Introduction and context

Croatia’s *Strategy for education, science and technology*, adopted by parliament in 2014 (Croatian Parliament, 2014), aims to develop all education and training subsystems. A major curriculum reform was launched by the government in 2015, but implementation has been delayed. A pilot curriculum reform was introduced in general education in 2018/19 to increase quality and relevance, and new legislation is setting the ground for reforms in VET. The country has the lowest rate of early school leaving in the EU (3.1% in 2017, compared with the EU average of 10.6%). The employment rate of recent vocational education and training (VET) graduates increase sharply from 45.7% in 2015 to 70.3% in 2016, but fell to 59.4% in 2017. The country faces important challenges in terms of basic skill levels, especially in science and maths, participation rates in early childhood education and care and in adult lifelong learning, and low relevance of VET and higher education for employability (European Commission, 2018). The Croatian qualifications framework (CROQF) is seen as an important tool for the latter aspects, aligning education and training with the needs of the labour market (European Commission, 2017).

Development of the CROQF started in 2006, aiming to modernise secondary VET, higher education and adult education and to address existing and foreseen skill shortages on the labour market. The CROQF Act (Croatian Ministry of Science, Education and Sports, 2013), adopted by the Croatian Parliament in 2013 and subsequently amended in 2018 (Croatian Ministry of Science and Education, 2018), established the CROQF and set out the legislative and institutional framework for its development and implementation. It is a single, comprehensive framework, which has eight levels and three sublevels (1), described in terms of learning outcomes: knowledge, skills and level of autonomy and responsibility. It also incorporates credit systems. It includes qualifications from all levels and subsystems of formal education and training (general education, VET and higher education) and forms the basis for developing a system for validation of non-formal and informal learning. The framework was taken into account while creating the comprehensive curriculum reform for

(1) Initially, the CROQF had sublevels at levels 4 and 8. A sublevel at level 7 was introduced in 2018 with the amended CROQF Act.
primary and secondary education and in the amended Act on VET, in force since March 2018 (2). It is also linked to planned developments in higher and adult education (European Commission and Cedefop, 2018).

The CROQF was linked to the European qualifications framework (EQF) and self-certified against the qualifications framework of the European higher education area (QF-EHEA) in 2012.

Policy objectives
While the CROQF development process started in response to the two European qualifications frameworks (EQF and QF-EHEA), its aims are closely linked to the Croatian context. Besides allowing for comparability of Croatian qualifications at European level and internationally, the framework is seen as reflecting national needs and priorities, as an instrument for developing new education and training solutions.

The CROQF development aims to: enable better communication and coordination between stakeholders in the qualifications system; provide a classification of the existing system as a basis for transparency of qualifications, including description of old qualifications and facilitation of recognition of foreign qualifications; and act as a tool for reforming national education and training, promoting the use of learning outcomes, the development of quality assurance systems and of validation and recognition of non-formal and informal learning (Croatian Ministry of Science, Education and Sports, Agency for Science and Higher Education, 2014).

Objectives for the development of the CROQF and principles guiding its implementation include:
(a) better linking education and training with labour market needs;
(b) improving personal, social and economic development, and social inclusion and equity;
(c) emphasising the role of key competences for lifelong learning;
(d) improving pathways between subsystems and between sectors;
(e) making qualifications transparent and more consistent with the use of learning outcomes;
(f) supporting partnerships among stakeholders in the qualifications system;

(2) The text of the amended Act on VET is available at: https://www.zakon.hr/z/383/Zakon-o-strukovnom-obrazovanju (in Croatian).
The CROQF builds on reforms under way since 2005, such as developing new education standards and national curricula for general education and VET, and introducing the State 
matura. The comprehensive curriculum reform for primary and secondary education, which takes the CROQF into account, has as its main goal to modernise education to respond better to learners’ age and interests, preparing them for work, further education and contemporary life challenges. It also seeks to define clear learning outcomes and redefine the roles of teachers and educational institutions (European Commission and Cedefop, 2018).

