and five-year VET programmes (⁹) lead to qualifications at CROQF level 4.2 / EQF level 4. The participation rate in the programmes is 65-67% of the total secondary VET population and has been relatively stable in recent years. The entry requirements include certificate of completion of primary education, and a good physical and mental health required by curricula. There are 95 programmes that offer relevant qualifications. In order to enrol in higher education, graduates can choose to pass the external State matura exams.

2.2.2. Continuing vocational education and training (CVET)

Formal CVET programmes provide learners older than 16 years with CROQF levels 2-4.1/4.2 (see Chapter 3):

- vocational qualifications;
- supplementary vocational qualifications; or
- competences for the labour market without a qualification.

Entry requirements, such as a vocational qualification or work experience exist. The duration of programmes is less than one year and depends on the complexity and target group. Programmes are always linked with a state-recognised qualification/profession.

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⁹ Five-year health sector education programmes for regulated occupations (e.g. nursing) are provided under the title ‘four-year programmes’ and are aligned with the EU Directive 36/2005/EU.
Professional improvement CVET programmes are approved by the Education Ministry (Ministarstvo znanosti, obrazovanja i sporta) enable people regardless of their age and education/professional background to master in a systematised way professional knowledge and skills for the labour market. They aim at:

- acquiring a secondary school diploma or qualification;
- acquiring low-level professional qualification;
- (supplementary) professional (re)training.

2.2.3. Main features of apprenticeships and similar schemes

The formal three-year VET (industry, trades and crafts) programmes provide the highest level of work-based professional competences. The most of the programmes in trades and crafts (but not industrial) are implemented according to a VET curriculum comprising of general education and apprenticeships (Letica, J., Ištvanić, I., Buić, N., 2014). Apprenticeships consist of a theoretical part and practical training/practice. Curricula are approved by the minister in charge of education with prior consent of the Minister in charge of crafts.

General education and theoretical instruction are implemented in VET schools. The practical training and practice take place mainly in a work environment, i.e. in craft business workshops or in a trade association, institution or in a ‘cooperative’ licensed by the Chamber of Crafts and Trades (Hrvatska obrtnička komora, HOK). In 2013/14, the total number of licensed craft workshops or legal entities involved in the implementation of the apprenticeship-type scheme was 10,560. To a lesser extent, the practical training takes place in VET schools' workshops. Provision of practical training/practice requires the real work conditions in accordance with the curriculum. A student must have a mentor appointed to him (her) with adequate qualification(s) and pedagogical competences.

After successful completion of vocational education and training programme for crafts student take apprenticeship exam that is organised by the agency for VET and adult education and the national centre for external evaluation of education (Nacionalni centar za vanjsko vrednovanje obrazovanja).

The journeyman (potvrda o položenom pomoćničkom ispitu) and master craftsmen (potvrda o položenom majstorskom ispitu) certificates/qualifications can be obtained through apprenticeship schemes coordinated by the Chamber of Crafts and Trades (HOK). A journeyman/master craftsperson candidate has to have sufficient work experience in the field. The chamber also organises exams for retrained craftspersons; usually youngsters who could not find employment in the profession for which they have originally been trained or who wish to advance to a master craftsperson status.
Alongside to the mainstream apprenticeship scheme, students in other three and four year VET programs have, but at much smaller scale some type of the work-based learning (training/practice) in companies but they are not perceived as apprentices.

2.2.4. Permeability

Legislative changes in 2012 obliged all schools providing three-year programmes to organise an additional (tuition-free) fourth year for students aiming to continue their education, for example in higher (tertiary) education. This requires a great deal of determination (European Training Foundation, 2013). According to the Eurostudent 2010 survey, only about 9% of students in professional higher education and none of university students have previously completed three-year vocational education.

Studies suggest that changing between three-year and four-year programmes is usually allowed and encouraged at the start of the programme (European Training Foundation, 2012; European Training Foundation, 2013). As time passes, the change becomes more demanding for students as the amount of practical training and the number of exams they have to pass in order to make up for the difference between programmes is high. Therefore, students are more mobile within similar courses or programmes. Vertical mobility is strongly influenced by academic achievements. Low-achievers in four-year programmes often change to less demanding three-year programmes. Mobility from three-year to four-year programmes is more difficult. It is mostly merit-based as students need to have good grades in order for the teachers’ council to allow them to transfer between programmes. Horizontal mobility may increase the chance of grade retention for some students who were unable to find an apprenticeship in time or to make up for practical training. Transfer of a secondary student from VET schools to general secondary education, i.e. gymnasia, is not common due to the obvious differences between two types of secondary education.

