



D2.2

# Proposals for flexibilization of VET on national levels

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## List of abbreviations

<b>VET</b>	Vocational education and training.
<b>CEDEFOP</b>	European Centre for the Development of Vocational Training.
<b>EQF</b>	European Qualifications Framework.
<b>WBL</b>	Work based learning.
<b>ECTS</b>	The European Credit Transfer and Accumulation System

## AgriNext Consortium



BC Naklo - Biotehniški center Naklo



OnP - On Projects Advising, SL



COAG Jaén - Coordinadora de Organizaciones Agrarias



IES Galileo - Consejería de educación - Junta de Andalucía



CPI - Center RS za poklicno izobraževanje



ARCTUR - Računalniški inženiring, d.o.o.



SLOGA - Kmetijsko gozdarska zadruga z.o.o.



TUS - Technological University of the Shannon: Midlands Midwest



VUKA - Veleučilište u Karlovcu



SKINK - Skink, d.o.o.

## Executive summary

The document named Proposals for Flexibilization of VET on national levels is Deliverable, D2.2, of the AgriNext project in the Work Package WP2 - Flexibilization of school systems. The aim of the document is to make the proposals for flexibilization of VET systems in consortium countries (Croatia, Ireland, Slovenia, and Spain) to integrate systematic changes to facilitate fast responses to job market changes.

The Flexibilization Model of the VET System is based on ten areas: the flexibility of curriculum design and school autonomy; allowing flexibility in the enrolment process; flexibility in programme implementation and delivery; learner-centred approach, individualised support and plans; breaking down programmes into units or modules to enable movement across the system; integration and development of competencies, prior knowledge validation, recognition, credit transfer and qualification framework, inclusion of social partners and response to the labour market needs, allowing horizontal and vertical flexibility (including I-Vet and C-Vet), promote alternatives to grade retention and avoid suspension.

The Proposals for flexibilization of VET on national levels are based on previous analyses from EQF 3 to EQF 6. For each mentioned EQF level and four countries (Croatia, Ireland, Slovenia, Spain) the comparison was made. Analyses for Implementation level gathered data, focused on mapping the existing options of flexibilization in current educational programmes on different EQF levels.

It is important to emphasise that flexible VET education and training systems should be a path, not only a goal. All stakeholders that are actively engaged in the legalisation, planning, implementation, assessment, and evaluation of VET should build their capacities slowly and strategically.

## Table of contents

PROJECT INFORMATION .....	2
DOCUMENT INFORMATION .....	2
VERSIONING AND CONTRIBUTION HISTORY .....	2
ACKNOWLEDGEMENT .....	2
LEGAL NOTICE .....	2
LIST OF ABBREVIATIONS .....	3
AGRINEXT CONSORTIUM .....	3
EXECUTIVE SUMMARY .....	4
TABLE OF CONTENTS .....	5
1. INTRODUCTION .....	6
1.1. Aim of the document.....	6
1.2. Methodology .....	7
2. MODEL OF VET SYSTEM .....	9
2.1. The flexibility of curriculum design and school autonomy.....	10
2.2. Allowing flexibility in the enrolment process .....	10
2.3. Flexibility in programme implementation and delivery .....	10
2.4. Learner-centred approach, individualised support, and plans.....	11
2.5. Break down programmes into units or modules to enable movement across the system. ....	11
2.6. Integration and development of competencies .....	11
2.7. Prior knowledge validation, recognition, credit transfer and qualification framework .....	12
2.8. Inclusion of social partners and response to the labour market needs. ....	12
2.9. Allowing horizontal and vertical flexibility (including I-Vet and C-Vet).....	12
2.10. Promote alternatives to grade retention and avoid suspension.....	13
3. PROPOSALS FOR FLEXIBILIZATION OF VET ON NATIONAL LEVELS .....	14
3.1. The flexibility of curriculum design and school autonomy.....	14
3.2. Allowing flexibility in the enrolment process .....	17
3.3. Flexibility in programme implementation and delivery .....	19
3.4. Learner-centred approach, individualised support, and plans.....	20
3.5. Break down programmes into units or modules to enable movement across the system. ....	22
3.6. Integration and development of competencies .....	24
3.7. Prior knowledge validation, recognition, credit transfer and qualification framework .....	25
4. INCLUSION OF SOCIAL PARTNERS .....	27
4.1. Market needs.....	27
4.2. Allowing horizontal and vertical flexibility (including I-Vet and C-Vet).....	28
4.3. Promote alternatives to grade retention and avoid suspension.....	30
5. DUAL WAY/ APPRENTICESHIP AS A CROSS SYSTEM PRACTICE .....	32
6. WHAT SHOULD WE CHANGE AND WHY? .....	33
7. CONCLUSION .....	36
8. REFERENCES .....	37



## 1. Introduction

EU encourages member states to adopt policies and practices that promote high-quality education and training, support lifelong learning and mobilities, promote the development of a skilled workforce, adopt EU competencies frameworks, etc. An important element enabling these policies and practices is the flexible VET education and training systems.

Flexible education systems enable learners to move within and across education, training and employment. Flexibility means that learners can adapt their learning pathway as they go along to suit their interests and abilities<sup>1</sup>. Flexible VET target different groups of learners, including adults, student with special needs, migrants, etc.

Shaping flexibility in VET means analysing the conditions and implications to be found in the institutional and political context of VET systems, in the socioeconomic expectations of stakeholders, found in regular pathways to the labour market, in the organisational design of VET inside schools and companies, in the educational tools, such as pathways, curricula, learning materials and assessment procedures, and, last but certainly not least, in the professional expectations and ambitions of teachers and trainers. These conditions form the context for powerful teaching and learning environments in which the formal and non-formal skilling processes will take place<sup>2</sup>.

### 1.1. Aim of the document

The document (D2.2) Proposals for flexibilization of VET on national levels presented the Flexibilization Model of VET System and the proposals for flexibilization of VET in national levels to integrate systematic changes to facilitate fast responses to job market changes.

This document will, be a starting point for establishing systems of continuous exchange between employers, teachers/trainers/guidance service providers to respond to the competencies needed in the job market. The document will also be a base for development training for teachers and trainers to upskill their pedagogical and professional competencies in the field of multifunctional agriculture to be able to respond efficiently to the job market changes.

Chapter 2, The Flexibilization Model of VET System was created because of analysing flexibilization conditions on national levels of four partner countries (Croatia, Ireland, Slovenia and Spain).

The Flexibilization Model of VET System is designed as sunflowers. In nature, the head of a sunflower is composed of millions of individual flowers converging together. The metaphor of togetherness can also be transmitted to the ecosystem's creation, in which experts, schools, teachers, learners, social partners, and others reduce barriers and increase opportunities towards permeable education and training systems.

Chapter 3, Proposals for flexibilization of VET on national levels, based on ten areas of the Flexibilization Model of VET System:

1. The flexibility of curriculum design and school autonomy
2. Allowing flexibility in the enrolment process
3. Flexibility in programme implementation and delivery
4. Learner-centred approach, individualised support and plans.
5. Break down programmes into units or modules to enable movement across the system.
6. Integration and development of competencies

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<sup>1</sup> Adapted from: <https://www.cedefop.europa.eu/en/tools/vet-toolkit-tackling-early-leaving/intervention-approaches/flexible-education-and-training-systems>

<sup>2</sup> Adapted from: Shaping conditions for a flexible VET

7. Prior knowledge validation, recognition, credit transfer and qualification framework
8. Inclusion of social partners and response to the labour market needs
9. Allowing horizontal and vertical flexibility (including I-Vet and C-Vet)
10. Promote alternatives to grade retention and avoid suspension.

The purpose of this chapter is to:

- Look at the national policies and frameworks of partner countries.
- Map the existing options of flexibilization in current vocational educational programmes from EQF level 3 - 6 through the lens of the Flexibilization model of VET System.

The proposal should serve as a foundation and inspiration for further discussions, decisions, and actions. Each element of the Flexibilization model of VET System is first briefly introduced and then analysed on a national and/or implementation level.

## 1.2. Methodology

Proposals for flexibilization of VET on national levels was led by consortium partner CPI, prepared with other AgriNext partners with cooperation with VET-school managements, sector representative, employers and other stakeholders inside the partners organisations.

Based on the previous findings (Deliverable, D2.1): overview of the formal Vet system in partner Countries, relationship between initial and continuing VET education, procedures of changing curriculum, relationship between educators and stakeholders, dual system/apprenticeship, IVET and CVET for trainers and teachers, assessment of competencies, we presented the Flexibilisation Model of VET system.

The Proposals for flexibilization of VET on national levels based on previous analyses from the Deliverable 2.1, chapter: Comparability of VET systems, from EQF 3 to EQF 6. For each mentioned EQF level and four countries (Croatia, Ireland, Slovenia, Spain) the comparison in the following areas and questions was made:

- The length of educational program in years
- ECTS
- Can the program be implemented either school based or in dual way or both (describe)?
- Which type of education is implemented (describe)?
- National educational programme (please describe)?
- Is horizontal transferability between programmes possible?
- Proportion of the curriculum that is optional (school and students choose between different modules - set at national level or set at school level in cooperation with the social partners).
- Proportion of the WBL.
- How specific are the objectives of the practical on-the-job training/WBL?
- Does the law require an individual learning plan for each student.
- The share of the education/study programme that can be determined by the school in cooperation with the social partners.