In the framework of the Strategy for education, science and technology (Croatian Parliament, 2014), the CROQF is seen as a basis for establishing a quality assurance system at all levels of education and training by driving the development of necessary elements and instruments. It is also seen as a central instrument for improving and expanding work-based learning. The role of the CROQF in improving education quality is also emphasised in the Strategy for lifelong career guidance and career development (3), which establishes links between career guidance development, recognition of prior learning and the CROQF (European Commission and Cedefop, 2018).

Levels and use of learning outcomes

The CROQF is a qualifications and a credit framework. Each qualification in the framework is defined in terms of profile (field of work or study), reference level (complexity of acquired competences) and volume/workload (credit points) (4). Qualifications can be full and partial. The CROQF has eight reference levels, in line with the EQF, but with three additional sublevels at levels 4, 7 and 8. Level descriptors are defined in terms of knowledge (theoretical and factual); skills (cognitive, practical and social skills); and responsibility and autonomy. Although some key competences are explicitly indicated in the CROQF, it is emphasised

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(3) Available at: http://www.hzz.hr/UserDocsImages/Strategija_CPU_i_razvoja_karijere_u_RH_2016-2020_EN.pdf

(4) Three credit systems are used to measure the volume of qualifications and of learning outcomes: the Croatian credit system for general education (HROO), the European credit system for vocational education and training (ECVET), and the European credit transfer and accumulation system for higher education (ECTS).
that key competences should be included in each qualification (Croatian Ministry of Science, Education and Sports, Agency for Science and Higher Education, 2014).

Initially, sublevels for levels 4 and 8 were agreed to cater for existing Croatian qualifications of different workload and complexity. For example, a qualification with a minimum of 180 ECVET and/or HROO points (from which a minimum of 120 ECVET and/or HROO points are required at the fourth reference level or higher) is referenced to level 4.1. For a qualification at level 4.2, a minimum of 240 ECVET and/or HROO points are required (a minimum of 150 ECVET and/or HROO points at the fourth reference level or higher) (Croatian Ministry of Science, Education and Sports, Agency for Science and Higher Education, 2014).

Sublevels of level 7 were recently introduced. According to the 2013 CROQF Act, level 7 included graduate university studies (sveučilišni diplomski studiji), specialist graduate professional studies (specijalistički diplomski stručni studiji) and post-master specialist university studies (poslijediplomski specijalistički studiji). Following public debate, the CROQF Act was revised in 2018 (Croatian Ministry of Science and Education, 2018), splitting level 7 into sublevel 7.1 which now covers graduate university studies (sveučilišni diplomski studiji) and specialist graduate professional studies (specijalistički diplomski stručni studiji); and sublevel 7.2 which includes post-master specialist university studies (poslijediplomski specijalistički studiji) (European Commission and Cedefop, 2018). While keeping the two qualification types (academic and professional) at the same level (7.1), this amendment limits access to doctoral programmes for graduates of professional studies (European Commission, 2017). Entry requirements for level 8.2 were also redefined with the amended CROQF Act (\(^5\)).

The CROQF plays a central role in developing and implementing the learning outcomes approach in all subsystems of education and training, building on the reforms so far. Strengthening learning outcomes is supported by major stakeholder groups and mentioned in the Strategy for education, science and technology (Croatian Parliament, 2014) as central to the CROQF role in increasing quality assurance of education and training and in responding to the

\(^5\) The entry requirement for level 8.2 (postgraduate university doctoral studies) is a qualification acquired on completion of a graduate university degree, fulfilment of conditions defined in a regulation adopted by a university or university component and conditions defined in the study programme of the university or the university component. Exceptionally, the university can define another previously acquired qualification as entry requirement providing that an additional programme was completed in the university.
demands of the labour market. Learning outcomes are the main element of any qualification and they are organised in units/modules of learning outcomes. This is seen as giving transparency to qualifications and having a positive impact on transfer and accumulation of learning outcomes across sectors and institutions (European Commission and Cedefop, 2018).

