



**Tracking Learning and Career Paths
of VET graduates to improve quality
of VET provision**

Context Study of Tracking Systems and Measures

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THE PROJECT ONTRACK

In many EU Member States, especially in Southern and Eastern Europe, a main concern is the employability of young people. VET graduates are often unemployed, or they are working in jobs that are irrelevant with their education. To understand employability problems as well as possible success factors in specific regions, economic sectors or particular VET institutes and disciplines, it is important to have good quality information about VET graduates. Essential information is what graduates do after they leave their studies and trainings as well as how they use the knowledge, skills and competences they acquired in their education. Such information about VET graduates can be used to determine solutions.

Recently, in various policy documents, the monitoring of education and training graduates was highlighted as an important issue. “New Skills Agenda for Europe” (2016) emphasized the need for EU Member States to have a ‘better understanding of performance of graduates’. Similarly, the Council Recommendation on tracking graduates (2017) underlines the necessity to improve the availability of qualitative and quantitative information about graduates from tertiary education and vocational educational training in Europe, especially what they do after their graduation. Therefore, the Recommendation proposes a new ‘initiative on graduate tracking to improve information on how graduates progress in the labour market’.

From a study that mapped VET graduates tracking measures in EU Member States, one can see that there is a large variety of approaches at different levels, national, regional, sectoral or at the level of VET providers. Some Member States, like Bulgaria, Cyprus, Greece and Latvia do not have any measures to track VET graduates, whereas Slovakia has some measures at the national level, the Basque Country in Spain has measures at regional level and Austria has tracking measures at national, regional and sectoral level. None of those mentioned countries have tracking measures at VET provider level.

Tracking VET graduates and providing feedback and input to the quality assurance system of VET providers is one of the main gaps in the implementation of EQAVET. EQAVET is based on a four stage quality cycle. The establishment of feedback loops between different stages is one of the most challenging things in EQAVET, as it requires gathering, analyzing and interpretation of evidence from past performance of VET provider and a process to feed the information and knowledge into future planning.

The project “OnTrack” will eventually contribute to identification of *skills needed in the labour market*, gathering relevant data from VET graduates. The identification of skills is one of the operational priorities of Cedefop that support EU Member States in up-down and bottom up approaches to establish data collection methods for skills needs identifications.

OnTrack aims to develop a tracking system for VET graduates of initial vocational education and training schools and institutes. The tracking system will gather qualitative and quantitative data from VET graduates, related to further education, employment, career paths, skills and competences required in the labour markets, with the aim to provide feedback to the quality assurance system of the VET provider. The tracking system can also provide input to the design of VET qualifications and programmes, planning and implementation of learning processes as well as other additional services.

Therefore, the project not only addresses the VET priority “establishment of feedback loops to adapt VET provision based on outcomes”, but the project will also develop, implement and evaluate a VET graduates tracking system that will be integrated with the quality assurance system of VET providers. It will also promote quality improvements in VET providers and will support the evidence – based monitoring of VET graduates. OnTrack will also address the horizontal priority “sustainable investment, performance and efficiency” supporting the design of evidence – based policies that deliver quality, innovation and relevance in vocational education and training.

There are four different steps in the project:

- To carry out an analysis of the context and need in each country
- To develop a tracking system for VET graduates at institutional level¹ that will feed into the quality assurance system of VET providers
- To pilot test and implement the tracking system. Establish tracking mechanism and integrate it, in VET monitoring processes
- To support VET providers to establish the tracking mechanism and integrate it into their quality assurance system

The main target groups for the project are:

- VET schools and institutions providing secondary and post-secondary initial VET (EQF level 3-5)
- Institutions providing further VET courses and higher education institutes (EQF level 6-7)

The project expects various results:

- Context study of tracking systems and measures
- Tracking system for VET graduates
- Guide: Implement tracking system for VET graduates and integrate it into organizations' quality assurance system

OnTrack addresses not only European policies and priorities but also responds to common needs of European VET providers. The project is based on the idea that will be implemented in countries that

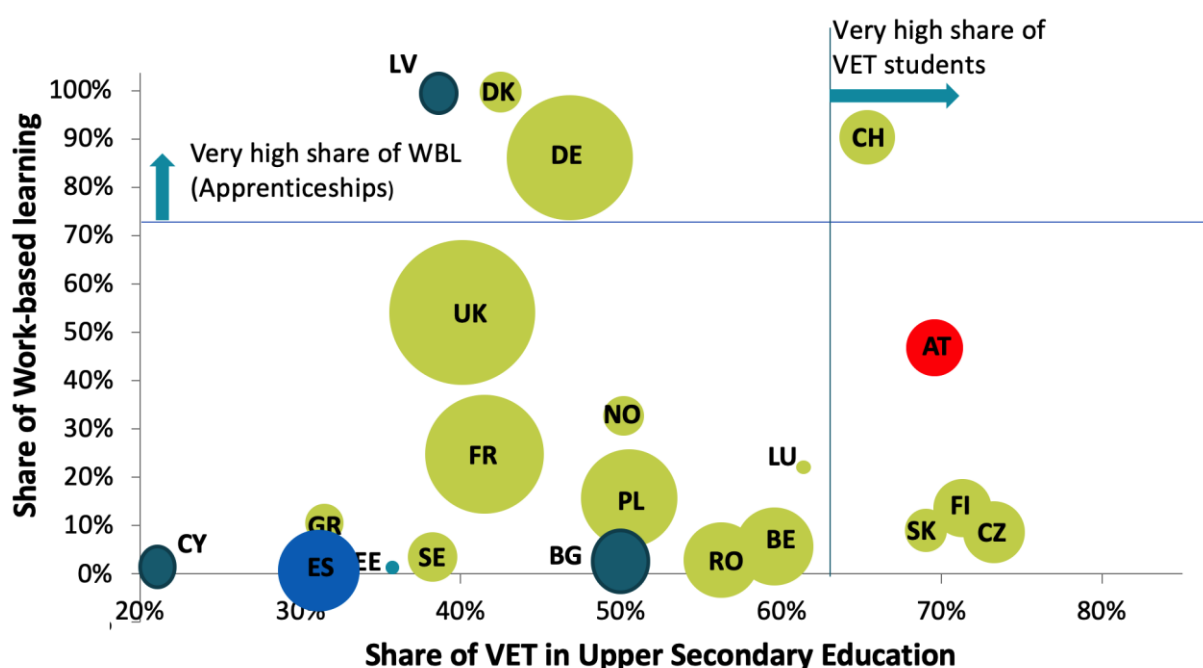
¹ We are talking about VET institutions, which may be VET schools or other VET providers (as Higher Education institutions)

do not have demonstrated systematic approaches in tracking VET graduates. The transnational partnership guarantees the development of a tracking mechanism and tools that responds to different needs of all involved countries and it can be transferred in other countries.

The transnational partnership consists of 7 different partner countries (Austria, Bulgaria, Cyprus, Greece, Latvia, Slovakia and Spain) with 9 involved partners:

- 3s Research Laboratory – Forschungsverein – Austria
- NAVET – Bulgaria
- Intercollege – Cyprus
- IDEC – Greece
- IEK Delta – Greece
- Biedriba Eurofortis – Latvia
- Technical University of Kosice (TUKE) – Slovakia
- Politeknika Ikastegia Txorierri – Spain
- ASTRA – Slovakia

Due to the transnational partnership with 7 different countries, one can observe that those 7 countries have different approaches regarding VET. It can be best presented in this comparable graphic.



Example: In Austria, 70% of all pupils at upper secondary level are enrolled in vocational education and training (VET), 47% of those are in work-based learning. (The size of the bubbles illustrates the overall number of pupils enrolled in VET.)
Source: Data for 2015, Eurostat, educ_uoe_enrs04

This graph shows different EU Member States and their allocation in regard to the share of work-based learning as well as the share of VET in upper secondary education. Vocational Education and Training plays in the partner countries different roles. Consequently, it is important to analyse first the European perspective and policy context and then the national context of each partner country to identify indicators, specific needs and challenges that have to be included in a new tracking system. Those results are compiled in this transnational context study, which will be the basis for the development of the new tracking system.

EUROPEAN PERSPECTIVE

This chapter reviews the most relevant developments of the European Union policies and initiatives related to VET tracking. It shows how education and training policy challenges have been identified and addressed, especially for VET graduates tracking measures at EU level.

MEASURES IN EU MEMBER STATES

Currently there are no VET graduate tracking measures at EU level, only some EU level graduate tracking initiatives are available in other sectors of education, principally in the higher education systems. For higher education graduates there have been several EU level tracking initiatives (CHEERS², REFLEX³ and HEGESCO⁴) but they have been only conducted once. Other studies (TRACKIT⁵, CATEWE⁶, SWTS⁷) were carried out by various institutions, but none of them focus especially on VET graduates.⁸

The European Training Foundation, Cedefop and International Labour Organisation have commissioned in 2016 a guide for professional research staff and practitioners involved in graduate tracking. The guide ‘Carrying out tracer studies’ proposes a methodological approach to graduate tracking both at central level (led by ministries and their agencies) and at provider level. This guide is relevant not only for higher education, but also for VET tracking.⁹

In 2017 an European survey “Mapping VET graduates tracking measures in EU Member States” was conducted by the DG Employment, Social Affairs and Inclusion (DG EMPL), which presents a systematic review and analysis of VET graduate tracking measures in place at system level and states options for EU activities in this field to improve data collection systems at EU level as well as national level.

The European survey identified a total of 85 VET graduate tracking measures in 24 EU Member States. The majority of EU Member States have implemented at least one measure at national level or regional level for VET graduate tracking on a regular basis with different data collection approaches.

According to the European survey in 2017, there is no appropriate longitudinal data on VET graduates, outcomes can be only investigated by jointly analysing educational background and current situation on the labour market from international cross-sectoral surveys. Those international surveys can be

² Careers after Higher Education, a European Research Study, 1998-2000.

³ International Survey of Higher Education Graduates, 2005.

⁴ Higher Education as a Generator of Strategic Competences, 2008.

⁵ Tracking Learners’ and Graduates’ Progress Paths, 2010-2012.

⁶ Comparative Analysis of Transitions from Education to Work in Europe, 1995-1997.

⁷ School-to-Work Transition Survey.

⁸ Cf. Mapping of VET graduates tracking measures in EU Member States. Final Report –Study 2018, p 7 et seqq.

⁹ Cf. Mapping of VET graduates tracking measures in EU Member States. Final Report –Study 2018, p 23.

used for the analysis of VET graduates' transition into the labour market, only if they have a sufficient sample of VET graduates at EU level.

One of the most used large-scale international surveys that have been used for the analysis of the outcomes of VET graduates, have been the European Labour Force Survey and its 2009 module 'Entry of young people into the labour market' (Cedefop, 2012) and the PIAAC survey (Brunello and Rocco, 2015). Due to several factors, it is unlikely that the existing international surveys could be adapted to track VET graduates.¹⁰

POLICY BACKGROUND

Due to the fact, that no European-wide VET graduate survey has been developed yet, there have been some ongoing initiatives which aim to improve the quality of tracking systems. The Copenhagen Declaration provides the basis for voluntary cooperation in VET. The priorities were reinforcing the European dimension in VET; increasing information, guidance, counselling and transparency of VET; developing tools for the mutual recognition and validation of competences and qualifications; improving quality assurance in VET. In 2010 and 2015, the Commission has given added impetus for cooperation in vocational education and training which contributes to the Europe 2020 strategy and the Education and Training Strategic Framework (ET 2020).

In the 2016's initiative 'Investing in Europe's Youth' the Commission highlighted the importance of high quality education and training in supporting people's personal development and their transition to high quality employment. In the Communication from the Commission¹¹, the Commission states that it *will work with Member States to improve the availability of data on graduate employment and social outcomes ('graduate tracking') spanning also across vocational education and training sector* to improve and modernize the education sector.

In 2017 the initiative 'Coordinated approach to (tertiary) graduate tracking'¹² was introduced – a roadmap with broad guidelines on tracking graduates. Member States were invited to support specific EU-level activities to improve the availability of tracking data. The initiative wants to improve the availability of qualitative and quantitative information about what VET graduates and graduates from tertiary education do after they completed their education and training. Therefore, specific objectives were proposed:

- Exchange of expertise and knowledge about various graduates' surveys and tracking systems

¹⁰ Cf. Mapping of VET graduates tracking measures in EU Member States. Final Report –Study 2018, p 13.

¹¹ COM (2016) 941 final.

¹² Cf. Roadmap, Coordinated approach to (tertiary) graduate tracking, 2017, https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2017-1062340_en, accessed on 21.05.2019.

- Pilot phase of a European graduate survey in 2017

With those specific objectives the initiative wants to react to three main problems:

- Not well-developed data collection systems in many parts of the EU
- Limited exchange of knowledge about good practice and mutual learning within the Member States
- Incomparable data from various countries.¹³

The European Commission has adopted the proposal for a Council Recommendation on tracking graduates. The European Council Recommendation 2017 on tracking graduates focuses on various aspects to enhance VET graduate tracking systems:

- Improve the availability and quality of data about the activity of graduates by collecting various administrative data (education, tax, social security databases),
- Developing longitudinal graduate surveys,
- Link data from different sources anonymously,
- Recommends the Member States to use graduate tracking data to strengthen career guidance, design and update curricula, improve skills matching, plan for evolving employment, education and social needs, and improving policy development,
- Asks Member States to report to the Commission annually on the implementation and evaluation process,
- Includes a recommendation for the Commission to provide capacity building support for the establishment of VET graduate systems and facilitate mutual knowledge on the topic among Member States.

Key aspects of the Council Recommendation include the need to rely on administrative data and graduates' surveys to collect information on career pathways and other skills that are useful in the labour market.

From this non-exhaustive enumeration, it can be seen that different policy documents at EU and national level want to develop and improve VET, with the specific aim and focus to support young people's transition to employment and further education. Furthermore, policies ensure that VET is relevant to employers and the labour market needs. Therefore, it is important to understand the path of VET graduates, how their education, training and skills helped them to get into the labour market. Good quality information about what graduates do after they leave education and training is essential to understand the reasons of graduates' employability problems. Although some basic information on graduates' outcomes is available from existing data collection, no detailed information can be used

¹³ Cf. Roadmap, Coordinated approach to (tertiary) graduate tracking, 2017, https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2017-1062340_en, accessed on 21.05.2019.

to understand what is happening to graduates from specific sectors and education pathways. Likewise, it is not possible to create divergent solutions for unemployability problems of youth across Europe.

In consequence, to take a step forward into this direction, the project OnTrack wants to develop a new tool for educational institutions for tracking VET graduates. For this purpose, the 7 partner countries analysed their national context and their needs in regard to VET tracking systems and those reports will be summarized in this context study, with a comprehensive in-depth analysis and recommendations for further steps that will be taken when developing a new tool.

TRANSNATIONAL CONTEXT STUDY

MAIN AIM

Some studies of VET graduate tracking measures in EU Member States emphasize that little systematic measures for tracking VET graduates are available in the partner countries and often only ad-hoc measures of different types are in place.