Analyses for Implementation level gathered data, focused on mapping the existing options of flexibilization in current educational programmes on different EQF levels:

- Planning of the study programme that can be determined by the school (who designs it, who approves it, how often it is revised, ...).
- Degree of autonomy of the teacher/trainer (how detailly is the content/forms/methods of work defined on national/regional).
- How participants lifelong learning competencies as *DigComp*, *GreenComp*, *EntreComp*, *LifeComp*... being developed?
- To what extent school can take participants' preferences into account when choosing an employer?
- Which forms of blended learning can be implemented (example: FlexModel, Blended Learning, Flipped Model, A la Carte...)?
- Have you got business Incubator (Business simulation, learning enterprises, from idea development, startup, .... to closure)?
- Organised forms of student support: Additional professional support for students with additional needs.
- Describe if your school promotes alternatives to grade retention and how.



## 2. Model of VET System

### *Path towards transformative and sustainable ecosystem for learning.*

Flexible VET Education and Training systems present the path towards a Transformative and Sustainable Ecosystem for learning. Transformative in terms of encouraging different learning pathways that follow learners' interests and sustainable in terms of enabling lifelong learning for everyone who co-creates the VET system.

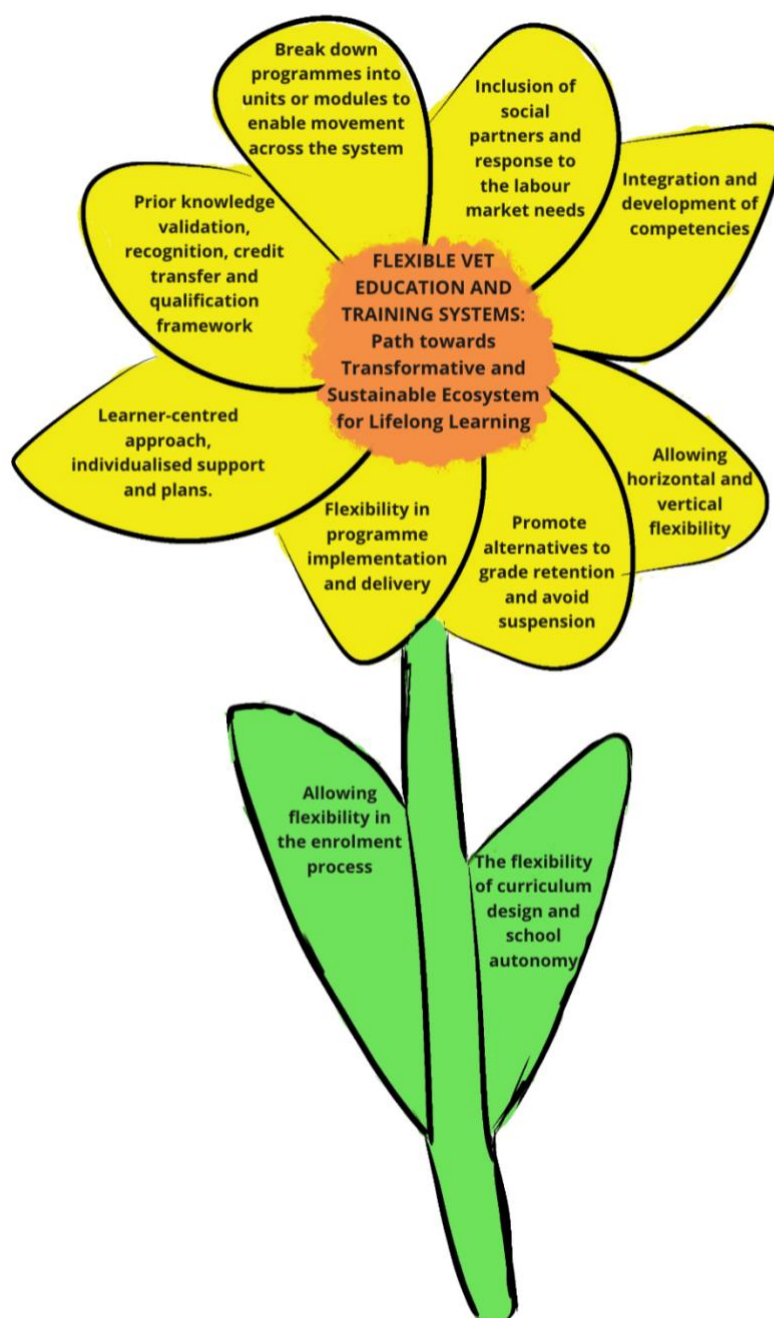


Figure 1: Drawing of Model of VET System - The Sunflower.

The model consists of 10 elements that are described separately; however, they are interconnected and influence each other. Elements that enable FLEXIBLE VET EDUCATION AND TRAINING SYSTEMS are described in the following sections.

### 2.1. The flexibility of curriculum design and school autonomy

Flexibility in curriculum design and school autonomy form a stable foundation or a stem for flexibility at many other levels. A policy that defines curriculum design is built in dialogue (with schools, the Ministry of Education and/or Labour and other social partners) and provides a relatively high proportion of the optional curriculum. That enables learners to choose between different modules set at the national or school levels in cooperation with social partners. The flexibility of curriculum design also refers to work-based learning (WBL) and its ability on all EQF levels to meet the learner's needs and practical on-the-job training/WBL objectives. On the implementation level, schools, teachers/trainers/professors have a high degree of autonomy regarding the content details, forms, and methods.

### 2.2. Allowing flexibility in the enrolment process

Strict enrolment conditions and registration deadlines can hinder participation in VET. Therefore, allowing flexibility in the enrolment process is the second important element that builds a solid foundation or a stem of a flexible VET system. Young people waiting for the results of their initial education may apply to a programme and then be unable to access it due to not attaining the required grades. It is important to keep enrolment and registration open long enough to allow such learners to apply to other programmes. This empowers learners (especially the ones who don't fit into the system) to start their education at any time of the year. Additionally, that can help avoid drop-outs in transition periods between education levels<sup>3</sup>.

### 2.3. Flexibility in programme implementation and delivery

VET schools offer flexibility in programme implementation and enable learners to learn in different settings: in school and in a dual way. It is essential that schools don't narrow the legal options offered to learners when implementing the program in their context. National curricula define broadly learning outcomes to be achieved and allow schools and training institutions to select teaching methods and content and to adapt to learners' and employers' needs. Different learning systems, such as school and dual learning and other learning methodologies, such as classroom-based learning, blended learning, flipped model, and distance learning, offer learners an opportunity to learn in different ways and adapt their time, space and pace of learning. Programmes are provided to learners part-time or full-time throughout the year in the mornings, afternoons, evenings, or weekends.

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<sup>3</sup> Adapted from <https://www.cedefop.europa.eu/en/tools/vet-toolkit-tackling-early-leaving/intervention-approaches/flexible-education-and-training-systems>

## 2.4. Learner-centred approach, individualised support, and plans.

Learners learn the most when they are the agents of their learning and are encouraged to think, explore and act rather than memorise. This requires flexibility in how we perceive learning and define teacher and learner roles. The learner-centred approach enables a shift of teacher roles. Teachers create a supportive learning environment for learners and facilitate learning as a guide on the side rather than direct instruction. They also have didactical knowledge that enables individualisation, so learners can acquire knowledge and develop their skills, abilities, potential and personal qualities. On the national level, legalisation can support individualisation with recommendations (or even requirements) for Individual Learning Plans. Flexibility also refers to how learners' preferences are considered when choosing an employer and the organisation of different forms of support. Schools can also organise additional professional support for learners with special needs, teachers' learning support for learners, peer support, volunteer support and others.