The CROQF also establishes competence-based occupational standards and learning-outcomes-based qualifications standards as the basis for accreditation of programmes developed in line with the CROQF methodology (6). Occupational standards are developed through research-based analysis of labour market needs, particularly the Occupational standard survey, a questionnaire completed by employers. Occupational standards are then the basis for developing qualifications standards for qualifications aimed at the labour market. Qualifications standards developed for other purposes (pursuing further education, other individual or societal needs) are not based on the occupational standards. Qualifications standards entered in the CROQF register are the basis for developing and redesigning education and training programmes. At present, aligning programmes with qualifications standards in the CROQF register is not mandatory but is a mark of programme quality, transparency and relevance, leading to a qualification with an assigned CROQF/EQF level.

The learning outcomes approach has been gradually introduced in VET since 2006. The amended Act on Vocational Education and Training (7), in force since March 2018, defines occupational and qualifications standards in compliance with the CROQF Act. VET curricula are developed according to occupational and qualifications standards. In 2018, the dual model of VET education was launched experimentally for particular qualifications as a model based on the cooperation between education institutions and employers. Regional centres of competence were appointed to make VET more attractive.

The State matura was introduced in 2010 as an obligatory final exam (including Croatian language, mathematics, the first foreign language and the mother tongue for ethnic minority pupils) for gymnasium graduates and as an optional choice for VET graduates on completion of four-year programmes. In 2018, the experimental reform programme School for life began in general education, aimed to prepare students for challenges they face in life.

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6 Development of occupational and qualifications standards based on learning outcomes has been supported through IPA and ESF projects, including through workshops on the use and assessment of learning outcomes.

7 The amended Act on VET is available at: https://www.zakon.hr/z/383/Zakon-o-strukovnom-obrazovanju (in Croatian).
Higher education has undergone extensive change in the last decade, including strengthening the learning outcomes dimension. The decision (2001) to take part in the Bologna process made it necessary for Croatia to adjust its higher education system significantly. Introduction of undergraduate (first cycle) and graduate (second cycle) programmes started in 2005. The change in curricula is intended to develop competences needed on the labour market. The CROQF is thought to be the main instrument for bridging higher education and the labour market (European Commission, 2017). A number of occupational and qualification standards in higher education have already been developed and are to be assessed by the sectoral councils (European Commission and Cedefop, 2018).

Stakeholder involvement and institutional arrangements

Major stakeholders from education and training and the labour market (government representatives, learning providers, employers, students and other social partners) were involved in all phases of CROQF development. Public debate and round table discussions for the broader public were held in the initial phase of drafting of the CROQF Act (Croatian Ministry of Science, Education and Sports, 2013). The act sets up the institutional and legislative framework for CROQF implementation and defines the involvement, roles and responsibilities of key bodies and stakeholders.

The National Council for Development of Human Potential was appointed by the Croatian Parliament in June 2014, as the strategic body for developing and implementing the CROQF. It comprises a president and 24 representatives of national ministries, regional structures, social partners, education providers and national agencies involved in developing and awarding qualifications in different subsystems of education and training. The council oversees policies in education, training, employment and human resource development and monitors and evaluates the CROQF’s impact and the work of the sectoral councils. The National Council for Development of Human Potential consists of representatives of the following institutions: Ministry of Science and Education, Ministry of Labour, Ministry of Entrepreneurship and Crafts, Ministry of Economy, Ministry of Regional Development, regional structures, associations of unions, associations of employers, civil society organisations, the Chamber of Commerce, the Chamber of Trades and Crafts, the sectoral councils, higher education institutions, adult education institutions, the Agency for Education and Teacher Training, the Agency for Vocational Education, the Agency for Science and Higher Education, and the Croatian employment service.

\(^{[8]}\) The National Council for Development of Human Potential consists of representatives of the following institutions: Ministry of Science and Education, Ministry of Labour, Ministry of Entrepreneurship and Crafts, Ministry of Economy, Ministry of Regional Development, regional structures, associations of unions, associations of employers, civil society organisations, the Chamber of Commerce, the Chamber of Trades and Crafts, the sectoral councils, higher education institutions, adult education institutions, the Agency for Education and Teacher Training, the Agency for Vocational Education, the Agency for Science and Higher Education, and the Croatian employment service.
variety of stakeholders actively involved in the national council is both the strength of the current governance arrangement – as it ensures wide consensus on matters regarding the CROQF – and also its weakness, as the decision-making process may take a long time.