Therefore, this context study compiles the various tracking systems and measures at VET provider level in the seven countries of the transnational partnership. It will provide a comprehensive in-depth analysis of context, needs and challenges in the partner countries as well as recommendations for further steps that should be considered when developing a new graduate tracking tool. The study will be the basis for a new VET provider focused European tracking system for VET graduates.

The results of the transnational context study can be potentially used by other VET providers, due to the fact, that during the project some awareness will be raised on the relevance and importance of VET graduate tracking systems among VET providers, policy makers, stakeholders and experts.

For the transnational context study each country provided a national report with an overall national context, various challenges and needs of the country, a mapping of tracking measures at VET provider level, a comprehensive description of one or more tracking measures and a specific case study of one national VET provider. The national level covers different measures or practices that are in place for tracking VET graduates (even if they are not systematic or comprehensive), available administrative data, that can be used for tracking, some quality assurance practices and the existing 'quality culture of the country's VET system and the VET provider, as well as different organizational capacities and IT competences.

METHODOLOGY

Several aspects had to be provided by all 7 partner countries for this study:

- desk research (to summarize the overall context of VET graduate tracking)
- survey of VET providers doing graduate tracking
- interviews with VET providers about their graduate tracking system
- a case study of a VET graduate tracking system

All that information from these different research methods were compiled in 7 different national reports from each country.

From this table it can be seen how many indicators had been identified:

INDICATORS				
	Contacts	Responses	Interviews	Case Study
Austria	18	9	4	2
Bulgaria	20	15	5	1
Cyprus	8	6	5	1
Greece	811	41	1	1
Latvia	62	13	2	1
Slovakia	100	20	2	1
Spain	24	10	3	1
Total	1,043	114	22	8

Many institutions were contacted, and a few were selected for in-depth case studies.

- University of applied Sciences FH BFI – Austria
- MODUL Vienna – Austria
- Center for Vocational Training – Bulgaria
- The Ministry of Education and Culture (Department of Secondary Technical and Vocational Education) – Cyprus
- Survey and interview with a VET provider – Greece
- Higher education graduate tracking – Register of Students and Graduates – Latvia
- Secondary School of Jan Bocatia – Slovakia
- Politeknika Ikastegia Txorierri – Spain

CONTEXTUAL NATIONAL BACKGROUND

In this section all 7 countries studies (Austria, Bulgaria, Cyprus, Greece, Latvia, Slovakia and Spain/Basque region) are described on the basis of several indicators linked to their tracking systems, as well as their approaches and the implementation of these policies. The similarities and differences between these countries are based on the following indicators:

- focus on the existing national policies regarding VET tracking
- main actors of VET tracking measures, identifying various stakeholders
- various graduate tracking measures in place that already exists in the partner countries

Those three main characteristics will be compared and analysed on the basis of the national reports and the in-depth case studies, that were carried out by the 7 partner countries. All country reports are appended in the Annex.

Policy focus

Looking at the different regulations and policies in the 7 partner countries, one can see some differences as well as some similarities. It is understandable, that the legal system varies from country to country and therefore a strict comparison could be distortive. Nevertheless, from the divergent national reports one can highlight some trends.

- *Specific regulations for VET graduate tracking:* **Bulgaria** is one of the few countries that had a Vocational Education and Training Act. The VET Act has been changed twice in the last years to improve the quality of VET, to establish a national validation system, introduce flexible learning pathways for students, dual education and training etc. Nevertheless, the VET Quality Assurance Ordinance was abolished and after the abolishment of the Quality Ordinance – VET Act, NAVET developed and published indicators for providing annual information on the quality of VET centers.¹⁴ In consequence, there is no institutional requirement to provide detailed information on the follow-up of VET graduates.
- *Some related policies to VET graduate tracking:* Cyprus, Latvia and Greece have some stated initiatives and strategic plans that are correlated with VET.
In **Cyprus** two specific actions (the development of a national monitoring system of IVET and CVET graduates; the continuation of carrying out evaluation studies) were included in the country's priorities for technical and vocational education 2015-2020.¹⁵

¹⁴ Cf. National Report Bulgaria, p 3 et seqq.

¹⁵ Cf. National Report Cyprus, p 3.

In **Latvia** there is no centralized approach to graduate tracking but there are some regulations regarding an annually self-evaluation report of a vocational education institution or an education institution that implements a vocational education program.¹⁶

In **Greece** there is no specific regulation, although the Law 3879 on Lifelong learning tries to achieve an interconnection of lifelong learning to employment.¹⁷

- *No legal obligations to VET graduate tracking:* In Austria, Slovakia and Spain there are no legal obligations regarding VET.

In **Austria** there is no policy framework or legal obligation to conduct graduate tracking. From another viewpoint, some legal restrictions exist for school curricula (that lead to limitations for VET providers).¹⁸

In **Slovakia** an Action Plan of the Slovak Ministry of Education was concluded in 2017, which contains the obligation to prepare the call for development projects regarding the work of school graduates. Nevertheless, there is no legal obligation to conduct VET or HEI graduate tracking in Slovakia.¹⁹

In **Spain** there are also no legal obligations in regard to VET graduate tracking, only some regulation in regard to sharing information.²⁰

From the various national reports, it can be seen, that most partner countries have some one-off ministry or central projects, for instance BibEr – Education-related employment career monitoring (Austria), a study regarding the management for effective vocational education (Bulgaria), development of an evaluation system for active labour market programmes (Cyprus), survey by KANEP-GSEE (Greece), HE graduate tracking (Latvia), school projects to track school leavers in the labour market (Slovakia).

It can be summarized that most of the countries do not have a specific VET policy when it comes to tracking VET graduates. Nevertheless, some kind of legal initiatives were taken by the state institutions, mostly by the ministries or other regional or local organisms.

Due to the various legal systems it can be of interest to look at the various main actors which are dealing with existing graduate tracking measures.

¹⁶ Cf. National Report Latvia, p 7.

¹⁷ Cf. National Report Greece, p 5.

¹⁸ Cf. National Report Austria, p 3 et seqq.

¹⁹ Cf. National Report Slovakia, p 4.

²⁰ Cf. National Report Spain, p 3.

Main actors

Not only ministries play an important role when it comes to collect data related to labour market and graduates. There are also various public as well as private organizations that play an essential role in it.

In **Austria** the Austrian Public Employment Service (AMS) as well as the national statistical office (Statistik Austria) take part in the BibEr national tracking measure of graduates. Additionally, the AMS and the Austrian Chamber of Labour (AK Österreich) conducted one-off studies and the ibw Austria – Research & Development in VET releases continually various studies about the situation of VET graduates.

Furthermore, universities of applied sciences have a legal obligation to track their graduates. The universities use the agency for quality assurance and accreditation Austria (AQ) for annually analyses and reports about their quality and accreditation, but also to analyse the graduates' labour market integration²¹.

In **Bulgaria** the main actors of VET can be found on three different levels: system/national level, regional/local level and institutional level. The Ministry of Education and Science is the responsible state body for the quality of vocational education and training. Beside various ministries that interact and work together, the main institution that is involved in the development of VET tracking is National Agency for Vocational Education and Training (NAVET). NAVET is a public administration body which has responsibilities for the quality of vocational training of persons over 16 years of age. Additionally, Centers for Vocational Training (CVT) provide quality of vocational training through the establishment of an internal quality assurance system in compliance with the state education standards for acquiring qualification in professions and the current legislation.²²

In **Cyprus** the Human Resource Development Authority of Cyprus is a semi-governmental organization, with the mission to create the necessary perquisites for the planned and systematic training and development of human resources. The HRDA conducts every year evaluation studies regarding the impact of its Schemes. In the Higher Education Areas, the Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA) was established recently. CYQAA is responsible to ensure the quality of HE in Cyprus and to support, a continuous improvement and upgrading of higher education institutions and their programs of studies.²³

In **Greece** various governing bodies are operators of the National Network for Lifelong Learning. On the national level, the National Organization for the Certification of Qualification & Vocational Guidance (E.O.P.P.E.P.) is the responsible institution for QA in VET. Another significant association is

²¹ Cf. National Report Austria, p 3 et seqq.

²² Cf. National Report Bulgaria, p 8 et seqq.

²³ Cf. National Report Cyprus, p 10 et seqq.

the Scientific Association for the Promotion of Educational Innovation (E.E.P.E.K.) which promotes innovative actions and developments in the educational community.²⁴

In **Latvia** the education system is administered at three levels – national, municipal and institutional. Educational institutions are legally obliged to collect data on graduates and report it annually to the Central Statistical Bureau of Latvia and the Ministry of Education and Science. By the end of 2019 various databases of the Central Statistical Bureau (CSB), the State Revenue Service (SRS) and the State Employment Agency (SEA) will be used to gather information about graduates and their employment.²⁵

In **Slovakia** the tasks of developing a proposal on how to track secondary school graduates were assigned to the State Institute of Vocational Training (SOVI). Various ministries are involved in the analysis of graduates as well as the Slovak Centre of Scientific and Technical Information. Although ministries are under pressure of large employers to change schools and Higher Educational Institutions, secondary school competences have self-government regions that are not willing to adapt to the demands of large employer.²⁶

In **Spain**, especially in the Basque Country, not only the training centers, but also local organisations take part in tracking their graduates. Schools and entities in charge of education and employment dependent to the Basque Government are connected in terms of sharing information, in order to obtain better results that reflect a more real way of the situation of the region. LANBIDE is a public organisation, that belongs to the Basque Government. It created a useful method to track VET graduates.²⁷

Measures in Place

Looking at the national reports from each country, one can easily find various measures that were already taken to improve data collection and the information gathered about graduates and the labour market.

In **Austria** one has the national tracking measure of graduates BibEr – Education-related employment career monitoring, which is carried out annually by Statistik Austria. Additionally, some studies regarding graduates and employment are done occasionally. Austria does not have any systematic measures for tracking VET graduates.²⁸

²⁴ Cf. National Report Greece, p 5 et seqq.

²⁵ Cf. National Report Latvia, p 10.

²⁶ Cf. National Report Slovakia, p 2 et seqq.

²⁷ Cf. National Report Spain, p 3.

²⁸ Cf. National Report Austria, p 4 et seqq.

In **Bulgaria** the Centers for Vocational Training have fully self-funded the measure ‘Realization of the persons who have acquired professional qualification’. Data is collected and analysed annually by NAVET. Another measure was the project ‘Management for effective vocational education’ from 2007-2014 with was carried out through a web-based platform with online surveys. Although the collected data can be used at national and sectoral level, the project has no sustainability and the platform is not supported anymore. Nevertheless, it can be seen that some VET providers have their own well-developed internal measures to track their graduates.²⁹

In **Cyprus** some measures were taken to enhance the data collection of graduates. In 2016, the Ministry of Labour, Welfare and Social Insurance developed a computerized evaluation system for active labour market programmes. In 2018, a platform for data collection has been developed by the Ministry of Education and Culture, which can be used by the students of public IVET and CVET programmes – but this platform has not been launched yet. Additionally, there are some public statistics as well as evaluations studies and research done by HRDA. There are some partial graduate tracking measures in place in Cyprus, but none of the existing tools seems to specifically target the ‘*education achievements of graduates in completion of VET*’. Although graduate tracking is seen as part of quality assurance in education, there is no obligation for VET providers to collect data.³⁰

In **Greece** some surveys and studies were conducted regarding graduates and the labour market. Of particular note, two studies are highlighted by the national report: one by KANEP-GSEE (Development Centre for Education policy) in 2013, a systematic and in-depth research related to education and occupation, and another one in 2017 by Patras PVTI (Public Vocational Training Institute).³¹

In **Latvia** the State Education Quality Service introduced from 2016 to 2017 EQAVET indicators and basic principles into the Latvian VET system. With the findings from this project, new policy recommendations were formed. For this reason, vocational educational institutions have to submit annually a self-evaluation report which must contain various educational quality indicators. Despite the fact, that VET providers are obliged to collect data and pass it on for analysis, this is only a partial graduate tracking system and the existing indicator systems for studying graduates after graduation does not provide comprehensive monitoring of the impact of their life events, career paths, professional development education and employment policy changes.³²

In **Slovakia** only statistical data on the number of students and graduates are collected. There are only two separate statistical packages – either on the study programmes and graduates themselves or on unemployment. The system is static and lacks tracking dynamics. Some measures regarding tracking of graduates exists only on the initiative of individual schools, or as one-off projects. Some

²⁹ Cf. National Report Bulgaria, p 6 et seqq.

³⁰ Cf. National Report Cyprus, p 3 et seqq.

³¹ Cf. National Report Greece, p 3 et seqq.

³² Cf. National Report Latvia, p 3 et seqq..

school do have a basic tracking system, but they do not have a comprehensive system for tracking graduates and often the information is not sufficient.³³

In **Spain**, especially the Basque Country, tracking measures are made by different organisms and using different methods. The Basque Government has a systematic measure to track students that takes part in the dual system. These measures are basically to track students during their apprenticeship. As mentioned before, LANBIDA has created a useful method to track VET graduates, but some schools have their own way to track their graduates.³⁴

³³ Cf. National Report Slovakia, p 3 et seqq.

³⁴ Cf. National Report Spain, p 3.

COMPARATIVE ANALYSIS OF THE COUNTRIES

From the comparison of the 7 different countries, several aspects should be emphasized. First of all, it can be determined, that all 7 countries do have some kind of statistical data about their graduates. Such information is gathered in the countries, even if they are collected in different ways. The availability of statistical databases is a good starting point for further developments.

On the international and European level, there are some tendencies to make data more comparable. For instance, the OECD or Eurostat aim to achieve more comparable statistics. The only crucial point regarding statistical databases and data sets is how to combine them and how to compare them. Data collected nationally is not comparable between countries. In most countries it is not possible to interlink various data sets for further research and outcomes. This incomparability makes it difficult to learn from differences in trends and observe outcomes across countries and regions.

Most countries have to some extent available administrative data regarding VET graduates. This can be a good starting point of one wants to know more about the graduate's situation, but administrative data can also suffer from certain weaknesses. The restriction to use only administrative data leads to the result, that one gets no information about institutional strengths and weaknesses. Institutions don't get any feedback regarding their training programs and their curricula. Institutions only get the information if a graduate is employed or not – but no information if the employment has to do something with the graduates' education and training. Through administrative data institutions don't get any qualitative statements, opinions or evaluation from the graduates. This is only possible through institutional inquiries and structured surveys.

Secondly, it can be seen, that in every country, some kind of tracking measures on the institutional level was developed and implemented. Some schools or VET providers do already track their graduates on their own, with a special tracking system or with one-off surveys.

Graduates should be seen as a 'tool' for quality assurance at educational institutions. Former students can provide valuable information how study programs can be adapted, so that education and training matches better to the demands of the labour market³⁵.

To combine administrative data with institutional data would be the perfect goal, but it is still a long way to go before one can reach this stage. Therefore, one has to focus on various challenges and obstacles that are standing in the way when it comes to tracking graduates. From the 7 different national reports one can see similar challenges and struggles regarding tracking graduates.