## 2.5. Break down programmes into units or modules to enable movement across the system.

Modularisation of VET programmes enables learners to move across the system and select what interests them in terms of units/modules and competencies. Additionally, breaking down programmes into units and modules enables VET to adapt faster to changes in the labour market by providing the right skills for employment and empowering learners to respond to these changes. Modular structures can be organised as mandatory, core and elective; specialisation; and introductory modules. Modular structures in VET are also linked with developing credit arrangements based on learning outcomes and progress in recognising and validating non-formal and informal learning.<sup>4</sup>

## 2.6. Integration and development of competencies

Vocational education and training (VET) provide learners with vocational and key competencies that combine knowledge, skills and attitudes. That enhances their employability, supports personal development, and encourages active citizenship. When developing and assessing competence(s), we should have in mind that:

- Competence(s) is both individual and collective (collaborative learning and expertise)
- Competence(s) is accumulated both in formal education, non-formal and in informal contexts (experiential learning)
- Competence(s) is about knowing, controlling and mastering one's work. Social interaction also becomes more pronounced (team learning).
- Competence(s) means flexibility, tolerating uncertainty and a positive attitude to change.
- Competence(s) requires continuous assessment and development. The assessment is both self-assessment and external assessment.
- Competence(s) is context-dependent (triological learning). Thus, its assessment is linked to the prevailing valuations and the operating environment.<sup>5</sup>

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<sup>4</sup> Adapted from: [https://www.cedefop.europa.eu/files/6126\\_en.pdf](https://www.cedefop.europa.eu/files/6126_en.pdf)

<sup>5</sup> Source: [https://www.cedefop.europa.eu/files/111332\\_Competence\(s\)\\_framework\\_for\\_VET\\_professions.pdf](https://www.cedefop.europa.eu/files/111332_Competence(s)_framework_for_VET_professions.pdf)

## 2.7. Prior knowledge validation, recognition, credit transfer and qualification framework

Real permeability must enable learners to transfer and build on all types of prior learning outcomes acquired in formal, non-formal or informal contexts, whether this learning took place in schools, work or during leisure. Therefore, access to certain forms of education and training, admission to a specific course or programme, exemption from certain parts of it, the right to practise in an occupation or have their prior learning recognised as equivalent to a particular qualification should not depend only on formal learning but also on identifying all types of previous learning. Recognition of prior learning means validating learning outcomes, whether from formal education or non-formal or informal learning, acquired before requesting validation. For learners, “this broader view of what is considered as relevant learning makes a substantial difference. It gives value to learning outcomes acquired over time and in different settings.”<sup>6</sup>

In that terms, National qualifications frameworks (NQFs) play an important role because they classify qualifications according to a set of levels based on learning outcomes. NQF levels reflect what the holder of a certificate or diploma is expected to know, understand and be able to do. By linking or ‘referencing’ NQFs to the EQF, learners and employers can compare the levels of qualifications awarded at home and by other countries.

## 2.8. Inclusion of social partners and response to the labour market needs.

The engagement of social partners in VET systems helps to improve labour market outcomes for learners and helps to meet the skill needs of employers. Social partners have an important role on a national level in terms of policymaking and decision-making. And at the sectoral, local, and regional levels. They are partners in designing specific programmes, developing occupational standards, curriculum design, apprenticeships, work-based learning, assessment, etc. Their active involvement can:

- effectively mediate between the worlds of work and education
- help to identify existing and emerging qualification requirements in companies and help translate these into relevant training programmes.
- ensure that VET qualifications are recognised, primarily throughout their country but increasingly also beyond its borders.
- help to facilitate learning processes, whether in schools, dual systems, or apprenticeships

## 2.9. Allowing horizontal and vertical flexibility (including I-Vet and C-Vet)

There should be no limitations when establishing progression routes for I-VET and C-VET learners. Moving towards permeable education and training systems requires bridging subsystems and reducing barriers between levels and institutions of learning and qualifications. The transition between different education sectors must be facilitated to meet the needs of individual learners or workers and the demands of a modern work environment. Learners should be able to move easily between different types of education (academic and vocational) and between different levels (such as upper secondary or apprenticeship, up to higher education) as they decide. The articulation agreements between education providers should be mandatory, with progression paths built into a learner’s programme of study.<sup>7</sup>

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<sup>6</sup> Adapted from: [https://www.cedefop.europa.eu/files/9072\\_en.pdf](https://www.cedefop.europa.eu/files/9072_en.pdf)

<sup>7</sup> Adapted from the article: Conditions for flexible transitions between vocational and academic education

### 2.10. Promote alternatives to grade retention and avoid suspension.

Grade retention should only be used in exceptional circumstances. It is important to assess the benefits of repetition and alternative measures on a case-by-case basis. Parents and learners should be involved in the decision on grade repetition. Also, learners must not be simply held back. To ensure that repetition positively impacts learners, there need to be specific measures to promote repeaters' achievement and social skills. Alternatives to grade retention include, for instance, one-on-one or small group support, tutoring or counselling, cooperative learning, peer tutoring, parental involvement, the establishment of positive teacher-learner relationships, multi-age grouping or smaller class groups, participation in extracurricular activities, etc. Alternatives to grade retention can be promoted at the system level by allowing schools to adapt curricula and assessments to individual needs.<sup>8</sup>

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<sup>8</sup> Adapted from: <https://www.cedefop.europa.eu/en/tools/vet-toolkit-tackling-early-leaving/intervention-approaches/flexible-education-and-training-systems>

### 3. Proposals for flexibilization of VET on national levels

The purpose of the overview is to:

- look at the national policies and frameworks of partner countries.
- map the existing options of flexibilization in current vocational educational programmes from EQF level 3 - 6 through the lens of the Flexibilization Model of VET System. The overview should serve as a foundation and inspiration for further discussions, decisions, and actions.

Each element of the Flexibilization Model of VET System is first briefly introduced and then analysed on a national and/or implementation level.

*In the agriculture sector, all partner countries have vocational educational programmes on EQF<sup>1</sup> levels 3 to 6; however, Croatia is not implementing EQF level 5, and Spain does not have programmes officially linked to EQF levels.*

#### 3.1. The flexibility of curriculum design and school autonomy

On the national level, the flexibility of curriculum design depends on the proportion of optional curriculum, the proportion of work-based learning (WBL<sup>9</sup>) and how specific the practical on-the-job training/WBL objectives are prescribed. On the implementational level, flexibility refers to the school's autonomy regarding the curriculum's planning and implementation. In the continuation, different legalisation frames and implementation practices of all 4 countries will be presented from EQF levels 3 - 6.

##### 3.1.1. National level

At the EQF level 3, the proportion of the optional curriculum (school and learners choose between different modules - set at the national level or set at the school level in cooperation with the social partners) is generally relatively low. The highest proportion of the optional curriculum can be found in the Irish courses that last 1 to 2 years. Learners have a portfolio course where they can mix and match various subjects and assemble their learning package. In the other 2-year programmes in Ireland, the proportion of optional curriculum is only 25%. The situation is quite similar for the learners of the 2-year vocational programmes in Slovenia. The proportion of the curriculum that is optional for them is 29%. In the case of Spain and Croatia, there is no optional proportion of the curriculum.

One of the critical factors regarding the flexibility of the curriculum design is the proportion of work-based learning (WBL). Learners of a 3-year programme in Croatia have the highest proportion of WBL at 40%. The proportion of the WBL is also relatively high in Slovenia (35%) and in 2-year

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<sup>9</sup> Work-based learning = Instructional model in which the learner acquires knowledge, know-how, information, values, skills and competencies carrying out - and reflecting on - tasks:

1. At the workplace - also known as workplace learning or in-company training - e.g., through internships/traineeships, apprenticeship, alternate training or company visits, job shadowing, etc.
2. In a simulated work environment, e.g., in workshops or laboratories in vocational education and training institutions, inter-company/social partner training centres.



programmes in Ireland, where learners there can have 30% of WBL. Regarding the 2-year programme in Spain, the proportion of WBL is 13%.

The differences can also be identified regarding how specific the practical on-the-job training/WBL objectives are prescribed at the EQF level 3. The objectives are roughly prescribed (they are not very detailed) in 2-year programmes in Slovenia and in 1-2-year programmes in Ireland. On the other hand, in the 2-year programmes in Spain and Ireland and 3-year programmes in Croatia, the learning outcomes are precisely prescribed; there is no flexibility regarding the objectives of the practical on-the-job training/WBL.

At the EQF level 4, the proportion of optional curriculum is the highest in Ireland, with 25%. In Slovenia, different 4 years programmes offer schools and learners a choice between other modules. The percentage differs from program to programme, from 6% - 10%. Croatia and Spain don't have any proportion of the curriculum that is optional.

The proportion of work-based learning (WBL) is on the EQF level 4, the highest in some of the four-year programmes in Slovenia (60% in the dual way programs and 40 % in the school programs implemented in the school way). In the case of Ireland, the WBL proportion is 25%. In Spain, the proportion of WBL is 20.5%, and the Croatian 4-year programme has a 10-20% proportion of the WBL. Some of the Slovenia 4-year programs offered only 15 proportion of WBL.

Like the EQF level 3, the differences can also be identified regarding how specific the practical on-the-job training/WBL objectives are prescribed on the EQF level 4. In Slovenia, most of the 4 years programme WBL objectives are roughly defined (in some cases, schools also provide the recommendations). Practical on-the-job training/WBL learning outcomes are precisely prescribed in Croatia, Ireland, and Spain.

*Croatia's national curriculum allows learning flexibility and specialisation through up to 30% of elective modules integrated into upper secondary VET curricula.*

*In Slovenia, VET schools have the possibility of an open curriculum, which allows the acquisition of competencies that build on the basic knowledge of the compulsory curriculum.*

At the EQF level 5, the proportion of optional curriculum that schools design in cooperation with social partners is only possible in Slovenia and accounts for 40 % of the programme. In Ireland, representatives of schools and social partners are only consulted (as members of a working group or management board) by the national agency in determining the education/study programme. Social partners implicitly bring an understanding of work roles and activities into the design of learning outcomes.