2.2.5. Provision for groups at-risk

As shown in Table 3, the share of early leavers from education and training has been increasing since 2008 but still remains low compared to other EU member states. In order to reverse the trend, early leavers from education and training are encouraged by public employment service (PES) to use active labour market measures leading to a qualification. The measures allow learners to enrol in adult education/CVET programmes offered by VET schools or adult education providers.
Most of early leavers are from VET, particularly from three-year courses where enrolment macro data indicates that up to one-sixth of the cohort drops out. This issue, however, has not yet been sufficiently addressed and linked to other policies for youth. VET-driven social inclusion efforts in secondary VET are primarily aimed at the integration of special needs students or Roma who reach upper secondary education in greater numbers (European Training Foundation, 2013b). Students with physical or learning disabilities generally have three options. One option is to pursue regular VET programmes accompanied by individualised support. Another option, in the case of those with severe disabilities, is to enrol in adapted programmes within the framework of the one-year and two-year VET programmes which prepare them for so-called ‘auxiliary’ vocational occupations. Alternatively, learners may enrol in special educational institutions with tailored pedagogical approaches and infrastructure. Measures aimed at ensuring learning opportunities for unemployed are elaborated in Section 1.4 ‘Employment policies relevant to VET’.

### governance and funding

Although several ministries have influence on the developments of VET for the sectors under their remit, the Education ministry is responsible for overall VET policy. It monitors compliance of the VET system with legislation and coordinates multiple executive agencies in the field of education.

The agency for VET and adult education is responsible for implementation of most IVET and CVET policy since 2010. The agency is a result of a merger of two former agencies (agency for adult education established in 2006 and VET agency established in 2005). As an executive body in charge of the overall development/organisation of the VET system, the agency for VET and adult education is responsible for:

- development of VET system and programmes;
- cooperation with professional organisations;
- supervision of VET and adult education institutions;
- provision of advice and counselling services;
- continuous professional development of employees in the field of VET;
- promotion of participation in VET;
- monitoring VET and adult education (database), including funding;

Table 3. **Early leavers from education and training, 2008-13 (%)**

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-28</td>
<td>14.7</td>
<td>14.2</td>
<td>13.9</td>
<td>13.4</td>
<td>12.7</td>
<td>12.0</td>
</tr>
<tr>
<td>Croatia</td>
<td>3.7</td>
<td>3.9</td>
<td>3.7</td>
<td>4.1</td>
<td>4.2</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Source: Eurostat, Date of extraction: 17.11. 2014.
• investments in VET.
The agency develops and modernises VET curricula based on occupational and qualifications standards based on labour market needs (see Chapter 3). The agency is also responsible for the professional development of VET teachers by providing the (in-service) training, organising professional exams and developing procedures for promotion.

Established by the 2009 VET Act (see Chapter 3) the VET council (Vijeće za strukovno obrazovanje) plays an important role by:
• giving advice on VET policy;
• proposing the structure of educational sectors;
• providing a forum for the key stakeholders;
• proposing changes to curricula.

The Minister for education appoints 17 council members representing all stakeholders in the field of VET. The VET council replaced 13 VET sectoral councils (Sektorska vijeća).

The institutional framework for CVET is not fully established. Apart from the companies, overall responsibility and the majority of actions in this area lies with the Agency for VET and adult education but also with the Chamber of crafts and trades (e.g. coordination of the master craftsman exams, re-training for trade and craft professions, etc.). Other stakeholders/social partners that have (in)direct influence on the overall developments of VET are:
• Education and teacher training agency (Agencija za odgoj i obrazovanje);
• Ministry of entrepreneurship and crafts (Ministarstvo poduzetništva i obrta);
• Ministry of labour and pension system (Ministarstvo rada i mirovinskog sustava);
• Adult education council (Vijeće za obrazovanje odraslih);
• Chamber of economy (Hrvatska gospodarska komora);
• Employers’ association (Hrvatska udruga poslodavaca);
• Industrial trade unions (six confederations of trade unions).

Since 2001, secondary school financing (including VET schools) has been decentralised. The intention was to increase education planning and management responsibilities of local government and strengthen the school ties with its social and economic environment. Funds are derived from two sources. The State budget finances:
• salaries for teachers and other employees in education;
• in-service training of teachers and other specialists;
• additional funding for education for at-risk groups (ethnic minorities, with special needs) and for gifted students;
• transportation costs (except for elementary school pupils and employees of secondary schools that are provided by local or regional governments);
• teaching materials and equipment;
• information and communication technology infrastructure and software for schools;
• school libraries;
• capital (buildings, infrastructure) investments.

Local and regional governments provide/cover:
• school premises and equipment;
• operating costs of secondary schools;
• transportation costs of elementary school pupils and employees of secondary schools;
• co-financing food and lodging in student residence;
• capital (buildings, infrastructure) investments according to criteria determined by the Minister.

If local / regional governments cannot ensure the minimum funding, the centrally managed equalisation fund (*Fond za izravnavanje*) provides a financial support to them.

The distribution of education expenditure 2014 (10) shows that the largest share of the education budget is spent on primary education (ISCED 1-2) – 37.6; 13.6% is spent on pre-primary education (ISCED 0), 22.1% on secondary education (ISCED3, general and vocational) and 18.4% on higher education (ISCED 5-8).

Financing of CVET is provided by the state, local and regional governments’ budgets, and by individuals and employers. Most of money is managed by public employment service (PES) that procures training (mainly short courses for unemployed adults or redundant workers) within the active labour market policy measures.

IVET and (to a lesser extent) CVET reforms in the last decade has been strongly supported by the EU pre-accession funds, including CARDS and IPA programmes.