³⁵ Cf. Mitterauer, AbsolventInnenstudien, p 191 et seqq.

DIFFERENT CHALLENGES

It is undisputable, that every country has its own unique challenges when it comes to tracking VET graduates. None of these challenges can be completely solved by only one additional measure. Nevertheless, some essential points and main challenges that came up repeatedly in the national reports of the 7 countries can be highlighted.

OUTREACH AND TIMING

One of the main challenges is to stay in a continuous and regular touch with graduates. In Greece they observed the difficulty related to the incomplete or incorrect contact details of their graduates that were available to the institutions³⁶. Graduates are usually tracked through informal channels, emails and phones, but there are still difficulties to make quality follow-up, especially in Bulgaria and Slovakia. Both countries point out that they lose contact with their graduates, if those graduates are working abroad.³⁷

Slovakia also pointed out, that schools have difficulties to motivate graduates to answer questionnaires and there is a substantial unwillingness of graduates to cooperate with the schools³⁸. Cyprus mentioned a similar problem.³⁹

Despite the fact, that one will be able to contact their former students and graduates are willing to answer the questions and surveys, there still remain additional challenges.

One of the fundamental problems is the timing when educational institutions should reach out to their graduates. After the graduation, former students often relocate, and the address do not go in line with the already existing data in schools. Online surveys may help in this challenge due to the fact, that emails are maintained for a longer period of time. Nonetheless, even if schools use online surveys to reach out to graduates, data quality is another important issue that has to be considered.

Schools and other educational institutions often reach out to graduates few years after their graduation to get new information about their current situation. If one takes into account, the average duration of studies and the timing of the outreach it can accumulate up to 5 or even 10 years after graduates started to study. Consequently, the problem appears, that the knowledge and understanding of their studies have changed for graduates during the years. Retrospective evaluation

³⁶ Cf. National Report Greece, p 9.

³⁷ Cf National Report Bulgaria, p 12, National Report Slovakia, p 3.

³⁸ Cf. National Report Slovakia, p 5.

³⁹ Cf. National Report Cyprus, p 17.

of studies can lead to distortions, especially when it comes to the acquired skills. With an increasing temporal distance, the recollection declines and no conclusive statements can be made anymore.⁴⁰

Then again, if one wants valid data and statements regarding the study programmes, one has to do the surveys as close as possible after students graduate so that the time gap won't be too substantial. But there again, the challenge exists that if one wants to track the development of graduates and the impact on the labour market, the data will be not substantially enough, because during the short period after graduation graduates won't be able to say much about their employment situation.⁴¹

Another timing challenge that was highlighted by Austria is the comparison of existing study programmes with the old programmes of graduates. Study programmes do change over time and therefore, it can be a difficulty to get information about an old study programme that does not exist anymore in the exact same constellation⁴². Due to the changing curricula and study programmes and the available evaluation from the graduates, it makes it considerably more difficult to develop a better study programme based on the information and evaluation of former students.

INFLUENCE OF THE EDUCATIONAL INSTITUTIONS

In several countries educational institutions have additional challenges when it comes to curricula. Changes in curricula lead to improvements and development of study programmes and trainings. Nevertheless, not all countries have the possibilities to adapt curricula as they wish. For instance, in Austria schools have a fixed curriculum, stipulated by the Austrian government. Although schools are allowed to interpret the curricula for themselves, their possibility to change the curricula itself is very limited. Therefore, Austrian schools and educational institutions do not have many chances to influence the educational system in regard to tracking graduates.⁴³

In Slovakia there is a similar challenge, due to the fact, that secondary school competences have self-government regions and they are not willing to adapt to the demands of the ministry, which tries to make changes in the focus of schools and Higher Education Institutions. This kind of regulation leads to a fragmentation of the education system and it makes it even more difficult to introduce a comprehensive graduate tracking system for schools.⁴⁴

⁴⁰ Cf. Mitterauer, AbsolventInnenstudien, p 193 et seqq.

⁴¹ Cf. Mitterauer, AbsolventInnenstudien, p 196.

⁴² Cf. National Report Austria, p 8.

⁴³ Cf. National Report Austria, p 12.

⁴⁴ Cf. National Report Slovakia, p 3.

QUALITY CULTURE AND CAPACITIES

For VET providers it is important to seek for feedback regarding their study programmes and trainings. Such a feedback would be also of advantage for national authorities to assess the effectiveness of VET systems. Measures at the institutional level are limited and do not contribute to qualitative analysis in the field of VET graduates. Nevertheless, in Bulgaria there is no integrated approach to make it easier for VET providers to track their graduates⁴⁵.

An additional obstacle is the lack of traditions in terms of career development. There is no culture of career planning at the individual and organization level. Such lack of quality culture can be found not only in Bulgaria, but also in Latvia and Slovakia. In Latvia and Slovakia there is no comprehensive monitoring regarding graduates. In Slovakia schools use public data from the Office of Labor, Social Affairs and Family, but those data sets are not sufficient for other purposes⁴⁶. In Latvia on the contrary, educational institution do not have access to official data and for this reason, educational institutions are not able to verify the veracity of the information⁴⁷.

Besides the challenge of the minimal quality culture that already exists in the partner countries, another aspect that has to be considered is the capacity of VET providers. Bulgaria states, that one of the main reasons, why graduates are not tracked is the lack of tools, methodology and capacity of VET providers.⁴⁸ Similarly, in Slovakia, schools cannot estimate their further interest in in graduate tracking system, as they are afraid of a lack of capacities and also lack of IT support⁴⁹.

DATA PROTECTION

Recent developments in regard to data protection leads to new challenges. The General Data Protection Regulation⁵⁰ (GDPR) was implemented on 25th of May 2018. The regulation legislates on EU level about data protection and privacy for all individual citizens of the EU. Whenever schools or other educational institutions and VET providers want to receive information about their graduates, they will have to keep in mind the regulation. Appropriate technical and organisational measures need to be put in place, when implementing the data protection principles. Therefore, VET providers have to make further modifications regarding the collection of personal information about their graduates and enclose confidentiality clauses. Graduates have to know, for what purpose their data will be used.

⁴⁵ Cf. National Report Bulgaria, p 14.

⁴⁶ Cf. National Report Slovakia, p 4.

⁴⁷ Cf. National Report Latvia, p 11.

⁴⁸ Cf. National Report Bulgaria, p 3.

⁴⁹ Cf. National Report Slovakia, p 7.

⁵⁰ Regulation (EU) 2016/679.

DATA MAINTENANCE AND EXPERTS

Whenever data has been collected by VET providers, there are still some challenges that have to be considered. Although some VET providers have few measures to stay in touch with graduates, there are often no systematic recordings or surveys regarding their graduates. In Greece there are no regular measures for VET graduate tracking, just some one-off studies⁵¹. In Austria and Slovakia alumni clubs are a common way to track graduates after graduation as well as exchange contacts and information with graduates. Nevertheless, alumni clubs rarely do systematic recording of their graduates. Therefore, it is a question how and what kind of systematic measures can be developed and implemented in the 7 different partner countries.

Bulgaria has highlighted the issue, that an effective implementation of follow-up measures for graduates require time as well as additional resources. Additional consideration should be given to whether data should be required to be submitted periodically to institutions involved in VET systems in order to produce aggregated data and qualitative analyses at national, regional and sectoral level⁵².

In most partner countries, especially in Austria, Latvia and Slovakia, graduate monitoring is carried out by school staff. Although school staff can have better access to their former students, there are often no experts who would analyse the information they received from their graduates.

This also leads to the challenge, that there has to be someone who will maintain the existing database and keep up the consistency of tracking graduates⁵³. This remains as a main obstacle due to the fact that it is not clear which person, a school staff member or an expert, would be assigned to carry out those graduate tracking measures.

MOTIVATION FOR INSTITUTIONS AND SUSTAINABILITY

When it comes to developing a new graduate tracking measure, one has to take few complications into consideration. One of the main obstacles is that schools and VET providers can be hesitant to use a new graduate tracking tool, due to their uncertainty about their further interest in graduate tracking and they are often resource-restricted, even though they understand the importance of tracking graduates and are motivated to implement new measures. Therefore, one has to find the right time and occasion when to introduce a new tracking tool for graduates for VET providers.

⁵¹ Cf. National Report Greece, p 3.

⁵² Cf. National Report Bulgaria, p 12 et seqq.

⁵³ Cf. National Report Austria, p 12.

Quality assurance in VET has to be improved by sustainable projects. As it can be seen from other projects in Bulgaria, project team members may underestimate the possibilities of a tool⁵⁴. The lack of awareness of tracking systems and their value for higher quality study programmes as well as programmes improvement⁵⁵ leads to the consequence, that various projects in regard of graduate tracking do not have any sustainability.

⁵⁴ Cf. National Report Bulgaria, p 11.

⁵⁵ Cf. National Report Slovakia, p 7.

RECOMMENDATIONS

Considering various aspects and challenges when it comes to tracking VET graduates, some recommendations for tool development are now introduced in the following.

RAISING AWARENESS

Based on the findings of the ON Track country reports for IO1 we have to consider that especially awareness raising for tracking graduates, relevant systems and tools and its values for quality assurance and quality development in VET is one major aspect of the tool to be developed. Up to now, many VET systems have not demonstrated a serious interest in tracking their graduates in comparable and relevant ways for several reasons:

- There is no sustainable quality culture in place focusing on graduates, as the focus of quality assurance is mostly on recent students and recent curricula; relevant staff to carry out graduate tracking over a longer period of time is often not in place.
- Other feedback mechanisms play a more important role than graduate tracking, as qualitative feedback from employers and recent students / respective parents.
- The institutional influence in curriculum design itself is seen as rather weak or very weak, even if there would be possibilities to influence the delivery of the curriculum.
- Institutional measures for tracking graduates are also seen as expensive, work-extensive and complex in execution, analysis, and interpretation.

In addition there is a European tendency to know more about the relevance of education and especially of VET; a European roadmap⁵⁶ towards tracking VET graduates is in place and especially in countries, where different administrative databases cannot be connected to track graduates, the institutional approach is seen as the first step towards a sectoral or national graduate tracking system. Furthermore, administrative datasets cannot answer some crucial questions concerning quality assurance and future curriculum development in VET, like the possible relevance of future curricula for future labour market challenges.

The OnTrack graduate tracking tool wants to raise the awareness for graduate tracking not only by providing an easy-to-use comprehensive tool for VET institutions, but also by providing relevant and sensitive information about the topic to a broader public and especially the targeted audience in VET institutions and VET quality boards.

⁵⁶ Cf. Roadmap, Coordinated approach to (tertiary) graduate tracking, 2017, https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2017-1062340_en, accessed on 21.05.2019.

FEEDBACK ONLY, OR FURTHER SERVICE TO GRADUATES?

To engage graduates to provide relevant feedback for the VET institutions they attended, it is necessary not only to address them properly, but also to think of added values for them to answer a questionnaire. This added value has to be defined by the VET institution with regard to possible specific needs from the graduates. One example mentioned was the possibility to get in contact to other graduates as added value, another could be specific further education offers especially in the field of the VET institution, tailor made to the needs of graduates.

COOPERATION AND NETWORKING BETWEEN VET PROVIDERS

Especially small VET providers may have problems to carry out graduate tracking by themselves. This may be due to technical issues or personal capacities. The proposed tool should take this into account. It should be easy to use (from a technical perspective), but it should also be usable by VET providers or other institutions supporting one or more VET providers in carrying out graduate tracking as an inter-institutional concept. This means that a supporting institution will receive graduate data for the use of graduate tracking only (especially due to GDPR regulations) from several VET providers and handle the tool for them including the provision of basic analyses for each VET provider. With this approach the tool may lead to a more sustainable tracking of VET graduates.

COOPERATION WITH EMPLOYERS

The graduate tracking tool to be developed in our project is focusing on the graduates' feedback only. It may include questions on how employers do assess the performance of graduates or their respective VET schools; but this question as such will not lead to a real assessment from employers. For a real employers' assessment, it would be necessary to approach employers directly. And employers' feedback would also be necessary to get an even better picture of the quality of the curriculum and its delivery for the VET provider.

In our tool no connection between graduates and employers is foreseen. But we may include the question for contact details for employers, especially as the term "employers" may also be misleading. Very often the direct responsible leading position can give answers with higher relevance as feedback to the VET provider than an "employer" in the meaning of a CEO of a multinational company or at least a big company with not direct notion of the graduate's work. But still, contact and cooperation with employers is not covered by the tool to be developed.

SYSTEMATIC COLLECTION OF DATA (METHODOLOGY AND DATABASE)

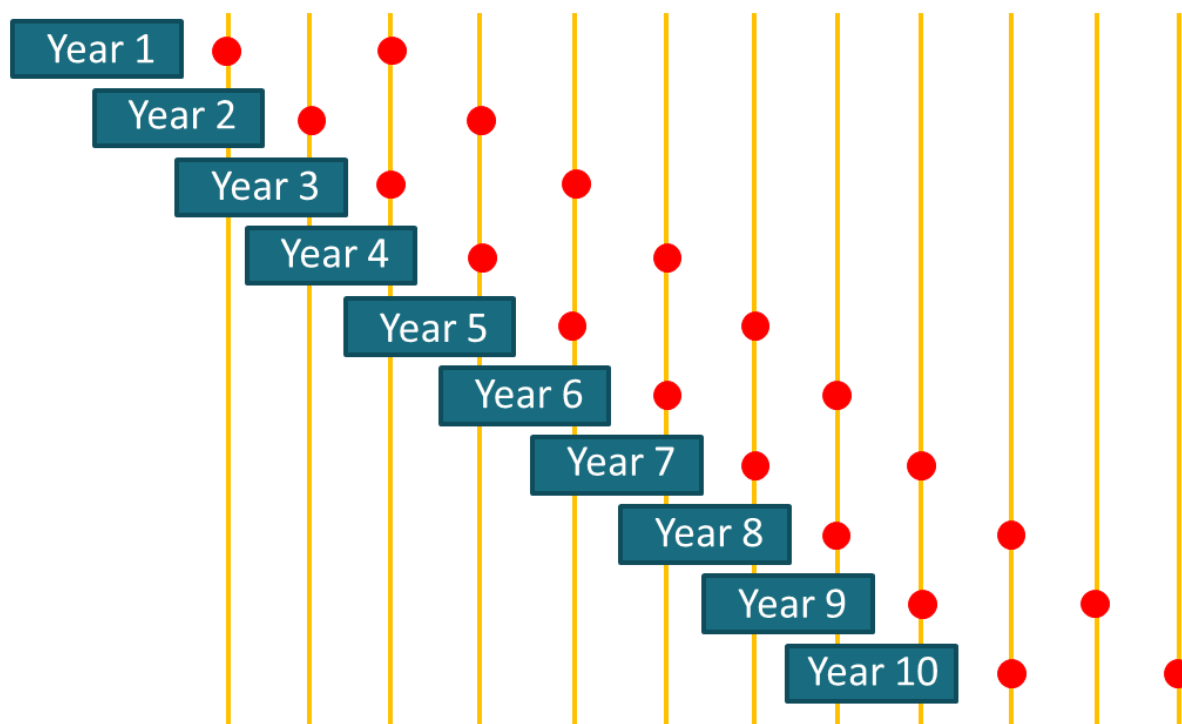
Feedback from graduates is – up to now – usually collected ad hoc, especially when a change in curriculum design or a change in the overall orientation of the curriculum is considered. The proposed tool should be able to compute feedback from graduates on a more systematic basis (see regularity and sustainability). The basis for regular and sustainable feedback is the stability of questions and an easy-to-use design.