On a technical and policy level, the Ministry of Science and Education coordinates development and implementation of the CROQF, in cooperation with the Ministry of Labour and Pension System. The main tasks of the Ministry of Science and Education include: setting up and maintaining the national CROQF register, establishing and coordinating the work of sectoral councils, providing support to the National Council for Development of Human Potential, developing procedures related to standards of qualifications, developing a system of validation of non-formal learning, and informing the public about the CROQF. The main tasks of the Ministry of Labour and Pension System include managing the sub-register of occupational standards and developing procedures related to them. Cooperation between the two ministries is ensured through regular coordination meetings.

The Ministry of Science and Education is also the EQF national coordination point (NCP). The budget for NQF-related activities comes from various sources: the State budget, the EQF NCP grant, the European Social Fund and the Swiss-Croatian programme of cooperation for projects implemented by education institutions and the Ministry of Science and Education, and the Croatian employment service. Most funds are directed towards NQF development, implementation and research (Cedefop (2015)).

Sectoral councils (25 advisory and professional bodies working on the development of human potential in line with labour market needs in their respective sectors) have been established and started their activity. Each sectoral council has a president and 10 members (representing the ministry of the respective sector, the Croatian employment service, the agency for quality assurance, and sectoral experts), who are appointed by the minister of Science and Education. Their role includes assessing proposals for occupational standards, qualifications standards and units of learning outcomes.

Occupational and qualifications standards are developed by working groups including representatives from education institutions and the labour market, in line with a detailed methodology. They are then assessed in the sectoral councils, and need to be finally approved by the competent minister. Once approved, they are entered in the CROQF Register and become national standards. Qualification standards entered in the CROQF register become the basis for development or redesign of education and training programmes.
Recognising and validating non-formal and informal learning and learning pathways (9)

While there is yet no formal national consensus in Croatia on how validation is to be implemented, it has been incorporated in several strategic documents (10). Developments in the past five years have been slowly, but steadily, setting the scene for a national validation framework. The Strategy for education, science and technology (Croatian Parliament, 2014) recognises validation as an essential part of lifelong learning, with adults as the main target group, and points out the need for consensus among key stakeholders.

One explicit aim of the CROQF (11) is to set up a system for recognition and validation of non-formal and informal learning (VNFIL) at national level, based on units of learning outcomes. The development of qualifications standards, units of learning outcomes and occupational standards, as well as the CROQF itself and the CROQF register were seen as prerequisites of the VNFIL system. The register (12) is seen as the main quality assurance tool for validation and most education and training efforts have been focused on CROQF-related developments in recent years. Building on previous work, two key methodologies were developed in the form of national level guidelines: one for developing occupational standards (13) and one for qualifications standards (14).

Article 15 of the CROQF Act foresees the creation of an Ordinance on recognition and validation of prior learning; this will specify the procedure in detail, and establish a closer link to the CROQF. According to the CROQF Act,

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9 This section draws mainly on input from the 2018 update to the European inventory on validation of non-formal and informal learning (European Commission et al., forthcoming).

10 Besides the Strategy for education, science and technology (Croatian Parliament, 2014), other strategic documents referring to validation are: the Strategy for lifelong career guidance and career development 2016-20; the Strategic plan 2017-19 of the Ministry of Science and Education; and the Strategic framework for the promotion of lifelong learning in the Republic of Croatia 2017-20.

11 Article 3 of the CROQF Act (Croatian Ministry of Science, Education and Sports, 2013).

12 The CROQF register is available at: https://hko.srce.hr/registrar/


recognition of prior learning for CROQF levels 6 and higher shall be regulated by higher education institutions, so the Ordinance on recognition and validation will be applicable to CROQF levels 1-5 (European Commission and Cedefop, 2018).