The proportion of work-based learning (WBL) is on the EQF level 5, again the highest in Slovenia, where WBL presents 26% of the programme. In Spain, the proportion is 18.5% and only 8% in Ireland.

The practical on-the-job training/WBL learning objectives at EQF level 5 level are precisely prescribed in Spain and Ireland. In Slovenia, curricula for WBL are prepared, and learning outcomes are framed but not precisely described.

At the EQF level, the proportion of the optional curriculum is in the case of Slovenia 8 - 10% and 13% in the case of Croatia.

The proportion of the WBL at the EQF level 6 exists in Slovenia (21%), Croatia (10%) and in Ireland (8%). The practical on-the-job training/WBL objectives are roughly prescribed in Slovenia and Croatia and precisely described in the case of Ireland.

*In Slovenia, the curriculum for EQF levels 3-5 is revised based on Occupational standards. The occupational standards are revised every five years with the involvement of experts, social partners, and schools.*

*In Croatia, VET curriculum reform is oriented towards comprehensive redesign aligned with labour market needs, focused on learning outcomes, work-based learning, contemporary teaching and close support to VET providers. The new process of curriculum development foresees each curriculum as aligned with two inputs: one from the education sector and the other from labour and employment. The national curriculum for VET, sectoral curriculum, and occupational and qualification standards will inform each curriculum.*

### 3.1.2. Implementation level

Planning of the study programme determined by the school (who designs it, who approves it, how often it is revised) is implemented differently on the EQF levels 3 and 4. In Croatia, each year, the professional association of teachers can suggest modifications to the curriculum to the school board; however, the school board must approve the revision before the school year starts.

In the case of Ireland, the national regulatory agency SOLAS (The Further Education and Training Authority) is responsible for planning the study programme in consultation with the school and other stakeholders. Also, VET schools must design a learning programme to be submitted to the regulatory government authority Quality and Qualifications Ireland (QQI) for approval. The schools' contribution focused on implementation and less on planning, evaluation, and review processes.

In Slovenia, learners, VET teachers, school principals and social partners fill out the yearly questionnaire connected to the open curriculum. Based on the analysis, schools decide on the open curriculum's structure, considering the learners' preferences, the employers' needs, and the possibilities of implementing the course in the school (provider, space).

*For example, in multifunctional agriculture, the open curriculum can help learners acquire the necessary skills and competencies to serve as complementary activities on farms, such as tourism, processing of numerous products, and not only its production but also the marketing of products.*

In Spain, the study programmes on EQF level 4 have 3 hours (during the second year of the studies) that each high school can determine. The department in charge of the studies decides if those hours are devoted to languages, ICTs, or to improve content related to the department's field.

At the EQF level 5, the flexibility of planning the study programme is organised differently. In the case of Ireland, the national regulatory agency is responsible for planning the study programme in consultation with the school and other stakeholders. Also, VET schools must design a learning programme to be submitted to the regulatory government authority for approval. The schools' contribution focused on implementation and less on planning, evaluation and review processes.. In Slovenia, planning is done in cooperation with the management and the faculty, indirectly

through the practical training organiser with employers and other forms of collaboration with other social partners.

Some differences regarding the flexibility of planning the study programme can also be found at the EQF level 6. In Croatia, lecturers can suggest curriculum modifications to the departmental committee to revise study programmes yearly. Based on the analysis, the departmental council and institutional council of Karlovac University of Applied Sciences decide on the curriculum's structure, considering the preferences of the learners, teachers, and employers. In Ireland, the national regulatory agency plans the study programme in consultation with the school and other stakeholders within the country. VET schools must also design a learning programme to be submitted to the regulatory government authority for approval. The schools' contribution focused on implementation and less on planning, evaluation and review processes. In Slovenia, planning takes place with the management and representatives of the individual heads of departments. Research activities are carried out in collaboration with other faculties, research institutes and interested industry.

At EQF level 3 - 5, the highest degree of autonomy of teachers and trainers regarding the detail of the content/forms/methods of work defined on the national/regional level was reported in Croatia and Slovenia, followed by Spain, which reports quite an autonomy in that regard. In Slovenia, teachers have a framework of topics written in a catalogue of skills and have a high degree of autonomy in teaching. In the case of Ireland, teachers' and trainers' independence is less prominent (low autonomy) despite implicitly bringing an understanding of work roles and activities into the design of learning outcomes. They participate (as consultants) in developing the national approach and making VET more responsive to labour market needs.

At EQF level 6, professors in Slovenia have a high degree of autonomy within the framework of the study programmes outlined. High teachers' autonomy is also present in Croatia, while on the other hand, teachers'/trainers' autonomy in Ireland is less prominent (low independence). Teachers/trainers implicitly bring an understanding of work roles and activities into the design of learning outcomes, and similar to Ireland, they participate (as consultants) in developing the national approach and making VET more responsive to labour market needs.

### 3.2. Allowing flexibility in the enrolment process

Managing and adapting the curriculum to meet the learners' challenge and need through flexibility in the enrolment process will attract learners for VET courses. Although the current enrolment process in partner countries has little flexibility in formal education, more flexible options already exist and could be adapted.

In Ireland, VET programs under the Education and Training Boards (ETBs) are advertised for a specific period in the year with little or no room for late enrolment from prospective students.

In Slovenia the enrolment process is regulated with Enrolment policy which sets the rules for educational institutions. VET upper secondary schools (EQF 3 and 4), higher educational schools (EQF 5) and universities (EQF 6) have to publish call for admission, where all criteria, procedures and deadlines are described. Procedures are often connected with financing since most of the educational institutions are financed by the state budget.

Croatia has also a centralised enrolment system as well, since the education ministry defines the elements and criteria for enrolment and students enrol into upper secondary education through the centralised e-system. To enter IVET, they need to have a certificate of completion of primary

education and adequate physical and mental health, as required by VET curricula. Enrolment in higher education requires taking State matura exams. For most of the tertiary education programmes, graduates in four- and five-year IVET programmes have to take these exams if they want to study at the tertiary level. VET upper secondary schools (EQF 3 and 4), higher educational schools (EQF 5) and universities (EQF 6) have to publish a call for admission, where all criteria, procedures and deadlines are described. For EQF 6 there is an obligation to publish a call for admission 6 months before the start of the academic year. The selection procedure and the criteria on the basis of which the classification is carried out are determined by higher education institutions. Information about admission to the first level of studies in the Republic of Croatia is published on the pages of the National Information System for applications to higher education institutions "Become a student". Students can enrol into a study programme as a full-time or part-time student. Full-time students are the students who attend the studies according to the full-time programme. The costs of full-time study programmes are partially or fully subsidised from the state budget in accordance with the decision of the Government of the Republic of Croatia. Part-time students are the students who at the same time also work or perform some other activity that requires a special programme. The costs of such study programme are covered in whole or in part by the student himself/herself.

Students who are citizens of EU member states can enrol in a study programme in the Croatian language within national enrolment quotas and under the same conditions as Croatian citizens and accordingly pay the same amount of study costs or are entitled to subsidised costs of a study programme. Third-country nationals are enrolled within the quotas for foreigners and under the same conditions as Croatian nationals, but they may, in accordance with the general act of the university, polytechnic or college, be required to pay a part of or the full cost of a study programme.

The enrolment system in Andalusia (Spain) is based on a system of applications, which are then evaluated based on the academic record of the applicants and then the deadline for registration is opened. These deadlines and calls are always in the summer period, since they are mainly oriented to complete courses from the month of September to the month of June, it is not possible to learn and train in the summer period, and there are no openings for applications in the non-summer months. The registration system in Andalusia and by extension in Spain, in the case of initial vocational education and training, is a bit rigid, since what is frequent and what usually has priority is registration for complete courses, it is true that registration exists for partial (modules), but the full enrolment system is generally discounted. For those adults who want to train in formal education, there is, in addition to the first problem already mentioned, the aggravating factor that the schedules are usually very rigid and there is usually no offer in the afternoon hours, so enrolment of interested working adults is not possible. In the case of non-formal vocational training, these are systems in which the offer is not usually continuous over time, except in some institutions, and which tend to change over time with offers that often do not coincide with the interests of people who want to train. All the above must be understood that it is for face-to-face training.

However, the Open College (<https://www.theopencollege.com/>) in Ireland enrolls students in VET programs throughout the year by offering delivery flexible programs and education choices using a variety of delivery methods that include distance learning, e-learning, and attendance learning.

A bit more flexibility in enrolment in Slovenia is allowed at the level of adult education, where educational institutions have more autonomy when to publish call for admission into educational program and when to start implementing the educational programme. The adult educational

institution must prepare individualised educational plan and educational contract for enrolled students.

In Spain On-line trainings can offer more variability and flexibility.

Flexibility in the enrolment process is one of the factors that can motivate learners as the more traditional/full-time on-campus curriculum strict enrolment process may not always be possible.