Therefore, we propose a small questionnaire design, which is the same for all users (VET providers, institutions supporting VET providers). Additionally, users should be able to individualise a set of questions, which do go more into detail in several aspects. The users themselves should be able to decide if and which individual question sets they will use. The set of possible questions provided in this report (see Possible Topics for the Questionnaire) shows the basic questions, which are foreseen to all users.

Individual additions may not include the proposed add-on questionnaires. They may even use different methodologies like interviews or focus groups (to name two important qualitative measures). The tool should only give hints of the variety of methods to be used and possibly some add-on example-questionnaires.

REGULARITY AND SUSTAINABILITY

An easy-to-use platform for graduate surveys could be implemented on a VET providers technical surrounding rather easy. This should guarantee a regular use of the tool without “over questioning” graduates. The following picture shows a possible timetable, where graduates are asked half a year after graduating and a second time two-and-a-half year after graduating to see their development and progress in education and/or labour market.



Year x Graduation Cohort in VET

● Questionnaire sent

With this time frame every graduate will receive a questionnaire twice (after 0.5 and 2.5 years after graduation), the VET provider will have to send questionnaires out only once a year. Analyses can be made for each graduation cohort, comparing graduation cohorts and for education and labour market progress and development for each cohort once.

OUTLOOK: METHODOLOGY, INDICATORS, QUESTIONS

This chapter provides an outlook for the new graduate tracking tool that will be developed during this project. Taking the practices, needs and resources in all partner countries into consideration, as well as the recommendations, it can be said, that the new tracking system should at least include:

- Indicators to be measured through the tracking system for a possible comparison
- An online survey tool for the tracking
- Administrative arrangements for the administration of the surveys and data

METHODOLOGY

The main purpose of the new tracking system is to reach out to VET graduates through surveys and gather information and data related to further education, employment, career paths and competences that are required in the labour market.

Qualitative and quantitative data will be gathered by the new tracking system. The tracking system will measure various indicators, what can be used for further purposes.

Qualitative data:

- Socio-biographical and socio-economic information,
- Study intensity,
- Study method,
- Qualification(s),
- Credit received,
- Field of study,
- Transition to employment or further education and training,
- Earnings,
- Type of contract,
- Employment status,
- Occupation,

- Professional status,
- Activity, geographical and/r sectoral mobility.

Quantitative data:

- Relevance of study to employment,
- Skills needed in the job/ skills acquired during studies,
- Participation in volunteering or civic engagement activities,
- Career progression and satisfaction,
- Perceptions of the quality and relevance of their education and training experience.

ADMINISTRATIVE ARRANGEMENT

The new tracking system has to be administrated as well as the collected data has to be maintained by an adequate person or staff of the school/institution or an external expert. There is a need for a reference person who will manage the contact details of the graduates and keep the registry of graduates as well as another contact person (or could be the same person) who will be preparing, evaluating and analysing the collected data as well as take care of the technical facilities regarding the new tracking tool.

It depends on the capacities and resources of VET schools, institutions and other VET provider whether and whom they assign to the task to administer and manage the VET graduate tracking system.

TOOLS

There are two possible tools that can be used to track graduates, especially when it comes to specific survey tools. On the one hand one can set up a complex survey tool (e.g. lime survey or survey monkey), on the other hand a simple and basic tool (e.g. Google Forms) could be used for collecting data.

A simple and basic tool is easier to use, but it has its limitations regarding specific filter questions or follow up questions. A more advanced and complex tool will have the possibility to have questions that are more in-depth than in the simple tool, but a potential disadvantage could be the technical issue, due to the fact that one has to set up an own server for the tracking surveys.

Again, it depends on the capacities, resources and IT systems of the VET providers which tool they will be willing to use.

OnTrack will develop two different open source survey tools with the potential to be adapted to the specific need of each VET provider in the partner countries. Therefore, the VET providers will be able to adapt the survey tool to their own needs (e.g. delete or add questions, modify questions, change indicators).

INDICATORS AND POSSIBLE TOPICS FOR THE BASIC QUESTIONNAIRE

The project team discussed a first possible basic questionnaire in the previous project meeting. It was agreed that there will be a basic questionnaire, covering the questions for all institutions that will use the OnTrack tool. Institutions can decide to use more than the basic questions, and in IO2 (questionnaire development) the project team will develop further possible questions that could be included in addition to the basic questionnaire.

From the possible questions below one can identify 9 different indicators. With the collected qualitative and quantitative data the percentage of graduates can be determined and analysed in regard of those 9 indicators:

- Employment status
- Status in further education and training
- Interlinkage between the received education and current employment
- Simplicity or difficulty to find a job
- Leading position
- First salary after graduation
- Current salary
- Interlinkage between a further education track and received education
- Probability of obtaining the same education again

A. Questions to receive feedback to the further progression after graduating VET

- 1 Are you employed?
(Yes / No)
- 2 Are you attending a further educational track?
(Yes / No)
- 3 Do you have any other duties to fulfil besides employment or further educational tracks?
(Care of a family member / Military or social service / Being abroad for a while)
- 4 Are you unemployed?

B. *(Only to be asked if employed)*

Questions to see a connection between VET and the employment

- 5 Is there a connection between VET programme attended and your recent employment?
(Strong / rather strong / rather weak / weak)
- 6 If employed: how difficult/easy was it to find a job?
(very easy / rather easy / rather difficult / very difficult)

- 7 Do you represent a leading position in your company (are you responsible for some staff members in your company)?
(Yes / no)
- 8 Including this employment: How many different companies have you been working after graduating? (Numbers)
- 9 What was your first salary after graduating (monthly net income)
- 10 What is your current salary (monthly net income)
- 11 What is your employment status
(full time employed / part time employed / time contract)

C. (Only to be asked if attending a further educational track)

Questions to see further progression in education

- 12 What kind is the educational track you attend now?
(A progression in higher education building upon the VET track / A progression in higher education NOT building upon the VET track / A progression in VET or further education building upon the VET track / A progression in VET or further education NOT building upon the VET track)

D. Further planning of progression / development

- 13 What plans do you have as next step for further progression / development?
(Find a job in the field of the VET I attended / Find a job in a different field / Attend an educational track as progression upon the VET I attended / Attend an educational track as progression NOT in the field of VET I attended / Others)

E. Final Questions to evaluate the VET course attended

- 14 Would I attend the same education again?
(Yes / No)
- 15 What was good in the curriculum / VET I attended?
- 16 What was bad in the curriculum / VET I attended?
- 17 What was missing in the curriculum I attended?
- 18 What languages are used at the workplace / education / living situation now?
(Languages for ticking? OR Mother tongue / other language, as:)
- 19 Which skills are useful in work or further education that were developed in school?

F. Socio economic questions and questions covering the VET course attended

- 20 What is your age?
(in years)

- 21 What is your gender?
(female / male)
- 22 What was the field of VET you attended
(answering possibilities to be developed)
- 23 How did you attend your VET study?
(full time VET / part time VET / apprenticeship with more than 50% of time in school /
apprenticeship with less than 50% of time in school)
- 24 In what year did you start your VET course?
- 25 In what year did you finalise your VET course?

Many of the questions asked could be added by an open question, like “why” or “what kind”. But these open questions might be in the additional programme of the tool and not in the basic programming. This has to be decided during the development of IO 2.

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ANNEXES: COUNTRY REPORTS

AUSTRIA



Tracking Learning and Career Paths
of VET graduates to improve quality
of VET provision

IO 1 ONTRACK NATIONAL REPORT

AUSTRIA

This project has been funded with support from the European Commission.
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contained therein.

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CONTEXTUAL BACKGROUND

Austria has only few systematic measures for tracking VET graduates. The main reason for this is that the VET graduate tracking in general is not addressed in any VET policy document. There is also no legal obligation to conduct VET graduate tracking in Austria and no future reforms are planned.

The Austrian Federal Ministry of Education, Science and Research started in 2004 the initiative, QIBB – the VET Quality Initiative, to implement systematic quality management in the Austrian VET school sector. Since 2006 QIBB has been implemented in almost the whole VET school sector in Austria: in schools and colleges for engineering, arts and crafts, business and business administration, social and services industries, agriculture and forestry as well as nurse teacher training colleges and colleges of social pedagogy. All institutional levels of the school systems are regularly evaluated and continuously improved in a four-phase quality assurance cycle. The process is controlled, supported and structured by applying specific QM instruments. One of the instruments is evaluations, especially individual feedback, a self-evaluation which reflects the development of the teachers and managers professional activities, as well as a system feedback, which optimizes teaching and administrative processes at organization and system level. On an online evaluation platform one can find various evaluation instruments and tools (questionnaires, survey grids, guidelines) that can be used for standardized data evaluations. An additional evaluation procedure to support school development and quality development is an external peer review. Every type of VET school and college have their own QM system.

Annually, every school and college have to submit a quality report with evaluation results and a development plan with strategic and operational objectives and measures. Nevertheless, those quality management measures do not exclusively track or monitor graduates, due to the fact, that the objectives of QIBB are very broad.

Although there is in Austria no legal obligation for tracking VET graduates, there are still some achievements that can be seen as a step in the right direction. In general Austria has a positive attitude towards the idea of tracking graduates. One of the main measures in Austria is the “Education-related employment career monitoring (BibEr)” (see below), but neither does it have any policy framework nor is there any legal obligation to conduct this measure, it is only set up as a project. Despite the fact, that during the development of BibEr, there was a political interest in the results, the main motivation for developing BibEr was to provide an analytical instrument which would track graduates in connection with the labour market.

One can argue, that Austria fulfils the European VET policies and objectives with the project BibEr, due to the fact, that it tracks VET graduates, but it should not be ignored that the main aim of BibEr was to develop an analytical instrument with statistic data. It can not monitor or track individual VET graduates. Therefore, other measures have to be considered if one wants to track VET graduates.

BIBER: EDUCATION RELATED EMPLOYMENT CAREER MONITORING

A national tracking measure of graduates is the Education-related employment career monitoring (BibEr). It was firstly implemented in 2008/09 and since then, the measure is carried out annually. This project is funded by the Federal Ministry of Labour, Social Affairs and Consumer Protection (Sozialministerium) and the Austrian Public Employment Service (AMS). Statistik Austria, the national statistical office, collects through different administrative data sources (e.g. population register, social security register) details regarding education and the labour market. The main aim of BibEr is to make the employment career of all persons living in Austria after they left a formal education institution statistically evaluable. The graduate tracking measure covers not only VET graduates but all different types of graduates. The target group of BibEr are all graduates of a formal education institution. Regarding VET students, various ISCED levels are covered in this measure. The tracking measure is based on the total reference population and there is no sampling or control group. Data is collected at multiple measurement points and continuously measured several months after the graduation. The measure also monitors the participation of graduates in further education, training pathways and if graduate received any further qualification.

The main objective of the measure is the use the results for supporting policy planning and future development, due to the fact, that it provides detailed insight into the labour market entry of graduates.

The main strengths of BibEr is that it allows to track graduates from different formal education and training programmes. The data is growing every year, due to the fact that more and more graduate cohorts are integrated into the data. Due to the fact, that one is using administrative data to track various graduates, it is easier to analyse the situation of the labour market entry of graduates of different formal education and training programmes.

The main weaknesses of the BibEr data is that the analyses can be very difficult due to restricted small cell frequencies. Those small cell frequencies prevent analysing some questions and issues in more detail. Therefore, it is not possible to analyse certain questions on an individual level, e.g. motivation or job satisfaction of a single VET graduate.

IBW SURVEYS AND CALCULATIONS

The ibw Austria – Research & Development in VET releases continually various studies about the situation of VET graduates. Those studies have different thematic focuses in regard of VET students. For many studies, ibw uses its own static calculations, surveys as well as publicly available data.

- From 2008 till 2014 ibw tracked graduates with apprenticeships qualifications with data from the Austrian Economic Chambers (WKO), Public Employment Service Austria (AMS) as well as their own static calculations. This data was then used to analyse the success in the labour market.
- Another apprenticeship graduate tracking was made from 2016 till 2017. It was a nationwide

online survey in various part-time vocational schools for apprentices.

- In 2018 ibw interviewed various companies and establishments regarding the specialised personnel at the workplace. The data was interconnected with the data from the Austrian Economic Chambers (WKO), especially the specialised personnel radar (Fachkräftenadar). The analysis of the lack of specialised personnel and the different educational background shows various labour market demands.

AMS STUDY 2016

The Public Employment Service Austria (AMS) conducted in 2016 an analysis about the unemployment in regard to the educational background, gender and age. The study focused on the labour market data in the context of educational qualification in the year 2015. It presented different formal educational backgrounds in relation to the unemployment rate. It also shows the development of the different unemployment rate for various educational backgrounds since the 1990s till 2015. This study had its own calculations regarding the various educational backgrounds and did not have any specific tracking system for graduates.

AK STUDY 2017

The Austrian Chamber of Labour (AK Österreich) published in 2017 a study about the two important vocational education and training pathways in Austria, the apprenticeship system and medium-level secondary VET schools. The analysis evaluates the consequences of the different educational backgrounds and the knowledge transfer of both educational pathways, comparing several skills and the labour market situation of its graduates. For this purpose, different data sources were used and interconnected for this analysis, in particular PIAAC, PISA and BibEr.

With the combined data, the study can present various important issues that are related to the labour market. It analyses and discusses the work satisfaction and the request for further education of graduates with different educational background. It compares the labour market situation for both educational pathways as well as the differences of full-time employment. Furthermore, it analyses the integration into employment, changes of employment or industries as well as unemployment. It also mentions voluntary work and political participation of the graduates.

The AK presents a detailed study with various information, what can be used regarding graduates of different educational background. Nevertheless, the study did not monitor or track graduates on its own. It used only the common measures, like BibEr, for analysis.

GRADUATE TRACKING MEASURES IN PLACE

Due to the fact, that Austria does not have any systematic measures for tracking VET graduates, we decided to reach out to various part-time vocational schools of apprentices, VET schools and colleges as well as universities of applied science.

Considering the fact, that there is no legal obligation to track its graduates and students, it is unknown how many of those schools and colleges track their graduates. Therefore, we reached out to those schools and colleges who offer some kind of an alumni club or a Graduate Students' Association for their graduates. We assume that most of the information about graduates are exchanged during alumni meetings and reunions. We picked nationwide different kind of schools and colleges (e.g. education in technical issues, agriculture and forestry, tourism industry, food technology) to have a broader variety.