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2.2.7. Education and training providers

IVET providers are public and private secondary VET schools. Teachers and trainers in the IVET are divided into two main groups:

- general subject teachers (languages, mathematics and natural sciences, social sciences, art) with pedagogical qualification who passed the exams on general pedagogy, didactics, psychology of education, and teaching methodology;
- VET teachers and trainers (11):
  - teachers of theory (Nastavnik stručno-teorijskih sadržaja) require higher education (180 ECTS or more) complemented by a pedagogical competence course (60 ECTS) and other requirements linked to curricula;
  - trainers (Nastavnik praktične nastave i vježbi) require undergraduate university/professional degree (80 ECTS or more) complemented by a pedagogical competence course (60 ECTS) along with the qualification required;
  - vocational teachers (Strukovni učitelj) require a level of education regulated by curricula, and has at least secondary vocational education of corresponding profile, complemented by a pedagogical competence course (60 ECTS) and work experience in appropriate profession for at least five years;
  - teaching associates (Suradnik u nastavi) require secondary education complemented by a pedagogical competence course (60 ECTS) and has a work experience for at least five years, unless regulated differently by vocational curricula.

There are no pre-service higher education programmes for VET teachers and trainers. None of the professional degree programmes includes courses in educational sciences. Therefore all higher education institutions educate potential VET teachers. Upon obtaining their professional degree (four to five years) VET teachers-to-be must complete an additional pre-service programme (pedagogical competence course of 60 ECTS) including general pedagogy; didactics; psychology of education; methods of teaching; education for creativity; psychology of children with special needs; methodology of educational research; school pedagogy; theories of curriculum; general and developmental psychology; multimedia teaching; applied developmental psychology; and classroom management.

VET teachers for three-year VET programmes for the fields not represented in higher education, unlike other teachers, do not need higher education degree but at least a

(11) As defined by the recently adopted Vocational Education and Training Act.
secondary school certificate. In addition, they have to complete a pedagogical competence course of 60 ECTS. Master craftpersons who teach in licensed crafts/workshops have to be qualified to train apprentices, and are obliged to take an exam in industrial pedagogy administered by an independent expert commission.

There are approximately 6,300 teachers, trainers and assistants who carry out subject teaching in the IVET schools, including 4,000 teachers of vocational-theoretical subjects, 1,500 trainers of practical workshops and laboratories, and 400 assistants. Part of the teaching of vocational subjects is done by teachers without the required qualification, due to difficulties in recruiting appropriate teaching staff.

The continuous professional development and in-service training of VET staff is mainly offered by the agency for VET and adult learning based on an annually updated catalogue for in-service training (Katalog stručnog usavršavanja). VET schools are also expected to provide in-house staff development activities, but there are no available data on quality or effectiveness (see also below for school-based developmental projects and mobility projects funded by the respective EU programmes).

Apart from the state-funded in-service training as described above, in-service training of VET teachers is also implemented by:

- professional associations and other non-governmental organisations that offer trainings either free of charge or for a fee;
- public open universities (Pučka otvorena učilišta, PUO);
- the Chamber of Crafts and Trades;
- international institutions (through bilateral financial assistance), e.g. British Council.

These in-service trainings do not require programme or provider accreditation. The copyrights of programmes developed outside of the mainstream system are fully regulated, therefore, driven by their mission mainly international institutions invest significant resources into the in-service training.

Public institutions, such as public open universities, secondary schools, higher education institutions, the Chamber of Crafts and Trades and care service for persons with special needs and disabilities, registered as providers of adult education may provide formal CVET programmes. These institutions may be founded by the State, local and regional governments, and other legal entities. The provision of formal CVET programmes is liable to inspection and professional supervision.

CVET teachers and trainers are required to have the same qualifications as IVET teachers and trainers working in secondary VET. Support to the continuous professional development of CVET teachers and trainers is also provided through the work of the
andragogy society (Hrvatsko andragoško društvo) and the association of adult education institutions (Zajednica Ustanova za obrazovanje odraslih).

2.3. Other forms of training

Institutions that provide other forms of training are open universities (public and private), primary and secondary schools that implement adult education programmes, polytechnics, universities and other institutions of higher education, companies/education centres in companies, various private schools (e.g. foreign language schools), driving schools, professional associations and organisations, non-governmental organisations (udruge), employers’ associations, trade unions, correctional institutions and institutes, religious institutions, foreign institutions, etc.

Different job-related knowledge, skills and competences acquisition or improvement is provided at sectoral or enterprise level mainly as non-formal education or short professional improvement courses. Non-formal training refers to organised learning for adults for work, social activities and personal development. Such training does not have to meet prescribed standards for implementation; instead, the conditions for programme implementation are a matter of the education provider’s choice and internal quality assurance. For certain regulated professions other bodies may be consulted to ensure that relevant occupational standards are met. The quality of provision is not otherwise monitored. In enterprises, the training of employees is not mandatory. Thus, in most cases, learning in enterprises depends on enterprise initiative and resources, since learning is a voluntary activity. Enterprises tend to provide learning through external or internal courses.