*In 2011, the Irish Government National Strategy for Higher Education to 2030 called for a more flexible system that includes more flexible learning programs, more flexible routes of progression and transfer, and more flexible working arrangements.*

### 3.3. Flexibility in programme implementation and delivery

On the national level, programmes can be implemented in school and in a dual way or only a dual way. Flexibility in programme implementation also refers to how detailed the educational programmes are and to whom they are offered. At the implementation level, flexibility refers to different forms of programme delivery, including distance learning, Flex and Flipped Models and Blended Learning Environments. Flexibility in programme implementation and delivery in all 4 countries will be presented from EQF levels 3 - 6.

#### 3.3.1. National level

In Spain, Ireland and Croatia, programs at EQF level 3 can be implemented in school and in a dual way, whereas in Slovenia, programs can be implemented only in a school-based way. Even though the national legalisation of all four countries offered the previously described framework, there are some differences regarding the type of education implemented. In the case of Ireland and Croatia, education is implemented only in schools (and not a mix of in school and in a dual way).

There are also some differences regarding how detailed the educational programmes are on EQF level 3. National educational programmes in Spain and Ireland are very detailed, whereas programmes in Croatia are very detailed and additionally allow social partners and participants specificities. In the case of Slovenia, the educational programmes are indicative.

At EQF level 4, VET programs in Croatia can be implemented only in schools. In case of Slovenia some of the 4-year programmes can be implemented in schools and in a dual way, whereas In the case of Spain and Ireland, all 4 years programmes on the EQF level 4 can be implemented both ways.

A national education programme at EQF level 4 is very detailed in Ireland and Spain, whereas Croatia and Slovenia programmes allow social partners and participants specifications.

At the EQF level 5, programmes can be implemented in schools and in a dual way, in the case of Spain and Ireland. In Slovenia, WBL doesn't have a tripartite contract (employer-school-learner); however, learners spend 22% of their time working with an employer.

A national education programme at EQF level 5 is very detailed in the case of Spain and Ireland and indicative or very detailed in the case of Slovenia.



EQF level 6 programmes can be implemented in school or in a dual way in the case of Ireland and Croatia. In Slovenia and Croatia, programmes can be implemented only in schools.

National education programmes are very detailed in Ireland and Croatia. Additionally, some programmes in Croatia also allow the inclusion of specifications from the social partners and participants. In Slovenia, the university sets the training programme, or the programmes are indicative.

*VET courses in Ireland are designed and delivered within EQF levels 3-6 with flexible and workplace learning in response to the specific skills needs of individuals who require certified training to assist their return to or progression in the labour market. Most course providers deliver flexible and workplace learning (part-time, full-time, blended, online and evening) VET programmes for young and adult learners. Classes are offered throughout the year in the mornings, afternoons, evenings or weekends. This allows motivated learners to combine a return to learning with work, family and other responsibilities. Also, specific skills training allows people who have lost or are changing jobs to learn new job-related skills. There are short and long-day courses, online courses, blended learning and evening courses. The courses are run during the day and in the evenings.*

In the case of the Irish VET courses, daytime courses are given priority to unemployed people. A day course is free to all unemployed people, even if you are not getting a social welfare payment. An evening course is not free unless you receive a social welfare payment. Some of the VET courses examples are:

- Post-leaving Certificate (PLC) programme: Full-time basis
- Apprenticeships: Full-time basis
- Vocational Training Opportunities Scheme (VTOS): Full-time basis
- Traineeships: Full-time basis
- Back To Education Initiative (BTEI): Part-time basis
- Community Education: Part-time basis
- Lifelong Learning & Continuous Professional Development: Part-time basis

### 3.3.2. Implementation level

Schools are implementing different forms of flexibility in programme delivery on EQF levels 3 and 4. Learners can learn in a blended learning environment in Ireland, while Spain offers dual learning to learners on the EQF levels 3 and 4 courses. On the EQF level 4, learners can also participate in blended and distance learning environments, and learners in Croatia on both levels are engaged in a Flipped Model.

On the EQF level 5, learners can learn in a blended learning environment in Ireland and Slovenia. Additionally, Spain offers their learners dual and distance learning.

On the EQF level 6, a blended learning environment is offered to learners in all three countries: Croatia, Ireland and Slovenia. Learners in Croatia are also offered Flex and Flipped Models.

## 3.4. Learner-centred approach, individualised support, and plans

National legislation can support learners' knowledge, competencies, interests, potential, and personal development with the requirement or recommendation of individual learning plans. On



the implementation level, flexibility refers to how learners' preferences are considered when choosing an employer and organising different forms of support. Next, we will present how learner-centred approaches, individualised support, and plans are implemented in all 4 countries from EQF levels 3 - 6.

### 3.4.1. National level

At the EQF level 3 an individual learning plan is required for each learner in the Irish 1-2-year programme. In Spain and Croatia, the individual learning plan is not required. The same also refers to the 2 years programme in Ireland.

At the EQF levels 4 - 6 levels, the law doesn't require an individual learning plan; therefore, learners of all four countries participating in the project don't have it.

*In the case of Slovenia, an individual learning plan is required by the law plan for each learner with special needs on all EQF levels.*

### 3.4.2. Implementation level

There are different levels of how learners' preferences are considered when choosing an employer on the EQF levels 3 and 4. In Slovenia, the organiser of the work-based practical training considers the learner's preferences, their abilities and the employer's requirements, thus arriving at a common agreement (e.g. within the agricultural sector, the participant's preferences are fully taken into account: learners choose a worksite according to their preferences. Employers receive indicative recommendations prepared by the school about learning outcomes). In the case of Croatia, learners can choose employers according to their preferences, and schools prepare all the information about the learning outcomes, etc. Learners' preferences are not considered in Spain since they often depend on supply and demand.

Different forms of learner support are also organised at the EQF levels 3 and 4. Additional professional support for learners with special needs, host country language learning for foreign learners, and teacher's learning support are organised in Slovenia and Spain. The same forms of support are also organised in Croatia, except for the host country language learning for foreign learners. In Ireland, learners are eligible for travel and meal allowance and social welfare payments. Learners are eligible for travel and meal allowance, social welfare payments, free tuition, books and materials.

In Slovenia, some learners on the EQF levels 3 and 4 who need adaptation for various reasons (intense athletes, health problems, maternity, etc.) are also supported with an individualised learning programme. Learners keep a career folder, supported by teachers, detailing professional and general competencies and progress in personal development.

Different levels of how learners' preferences are taken into account when choosing an employer are also present on the EQF levels 5 and 6. In the case of Slovenia, the participants' preferences within the agricultural sector are fully considered at EQF level 5. Learners choose a worksite according to their preferences. Employers receive indicative recommendations prepared by the school about learning outcomes. In Spain, preferences are considered, but it will depend on supply and demand. At EQF level 6, learners in Slovenia can choose, in cooperation with the practical training provider, the specific areas of work offered, which are mainly linked to the research units, or they can do their practical training in a commercial organisation, where they must apply. In

Croatia, EQF level 6 learners can choose an employer according to their preferences. Schools prepare all the information about the learning outcomes etc.

On the other hand, at EQF levels 5 - 6, individual support is significantly smaller than on EQF levels 3 - 4. At EQF level 5, Slovenian schools offer additional professional help for learners with special needs. Learners in Ireland receive a salary during the programme duration at EQF levels 5 - 6. The course provider has a well-developed support structure to help participants with literacy and numeracy issues. At EQF level 6, teachers in Croatia offer learning support for learners.

### 3.5. Break down programmes into units or modules to enable movement across the system.

Vocational education and training (VET) are being increasingly challenged to adapt better and faster to changes in the labour market, provide the right skills for employment, and empower learners to respond to these changes. Modularisation of VET programmes is widely seen as part of the answer to this need for flexibility, both about the labour market and in what concerns learners themselves. If the programmes are broken down into units and modules, learners can move across the system and select what interest them in term of units/modules and competencies. In the continuation, we will present the modularisation of two partner countries on the national level and modules of Multifunctional agriculture programmes of all partner countries on the implementation level.

#### 3.5.1. National level

In Slovenia, VET programmes are competence(s)-based and modularised. Completing a specific number of vocational modules leads to a vocational qualification.

The Spanish VET system is also modular, allowing recognition and transfer of (units of) competencies gained in one VET programme to another, shortening its duration. Units of competencies may also be acquired through the validation of prior learning. VET programmes also allow partial certification and re-engagement from a lifelong learning perspective and include compulsory workplace learning at the end of or during studies. Learners need to pass all modules to obtain the relevant qualification. VET programmes using online or virtual learning environments and platforms are increasing to ease access to VET.

In Spain, adults may also acquire a formal qualification through training, shorter than a general initial VET qualification. Regional authorities usually organise these certificates depending on company needs, social partner requests or minimum qualification requirements from sectoral regulatory bodies. When finishing these studies, which combine traditional learning and WBL, learners get a certificate of professionalism, similar to a micro-credential, but more extensive. This certification recognises different modules of an Initial VET qualification (for example Technician/Higher Technician). The person holding this certification can validate the modules acquired in this short programme to continue to study the programme, leading to the diploma of the Technician or Higher Technician.