Universities of applied science (FH) are integrated in this research, due to the fact that they are a comparatively young institution and they have an obligation to track their graduates. Those universities of applied science use the agency for quality assurance and accreditation Austria (AQ) for annually analyses, reports and audits about their quality and accreditation. Some of those analyses include a graduate tracking or at least a graduate feedback of the programme. Therefore, we included them into our research.

CASE STUDIES

1. UNIVERSITY OF APPLIED SCIENCES FH BFI WIEN

1 INFORMATION ABOUT THE HE PROVIDER

The University of Applied Sciences FH BFI Wien was established in 1995 with one of the first UAS courses in Austria ever. Austria was a “late developer” in the provision of applied academic programmes or so-called “teaching universities”, the first study programmes a universities of applied sciences were established in 1993 and since then they have been a fast-growing HE pathway. Up to now, a proportion of about 14% of all students are attending a university of applied sciences in Austria, but a number of 29% of all study beginners shows the high dynamic of the sector. 26% of all graduates also show that this track is of high importance for the HE sector in tackling the need of skilled workforce on the Austrian labour market, where unemployment of academic (especially graduates of universities of applied sciences) is very low.

Table 1: Student numbers in different HE tracks in Austria

HE Track	Number of students	Number of study beginners	Number of graduates
Universities	278,052 (2018)	41,016 (2017)	34,978 (2016/17)
Universities of Applied Sciences	51,522 (2017)	20,228 (2017)	14,116 (2016/17)
Private Universities	12,775 (2017)	4,322 (2017)	2,138 (2016/17)
Pedagogic High Schools	13,232 (2017)	4,226 (2017)	3,977 (2015/16)
Total	355,581	69,792	55,209

Source: <https://www.bmbwf.gv.at/wissenschaft-hochschulen/>

As the orientation of the whole sector of universities of applied sciences on the labour market needs is evident, the integration of graduates on the labour market is of very high interest not only for the accreditation process, but also for the whole internal quality assurance system. Therefore, graduate trackings had been established within all universities of applied sciences with more or less high

efforts, the one from UAS FH BFI Wien with rather high effort on analysing graduates' labour market integration every 2-3 years.

UAS FH BFI Wien is located in Vienna, and the sectoral orientation of the provided study programmes is around HR, European Management, Project Management, IT and Logistics. It therefore is a counterpart to other universities of applied sciences, focusing especially on technical study programmes.

2 DESCRIPTION OF GRADUATE TRACKING AT FH BFI WIEN

Graduates are contacted by e-mail, where a link to an online questionnaire is sent. The questionnaire was developed in close cooperation between UAS FH BFI Wien and 3s, and it covers the following topics:

- Status of employment
- Satisfaction with the attended university in general
- Satisfaction with the attended study programme and the provided competences
- Are skills, competences and knowledge from the study programme usable at the labour market?
- Employment, salary, job-satisfaction, leading responsibility, ways to find the first job after graduating as special focus questions

All graduates are asked between 6 months and 2,5 years after graduating at least once. Graduates are not tracked furthermore 3 years or more after graduating. One of the problems is to compare the existing study programmes with the graduates study programmes, as the study programmes do change often in time. So the feedback from graduates often covers study programmes, which do not exist in the same way any more.

Since 2003 (when the first graduate surveys were conducted) approximately 1,500 graduates gave feedback to their (around 20) different study programmes; about 4,000 graduates were contacted, so the response rate is approximately 38%.

3 CONNECTION TO OTHER DATA

In Austria BiBER is monitoring graduates from all educational pathways in the social security system. Items like “in education”, “in employment”, “in unemployment”, “in parental leave”, or other statuses can be seen at different points in time. The data is NOT available for single study programmes or educational providers as such, as Statistik Austria (responsible for the BiBER monitoring) does not want the results used for benchmarking or rankings. For the whole sector of universities of applied sciences the BiBER monitoring shows a high employment rate (higher than graduates from universities). The BiBER monitoring and other administrative data sources cannot be connected to the graduate surveys so far.

4 GRADUATE TRACKING AND THE QUALITY CULTURE OF THE PROVIDER

As 3s is conducting the graduate surveys for UAS FH BFI Wien, the raw data is collected and analyzed by 3s. The educational provider only receives study programme specific reports on graduates’ pathways entering and progressing within the employment system. The reports are available for the management team, the quality management team, and the respective study programme responsible. Some of the reports had been handed in to the former accreditation body (the FHR – Fachhochschulrat), to fulfill formal requirements for re-accreditation of study programmes (up to the year 2010). Since then the graduate tracking analyses are no longer a formal part of the re-accreditation of study programmes but has to be reflected somehow by the development teams for re-accreditation of study programmes. At UAS FH BFI Wien the reports are used as reflection basis for this re-accreditation process. But the reports are also used for finetuning the study programmes to the recent labour market needs in the respective study programme areas (using the feedback from graduates as cornerstones for new skills sets for existing study programmes).

5 ORGANISTAIONAL COMPETENCE AND IT INFRASTRUCTURE

Many Austrian universities of applied sciences are carrying out their own graduate surveys. As in the case example 3s is conducting the graduate survey, the IT and organisational competence is shifted to 3s. But the IT system from UAS FH BFI Wien would be ready to test a new graduate tracking system. The main question, which cannot be answered by now: The UAS will only agree to test a new graduate tracking system, if the ratio of new added value is higher than the “costs” (negative feedback from graduates by feeling “overevaluated”, disturbing the usual feedback cycles, etc.).

2. MODUL VIENNA

1 INFORMATION ABOUT THE HE PROVIDER

The MODUL Vienna is a vocational training school that was established in 1908. The tourism schools of MODUL are a private institution with public status, which is internationally recognized for their modern training and further education in the field of tourism and leisure industry.

The tourism schools are an educational institution of the Federal Chamber of Economy Austria (WKÖ). The Federal Chamber of Economy Austria is one of Austria's biggest private education provider which emphasizes on a business-oriented and practical teaching and learning. There are various learning opportunities on various educational levels.

The MODUL is working closely with other specialist groups like the hotel industry, gastronomy or travel agencies so that the students can connect their extensive knowledge with practical experience.

Annually, approximately 600 young persons are educated at the MODUL. More than 150 graduates per year complete the education at the vocational school.

The MODUL Vienna offers:

- secondary tourism school: 5-year education with a diploma for general qualification for university entrance
- tourism college: two-year training program in the field of hotel management
- additional qualification: Cheese connoisseurs, Wine waiter, Barkeeper
- further possible education at the MODUL University Vienna

The MODUL Vienna School also engages in a variety of different international projects: individual trainings, strategic additional education and training as well as complex development projects. The vocational school is well connected to numerous associations and federations in the field of tourism and leisure industry.

2 DESCRIPTION OF GRADUATE TRACKING AT MODUL VIENNA

The graduate tracking at the MODUL is a complex matter. The MODUL has approximately 6000-7000 graduates in its own database. There are no systematic recordings or surveys regarding their graduates, but there are various other measures to stay in touch with graduates. Together with the MODUL University, a MODUL Career platform was established a few years ago. In the database one can find emails and contact details of the graduates as well as business companies. Every year various events and career fairs are organized for senior students and graduates to inform them about various workplaces at MODUL's business partners as their possible future employers. The main focus lies on networking and presenting different job opportunities.

There is no official alumni club for graduates, only the inhouse database and the career platform. Students have a school-email address that remains after the graduation. Graduates can reach out to the school, reconnect and stay in touch. Newsletters are sent to the school-email (or other given email). From time to time some graduate meetings are organized where approximately 400 people get together.

The MODUL tries to stay in touch through their homepage, Facebook and other social media. Social Media play an important role, due to the popularity of the usage. There are some considerations to establish in the future a new LinkedIn Profile to stay in contact with graduates.

The measure is financed by the school itself, there are no external financial resources. It can be seen as an additional service for the graduates of the MODUL. The database is managed by some teachers as well as administration staff, depending on who has time and capacities for it.

Through the business partners, the measure is displayed into the public. Business companies are used as testimonials and role models at events as well as for advertisement. Some successful graduates come back as lecturer. Every class gets a partner company, for example a partner hotel, where they get practical experience as well as traineeships during their education.

Main difficulties and obstacles for tracking graduates:

- A fixed curriculum, where possible adjustments or changes of the school are very limited
- A consistency of tracking graduates and maintaining the existing database
- The continuity and regularity to stay in touch with graduates

3 CONNECTION TO OTHER DATA

The tracking measure is not connected to the BibEr monitoring, due to the fact, that the measure is on a school level and BibEr does not monitor this level. No other administrative data is connected to the measure.

The inhouse database of MODUL is not publicly accessible, therefore it cannot be used for comparison or any other tracking system.

4 GRADUATE TRACKING AND THE QUALITY CULTURE OF THE PROVIDER

Due to the fact, that there are no systematic records or surveys, the information about graduates can not be accessed by third parties. The only possibility of tracking graduates is through networking and the connections to various business companies as well as professional associations or a personal union. Although business partners can suggest changes regarding the education – the school have little possibilities to adjust the curriculum. The curriculum is fixed by the Austrian government and the autonomy of schools is very limited, only up to 9 hours, that can be freely arranged by the school. Therefore, the school can not adapt to the wishes of the business partners.

Through networking one can find out, that many graduates from the MODUL have high positions in companies in the field of tourism and leisure industry and this is the quality that MODUL presents to the outside world.

5 ORGANISATIONAL COMPETENCE AND IT INFRASTRUCTURE

MODUL has the IT infrastructure for the new tool and the school would be interested to try the new graduate tracking tool, but the main obstacles remain – consistency of the maintenance of the database and how to interact with graduates.

RECOMMENDATIONS

In our understanding, a measure, that can be implemented into the Austrian educational system to track VET graduates, would be an appropriate survey tool. Due to the lack of legal obligations it is impossible to bind the schools and colleges to track their former students. Such a survey tool could be a possibility for VET institutions to increase their quality of the education programs. Nevertheless, the questionnaire tool cannot be mandatory.

It would be a great opportunity for Graduate Students' Associations and other alumni clubs of the schools and colleges to keep on track of the achievements and further developments of their graduates with a survey tool, where all the data could be systematically collected and stored.

To this should be added that such a questionnaire tool should always be short and simple, otherwise people won't participate in any given survey.

SCHOOLS

We contacted several schools:

1. Berufsbildende Schulen Weyer (OÖ):

HLW, HLT, Hotelfachschule

Verein der Absolventen der Berufsbildenden Schule Weyer

<https://absolventenverein-bbs-wey.jimdo.com/absolventen/>

2. HTL Mödling (NÖ)

Maschinenbau, Hochbau, Elektrotechnik, Gebäudetechnik, Umwelttechnik, Elektronik, Fahrzeugtechnik, Wirtschaftsingenieur, Holztechnik, Tiefbau, Innenarchitektur, Mechatronik. Absolventenverein

<http://www.htl-absolvent.at/zeitschrift.asp?CurrentObject=44&CurrentPage=11>

3. HTL LMT Wels (OÖ)

Lebensmitteltechnologie, Getreide- und Biotechnologie

Absolventenforum/verein

<http://www.htllmt.at/index.php/absolventen-forum/14-absolventenforum/59-datenschutzgrundverordnung>

4. Don Bosco Schulen Vöcklabruck (OÖ):

HLW, FW, EFW

Absolventenverein

<https://www.donboscoschulen.at/absolventenverein-kopie.html>

5. Berufsbildende Schulen Gmünd (NÖ)

HAK, FSW, SOB (Altenpflege)

Absolventenverein mit Jobbörse

<http://www.absolvent-gmuend.at>

6. HTBLA Leonding (OÖ):

Informatik, Elektronik, Medientechnik, Medizintechnik Absolventenverband + Jobbörse

<https://www.htl-leonding.at/index.php?id=1622>

7. ABZ Lambach: Agrar Bildungszentrum (OÖ):

Ausbildung in Hauswirtschaft, Landwirtschaft, Pferdewirtschaft Absolventenverein

<https://www.abzlambach.at/schule/>

8. Ritzlhof: Gartenbauschule (OÖ):

Berufsschule/Fachschule/Abendschule für Gartenbau, Floristik, Garten- und Grünflächengestaltung Absolventenverein

<http://www.ritzlhof.at/schule/absolventen/>

9. LFS Kirchberg/Walde (Stmk):

Land- und Forstwirtschaftliche Fachausbildung Absolventenverband

<http://www.fachschulen.steiermark.at/cms/ziel/105587656/DE/>

10. Mostviertler Bildungshof (NÖ):

Ausbildung zu Ländliches Betriebs- und Haushaltsmanagement, Landwirtschaft, Betriebs- bzw. Dorfhelferinnen-Ausbildung;

Absolventenverband

[https://www.lfs-](https://www.lfs-giesshuebl.ac.at/de/ausbildung/laendliches_betriebs__und_haushaltsmanagement/)

[giesshuebl.ac.at/de/ausbildung/laendliches_betriebs__und_haushaltsmanagement/](https://www.lfs-giesshuebl.ac.at/de/ausbildung/laendliches_betriebs__und_haushaltsmanagement/)

11. Landwirtschaftliche Berufs- und Fachschule Weizenkirchen (OÖ): Absolventenverband

https://www.ooe-landwirtschaftsschulen.at/1407_DEU_HTML.htm

12. Tourismusschulen Salzburg: Absolventenverband (für Schulen) + Alumni (ITH)

Bad Hofgastein hat einen eigenen Absolventenverband, die anderen Schulen „erfolgreiche Absolventen“

<https://ts-badhofgastein.at/absolventenverband/>

13. HTL Bregenz (Vorarlberg):

Elektrotechnik, Kunststofftechnik, Maschinenbau, Automatisierungstechnik <http://www.htl-bregenz.ac.at/absolventenverein.html>

14. Ortweinschule (Stmk):

Bautechnik, Kunst & Design (Tischlereitechnik und Raumgestaltung) Absolventenverein mit Profit

<http://www.ortweinschule.at/de/community/absolventenverein/>

15. Siegfried Marcus Berufsschule (Wien)

Kraftfahrzeugtechnik, Sprengler, Karosseriebau, Metalltechnik

Preist über Berufschancen der Absolventen. <https://www.siegfried-marcus-berufsschule.at/schule/berufschancen/>

16. HLW Haag (NÖ)

HLW, Ernährungswirtschaft;

Absolventenverein + Feedbackformular!

<http://www.hlwhaag.ac.at/index.php/schulteam1/absolventen>

Also some universities of applied sciences were contacted.



BULGARIA



**Tracking Learning and Career Paths
of VET graduates to improve quality
of VET provision**

IO 1 ONTRACK NATIONAL REPORT

BULGARIA



BACKGROUND

The purpose of the vocational education and training system in Bulgaria is specified in the Vocational Education and Training Act (VET Act) – to prepare citizens for realization in the economy and other spheres of public life, creating the conditions for acquiring professional qualification and for its continuous improvement. In order to achieve the goal, the VET Act has been changed thoroughly in 2014, 2016 and the last amendments in 2018 added details for regulation of dual training and regular update of VET programmes, including texts on improving the quality of VET, the introduction of flexible learning pathways for students and persons over 16, the establishment of a national validation system, the introduction of dual education and training, etc.