Other non-formal training programmes can be financed by the regional and local self-governments (decentralised/local budgets), private sector, non-governmental organisations, users/adult learners, as well as through international funds and projects. Due to the dispersed nature of adult education and the large number of various funding sources, data on overall investments in adult education is not available.

Table 4. Participation (25-64) in lifelong learning in 2007-13 (%)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-28</td>
<td>9.3</td>
<td>9.3</td>
<td>9.3</td>
<td>9.1</td>
<td>8.9</td>
<td>9.0</td>
<td>10.5(b)</td>
</tr>
<tr>
<td>Croatia</td>
<td>2.4</td>
<td>2.2</td>
<td>2.3</td>
<td>2.2</td>
<td>2.3</td>
<td>2.4</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Source: Eurostat. Date of extraction: 17.11.2014.
NB: (b) - break in series
As demonstrated in Table 4, in 2013, the share (2.9%) of adults participating in training programmes was among lowest in the EU. There are various reasons why people do not undertake learning activities - lack of knowledge of what is on offer, learning opportunities not being accessible at work or in the local communities, poor quality of existing offers in the local communities, costs, or simple lack of interest. When it comes to the issues of geographical coverage, the major gaps exist in less prosperous and rural areas as well as on the majority of islands. Companies, mostly SMEs, do not actively promote learning due to lack of resources, low appreciation, or other reasons.
CHAPTER 3.
Shaping VET qualifications

3.1. Anticipation of labour market needs
In 2009-11, the Agency for VET and adult education established links between VET and the labour market needs, and development of qualifications within the national framework (CROQF, 2013). It has updated design procedures/methodology for occupational standards, qualifications and curricula, and introduced quality assurance tools in VET.

3.1.1. VET sectoral councils and sector profiles
Thirteen (one for each sector) (12) VET sectoral councils (13) (Sektorska vijeća, SV) were established in 2006. The fully-fledged structure of the councils was introduced with the 2009 VET Act when they became the key stakeholders linking VET with the labour market needs. The councils analyse the needs of the labour market; within 13 VET sectors and sub-sectors. This is done by using various tools and sources like sector profiles. This information is used for planning of contents of VET qualifications. The councils also:

- advice the Agency for VET and adult learning on the content of VET qualifications;
- analyse state-of-play and future competences within the VET sector;
- develop parts of the vocational qualification standard;
- promote VET sectors and employment in them; and
- provide advice to public institutions on sustainable VET curricula.

Each council is comprised of maximum 20 experts who are nominated by social partners and are appointed for five years.

The councils also develop ‘sector profiles’. The sector profiles (Profili sektora, PS) are a tool that comprises statistical and analytical data about economic and labour market developments, and VET provision. The tool is available to the VET agency, sectoral councils and other stakeholders. It helps developing VET qualifications in line with the labour market needs but is also used for planning enrolment quotas per educational programme in counties.

(12) See Section 2.2 for the titles of the sectors.
(13) With the introduction of the Croatian Qualification Framework (CROQF) as well as the enactment of relevant CROQF act (specific regulations/ordinances are yet to be completed) 13 VET sectoral councils will be replaced by the new ‘CROQF sectoral councils’.
The data are split into three parts and enable understanding of knowledge/skills in supply and demand. The first part presents the demand (a list) for occupations in each VET sector, analysis of demand for those occupations in specific economic activities, long-term employability trends in key economic activities related to each VET sector, data on income, and number of enterprises, employees and vacancies by sector, etc. Occupational supply is presented through information on the structure of unemployment, workforce and inactive population within sectors. Occupations are linked with education attainment, salary levels and a type (full-time and part-time permanent work contracts, fixed-term/temporary) of work contracts. The second part includes data on the demand for competences within sectoral occupations. A competency matrix is used for planning the structure and content of new qualifications and VET programmes. The third part shows data on VET graduates’ employment or progression to higher (tertiary) education.

The adoption of the National Qualifications Framework (CROQF) Act in 2013 has launched an establishment of the new structure of the sectoral councils called ‘CROQF sectoral councils’ that will widen their scope and include higher education (see Section 3.2).

3.1.2. Designing occupational standards, qualifications and curricula

According to the methodology (Metodologija za razvoj strukovnih standard zanimanja, kvalifikacija i kurikuluma, ASOO, 2011) the development of VET includes the development of occupational standards, qualifications and curricula. The Agency for VET and adult education appoints and finances the working groups responsible for the developments. The groups consist of education experts (VET and in some cases HE) and employers.

3.1.2.1. Development of occupational standards (Standard zanimanja)

Occupational standards define skills and knowledge required to become a ‘competent’ job holder. The standards are broken into units – sets of skills and knowledge. The level of detail provided within the occupational standards depends on what the intended use of them is. For VET qualifications, occupational standards are being developed to a level of detail which highlights and describes broad skills and knowledge sets which may be applied across a number of sub-sectors and related job roles within a particular industry. In other instances, occupational standards may be developed to a more detailed level.

The standards are developed through a process similar to a ‘functional analysis’. It ensures that workplace skills are suitably analysed and that the results are presented logically. To implement the process, experts involved in the development of occupational standards are required to consult with employers, investigate and explore the ways in which the job roles are carried out. If relevant, this process may also entail the following activities to
help inform the analysis process: visits to different workplaces, discussion events on the
skills needed with a range of employer representatives from different sizes of business and
from different geographical locations, detailed examination of job descriptions and written
information about the job roles concerned.