The National Council for Development of Human Potential has recently developed Recommendations for strategic development of validation of prior learning (15), as a basis for developing the ordinance. This set of 15 recommendations concerns the revision of legal acts in adult (16) and higher education, the operationalisation and financing of the system development, suggestion for a model for validation of competences, and suggestions for fundamental principles for the development of the validation system. A draft of the Ordinance has been developed and is expected to be approved in 2019.

The amendments to the CROQF Act adopted in 2018 define recognition and validation of prior learning in a broader sense (compared to the initial stipulation in the 2013 CROQF Act, which referred to validation of non-formal and informal learning), taking into account predefined standards (occupational, qualification) from the CROQF register that are valid at national level. The qualification standards will serve as a foundation for creating procedures for assessment and validation of non-formal and informal learning. All 25 sectoral councils foreseen by the ordinance on the CROQF register have been established and received training in preparing and evaluating occupational and qualification standards for inclusion in the register; these can then be used for validation purposes.

In practice, validation of learning outcomes acquired outside formal education and training is still rare; in principle, no access to formal qualifications can be currently granted without formal learning. Validation arrangements are in place for adult education on a sectoral level, and for crafts occupations. For instance, a master craftsperson exam can validate and recognise non-formally acquired knowledge and competences. The examination can be taken by a person having passed a journeyman exam (secondary level) in the desired occupation and having two years of work experience in it, or some other secondary level diploma and three years of work experience in the occupation. Some providers in higher education have developed internal guidelines for


(16) An update to the Adult Education Act is foreseen and should take into account developments related to the CROQF.
recognising prior learning for specific purposes, such as admission to certain higher education programmes or allocation of ECTS credits in the framework of accredited study programmes.

**NQF implementation**

The CROQF has reached an early operational stage; the CROQF Act was adopted in 2013 and amended in 2018. The amendments introduced definitions for types of qualifications at all levels, clarified the types of qualification that can be placed at sublevels of level 7, redefined entry requirements for level 8.2 and redefined recognition and validation of prior learning \(^{(17)}\). Governance and implementation structures have been decided. The ordinance on the CROQF register adopted in 2014 \(^{(18)}\) stipulates the content and management of the register, plus procedures for requests, assessment, and entry of qualifications into the register. The areas of activity of sectoral councils, the criteria for the selection of new council members and their operational activities, as well as the internal and external quality assurance systems, are also regulated by the Ordinance. All 25 sectoral councils foreseen have been established, have been trained in preparation and evaluation of occupational and qualification standards for inclusion into the register, and have started their activity.

The structure of the CROQF register and its online database have also been created. It consists of three sub-registers: one of occupational standards; one of units of learning outcomes; and one of qualifications standards \(^{(19)}\). The first is regulated and maintained by the Ministry of Labour and the other two by the Ministry of Science and Education. While no qualifications have been entered in the register so far, proposals for occupation and qualification standards have been developed as part of the implementation of projects jointly financed from the European Social Fund (ESF). Currently, there are six occupational standards already registered in the database and requests for the inclusion of another 61, at different qualification levels, were submitted (data from September 2018).

\(^{(17)}\) For details, please see section on *Levels and use of learning outcomes* and *Recognising and validating non-formal and informal learning and learning pathways*, above.

\(^{(18)}\) The text of the ordinance on the CROQF register (*Pravilnik o Registru Hrvatskog kvalifikacijskog okvira*) is available in English at: http://www.kvalifikacije.hr/sites/default/files/documents-publications/2017-09/Ordinance%20on%20the%20CROQF%20Register.pdf

\(^{(19)}\) The CROQF register is available at: https://hko.srce.hr/registar/
Occupational standards are the basis for development of qualifications standards for those qualifications aimed at the labour market. Once qualification standards are included in the CROQF register in a future phase of CROQF implementation, they will become the basis for development or redesign of education and training programmes.