The objectives and priorities of the VET system are the subject of key national strategic documents (National Strategy for Lifelong Learning 2014-2020, National Strategy for Development of VET in Bulgaria - 2015-2021, etc.).

The national priorities in education and science in the 2014-2020 Bulgaria concerning vocational education are defined as:

1. Improvement of the quality and provision of vocational education, corresponding to the regional economic priorities through the restructuring of the system of vocational schools.
2. Creating opportunities for good vocational training before entering the labor market:
 - Career guidance;
 - Acquiring of practical experience and skills by students in real conditions (traineeships and mobility).
3. Establishment of an effective national system for external evaluation of the quality of vocational education and training - concept, normative framework, institution building;
4. Introducing a system for maintaining and enhancing the qualification of teachers and VET teachers;
5. Improving VET links with business;
6. Creating opportunities to recognize non-formally acquired knowledge, skills and competencies.

The organizational and functional model of the VET in Bulgaria includes three levels:

- System / national level - includes national VET system (Ministry of Education and Science, National Agency for Vocational Education and Training, Social Partners)
- Regional / local level - includes regional VET authorities - Regional Education Offices, municipal administration, as well as social partners of regional importance
- Institutional level - includes the organizations under Art. 18 of the VET Act - vocational schools, sports schools, art schools, vocational colleges and centers for vocational training.

The variety of institutions in the VET system implies flexibility of the system and the possibility of better access for students to VET but on the other hand it poses additional questions about the management and quality of VET in all types of institutions as well as the provision of the necessary conditions for carrying out vocational training (teacher training, material facilities, practical training conditions, etc.).

According to the legal framework, the Ministry of Education and Science is the responsible state body for the quality of vocational education. This function is implemented by the Ministry of Education and Science together with the 28 regional education departments. A National Education Inspectorate was established at the Ministry of Education and Science. The MES is also the National Focal Point for the implementation of the Recommendation of the European Parliament and of the Council of 18 June 2009 establishing a European Quality Assurance Reference Framework for Vocational Education and Training.

In pursuance of the amendments to the VET Act from 2014, in 2015, the Minister of Education and Science approved Ordinance for the quality of vocational education and training. In the Annex to the Ordinance, containing Criteria for Evaluation Areas and Quality Measurement Indicators in Area 3: Realization of the persons who have acquired professional qualification, are included two items related to the tracking - 3.1. Relative share of the persons employed on the labor market by profession (one year after acquiring the professional qualification) of the total number of acquired professional qualification and 3.2. Relative share of the acquired professional qualification, continuing in the next level of education and/or degree of professional qualification, from the total number of acquired professional qualification.

As the Ordinance was subsequently abolished, there are no concrete results and aggregated data from VET providers in the country on these two indicators.

One of the reasons not to track the persons who have acquired professional qualifications is the lack of tools, methodology and capacity of VET providers.

The NAVET as a public administration body has responsibilities for the quality of vocational training of persons over 16 years of age, which is provided in the licensed centers for vocational training (as of 1st February 2019 there are 1046 centers located on the territory of the country). Pursuant to Amendments in the VET Act since 2014, the licensed centers annually submit to NAVET a self-assessment report on the quality of vocational training. NAVET systematizes and analyzes these data and distributes them among the licensed centers network using different channels of communication.

After the abolition of the Quality Assurance Ordinance, NAVET has developed and published on its website indicators for providing annual information on the quality of vocational training in vocational training centers (based on Art. 42, p. 12 in conjunction with Art. 22, paragraph 9 of the VET Act), including the 3rd Rating Area indicator of aimed at monitoring the realization of persons who have acquired professional qualification.

Interaction between the labor market and skills needs is organized through the adoption of State Educational Standards (SES) for the acquisition of qualification in professions that are developed with

the active involvement of employers. Training institutions develop curricula based on the standard with learning content aimed at acquiring the knowledge and skills set out in the standard. The main institutions involved in the development and updating of the SES are National Agency for Vocational Education and Training (NAVET), Ministry of Education and Science (MES), Ministry of Labour and Social Policy (MLSP), branch ministries - Ministries of Sport, Tourism, Health, etc., nationally represented organisations of employers and trade unions. In addition to the development of the SES, their responsibilities in relation to the education-business link are regulated by VET Act.

One of the priorities for Bulgaria is related to the forecasting of skills. In this connection, the following project in partnership between MES and CEDEFOP is being implemented: „Governance of EU skills anticipation and matching systems. In-depth reviews by country: Bulgaria“.

2 MEASURE 1 – “REALIZATION OF THE PERSONS WHO HAVE ACQUIRED PROFESSIONAL QUALIFICATION”

The first tracking measure that deserves attention in relation to On Track activities is “Realization of the persons who have acquired professional qualification “. Centers for Vocational Training (CVT) fully self-funded to implement this measure. The data are collected through the NAVET information system, as an area of the internal quality assurance system, as an obligation of CVT according to Art. 22, para. 8 of the Vocational Education and Training Act. Self-assessment criteria for VET providers were developed in 2013. Guidelines and an online tool are in place to support VET schools through the process. It is a requirement for CVET providers to have a quality assurance mechanism in place to obtain a license. The data are analyzed annually by National Agency for Vocational Education and Training (NAVET). There is a legal basis for the development of an internal quality assurance system for Centers for Vocational Training (CVT) and measurement of the achieved quality in the Center - Art. 9a, para 1 of the Law on Vocational Education and Training (VET). Quality refers to a set of characteristics of vocational training that are in line with the expectations and needs of the individual and society. CVT provide quality of vocational training through the establishment of an internal quality assurance system in compliance with the state educational standards for acquiring qualification in professions and the current legislation. The self-assessment of the quality of VET training is done in three areas:

- Access to vocational training;
- Acquiring professional qualification;
- Realization of the persons who have acquired professional qualification.

For each of the areas, self-evaluation is carried out by indicators, using criteria defining the level of quality, to be sent in the form of a report to the NAVET each year until 31 January.

Table 1. Criteria and indicators defining the level of quality

Rating area	Realization of the persons who have acquired professional qualification			
Relative share of the persons employed on the labor market by profession (one year after the acquisition of the professional qualification) of the total number of persons who have acquired professional qualification -% (for carried out trainings)	Less than 10 %	From 10 % to 39 %	From 40 % to 50 %	Over 50 %

Relative share of the acquired professional qualification, continuing in the next level of education and / or degree of professional qualification, of the total number of persons who have acquired professional qualification -% (for carried out trainings)	<i>Less than 10 %</i>	<i>From 10 % to 39 %</i>	<i>From 40 % to 50 %</i>	<i>Over 50 %</i>
Satisfaction degree of the persons acquired professional qualification from the quality of the vocational training (for carried out trainings)	<i>No survey has been carried out on the satisfaction degree of the persons acquired professional qualification with the quality of the vocational training</i>	<i>Less than 50% of respondents are satisfied with the quality of their vocational training</i>	<i>51% to 70% of respondents are satisfied with the quality of their professional training</i>	<i>Over 70% of respondents are satisfied with the quality of their professional training</i>
Satisfaction degree of the employers with the knowledge, skills and competences of the persons acquired professional qualification and their employability (for carried out trainings)	<i>No survey has been carried out on the satisfaction degree of employers with the knowledge, skills and competences of the persons acquired professional qualification and their employability</i>	<i>Less than 50% of respondents are satisfied with the knowledge, skills and competences of the persons acquired professional qualification and their employability</i>	<i>51% to 70% of respondents are satisfied with the knowledge, skills and competences of the persons acquired professional</i>	<i>Over 70% of respondents are satisfied with the knowledge, skills and competences of the persons acquired professional</i>
Satisfaction degree of the employers from the partnership with the VET or with the vocational college (for carried out trainings)	<i>No survey has been carried out on the degree of satisfaction of the employers in the partnership with the CVT or the institution under Art. 9, para. 2 VETA</i>	<i>Less than 50% of respondents are satisfied with the partnership with the CVT or the institution under Art. 9, para. 2 VETA</i>	<i>51% to 70% of respondents are satisfied with the partnership with the CVT or the institution under Art. 9, para. 2 VETA</i>	<i>Over 70% of respondents are satisfied with the partnership with the CVT or the institution under Art. 9, para. 2 VETA</i>

The target group is the trainees in centers for vocational training who carry out vocational training for persons above 16 for professions and majors from EQF 2,3 and 4.

The measure is applicable as of 2016, with the latest aggregated figures for 2017 and data from 2018 being processed.

Table 2. Summary data by 2017 rating areas

Rating areas:	Maximum points under Ordinance 2	Average points from self-assessment reports	Results in %
1. Access to vocational education and training	20	14,84	74,21

2. Acquiring a professional qualification	65	51,12	78,81
3. Realization of the persons who have acquired professional qualification	15	10,77	71,81
Total:	100	76,73	76,73%

Analyzes are available for 2016 and 2017, and 2018 data is being processed at this time.

In pursuance of this measure, the two annual reports set out areas for improvement, namely:

- follow-up of the development of the persons who have acquired qualification in CVT and satisfaction with the quality of the offered training
- seeking feedback from employers and their satisfaction with the knowledge, skills and competences of the acquired professional qualifications, as well as maintaining good cooperation with them.

3 MEASURE 2 – “GOVERNANCE FOR EFFECTIVE VOCATIONAL EDUCATION”

The second measure, which is of interest to the present study, is "Management for Effective Vocational Education", Project BG051PO001-3.2.03, financed under the Human Resources Development Operational Program 2007-2014, the European Social Fund and the State Budget of the Republic of Bulgaria, with contractor Ministry of Education and Science.

The specific activity is "Analysis of the correspondence between the offered vocational education and the needs of the labor market and development of a model of a unified system of management of vocational education on the basis of indicators and indicators of effectiveness included in a web-based platform"

As a result of the project, a measurement of the efficiency of the vocational education process was carried out through a web-based platform in which online surveys examine the views of representatives of different target groups: trainees, graduates, parents, trainers, employers.

The entire project activity budget is BGN 345,400. The cost of carrying out one data collection cycle (if information is available) is BGN 75,000 only for conducting the survey. BGN 130,000 were spent on developing a web-based platform, BGN 35 000 for development of model and indicators for measurement. The Ministry of Education and Science collects data through the network of vocational high schools and analyzes the results. The legal basis for the implementation of the measure is Art. 9a of Vocational Education and Training Act, Art. 22, para. 2 p.15 of the Law on Pre-School and School Education and Ordinance No 16 of 08.12.2016 on Quality Management in the Institutions.

Target groups are:

- Persons who are trained and acquired Certificate for Vocational Qualification in VET schools;
- Parents;
- Employers;
- Teachers;
- Social Partners.

The persons covered by the measure are students in vocational schools throughout the country trained in different specialties of the List of Professions for Vocational Education and Training, NQF/EQF 4 - initial VET.

In 2013 a total of 18,578 persons were covered by the survey, of whom 14,636 are students in vocational schools (grades 11 and 12), 265 out of 402 vocational schools, the rest are teachers, employers, parents. Not all of the target group is covered, but more than 50% of the VET schools are included.

The indicators for collecting data related to the On Track project are in the "Realization of the citizens who have acquired professional qualification in the economy and other spheres of the public life"

- Share of students who have successfully completed VET programme (successfully passed a state matriculation exam or a state exam in the profession) - source is the Information System of the Ministry of Education and Science;
- Share of dropouts / pre-term leaving vocational training - source is Information System of the Ministry of Education and Science;
- Share of students who have continued their education in the next level of Education - source is the Information System of the Ministry of Education and Science;
- Share of students on the labor market - five years after the end of the training - source is the National Revenue Agency;
- Share of the insured persons among the VET graduates professionally – source is National Social Security Institute;
- Share of officially registered unemployed among the vocational training graduates - source is the National Employment Agency;
- Satisfaction degree of the participants in the vocational training from the acquired professional qualification - the source is the survey in the web-based platform of the project;
- Satisfaction degree of the employers with the knowledge and skills of newly recruited workers with acquired professional qualification - source is the survey in the web-based platform of the Project;
- Ratio of the average wage of vocational graduates compared to the average wage in the region - collected annually - source is National Social Security Institute;
- Ratio of the average wage of VET graduates compared to the average wage in the region - collected annually - source is National Social Security Institute

Another type of data:

The employers' questionnaire includes a variety of questions - for example:

- In which range is the total annual turnover of your organization?
- Usually, how often you need to hire new people / release employees?
- To what extent are the knowledge and skills acquired by your employees in a VET school applicable to your organization's practice?
- How often your young employees with completed vocational education need additional training?
- Qualification in which major professions/specialties do you expect to look for in a new workforce?
- What is the approximate number of employees you expect to recruit in each of the listed professions/specialties?
- Is there such a profession that would be useful in the sector where your organisation/company operates, but the vocational education system in the country does not offer such training in VET schools?
- As an employer, do you have the possibility to offer, after half year, places of paid internship for VET students?

The data can be used at national and sectoral level. In terms of survey points, the study should be 5 years after graduation. In the framework of the project, in the testing and approval phase of the

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toolkit, only persons in the VET system who are in grades 11 and 12 are included. The project has not been extended and has not been applied with persons who have completed their professional education.

Some of the results, as well as several school practices, are available at the moment on the MES website. The platform itself is not available - <https://www.mon.bg/bg/2160>:

- Analysis of the effectiveness of the existing state of the vocational education system
- Indicators and indicators for measuring the effectiveness of vocational education in Bulgaria
- Unified Vocational Education Management System (EMSP): Model and Toolbox
- A Guide to Building the School Quality Management System in Vocational Schools
- Information on the "Effective Vocational Education Management"

The project has no sustainability. After its completion the activities are not financed by the Ministry of Education and Science. The platform is not supported.

Strengths:

- The model created by the project is comprehensive. It measures the quality of the vocational education provided, the access of the citizens to the system, the realization of the graduates.
- The indicators are in line with those of the European Quality Assurance Reference Framework (EQARF) supplemented by indicators used by CEDEFOP and Eurostat.
- The results of the survey can be done either by assessing the system (a particular sector or region) and by anticipating the needs of the labour market.
- The schools involved in the project approved and adopted the toolkit.

Weaknesses:

- The communication strategy was well developed (as an instruction), but the project team underestimated this part of the activity - a large part of the target group did not understand this possibility (including voluntarily in the study)
- MES did not recognize the instrument as its instrument for measuring performance
- Funds from the state budget are needed to initiate periodic surveys.
- The target group of teachers / students is easily reached and the survey does not require funds, but all other target groups require resources to get involved.