The VET sectoral councils and the Agency for VET and adult education initiate the
creation or renewal of occupational standards. Other key stakeholders may participate in this
process.

3.1.2.2. Development of the qualification standards (Standard kvalifikacije)
Once the occupational standards have been developed, the actual content of the
qualification is elaborated based on data from the industry. The qualification standards
translate skills described in the occupational standard into tools describing the criteria
against which a learner's progress is measured. The qualification standards contain 'units' of
learning outcomes and assessment criteria. The learning outcomes describe what a learner
should be able to achieve once a programme of tuition has been completed. The
assessment criteria describe how to assess the learning outcomes. Each unit has a credit
value – the amount of time required by a learner on average to complete learning and
assessment of learning outcomes. One credit is assigned for 25-30 hours of learning.
Learning occurs in organised classes, as independent studying. The assessment of the
student against the defined learning outcomes and assessment criteria is also provided.
Credits are assigned to each unit that form qualification credits.

The standard also defines mandatory and optional units. Mandatory units are used to
assess core (health, safety, etc.) and essential (related to a job) skills. Optional units reflect
specific skills and knowledge for an industry branch or region.

3.1.2.3. Development of curricula (Strukovni kurikulum)
VET curricula are developed once the qualification standards are agreed. The curricula set
out what needs to be taught to ensure the acquisition of learning outcomes. To help
organising the delivery content, the curriculum template requires it to be split into 'modules'
and 'subjects'. The modules group together units/learning outcomes from relevant
qualification standards. Modules are realised through teaching subjects. Each VET
curriculum has general education part and VET part. VET part is developed by working
groups appointed by the Agency for VET and adult education. Education and teacher training
agency develops the general part.
3.1.2.4. **E-qualifications database (E_kvalifikacije)**

An on-line database (14) for VET qualifications called ‘E-qualifications’ was developed in 2010. The database is a comprehensive tool that provides an overview of all relevant documents/materials needed for the development/upgrading of VET qualifications, for example an overview of VET curricula, occupational and qualifications standards and its units. The adoption of the CROQF regulation envisages development of new methodology for the occupational standards by the Labour Ministry and for qualification standards by the Education Ministry (see Section 3.2).

3.1.3. **Quality assurance tools in VET**

In line with the relevant provisions of the 2009 VET act, the Agency for VET and adult education develops a national quality assurance framework in VET (Nacionalni okvir za osiguranje kvalitete u strukovnom obrazovanju i osposobljavanju). It is based on the European quality assurance reference framework for VET and is aligned with the European quality assurance in VET’s quality cycle, indicative descriptors and indicators (Letica, J., 2014). Since 2010, the agency develops also a new quality assurance approach/methodology and relevant tools, based on school self-assessment with six assessment areas:

- planning and programming of work;
- teaching and support to learning;
- learning outcomes;
- material & human resources including continuous professional development of staff;
- cooperation within the VET school and with stakeholders; and
- administration and management.

Each area is broken down further into quality areas, which are described by individual quality criteria. All are primarily applied to IVET. In 2011, the secondary VET schools launched a self-assessment process and the first annual reports were produced and analysed. To assist the VET schools in the process, the VET agency developed a comprehensive manual and an online 'E-kvaliteta' tool (15) (that enables secondary VET schools to effectively present their self-assessment data and plans for improvements. Both are evidence-based. The process enables schools to measure their performance against

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(14) [http://e-kvalifikacije.asoo.hr](http://e-kvalifikacije.asoo.hr)

(15) [http://e-kvaliteta.asso.hr](http://e-kvaliteta.asso.hr)
qualitative indicators and to generate reports. Once complete, schools can compare their results with those of other schools and indicate the areas to be improved.

The quality assurance approach is currently being refined further with a view to facilitating improvements to the different quality assurance indicators and to establishing and ensuring correlation between them (for example self-assessment and external evaluations). The quality assurance rules for VET (Pravilnik o osiguranju kvalitete u strukovnom obrazovanju i osposobljavanju) and www.qavet.hr web site have been developed in 2014. They will further improve the quality in the IVET system.

3.2. Development of the national qualifications framework

In parallel to the development of the procedures/methodology for designing VET occupational standards, qualifications and curricula (see Sections 3.1.1 and 3.1.2), the process of the development of the national qualifications framework (CROQF) was launched. Since 2007, development of the CROQF has been a response to the need for a national framework of qualifications encompassing all awards for all aspects of education and training (Ministry of Science, Education and Sports /Agency for Science and Higher Education, 2014). The CROQF coordinates and integrates all stakeholders in the qualifications system, paying attention to the needs of the labour market, the needs of individuals and society.

There are eight levels (in some cases with sub-levels) in the framework, as shown in Table 5.