According to the ordinance on the CROQF register, qualifications and programmes included in the register need to be in line with CROQF standards and procedures. As far as the current legal framework is concerned, the CROQF is a voluntary option. Creating education programmes in line with the CROQF is not mandatory, although it represents a mark of quality. Legislative changes are necessary in the different education and training sub-systems for CROQF implementation, to regulate quality assurance procedures. This is seen as one of the main challenges in the current implementation phase. Recent amendments to the Act on VET define occupational and qualifications standards in compliance with the CROQF; revision of higher education and adult education legislation is also planned. Guidelines for developing study programmes in line with the qualification standards expected to be included in the CROQF register in the future will also need to be developed.

As recommended by the National Council for Development of Human Potential in December 2015, the CROQF will be used by the Agency for Science and Higher Education for initial accreditation and reaccreditation of study programmes in higher education. It is also recommended that CROQF should be used by public universities for their internal quality assurance systems and that higher education institutions should use CROQF for preparing and revising study programmes. In 2015, the National Council also adopted the Recommendations regarding the use of the CROQF in adult education. While the recommendations are not legally binding, they serve to support or initiate reforms.

Communication efforts in relation to the CROQF have so far targeted stakeholder groups directly involved in the development of the framework and in the development and assessment of occupational and qualifications standards. A high level of response to the public debate on the amendment of the CROQF Act, carried out in 2017, indicates a fairly high level of interest in the framework among stakeholders, though the CROQF is less known by the general public. Communication to a wider audience has mainly been carried out through the CROQF webpage (20) and the yearly CROQF conference organised by the National Council for the Development of Human Potential. It is foreseen that

(20) Available at: http://www.kvalifikacije.hr/en
CROQF and EQF levels will be indicated on qualification documents and Europass supplements once qualifications are included in the register and education and training programmes leading to CROQF qualifications are developed.

Referencing to the EQF

Croatia referenced its national qualifications levels to the EQF and self-certified to QF-EHEA in March 2012; it then published a joint report in 2014 (Croatian Ministry of Science, Education and Sports, Agency for Science and Higher Education, 2014). An updated referencing report is planned to be presented to the EQF advisory group by 2020, once the first qualification standards are included in the CROQF register.

Important lessons and the way forward

The relatively rapid development of the CROQF illustrates the importance of stimulating active and broad participation throughout the entire process, complemented by targeted support for, and training of, stakeholders. Progressive, step-by-step development has been emphasised. While the high level of response to the public debate on the amended CROQF Act, carried out in 2017, indicates a similar level of interest in the framework, the level of ownership of the CROQF among stakeholders will become clearer once the register is fully operational. So far, levels of ownership have been highest among the ministries involved in the development of the legal base, but it is gradually being accepted by others through participation in events and projects.

Some of the challenges encountered so far in the development of the CROQF have been met successfully. Agreement on key concepts among stakeholders was reached and the framework is now firmly grounded in legislation, with links to adopted or planned legal acts regulating the different education and training subsystems, and to strategic documents. Proposals for occupational and qualifications standards were prepared and are currently being assessed for entry into the CROQF register. All 25 sectoral councils tasked with assessment of standards and of units of learning outcomes have been established and have become operational.

Potentially, the CROQF is a pivotal instrument in the Croatian education and training system, underpinning the development of quality assurance mechanisms in all subsystems, the creation of a system for validation and recognition of prior
learning, enhanced dialogue between education and training and the labour market, and increased parity of esteem between different types of qualifications.

Further work is necessary, however, for the CROQF to reach this potential. To support implementation, its principles and application, and the legislation that regulates the different education subsystems will have to be further aligned with each other. Planned legislative changes in higher and adult education need to be taken forward, regulating quality assurance procedures. The development of proposals for occupational and qualifications standards for inclusion in the register will need to be supported, and education and training programmes aligned to qualification standards (that are to be included in the CROQF register in the future) will need to be developed and delivered before the first qualifications assigned to CROQF and EQF levels are issued. The Ordinance on recognition of prior learning is to be finalised and adopted, possibly in 2019.