*In partner countries, no formal VET educational program or occupational standard directly addresses multifunctional agriculture; however, there are some initiatives and possibilities to choose modules from different biotechnical programmes that give learners additional competencies to succeed in today's job market.*

### 3.5.2.Implementation level

On the implementation level, partner countries offer different modules of multifunctional agriculture programmes at all EQF levels.

EQF level 3 modules:

- Slovenia (2-year programme): The Biotechnical and Care Assistant programme provides content within the implementation and open curriculum modules.
- Croatia (3 years programme): Different categories of multifunctional agriculture are presented in the VET module, hydroponic cultivation of vegetable use of robots and drones.
- Ireland (2-year programme): General Horticulture and Ornamental Landscaping.

EQF level 4 modules:

- Slovenia (2-year programme): Different categories of multifunctional agriculture are presented in VET modules of the open curriculum, such as dairy and fruit processing, use of phytopharmaceutical agents, and some parts of professional mandatory models.
- Slovenia (3 and 4-year programme): Different categories of multifunctional agriculture are presented in VET modules of the open curriculum, such as dairy and fruit processing, beekeeping, vegetables and fruit production. Learners could also choose some courses in forestry (how to use and operate a chainsaw), use of phytopharmaceutical agents, baking bread and sweets, beekeeping and in some parts of professional mandatory models.
- Croatia (4 years programme): Different categories of multifunctional agriculture are presented in the VET module: hydroponic cultivation of vegetables using robots and drones.
- Ireland (1-2 years programme): Permaculture, Tourism and Ecotourism (Tourism with Business), Sustainable Organic Horticulture, Green Certificate, Horticulture with Garden Design, Organic Farming Principles.

EQF level 5 modules:

- Slovenia (2-year programme): Specific topics and multifunctional agriculture are covered in compulsory and optional modules and practical training.
- Ireland (2-year programme): Arboriculture.

EQF level 6 modules:

- Slovenia (3 years programme): Some higher professional education programmes cover themes in multifunctional agriculture, e.g., Agrarian Economics and Rural Development. Some of the content of multifunctional agriculture is also included to a lesser extent in the optional modules.
- Croatia (3 years programme): Various categories of multifunctional agriculture are presented in beer production and dairy study programmes. The main goals of projects connected to agriculture are rural development, development of rural tourism, environment protection, sustainability, usage of products for various purposes, etc. Ireland (3 years programme): several higher education programmes interface with multifunctional agriculture, e.g. agricultural science and sustainability. The aim of this program linked to on-farm agribusiness diversification and biodiversity conservation within a sustainable development context is a sound theoretical basis for understanding multifunctional agriculture.

### 3.6. Integration and development of competencies

The development of competencies is important due to learners' personal development, employment, integration into society and lifelong learning. On the national level, the integration and development of the competencies are mostly integrated into the curriculum. Additionally, teachers are trained to integrate the competencies in their models, subjects and everyday lessons. Since VET curricula are competence(s)-based in all partner countries, we will present how different competencies are integrated into the curriculum and modules at all relevant EQF levels.

#### 3.6.1. Implementation level

At the EQF level 3, teachers in Slovenia and Croatia receive regular education and training in lifelong competencies (e.g, DigComp, GreenComp, EntreComp, LifeComp, etc.) and try to integrate them into the classroom. Similarly, in Spain, teachers must incorporate lifelong competencies into the curriculum. Additionally, in vocational training in Spain, the curriculum has personal, social and professional competencies.

At the EQF level 4, the newer programmes in Slovenia, the objectives of the lifelong learning competencies are already integrated into the curriculum, and teachers are trained to integrate the competencies into the education process. Similarly, at the EQF level 5, the development of DigComp, GreenComp, EntreComp, and LifeComp is part of Slovenia's compulsory and optional modules. Teachers in Spain must integrate lifelong competencies at the EQF levels 4 - 5. Furthermore, the curriculum has personal, social and professional competencies in vocational training.

At the EQF level 6, the competencies are integrated into the individual compulsory modules in Slovenia (Green and EntreComp). At the same time, DigComp and LifeComp are part of the study process, left to more individual studies. In Spain, the objectives of life-long learning competencies are integrated into the curriculum, where teachers are regularly educated and trained to integrate the competencies into the education process.

The data indicates different assessment approaches. In Croatia and Ireland, self-assessment methods are also in place.

*In all 4 countries, some inspiring examples of Business Incubators can be found. They enabled learners to engage in start-ups, offer opportunities to practice business simulations, learn enterprise skills and develop product or ideas from beginning to closure, etc.).*

Some examples of Business Incubators on different levels are:

- At EQF level 3 in Ireland TUS<sup>10</sup>, in conjunction with the Thurles Chamber Enterprise Centre, developed and implemented several business incubators for micro-enterprises and small and medium-sized enterprises (SMEs) start-ups—for example, Start-Up Clinics, Learner Inc. and Market Link Entrepreneur for learners and young innovators. In Croatia, some school has voluntary interest learner organisations that contribute to the achievement of educational and socio-economic goals of the school. This is a form of extracurricular activity for learners, through which they acquire and develop work habits,

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<sup>10</sup> TUS is a multi-campus university spread across six campuses throughout Ireland's Midwest and Midlands region

responsibility towards work, creativity, awareness of the need to preserve nature and heritage, and usefully spend their free time.

- In Spain, each programme at EQF level 4 has a module called "Business and Entrepreneurial Initiative," where learners create a business plan. In Andalucía, there are several education programs to develop the EntreComp of the learners, such as "Innacia" and "Aula de emprendimiento". In a Slovenian school, BC Naklo, learners must take a compulsory VET module on entrepreneurship and marketing, where they develop their business ideas and build a simple business plan. They could also be involved in the JA project Slovenia (The Chamber of Commerce and Industry of Slovenia) programme, where they can open their enterprise. Companies and Croatian learners have the same options as on EQF level 3.
- On EQF level 5, schools in Spain offer the same module as EQF level 4, "Business and Entrepreneurial Initiative". In Slovenia, the school BC NAKLO is involved in the Green Lab project, where learners improve their knowledge and skills according to their preferences, focusing on green competencies.
- On EQF level 6, the Slovenian EIT Food Hub is part of the European Institute of Innovation and Technology. In Croatia, in a modern equipped brewery at Karlovac University of Applied Sciences, learners, through practical classes, develop the skills of producing different beer styles, acquire the knowledge necessary for independent control of the beer production process and train for work in the brewing industry. In addition, in the newly equipped chemical laboratory, they acquire the basic knowledge necessary for quality control of raw materials and the final product. Learners have a compulsory subject on economics and marketing. The main goal of this subject is to learn the basics about the business environment, business plans, and marketing and to develop business ideas. Learners can take elective subjects in the field of economics and business, which include business simulations. Also, learners can take VET modules in the field of public procurement and tourism.

### 3.7. Prior knowledge validation, recognition, credit transfer and qualification framework

The prior assessment process and recognition determine the extent to which an individual's competencies meet the requirements specified in the VET program module or course. These competencies may have been acquired through formal, non-formal and informal learning as defined below. The qualification framework permits the transfer of credits the learner achieves to another EQF level/programme/module/course. In continuation, we will present different systems of prior knowledge validation, recognition, credit transfer and qualification framework in all 4 partner countries.

#### 3.7.1. National level

In Slovenia, recognising non-formal and informal learning is possible within the national vocational qualifications (NVQ) system. National vocational qualifications enable citizens to get their vocational competencies, obtained through non-formal and informal learning, verified, but they cannot gain levels of education through this option.

In Spain, adults may have their skills recognised or acquire a formal qualification through training. There are common regulations for validating skills acquired through non-formal and informal learning and work experience. These procedures empower citizens to engage in further learning

and acquire full qualifications. Regional authorities can initiate public calls to validate non-formal and informal learning depending on company needs, social partner requests or minimum qualification requirements from sectoral regulatory bodies. Key competencies tests for higher VET programmes and professional certificate access have been developed.

In Spain, workers may have their skills recognised through work experience. There are common regulations for validating abilities acquired through work experience. These procedures empower citizens to engage in further learning and acquire full qualifications. Regional authorities can initiate public calls to validate non-formal and informal learning depending on company needs, social partner requests or minimum qualification requirements from sectoral regulatory bodies. This procedure is called “accreditation of professional competencies”.

In Ireland, higher education institutions recognise and validate skills and knowledge acquired through work experience through Recognition of Prior Learning (RPL). The RPL makes it possible for an individual to build on the formal, non-formally or informally acquired knowledge they previously achieved and to be rewarded for such, e.g., in the form of access to a programme or exemption/credit on a module(s) in a programme.



## 4. Inclusion of social partners

### *And response to the labour market needs.*

#### 4.1. Market needs

Strong VET systems involve social partners. Social partners represent business and the world of work, which is constantly changing, and their 'voice' needs to be continuously heard when skills are designed and updated. The VET system involves social partners at all levels, from policy and decision-making to curriculum design and providing work placements to VET learners.