Table 5. Levels and sub-levels of CROQF

<table>
<thead>
<tr>
<th>EQF level</th>
<th>CROQF level</th>
<th>Sub-level</th>
<th>Full or partial qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>8</td>
<td>8.2</td>
<td>full</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.1</td>
<td>partial</td>
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<td>7</td>
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<td></td>
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<td>/</td>
<td></td>
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<tr>
<td>4</td>
<td>4</td>
<td>4.2</td>
<td>full and partial</td>
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<td></td>
<td></td>
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In February 2013, the Government adopted the CROQF Act, which gives the necessary legislative and institutional framework for further development and implementation of the CROQF as well as for the referencing and self-certification of the CROQF to the European qualifications framework (EQF) and the Framework for Qualifications of the European Higher Education Area (QF-EHEA). According to the CROQF Act, the Education
ministry is the national coordinating body responsible for the development and implementation of the CROQF and the designated national coordination point responsible for referencing CROQF levels to the EQF and self-certification of the CROQF against QF-EHEA using a transparent methodology, providing access to information, guiding stakeholders through the referencing process, and promoting the participation of stakeholders in the referencing process.

Three main concepts serve CROQF quality assurance:

- occupational standards (key activities and required competencies for the workplace);
- learning outcomes (organised within units/modules);
- standards of qualifications (described by acquired learning outcomes, including assessment criteria and procedures), as a base for quality assurance and validation of non-formal and informal learning.

The CROQF defines basic (complete and independent) characteristics/properties of qualifications and units/modules of learning outcomes as: profile; workload/volume; reference level; and quality, as an implicit part of qualifications and units/modules, denoting the reliability and credibility of the statement made by the official certificate (and/or other documents) about learning outcomes. The quality assurance process covers:

- involvement of stakeholders and international and national experts (during development and implementation of the CROQF);
- fit to purpose check (labour market needs, and other purposes of qualifications, by standards of occupation and qualifications; validation; registration);
- curricula development;
- assessment and awarding criteria and procedures of qualifications and learning outcomes.

Three executive agencies for higher education, VET and adult education, and general education play a major role for external quality assurance of education and training, including curricula development, assessment and awarding of qualifications. The national council for development of human potential (Nacionalno vijeće za razvoj ljudskih potencijala, NVRLJP) is a central strategic body for the CROQF. The members of the council are the representatives of the Ministries of economy, labour, entrepreneurship and regional development, national agencies in the field of education, public VET/adult and higher education institutions, employers’ associations/chambers, trade unions, public employment service, regional and local authorities and NGO’s.
The council:

- assesses influence of public policies (mainly education, employment, lifelong guidance and regional development) on developing human capital potential and its contribution to achieving strategic goals of the country;
- gives recommendations for planning and developing human potential according to a national development strategy;
- proposes measures for integrated and harmonised policies related to employment, education and regional development;
- monitors and validates the impact of the CROQF and its qualifications, and gives recommendations on how to better adjust education to labour market needs;
- conveys to the minister responsible for education and science its opinion on sectoral council’s recommendations referring to admission policy, admission quota and financing of qualifications from public sources, by qualification and by county;
- monitors and validates CROQF sectoral councils’ activities.

CROQF sectoral councils (*HKO Sektorska vijeća*) are being replaced by 13 VET sectoral councils. The new councils cover 25 sectors. Together with cross-sectoral interdisciplinary council they are advisory bodies ensuring the development of human potential in line with labour market needs. They:

- validate learning outcomes, occupational standards and qualifications standards;
- analyse existing and required competences covered by a sector;
- recommend to the national council for development of human potential policies, including quotas and financing of qualifications;
- propose changes to qualifications standards based on changes in occupational standards;
- propose changes in the national classification of occupations to the ministry responsible for labour;
- advise the national council for development of human potential about sector developments;
- follow and analyse implementation of recommendations given to the national council for development of human potential about sector developments.

The CROQF currently introduces a register of five databases (on units/modules of learning outcomes; standards of occupations; standards of qualifications or generic qualifications; programmes for validation of units of learning outcomes; programmes for
acquisition of qualifications (including awarding institutions)). The register provides the formal link between qualifications and the quality assurance system of the CROQF.

It is envisaged that the register will encompass all types of qualifications including those outside the formal education system. Recognition of non-formal and informal learning is being developed within the CROQF. The Education Ministry is preparing regulation for it.
CHAPTER 4.
Promoting participation in VET

4.1. Incentives for learners and enterprises

In addition to the national investments, since 2004, Croatia received support from the CARDS, Phare and IPA pre-accession programmes that has been used to improve VET. With the accession to EU in July 2013, the country became eligible for structural funds, including European Social Fund (ESF). Responsible line ministries developed the 2014-20 operational programme for investment for growth and jobs that defines measures aimed at enhancing VET attractiveness and relevance.

4.1.1. Incentives for learners

In order to increase qualification level and employability potential of specific target groups a system of vouchers is being introduced. There are two types of vouchers:

a) vouchers for acquiring the 1st level qualification or one step up qualification for programmes in tourism and catering, agriculture, mechanical and electrical engineering and information technology or programmes leading to acquiring of basic skills (literacy, numeracy, ICT);

b) vouchers for validation of non-formal and informal learning with a view of making visible citizens’ qualification levels.