The current thinking behind the new Act on quality assurance in science and higher education – to make qualification standards mandatory for all new study programmes and to use the CROQF in quality assurance arrangements in accordance with the standards and guidelines for quality assurance in the European higher education area – shall be subject to broader public debate. It will be important to clarify the role of the framework for the various education and training subsystems and the nature of its regulatory function. Another related and open question that remains is the extent to which Croatian qualifications will be defined and regulated though the CROQF or through existing legislation at subsystem level.

Main sources of information

The EQF NCP for Croatia is the section for the Croatian qualifications framework at the Ministry of Science and Education.

- CROQF website: http://www.kvalifikacije.hr/en
- The CROQF register is available at: https://hko.srce.hr/registar/
### Croatian national qualifications framework (CROQF)

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<th>Qualification types</th>
<th>EQF levels</th>
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<td>8.1</td>
<td>Postgraduate research master of science diploma <em>(poslijediplomski znanstveni magistarski studiji)</em></td>
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<td>7.2</td>
<td>Post-master specialist university studies <em>(poslijediplomski specijalistički studiji)</em></td>
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<tr>
<td>7.1</td>
<td>Master diploma – graduate university studies <em>(sveučilišni diplomski studiji)</em></td>
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<td></td>
<td>Professional master diploma – specialist graduate professional studies <em>(specijalistički diplomski stručni studiji)</em></td>
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<td>6</td>
<td>Bachelor diploma – undergraduate university studies <em>(sveučilišni preddiplomski studiji)</em></td>
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<td></td>
<td>Professional bachelor diploma – undergraduate professional studies <em>(stručni preddiplomski studiji)</em></td>
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<td>5</td>
<td>Professional higher education diploma – short cycle <em>(kratki stručni studiji)</em></td>
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<td></td>
<td>VET post-secondary development and training certificate <em>(strukovno specijalističko usavršavanje i osposobljavanje)</em></td>
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<td></td>
<td>Master craftsman diploma <em>(programi za majstore uz najmanje dvije godine vrednovanog radnog iskustva)</em></td>
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<td>4.2</td>
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<td></td>
<td>Upper secondary VET certificate – four years / Upper secondary VET certificate – five years <em>(Četverogodišnje i petogodišnje strukovno srednjoškolsko obrazovanje)</em></td>
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<td>4.1</td>
<td>Upper secondary VET – three years <em>(Trogodišnje strukovno obrazovanje)</em></td>
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<td>3</td>
<td>Upper secondary VET certificate – two years / Upper secondary VET certificate – one year <em>(Jednogodišnje i dvogodišnje srednjoškolsko strukovno obrazovanje)</em></td>
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<tr>
<td>2</td>
<td>Vocational training certificate <em>(Strukovno osposobljavanje)</em></td>
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<td>1</td>
<td>Primary education certificate – eight years <em>(Osnovno obrazovanje) (</em>)</td>
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</table>

(*) First eight years of schooling are called primary education. It refers to both ISCED 1 and 2 (primary and secondary education).

Source: Adapted from Croatian Ministry of Science and Education (2018) (Article 7).
Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CROQF</td>
<td>Croatian national qualifications framework</td>
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<tr>
<td>ECTS</td>
<td>European credit transfer and accumulation system for higher education</td>
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<td>ECVET</td>
<td>European credit system for vocational education and training</td>
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<td>EQF</td>
<td>European qualifications framework</td>
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<td>ESF</td>
<td>European social fund</td>
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<td>HROO</td>
<td>Croatian credit system for general education</td>
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<td>IPA</td>
<td>instrument for pre-accession assistance</td>
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<td>NCP</td>
<td>national coordination point</td>
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<tr>
<td>NQF</td>
<td>national qualifications framework</td>
</tr>
<tr>
<td>QF-EHEA</td>
<td>qualifications framework in the European higher education area</td>
</tr>
<tr>
<td>VET</td>
<td>vocational education and training</td>
</tr>
</tbody>
</table>

References

[URLs accessed 28.11.2018]


European Commission; Cedefop (2018). *Survey on implementation, communication and use of NQF/EQF* [unpublished].