4 GRADUATE TRACKING MEASURES IN PLACE

The tracking of the VET graduates is done at a very limited level. While there is no institutional requirement to provide detailed information on the follow-up of VET graduates, VET providers see how important it is to seek feedback on their conducted trainings. The results of the interviews show that tracking the realization of the trainees is important and benefits to all stakeholders in the following:

- The VET provider receives information on the quality of the training and uses this data to improve its curricula, also to advertise to employers and future trainees;
- Trainees receive information about which professions are attractive and are sought by employers, and which providers offer quality training that will contribute to their employability;
- Employers receive information that helps them in recruiting staff;
- National authorities assess the effectiveness of the VET system.

Some providers have well-developed internal measures to track the graduates' realization - organising annual meeting classes, hiring an external consultant-sociologist. Other providers have been using the tracking method for more than 10 years. In some centers, improving the quality of VET has become an organisational valuable and there is evidence of developing a culture of learning in the workplace. It is easy for organisations of this type to follow-up the realisation of the trainees - they continue their professional development in the organisation with which a vocational training center is established.

Many VET providers find it difficult to make quality follow-up and they track their graduates through informal channels, emails and phones. Due to the lack of additional financial resources, this measure applies only to a limited number of graduates. The effective implementation of the follow-up measures for graduates require time and additional resources. There is no cooperation from the graduates themselves, and the additional obstacle is the loss of contact - many of the trainees go to work abroad. A large majority of respondents say that company's management is collecting and analyzing data. This is done in addition to their core management functions and is not considered so important. As a result, the data are not systematized and therefore not objective. There are no experts to analyze the information received. The lack of traditions in terms of career development is an additional obstacle to tracking the graduates' realisation.

5 CASE STUDY

Center for Vocational Training (CVT) at Address Real Estate, Sofia, Bulgaria

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Center for Vocational Training (CVT) at Address Real Estate holds a license for training of adults for the following professions: Broker, Sales Consultant, Office Manager, Office Secretary, Informatics economist. Most of the trainings over the years have been in the "Sales Consultant" and "Broker" professions. In the period 2005-2009 the center trained its own employees employed in "Address Real Estate", as well as external trainees. The courses for external trainees are for acquiring qualification for part of the profession. For the period when external courses were carried out, part of the CVT's activity was aimed at tracking the professional realization of the persons. Between 2007-2009 244 persons have completed external courses and various initiatives have been organized for them. One of them is called "Club Address Academy" – at the end of the course as part of the feedback for a full evaluation of the training, the graduates answered questions as to whether they wanted to become a part of the Alumni Club and whether they wanted to leave contact for further feedback.

The contacts of the graduates were collected and they received an e-mail newsletter on a regular basis. Twice a year the students were invited to attend an event at Club Address Academy in December and May. The events were informational meetings, where in open formats have been shared industry news, successes and challenges, employment opportunities, needs for further qualification. Again informally, in full discussion, the CVT's team received feedback on who started work in the real estate business, where, in what position, what is the degree of satisfaction. In these talks was shared information on which learners started their own business, who have chosen the realization in a close branch (construction, repairs, furnishings, lending to the purchase of real estate, etc.) and who have been targeting a completely different sector, with totally distant qualification. Specific statistics in the form of a percentage census were not produced, but the information gathered during the two annual meetings was analyzed and used in the preparation of future training calendars and as an indicator of the quality of the CVT's activity.

From 2010 the center stops conducting external courses and focuses only on training newly recruited staff. When recruiting new inexperienced employees, as a practice, they are found to pass a 3-month qualification course for part of the profession during which they are trained in theory and practice, and at the end of the course pass an exam. Those who successfully pass the exam continue to be employed on a permanent employment contract in the company.

For these people, statistics are kept by the human resources department, which is confidential, but for the purposes of the survey it is partly provided with the confidentiality clause. The age range of these persons is 25-55 years.

Year	Trained persons	Men	Women	Dropouts	Employed
2017	8	4	4	0	8
2018	46	16	30	2	44

6 RECOMMENDATIONS

Tracking VET graduates in Bulgaria is limited in scope. In many regions, there is no culture of career planning at the individual and organization level. Stakeholders still understand the importance of career management. As a result of desk research and in-depth research among VET providers, the following conclusions can be drawn:

- Measures at the institutional level are limited and do not contribute to qualitative analysis in the field of VET graduates;
- VET providers understand the importance of tracking graduates and are motivated to implement similar measures but are resource-restricted;
- There is no integrated approach to make it easier for VET providers to trace graduates.

The challenges of introducing a graduate tracking system are mainly related to the need to provide additional financial and human resources and to create an appropriate information environment for tracking itself. The question arises as to who will analyze the data and for what purposes it will be used. Consideration should also be given to whether data should be required to be submitted periodically to institutions involved in VET systems in order to produce aggregated data and qualitative analyses at national, regional and sectoral level. This is also tied to additional resources.

In view of the need to improve quality assurance in VET and the emerging needs of the labor market, an integrated follow-up approach is needed for VET graduates to both facilitate VET providers in the process and, on the other hand, to be applied to all graduates. This will increase the benefits for all stakeholders, which in turn will lead to a stronger link between the VET system and the labor market. An effective model for enhancing the quality of VET can be achieved by combining administrative data and sociological research data on tracking graduates. The demonstrated commitment of VET providers and their willingness to implement graduate tracking systems is a good environment and a prerequisite for the implementation of such a measure.

Specific recommendations:

- Institutional mechanism for CVTs, which use funding, could be developed. The main goal of this mechanism can be to obligate these CVTs to implement and actively use a system for tracking of realization of the persons who have acquired professional qualification. Also part of this mechanism can be preparation of a report to the funding institution and/or Ministry of labor and social policy and Ministry of education and science.
- Better cooperation between providers of VET trainings and Centers for information and vocational guidance is needed.
For example: person, who is consulted in Center for information and vocational guidance can be oriented for appropriate course. After the course CVT will collect and send information to another organization.
Vocational guidance is not an isolate service and is linked to education, training and employment.

- The tools, developed by this project (reports, methodology, templates, questionnaires, etc.) can be used as free sources and can be available for CVTs and other stakeholders.
- National Action Plans for Employment, managed by Ministry of labor and social policy, must include requirements for tracking realization of the persons who have acquired professional qualification.
- All vocational training courses funded under the Human Resources Development Operational Program, when approving the selection of a vocational training provider, include in the mandatory application documents and a system for tracing the professional realization of the trainees as well as and the availability of employers' feedback system on employability.
- The role and commitments in tracking process of the employers and other stakeholders must be clearly determined.
- According to the last GDPR EU regulation the type and way of collected data must be clarified.
- The project team can give some suggestions how can be developed method for sharing collected data with institutions, responsible for the national analyses in the VET area and between sectors.
- Last, but not least, the legislative framework should be adapted to the new tracking mechanism requirements.



CYPRUS



Tracking Learning and Career Paths
of VET graduates to improve quality
of VET provision

IO 1 ONTRACK NATIONAL REPORT

CYPRUS



PART A – DESKTOP RESEARCH

INFORMATION ON THE NATIONAL CONTEXT FOR VET GRADUATE TRACKING

Graduate Tracking at European Level

Definition: VET graduate tracking measures are defined as tools which collect information for analysis of graduates' educational achievements on completion of VET, their further education and higher achievements, and their employment.

[Mapping VET graduate tracking measures in EU Members States, 2018](#)

According to the [European Council Recommendation of 20 November 2017 on Tracking Graduates](#), each Member State should:

- Improve the availability and quality of data about the activity of graduates by collecting relevant administrative data from education, tax and social security databases; developing longitudinal graduate surveys; and possibly link data from different sources anonymously by 2020;
- Use graduate tracking data to strengthen career guidance, design and update curricula, improve skills matching, plan for evolving employment, education and social needs, an improving policy development;
- Ask Member States to report to the Commission annually on the implementation and evaluation of the Council recommendation, beginning within two years of its adoption;

In addition, the Recommendation states that the Commission will pilot a European graduate survey for tertiary education, providing capacity building support for Member States to put in place graduate tracking systems, and establish and support the network of experts, ensure that data and related analyses are made available.

Graduate Tracking Measures in Cyprus

According to the European survey “Mapping VET graduate tracking measures in EU Member States” conducted by the DG Employment, Social Affairs and Inclusion (DG EMPL) in 2017, Cyprus is one of the four countries (the other three being Greece, Bulgaria and Latvia) which “do not currently have any VET graduate tracking measure”.

The absence of graduate tracking measure in Cyprus has indeed being recognized by relevant national authorities and two specific actions were included in the country’s priorities for technical and vocational education 2016-2020 as agreed by the Ministry of Education and Culture (MoEC) and the Human Resources Development Authority (HRDA). The two relevant priorities call for the following:

- (a) The development of a national monitoring system of IVET and CVET graduates;
- (b) The continuation of carrying out evaluation studies on the impact of the activities of the Human Resource Development Authority.

More specifically the priorities state:

- The 2015-20 strategic plan for technical and vocational education and training (Section 1.2.1) aims to set up a national monitoring system of IVET and CVET graduates, which will inform the upgrading of the VET system.
- A European Social Fund (ESF) project Improvement of the quality, attractiveness and efficiency of VET in Cyprus and new modern apprenticeship 2014-20 (budget EUR 13 250 000) is being used to fund the setting up of the monitoring system.
- In 2016, the Department of Labour of the Ministry of Labour, Welfare and Social Insurance (MLWSI) finalised the user requirements for developing an evaluation system for active labour market programmes (ALMPs). The computerised system for collecting information on ALMPs was put in place in 2016. The system for continuously monitoring and evaluating ALMPs is expected to be operational in 2017.

Source: Cedefop (2018). Developments in vocational education and training policy in 2015-17: Cyprus. Cedefop monitoring and analysis of VET policies.

According to several country reports (e.g. REFERNET – Guidance and Outreach for Inactive and Unemployed, 2018) “the development of a national monitoring system of IVET and CVET graduates is a priority. To this end, a platform for data collection is being developed, which IVET and CVET students will be encouraged to use while they are still attending VET programmes, in order to become familiar with it. The students and graduates will be encouraged to register and upload their CVs and information about their field of studies. Enterprises will also be encouraged to register and upload

job vacancies, so that graduates will be able to be informed about job positions. In this way, and also through incentives such as notifications regarding job vacancies, events and other relevant information, as well as communication with employers' associations, IVET and CVET graduates will continue to use the platform and provide useful information regarding their progress and career. The Ministry of Education and Culture (Department of Secondary Technical and Vocational Education) has proceeded to purchase services for the design and development of the platform, which will be operational in 2018".

EQAVET Indicators

The latest publicly available EQAVET (EU Quality Assurance in Vocational Education and Training) Indicator report of Cyprus 2017 drafted by the National Reference Point of Cyprus (Ministry of Education and Culture) does provide some relevant data that help us paint the overall picture regarding data collection and the education system of Cyprus which relate directly to the topic of graduate tracking.

It is important to note that although only EQAVET Indicators No.5 & No.6 are directly related to the VET graduate system – in the table below Indicators No. 3-7 are also presented in order to give a better picture about VET data collection in Cyprus.

Table 1. EQAVET Indicators –Cyprus report (2017)

INDICATOR	RESULTS	COMMENTS
NO. 3 Participation rate in VET programmes: Number of participants in VET programmes (1), according to the type of programme and the individual criteria (2)	This data is collected as part of a Europe wide initiative however it is not clear how they are used by the VET system for quality assurance.	In respect of this topic, it is noteworthy that the entry/re-entry of human resources into the labour market is a strategic objective of the HRDA, implementing specific training schemes to support that goal.
	Data is available from the Labour Force Survey, whilst	There is no available data for private VET.

<p>NO.4 Completion rate in VET programmes:</p> <p>Number of persons having successfully completed/abandoned VET programmes, according to the type of programme and the individual criteria</p>	<p>information from state schools is available through examination of statistics of the Ministry of Education and Culture.</p>	
<p>NO.5. Placement rate in VET programmes:</p> <p>a) destination of VET learners at a designated point in time after completion of training, according to the type of programme and the individual criteria (3)</p> <p>b) share of employed learners at a designated point in time after completion of training, according to the type of programme and the individual criteria</p>	<p>HRDA Evaluation studies in 2015 covered the participants in two Schemes for Job Placement of Unemployed Young University Graduates and Secondary Education Graduates for the Acquisition of Work Experience and work-based training in enterprises/Organisations. The studies have shown that 49.8% of participating university graduates and 32.7% of secondary education graduates were in employment six months after completion of their training placement.</p>	<p>The HRDA has in place a comprehensive system for evaluating the impact of its activities, which was designed by independent external consultants. The HRDA every year conducts evaluation studies on the impact of its Schemes on participants. All studies include field research through telephone interviews with a statistically representative sample of all participants.</p>
<p>NO.6. Utilisation of acquired skills at the workplace:</p> <p>a) information on occupation obtained by</p>	<p>HRDA Evaluation studies in 2015 covered the participants in two Schemes for Job Placement of Unemployed Young University Graduates and Secondary Education Graduates for the Acquisition</p>	

individuals after completion of training, according to type of training and individual criteria b) satisfaction rate of individuals and employers with acquired skills/competences	of Work Experience and work-based training in Enterprises/Organisations. The studies have shown that 78.7% of participating university graduates and 90.7% of secondary education graduates were satisfied or very satisfied with the skills and competencies acquired through their training placement.	
NO7. Unemployment rate (4) according to individual criteria	The National Statistical Service of Cyprus collects and provides the relevant data.	HRDA uses the available data in order to develop and implement training activities for specific target groups like young and long-term unemployed persons.

Source: EQAVET Indicators, 2017 Cyprus

<https://www.eqavet.eu/Eqavet2017/media/Documents/CY-Indicators.pdf>

From the above the following points can be summarized:

1. VET participation rate:

- Data is available from the Labour Force Survey while information about states school is provided by the Ministry of Education and Culture. Note: The Labour Force Survey (LFS) is conducted by the Statistical Service of Cyprus (Ministry of Finance) on a quarterly basis. The aim of the survey is the collection of data which are useful in the formulation of policy on labour matters (employment, unemployment) and for pursuing and evaluating of the programmes that are applied both by Government and by the European Union.
- Information from state schools is available through examination statistics of the Ministry of Education and Culture.
- There is no available data for private VET.

2. VET placement rate - graduate transition:

- HRDA Evaluation studies in 2015 covered the participants in two Schemes for Job

Placement of Unemployed Young University Graduates and Secondary Education Graduates for the Acquisition of Work Experience and work-based training in Enterprises/Organisations.

- The HRDA has in place a comprehensive system for evaluating the impact of its activities, which was designed by independent external consultants. The HRDA every year conducts evaluation studies on the impact of its Schemes on participants. All studies include field research through telephone interviews with a statistically representative sample of all participants.

3. VET Utilization of Skills:

- HRDA Evaluation studies in 2015 covered the participants in two Schemes for Job Placement of Unemployed Young University Graduates and Secondary Education Graduates for the Acquisition of Work Experience and work-based training in Enterprises/Organisations.