Before the 2014 budget cuts, chamber of crafts and trades in cooperation with schools organised an annual ‘I want to be a master craftsman’ (Želim biti majstor) event to promote three-year VET programmes among potential learners. VET students, teachers and representatives of the chamber of crafts and trades jointly presented three-year VET programmes, disseminated promotional materials and provided direct feedback to potential learners and their parents. Such events were organised at the national level (e.g. within the framework of national fairs for crafts and trades and similar events) as well at the regional (county) level.

4.1.2. Incentives for enterprises

Since 2007/08, the Act on State Aid for Education and Training (Zakon o državnoj potpori za obrazovanje i izobrazbu) defines tax breaks for companies that provide training for three-year VET programmes’ students (Letica, J., Ištvanić, I., Buić, N., 2014) by reducing their taxable income. Entrepreneurs that train one to three students per year at their premises may reduce
the taxable income by 5%; an additional student further reduces the taxable income by one percentage point up to a limit of 15%.

In 2012, the Government introduced an annual stimulus ‘entrepreneurship impulse’ (Poduzetnički impuls) package for SMEs. The 2014 package comprises of four programme priorities, one of which is ‘Promotion and education for entrepreneurship and crafts’ (Promocija i učenje za poduzetištvo i obrt) with a budget of approximately EUR 326 thousand. It provides training grants for SMEs under apprenticeship-type scheme in crafts but also scholarships for students in programmes addressing labour market shortages.

4.2. Guidance and counselling

Public employment service (PES) is the main responsible actor for systematically organised activities of information, guidance and counselling aimed at students in final years of basic and secondary (including VET) education adults, the unemployed persons and job seekers, as well as employers (CISOK, 2011). Expert teams work in 22 PES regional offices, together with a coordination team at PES central office to prepare for employment. This includes lifelong career guidance, learning methods and techniques of active job seeking, training for employment and professional rehabilitation. Vocational guidance is defined as a set of various professional procedures to identify the possibilities, interest and competencies of users for them to be able to make decisions on education, training and employment, and manage their own professional development.

The guidance is also provided to pupils in transition from primary to secondary and from secondary to higher education through open days and career fairs, supported by the chambers, employers, former pupils and parents. Career guidance of the pupils/students is conducted through joint efforts of school counsellors and PES’s career guidance counsellors.

Particular attention is paid to the pupils/students who, according to evaluations, might face labour market problems after they complete their education, i.e. with development and health issues, learning disabilities and behaviour disorders. The PES also pays special attention to vocational guidance of VET students with disabilities. Furthermore, secondary schools students who achieve poor results are referred to the expert team for career guidance. In expert opinions on the most adequate choice of further education, labour market needs and education opportunities are taken into account, as well as the student's individual abilities and needs. If needed, the team evaluation is done with the possibility of psychological tests, an interview and a medical examination by a physician specialising in occupational health.
Once a year, PES conducts a survey of vocational intentions of primary and secondary school students on the basis of which the expert teams consisting of schools and PES representatives define the target groups that need specific services of career guidance. Aggregate results of the survey indicate the trends in the pupils' students' vocational intentions and are forwarded to stakeholders in the field of education and employment on the county and national level.

The PES has also developed My Choice (Moj izbor) computer software for lifelong career guidance. It is used in PES regional offices, some schools and other organisations. It has been developed for users aged 13 and above: primary school pupils, secondary school students, unemployed persons, employed persons considering the change of career and all other who are interested in various job information.

However, career guidance has still not been properly elaborated in education legislation. It has been inadequately mentioned in the Primary and Secondary School Education Act, the Vocational Education Act and in the Adult Education Act. Career guidance in schools is mainly of a recruitment nature and cannot be equated with careers information based on accurate labour market information. The use of ICT facilities in schools for group career guidance activities rarely occurs. There are limited in-service training opportunities for the existing school guidance practitioners.

Since 2011, Croatia participates in the European Lifelong Guidance Policy Network, with the aim of equalising the lifelong career guidance policies in the field of employment and education. It is a support to the development of the system of national policies of lifelong career guidance, connecting with employment, lifelong learning and social inclusion policies, and exchange of experience and knowledge among its member countries. Based on the decisions of the two ministries responsible for education and employment, the PES has been appointed as a national representative and operational partner of the project. The Euroguidance network in Croatia was established at the agency for mobility and EU programmes (Agencija za mobilnost I EU programme), as a part of the network of centres connecting the systems of career guidance in Europe. Euroguidance promotes mobility, provides expert assistance to career guidance counsellors and to individuals, enabling them to understand better the opportunities available to all citizens of Europe.

The public employment service has also launched the development of the regional network of centres for career information and guidance CISOK (Centri za informiranje i savjetovanje o karijeri). This regional network offer new service, including a more comprehensive approach to lifelong career guidance and a new philosophy in providing

\[\text{\textsuperscript{16}}\]

\[\text{See http://www.cisok.hr}\]
services in a more accessible, open and flexible way to all the citizens at the regional/local level.

4.3. **Key challenges**

- Further to the measures identified in new Strategy of Education, Science and Technology (*Strategija obrazovanja, znanosti i tehnologije*), a comprehensive curricular reform, including the reform of the VET curricula, is to be launched in 2015.