##### 4.1.1. National level

VET system is designed in collaboration with different stakeholders with the aim that learners develop competencies needed for their future careers and to produce employable workers ready for lifelong learning. This concept requires networking of different stakeholders at all levels in educational programmes (from conceptualisation and implementation to evaluation). Furthermore, this close cooperation between educators and stakeholders ensures that VET programmes are designed to meet the needs of the labour market.

The general overview shows us that in Slovenia, social partners are included on several levels:

- In developing occupational standards, social partners contribute the necessary competencies, i.e. the knowledge, skills and attitudes required to practise a particular occupation.
- In designing the curriculum, the catalogues of skills are drawn up by experts in the field of subject-specific education, with the involvement of social partners such as chambers of employers.
- Designing open curricula for educational programmes: the open curriculum of an educational programme is defined by the educational institution - school and the social partners in the local environment. This allows adaptability or flexibility of the education system to respond to the needs of the local working environment. As social partners, employers are also involved in the educational implementation of the educational programme through direct involvement by facilitating work placements and apprenticeships because they are training the learners to carry out vocational tasks.
- Representatives of the social partners are also included by law in the school council where educational programmes are approved.

In Croatia, stakeholders are involved in curriculum development, sector skills councils and the VET Council, which proposes measures for developing VET in Croatia.

In Spain, the education process is designed by The Spanish Government.

In the case of Ireland, the social partners participate in the curriculum design and delivery of VET courses, which ensures their support for the programme and develops their sense of ownership.

*All partner countries have in common that social partners are included in the design of curricula and organisation of WBL in education implementation to highlight the job market needs of competencies.*

In the next paragraph, the inclusion of social partners will be presented for each EQF level:

- At the EQF level 3, the share of the education/study programme that can be determined by the school in cooperation with the social partner is the highest in Slovenia, with 21%. In the case of Croatia, social partners can determine 10 of the education/study programmes in cooperation with the school. Ireland has a specific situation: in a 2-year programme, the share of the study programme determined by the school in collaboration with the social partners is limited, triggered by identifying job opportunities within the sector. The national regulatory authorities mainly determine it in consultation with the school and the social partners. Also, vocational schools must design a study/learning programme to be submitted to the national/government regulatory authority for approval. In the case of the 1-2 years programmes, the share of the study programme determined by the school in cooperation with social partners is less prominent. It is mostly consultative and limited, and the government regulatory authorities dominate the process. On the other hand, schools in Spain at the EQF level 3 don't have the practice of sharing education/study in cooperation with social partners.
- At EQF level 4, the share of the education/study programme that can be determined by the school in cooperation with the social partner is similar to at EQF level 3, the highest in Slovenia. The percentage differs from 15% to 9%, depending on the programmes. In Croatia, the share is also quite similar at 10%. In Ireland, the share of the study programme determined by the school in cooperation with social partners is less prominent. It is primarily consultative and limited; the government regulatory authorities dominate the process. In the case of Spain, the share of the education/study programme that can be determined by the school in cooperation with the social partner doesn't exist.
- At EQF level 5, Spain's reality is the same as at EQF level 4. On the other hand, Slovenia has an 11% share of the education/study programme that the school, in cooperation with the social partner, can determine. In the case of Ireland, representatives of schools and social partners are only consulted (as members of a working group or management board) by the national agency in determining the education/study programme. Social partners implicitly bring an understanding of work roles and activities into the design of learning outcomes.
- At EQF level 6, Ireland has the same situation as EQF level 5 regarding the share of the education/study programme that the school determines in cooperation with the social partner. In Croatia, the share is 10%. Slovenia has no precise estimation; the share of the education/study programme was described as small.

## 4.2. Allowing horizontal and vertical flexibility (including I-Vet and C-Vet)

Education and training systems traditionally have separate and distinct subsystems (general, vocational and academic/higher education) related to one other in a strict hierarchy of primary,

secondary and tertiary. This works well if learners follow a predefined route in their chosen area and subsystem. However, segmenting education and training creates institutional barriers restricting learners' options and choices on moving up to higher learning levels or moving sides. In the continuation, we will first present different horizontal flexibilisation such as enrolment in the programme, decision for a programme/profession after one year, possible transfer if the two programmes are related, possible transfer if differential examinations are passed and the possibility of training for two professions. After that, we will expose vertical flexibility and the relationship between initial (I-VET) and continuing vocational education (C-VET) in some partner countries.

#### 4.2.1. National level

At the EQF level 3, horizontal transferability between programmes differs from country to country. The transfer is the easiest in Ireland. In some 3-year programmes, the learners can transfer between programmes (if the two programmes are related) or choose the possibility of training for two professions. In Croatia and Slovenia, the transfer is possible if differential examinations are passed, but in the case of Spain, transferring is not possible.

Countries have different practices regarding horizontal transferability between programmes and the EQF level 4. In Croatia and Slovenia, the transfer is possible if differential examinations are passed. However, in some of the 4 years programmes in Slovenia, the transfer is possible if the two programmes are related. In the case of Ireland and Spain, learners can train for two professions.

At EQF level 5, transfer between the programmes is impossible in Slovenia and Ireland. In Spain, learners have the possibility of training in two professions.

EQF level 6 transfer between the programmes is possible if differential examinations are passed. That refers to Slovenia and, in some cases, also to Croatia. Croatian learners can additionally transfer between the programmes if the two programmes are related, or they can train for two professions. In the case of Ireland, the transfer is not possible.

EU strongly emphasises the relationship between initial (I-VET) and continuing vocational education (C-VET) as a key component of lifelong learning. I-VET provides learners with the foundational knowledge and skills required for employment in a specific vocational area. At the same time, C-VET enables workers to update and expand their knowledge and skills in response to changing labour market demands and technological advancements. One of the frameworks supporting the relationship between I-VET and C-VET is the European Skills Agenda, launched in 2020, which sets out a range of actions to strengthen skills development across Europe and promote a culture of lifelong learning.

*All partner countries have various I-VET and C-VET programmes in the range of EQF level 3 to 6, offering vertical and horizontal progressions to higher education levels or upskilling and re-skilling possibilities. Furthermore, all partner countries have options for VET programmes for adult learners. On the other hand, recognition of prior learning is in place more for adults as recognition of vocational qualifications than for younger learners. Furthermore, Ireland started to implement micro-credential projects at universities, which will credit unit modules.*

In Slovenia, the National Lifelong Learning Strategy (2011) reinforces the relationship between I-VET and C-VET, stressing the importance of access to C-VET for workers at all levels. Different programs and initiatives support the relationship between I-VET and C-VET. For example, the National Institute for Vocational Education and Training, CPI, offers a range of programs and services to support continuing vocational education and training, including certification programs NVQ (NPK), guidance and counselling services, and support for developing training programs. C-VET short courses are also organised by schools' inter-entrepreneurial education centres, which are organised to follow development and interests on the market. Learners and adults can attend these usually payable courses. Learners can also acquire ECTS by attending and do not need to pay a fee.

In Slovenia, I-VET and C-VET programmes are also available for adults. Adults can enrol in non-formal courses in the education service market provided by private entities or public schools to gain numerous VET or general competencies. I-VET and C-VET programmes are available for adults also in Spain.

In Ireland, I-VET and C-VET are rarely used. Instead, it is the status (e.g., age) of the learner that defines whether the VET is initial (I-VET) or continuing (C-VET). Both VETs are seen as part of Further Education and Training (FET) for young and adult learners (regardless of age, both I-VET and C-VET are accessible to persons of all ages, whether they are in employment). In the case of Ireland, the flexibilisation is also enabled with the delivery of VET courses within further education and training, encouraging learners to progress into the higher education system (EQF levels 7-8) by transitioning from EQF levels 3 - 4 to EQF levels 5 - 6. For instance, the Higher Education Links Scheme (HELS) allows learners to use their EQF levels 4 - 5 certificate to apply for a position in the first year of a higher education programme or access a wide range of third-level courses in most of Ireland's universities and institutes of technology. In 2017, SOLAS estimated that more than 20% of school leavers enrolled in VET and 16% progressed to higher education.

### 4.3. Promote alternatives to grade retention and avoid suspension

Grade retention means a learner is held back a year (i.e., repeats a year) due to their lack of progress, with this year allowing them to acquire the knowledge they need to continue schooling. Since there are considerable doubts regarding the usefulness and effectiveness of retaining grades, promoting alternative methods, approaches, and solutions is crucial regarding flexibility. We will present different grade retention options and avoid suspensions from EQF level 3 to EQF level 6 in all partner countries.

#### 4.3.1. Implementation level

Schools promote different forms of grade retention on EQF levels 3 - 4. In Slovenia, the management, teachers, and tutors, together with the learners and their parents (guardians), try to contribute to a successful school experience by taking into account the preferences of the learners when choosing an employer, by motivating and involving them in various activities at the school clubs, promotional events. Class teachers keep a year-round follow-up of the learner and address any learning difficulties (timely redirection to a more suitable programme). In Spain, high schools do not have competencies in different forms of grade retention. The only activity teachers are implementing is the preparation of extra activities, such as activities for reinforcement, to repeat the exams and to prepare activities that motivate the learners. In Croatia, additional professional support for learners with special needs.