- The VET system needs to develop national as well as sectoral VET curricula that: (i) are more flexible, (ii) provide general education and key competences as a basis for further education and lifelong learning; (iii) allow VET teachers to be more autonomous and creative; (iv) are clearly integrated into the CROQF accredited lifelong learning and (v) takes into consideration the planned transition to nine-year primary school.

- Specific measures will tackle the issues of raising VET teachers’ capacities as well as ensuring high quality support for their work and professional development. Particular emphasis will be put on the improvements of the VET teachers’ in-service training, including the introduction of the systematic in-service training programme development, a quality assurance system for the respective in-service training as well as development of the central web-portal for the in-service training.

- Further strengthening of Work Based Learning approach will be carried out, including apprentices schemes for VET students and training for VET teachers that provides access to latest developments in respective sectors.

- The VET sector visibility and promotion of its quality will be enhanced through a bottom-up approach (development of campaigns, student skills competitions, specialised school fairs, etc.), thus enhancing the conditions for acquiring of practical skills. The main task of the student’s skills competitions and student fairs will be presentation of practical skills that students obtained during education to employers.

- In order to tackle the shortage of practical skills and to improve the quality of transition from school to the labour market targeted investment will focus on establishing regional centres of competences in some vocational sectors.

- Interventions are planned in the area of capacity building for the quality assurance development and implementation at a system level as well as strengthening capacities of VET schools for implementation of the quality assurance approaches (e.g. self-assessment) and development of a strategic view of their internal development (including the development of school-based project pipeline with a view
of utilising diverse opportunities for financing of school-based projects available under EU structural funds and EU programmes, such as Erasmus+).

- Although the new education strategy contains a series of measures and guidelines for the further development of the VET system it was observed that it needed further elaboration. The Parliament amended the strategy that now enables Education Ministry to develop and adopt a strategic programme for the development of VET covering both initial and continuing VET, which is flexible, based on learning outcomes and has possibilities of international cooperation (mobility). The programme has been drafted in cooperation with all relevant stakeholders (ministries, chambers, agencies, unions, etc.) and is foreseen to be adopted by the end of 2015.
## List of abbreviations

<table>
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<tr>
<th>Abbreviation</th>
<th>Description</th>
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| ASOO         | Agency for VET and Adult Education  
  *(Agencija za strukovno obrazovanje i obrazovanje odraslih)* |
| CARDS        | Community Assistance for Reconstruction, Development and Stability |
| CEFTA        | Central European Free Trade Agreement (CEFTA) |
| CISOK        | Centre for career information and guidance  
  *(Centar za informiranje i savjetovanje o karijeri)* |
| CROQF        | Croatian Qualification Framework  
  *(Hrvatski kvalifikacijski okvir)* |
| CVET         | Continuous vocational education and training |
| DZS          | Croatian Bureau of Statistics  
  *(Državni zavod za statistiku)* |
| EQF          | European Qualification Framework |
| EU           | European Union |
| EQF          | European Qualification Framework |
| GDP          | Gross Domestic Product |
| HOK          | Croatian Chamber of Crafts and Trades  
  *(Hrvatska obrtnička komora)* |
| PES          | Croatian Employment Service  
  *(Hrvatski zavod za zapošljavanje)* |
| ICT          | Information and communication technology |
| IPA          | Instrument for Pre-Accession Assistance |
| IVET         | Initial vocational education and training |
| JMO          | Unified Model of Education  
  *(Jedinstveni model obrazovanja)* |
| MAPZ         | Active labour market policies  
  *(Mjere aktivne politike zapošljavanja)* |
| MRMS         | Ministry of Labour and Pension System  
  *(Ministarstvo rada i mirovinskog sustava)* |
| MZOS         | Ministry of Science, Education and Sports  
  *(Ministarstvo znanosti, obrazovanja i sportsa)* |
<p>| NEET         | not in employment, education or training |
| NUTS         | Nomenclature of Units for Territorial Statistics |
| NVRLJP       | The National Council for Development of Human Potential |</p>
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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>PIGZM</td>
<td>Youth Guarantee Implementation Plan (Plan implementacije garancije za mlade)</td>
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<td>PS</td>
<td>Sector profiles (Profili sektora)</td>
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<td>PUO</td>
<td>Public open universities (Pučka otvorena učilišta)</td>
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<td>RPL</td>
<td>Recognition of Prior Learning</td>
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<td>QA</td>
<td>Quality Assurance</td>
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<td>QF-EHEA</td>
<td>Framework for Qualifications of the European Higher Education Area</td>
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<td>SME</td>
<td>Small and medium entrepreneurship</td>
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<td>SMEs</td>
<td>Small and business enterprises</td>
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<td>SV</td>
<td>VET Sector Councils (Sektorska vijeća)</td>
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<td>VET</td>
<td>Vocational education and training (VET)</td>
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<tr>
<td>ZPZ</td>
<td>Employment Promotion Act (Zakon o poticanju zapošljavanja)</td>
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Vocational Education and Training Act (Zakon o strukovnom obrazovanju), Official Gazette No. 30/2009, 24/2010
## Websites

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