At EQF level 5, the Slovenian school BC Naklo encourages and motivates learners by offering workshops on thesis production by getting involved in the Green Lab or providing information on scholarships. Like EQF levels 3 and 4, teachers in Spain can only prepare extra activities, such as activities for reinforcement, to repeat the exams and to prepare activities that motivate the learners.

At EQF level 6, only faculties in Croatia promote alternatives to grade retention and by having offices for learner support and career counselling. The main purpose of this office is to help learners with learning problems, to organise various types of training for developing competencies needed in the labour market, to connect learners with employers, and to advise learners (psychological help).

## 5. Dual way/apprenticeship as a cross system practice

We are exposing apprenticeships separately from all other elements of flexibilization because it is a cross-system practice that could be underlined under every aspect of the Flexibilization model. It must be agreed upon regarding legalisation, programme, competencies, roles, and other important components. It also involves multiple stakeholders (companies, mentors, schools, learners, etc.) in designing, implementing, and evaluating the dual VET system.

The apprenticeship system is an important part of vocational education and training. The apprenticeship system is designed to allow learners to acquire practical skills and knowledge in a real work environment, while also earning a wage. This approach ensures that apprentices are well-prepared for their future careers and can positively contribute to the workforce.

In the continuation, we will present the overview of the apprenticeship system in all four partners countries:

- In Slovenia, the apprenticeship system is regulated by the Vocational Education and Training Act and lasts 3 years. During the apprenticeship, learners split their time between school classes 40%, where they learn general subjects and professional modules (theoretical and practical training) and the workplace at least 50%. The employer provides on-the-job training and supervision. They start with simple tasks and gradually take on more responsibility as their skills and knowledge develop.

*In Slovenia, at the beginning of an apprenticeship, the implementation plan for individual learners is prepared in cooperation between the school and the company under the supervision of the chamber, which is signed between the learner (or legal guardian) and representatives of the company and school. It includes the objectives and set of competence(s) for WBL, distribution and schedule of education at the school and in the company, ways and modes of communication and cooperation between the company and school, as well as information regarding the mid-term and final exam for the apprentice.*

- In Croatia, JMO, the education ministry, has initiated experimental implementation of dual education in 2018/19 in parallel to the existing apprenticeships. In 2019/20, dual education was offered experimentally in three-year and four-year programmes leading to EQF level 4 qualifications (three-year programmes for salesman, glazier, chimneysweeper, and painter-decorator at CROQF level 4.1 and have four-year programmes for beautician and hairdresser at CROQF 4.2). Learning takes place in the VET school during the first year of the dual programme. In the following years, most work-based learning is undertaken in companies<sup>11</sup>.
- In Ireland, apprenticeships are provided at the post-secondary level (EQF 4) and are available to young adults who seek occupational training after completing upper secondary education. The apprenticeship system is highly occupation-specific, with little emphasis on general competencies. Apprenticeship programmes are mainly accessible in construction, electrical and mechanical engineering professions, with only a few in agriculture, ICT, and finance. Apprentices receive an EQF level 5 on successful completion of the programme.

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<sup>11</sup> Source: <https://www.cedefop.europa.eu/en/publications/4181>



Lately, apprenticeship programmes are available in higher education (EQF levels 6-8). The apprenticeship system is highly occupation-specific, with little emphasis on general competencies. Apprenticeship is a well-structured work-based training (70-80%) with a systematic blend of on- and off-the-job elements. It combines and alternates learning in the workplace with learning in an education/training centre. The apprenticeship system is standards-based and typically lasts for up to four years. It involves seven phases: three off-the-job (totalling 40 weeks in all) and four on-the-job. The off-the-job component is relatively short (20-30%) in comparison to the total duration of the programme.

- Spain, on the other hand, is in the process of applying the apprenticeship system. The dual vocational training system occurs in enterprises, corporate training centres and vocational schools. This kind of system combines practice and theory and lasts two to three years. For EQF levels 4 and 5, between 530-800 hours of total duration must take place at the company. The company and the vocational school sign a practice agreement.

## 6. What should we change and why?

Shaping Flexibility in Vocational Education and Training is possible only if national, institutional, curricular, and professional conditions exist. The process is complex and requires professionalism, dialogue, co-creation, persistence, and un-learning and re-learning from everyone included.

Everyone is responsible for actively contributing towards providing choices, not closing the door. There are different ways to support the flexibility of the Vocational Education and Training System. We will present only a few of those related to professional conditions.

VET teachers, trainers and mentors should hold teachers' certificates that are enriched by work experiences. According to the Lifelong learning strategy, teachers in all countries have some national centre or hub providing C-VET (for example, Ireland is outlining SharePoint StaffConnect, which provides teachers with resources, forms, shared practices, and policies). Projects, national or international provide many teachers training as well.

The second option is also designing an online continuing professional development resource to encourage VET teachers and trainers to support each other's continuing professional development by developing and sharing resource lists. The sharing of information is an important continuing professional development activity for teachers and trainers as it validates and recognises practitioners as contributors to the professional development of others.

*In Ireland, Further Education Support Service (FESS) website [www.fess.ie](http://www.fess.ie) provide resource lists that are of particular benefit to the professional development of those who are teaching programme modules for the first time or for teachers looking for new ideas. The resource lists include themes and topics from quality and qualifications Ireland components and suggest relevant websites, books, leaflets, organisations, etc. This initiative facilitates teachers and trainers to share resources that they find useful and store them in one accessible location. Currently, over 200 resource lists have been uploaded to the FESS website and new resources are being developed on a continual basis.*

Promotion and awareness raising about the added value of Flexible VET are also important. Teachers should be informed (or invited to think on their own) about the importance that flexible and permeable education and training systems can have at different levels<sup>12</sup>:



INDIVIDUAL	INSTITUTIONAL	SYSTEM
<ul style="list-style-type: none"> <li>• Enabling different educational paths to VET education</li> <li>• A better understanding of education options</li> <li>• Building positive attitude towards lifelong learning</li> <li>• Improved education outcomes</li> <li>• Improved wellbeing</li> <li>• Creating a supportive ecosystem for learning</li> <li>• Improved motivation and confidence</li> </ul>	<ul style="list-style-type: none"> <li>• Institutional capacity building</li> <li>• Collaboration with social partners and other stakeholders - mutual learning</li> <li>• Programmes can respond to learners' needs</li> <li>• Higher completion rates</li> <li>• Creation of innovative solutions</li> <li>• Teachers cooperate</li> </ul>	<ul style="list-style-type: none"> <li>• Co-creation, collaboration and partnership between all stakeholders, including different ministries</li> <li>• Systemic learning</li> <li>• Interconnected services are being used</li> <li>• A system able to meet the needs of different groups of learners</li> <li>• Transversal and horizontal progression possibilities: There are no dead ends</li> <li>• Higher completion rates</li> <li>• Guidance and counselling are provided</li> <li>• Curriculum is developed in cooperation with all stakeholders</li> <li>• Validation of prior learning</li> <li>• Quality assurance of learning outcomes</li> <li>• Lifelong learning orientation</li> <li>• Key and transversal competences are at the heart of every VET qualification</li> </ul>

<sup>12</sup> Adapted from: <https://www.cedefop.europa.eu/en/tools/vet-toolkit-tackling-early-leaving/intervention-approaches/flexible-education-and-training-systems>



## 7. Conclusion

The analysis of the current VET education and training systems shows that differences exist among partner countries on comparable EQF levels on a national level from the detailed national curriculum, options for learners to select different educational modules, and proportion of WBL to the share of educational programme determined by the school in cooperation with social partners. However, at the implementation levels, we can also find some similarities. The focus on learners' preferences already exists; there are also some initiatives of alternatives to grade retention, key competencies are included in the curriculum, some blended learning is in place and a yearly revision of the implemented curriculum is done.

The Flexibilisation Model of the AgriNext Project was designed with the intent of inviting different stakeholders to re-think and re-imagine the VET education and training systems. Learners, young and adult, are at the centre of our model. We want to create a flexible and transformative ecosystem that enables lifelong learning and competence(s) development for everyone.

Flexible VET education and training systems can, on the other also provide a path towards sustainability, foremost of the system itself. We are all aware of the influence that era of digitalisation, AI and Industry 5.0 is having on VET education and training systems. A system can be sustainable only if it doesn't resist the changes but instead actively builds its capacities, resilience, and innovative solutions.

It is important to emphasise that flexible VET education and training systems should be a path, not only a goal. A path that requires small steps, not impetuous jumps. All stakeholders that are actively engaged in the legalisation, planning, implementation, assessment, and evaluation of VET should build their capacities slowly and strategically. We recommend starting small and adapting the model to every country's specific situation.

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