Analysis of the EQAVET Indicators and the measures being implemented in Cyprus shows that partial graduate tracking measures are in place in Cyprus – especially as means for monitoring employment and unemployment trends as well as for tackling skills mismatches. However, none of the existing tools seems to specifically target the “*educational achievements of graduates on completion of VET*” as described in Council Recommendation on graduate tracking. Since at the moment the quality assurance framework in place for VET providers is not explicitly linked to EQAVET – as a result data collection regarding all key indicators – including the ones which are directly related to graduate tracking are not obligatory for VET providers.

QUALITY ASSURANCE AND EDUCATION IN CYPRUS

An important educational reform has been taking place in Cyprus in the last few years and quality assurance seems to be one of the goals of education reform.

The recent development of the [National Vocational Qualification System \(CyQF\)](#) and the quality assurance system for CVET providers as implemented by the Human Resources Development Authority (HRDA) are considered to be main building blocks towards the adoption and implementation of an overall national approach to quality assurance in VET.

In the Higher Education Area (HEA) the most important development is the recent establishment of the **Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA)**. It is important to note that CYQF/EQF level 5 and up all fall under the Higher Education Area in Cyprus – therefore encompassing different VET type of qualifications.

VET Level	Quality Assurance Authority
Secondary technical education (IVET)	The Department of Secondary Technical and Vocational Education, based in the Ministry of Education and Culture (MoEC) supervises and monitors providers and coordinates all relevant actions. It is responsible mainly for the quality assurance of IVET.
Post-secondary technical education	The Department of Secondary Technical and Vocational Education, based in the Ministry of Education and Culture (MoEC) supervises and monitors providers and coordinates all relevant actions. It is important to note that with the recent establishment of the Quality Assurance and Accreditation in Higher Education (CYQAA) – Quality Assurance in all programmes Level 5 and up fall under the authority of CYQAA.
Vocational Training (CVET)	CVET is primarily managed by the HRDA
Higher Education	The Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA). Note: Higher education includes all educational programmes CyQF level 5 and up.

QUALITY ASSURANCE MECHANISM

Quality Assurance in Secondary Technical and Vocational Education

The Ministry of Education and Culture (MoEC) - responsible for the development and enforcement of educational laws, the implementation of educational policy and the administration on education. The MoEC and more specifically the Directorate of the Secondary Technical and Vocational Education and Training (STVET) is responsible for the introduction of new branches and specialisations, the determination of the numbers of students who will be enrolled in each branch and specialisation, the

design of curricula and the identification of special skills needed. In order to carry out these tasks, whilst considering the developmental needs of the Cyprus economy and the latest scientific and technological advances, the STVET has developed close cooperation with all major stakeholders, such as Ministries and the PB, the Social Partners (Employers' and Employees' Organisations), teachers and their associations, the University of Cyprus, UCY, the Pedagogical Institute, PI and the HRDA. Furthermore, the desires of gymnasium graduates to follow a branch and specialisation are also taken into consideration when determining the number of available places at each branch and specialisation.

Quality Assurance in Continuous Education

The Human Resource Development Authority of Cyprus (HRDA) is a semi-governmental organisation (Refers to the Ministry of Labour) of tripartite character with a mission to create the necessary prerequisites for the planned and systematic training and development of human resources in Cyprus at all levels and in all sectors, in order to meet the needs of the economy, within the overall national socio-economic policies. The HRDA operates a number of training and development schemes and is engaged in the development and implementation of a national System of Vocational Qualifications as well as in the design of a system for the Assessment and Certification of Trainers and Training Providers.

The Quality Assurance System of HRDA includes (self) assessment methodologies used by vocational training providers within the framework of the certification criteria. One of the elements that HRDA assessors consider, before proposing certification of a training provider, is the internal quality system of the provider, that is, the approach and methodologies used to assess training needs, plan and implement training activities, as well as the types of evaluation of learning (e.g. debriefing, formative), evaluation pillars (trainers, curricula, learners, infrastructure etc.), evaluation tools (questionnaires, diagnostic essays etc.), ways to publicise/disseminate results of evaluation, recipients of evaluation results (public authorities, HRDA, employers, learners).

The role of HRDA in defining labour market needs

The HRDA conducts research studies in issues of strategic importance, which constitute a useful guide for the formulation of the training and human resource development strategy and for planning the organisation's activities.

The research activity places particular emphasis on analyzing the trends in the labour market, with emphasis on human resource development issues, on providing employment forecasts, on examining the functioning of the VET systems and the training market, on analyzing participation in education and training and on evaluating the impact of training activities.

The results of the HRDA's studies on anticipation of skill needs are utilized by policy makers for the development of strategies and policies in education, training and lifelong learning. Furthermore, they are utilized at operational level for the development of programmes of study in education, including the programmes of study of technical schools and the post-secondary institutes of Vocational Education and Training of the Ministry of Education and Culture.

They are also utilized by people involved in counselling such as secondary education vocational guidance teachers and employment counsellors and by the general public. For this purpose, all research studies, upon completion are disseminated to a wide audience of prominent stakeholders. Special presentations are organized for secondary school guidance counsellors and employment counsellors, students and parents.

- Results of forecasting and identification of skills gaps in the labour market are also used in designing programmes of study at secondary (technical schools) and post-secondary level (VET Institutes), approving training programmes in CVET (offered by HRDA) and shaping the Standards for Vocational Qualifications.
- The main formal mechanism in place for the assessment of skill needs is operated by the HRDA. The Ministry of Finance provides projections for the growth of the economy. The MoEC is responsible for the identification of educational and special skill needs.

For the systematic employment forecasting and the identification of skills gaps, the HRDA conducts different research studies including the following:

- Long term employment trends and forecasting in Cyprus.
- Annual investigations for the identification of employment and training needs with the involvement of the social partners.

Quality Assurance in Higher Education

The most important development in the area of higher education comes from the establishment of the Cyprus Agency of Quality Assurance and Accreditation in Higher Education.

In 2015 the Council of Ministers of the Republic of Cyprus appointed the members of the Council of the **Cyprus Agency of Quality Assurance and Accreditation in Higher Education** (CYQAA) on the basis of the “Quality Assurance and Accreditation of Higher Education and the Establishment and Operation of an Agency on Related Matters Law of 2015.”

The legislation provides a quality assurance framework for higher education in Cyprus within which higher education institutions will be driven to enhance quality and develop an internal quality culture. CYQAA is responsible to ensure the quality of Higher Education in Cyprus and to support, through the procedures provided by the relevant legislation for the continuous improvement and upgrading of higher education institutions and their programs of study.

The agency has, according to the law, extended competencies amongst which are the following:

- Institutional, departmental and programmatic evaluation and accreditation of higher education.
- Quality assurance in higher education on the basis of the European Standards and Guidelines (ESG) – full compliance.
- The evaluation and accreditation of cross-border forms of education offered by local institutions in member states or third countries.
- Assessment of the conditions for the provision of cross-border education from foreign institutions in Cyprus.
- Assessment of inter-institutional cooperation of higher education institutions.
- The provision of information regarding quality assurance in higher education.

Source: <https://www.dipae.ac.cy/index.php/en/cyqaa/about-us>

Graduate tracking in Higher Education

Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)

The ESG are a set of standards and guidelines for internal and external quality assurance in higher education. The ESG are not standards for quality, nor do they prescribe how the quality assurance processes are implemented, but they provide guidance, covering the areas which are vital for successful quality provision and learning environments in higher education. The ESG should be considered in a broader context that also includes qualifications frameworks, ECTS and diploma supplement that also contribute to promoting the transparency and mutual trust in higher education

in the EHEA.

Standards and Guidelines for internal quality assurance relating to Graduate Tracking:

Category	Information Management
Standard	Institutions should ensure that they collect, analyse and use relevant information for the effective management of their programmes and other activities.
Guidelines	Reliable data is crucial for informed decision-making and for knowing what is working well and what needs attention. Effective processes to collect and analyse information about study programmes and other activities feed into the internal quality assurance system.
Type of Information	The information gathered depends, to some extent, on the type and mission of the institution. The following are of interest: Key performance indicators; -- Profile of the student population; -- Student progression, success and drop-out rates; -- Students' satisfaction with their programmes; -- Learning resources and student support available; -- Career paths of graduates.

Source: *Standards and Guidelines for Quality Assurance in the European Higher Education Area (2015)*.
https://enga.eu/wpcontent/uploads/2015/11/ESG_2015.pdf

CONCLUDING THE DESKTOP RESEARCH

Analysis of the EQAVET Indicators and the measures being implemented in Cyprus shows that partial graduate tracking measures are in place in Cyprus – especially as means for monitoring employment and unemployment trends as well as for tackling skills mismatches. However none of the existing tools seems to specifically target the “*educational achievements of graduates on completion of VET*” as described in the Council Recommendation on graduate tracking.

Undoubtedly an important educational reform has been taking place in Cyprus in the last few years and quality assurance seems to be at the center of this reform. Since graduate tracking measures are directly linked with increased monitoring, better planning and quality assurance in education – such measures seem to be gaining attention in the last few years. Public reports on VET show that some relevant initiatives are under way, for example the development of a platform for data collection for

IVET and CVET, that is currently under way by the Department of Secondary Technical and Vocational Education and Training (STVET) by the Ministry of Education and Culture. Although this platform has not been launched yet, it seems to be an important step towards graduate tracking albeit of limited scope since it will exclusively target the VET graduates of states schools and not of private schools. For the time being, graduate tracking does not seem to be obligatory for VET providers.

Regarding the Higher Education Area – the recent establishment of the Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA) seems to be the catalyst for many changes in this area. While this a very recent development it already seems that CYQAA – will be moving in the direction of asking for increased measures and tools for increased internal quality and better monitoring of educational programmes including graduate tracking measures.

PART B – SURVEY & INTERVIEWS

SURVEY & INTERVIEWS

Given that graduate tracking is not obligatory for VET providers and it is a relatively new recommendation for most higher education institutions it was decided that we needed a more targeted approach with the survey – rather than a mass email survey - in order to yield results. A more targeted survey that would include an initial informative discussion about the subject and the opportunity to ask and answer questions following the survey format.

The first step was to contact via phone and/or email a number of secondary and higher level institutions and give them some basic information about the survey we were conducting. At this stage some preliminary information was collected – answering directly the survey questions.

As a second step a face-to-face meeting was conducted with a number of providers and two policy makers in order to answer in full the survey questions where appropriate to carry out the more in-depth interviews.

Overall the following type of institutions were conducted:

- 1 University level
- 2 Colleges - private (considered as Higher Education)
- 1 Post Secondary Institution - public sector (also considered as Higher Education)
- 1 Upper Secondary technical school – public sector
- 1 Semi-government authority responsible for CVET in Cyprus

Total of 6 Surveys

In turn five interviews were carried out as follows:

- 1 University
- 2 Colleges
- 1 Post Secondary and 1 Upper Secondary both under the Ministry of Education and Culture (joined interview)

Total 5 Interviews

Results can be summarized as follows:

- Graduate tracking is gaining increasing attention for all forms of education including: initial VET (IVET), CVET and HE institutions (both non-University and University level).
- All institutions conducted mentioned that (1) they are already using some form of graduate tracking and/or (b) upgrading their graduate tracking system is in their future plans.
- For most institutions graduate tracking is seen as an opportunity to enhance their career employment services. Better and more targeted career services mean higher level of employment success for their learners – which means increasing their competitive edge. Successful graduate tracking results can be used as a marketing tool for attracting more learners.
- All educational institutions recognize the importance of graduate tracking – primarily as a means of enhancing the learner’s experience at the organization.
- Especially as HE institutions feel the pressure to become more competitive and offer high quality education and services to their learners.
- The main challenges with graduate tracking stem from:
 - limited resources – graduate tracking requires additional time and investment.
 - the type of graduate tracking system that best suits the organization – e.g. conducting students via phone seems to time consuming and not useful in the long run.
 - creating graduate tracking methods that invite the learner to stay actively engaged.
- For Higher Education/University – graduate tracking is conceived as part of creating an Alumni community – increasing the loyalty of learners to the institution.
- For upper secondary institutions graduate tracking is primarily conceived as a way of offering more employment opportunities to their learners.
- For CVET – graduate tracking is conceived as an evaluation mechanism for evaluating the impact of their programmes.

CASE STUDY

e-platform for Graduate Tracking – for Upper Secondary and Post Secondary Education in the public sector. The platform is currently under the last stages of development and it is expected to go live in May 2019. The platform is funded through European and government funding and it is under the responsibility of the Ministry of Education and Culture (MoEC).

The electronic **Communication Platform for Graduates and Employers for Technical Professions** aims to connect the graduates of the Upper Secondary Technical Schools and the graduates of the Post Secondary Vocational Education Institutes with the labour market and specifically with employers, who are looking for technically trained staff.

Through the platform, the graduates have the ability to:

- create their personal profiles
- upload their CV
- present information about their field of studies, interests etc.
- communicate with other members/users
- search for jobs and contact companies
- create and store favourite posts (jobs and companies)
- access to a bulletin board

On the other hand, employers will have the option to send their vacancies to administrator and once the position is approved they will be able to post their vacancy on-line – thus attracting qualified candidates.

In this way, and also through incentives such as notifications regarding job vacancies, events and other relevant information, as well as communication with employers' associations, it is expected that graduates will continue to use the platform and provide useful information regarding their progress and career.

The platform will be available to graduates with a "registration code" which will be provided to the learners by the VET provider.

CONCLUSIONS REGARDING THE SURVEY/INTERVIEWS

Both VET providers and HE institutions are starting to pay increased attention to graduate tracking systems. Institutions view graduate tracking systems as potentially valuable “marketing tools” for developing a strong network of graduates, enhancing the learners’ experience and enhancing their loyalty to the institution. In addition, graduate tracking systems are viewed as important tools for evaluating and monitoring the impact of their programmes and services especially in regards to the employment services provided by the organization. All the educational institutions surveyed seem to directly link graduate tracking – with the career and employment services at their institution. In actuality, they see graduate tracking as a way of offering on-going employment services to their graduates – which means they view graduate tracking as an interactive measure/service for all parties involved. In addition, HE institutions view effective graduate tracking systems as offering a competitive advantage to their institution.



The institutions seem to agree that the biggest challenge is to keep the learners active and engaged so any graduate tracking system must first be able to offer some type of service and be of value to the learners themselves.



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Tracking Learning and Career Paths
of VET graduates to improve quality
of VET provision

IO 1 ONTRACK NATIONAL REPORT

GREECE

CONTEXTUAL BACKGROUND

As it has been shown by a recent EU survey on VET graduate tracking, Greece is among those countries where the stage of development of such measures can be classified as non-systematic - in other words, where the study does not identify regular measures for VET graduate tracking. In fact, in Greece there are currently no measures for VET graduate tracking, just a one-off tracking study of apprenticeship graduates has been developed in 2015, as part of the reengineering of the public employment service (Source: Greek Public Employment Service representative; further information on this study is not publicly available).

Over the years, many studies and surveys highlighted the necessity of the development and the implementation of such a system, in order to achieve an overall improvement in the quality of the education system itself and at the same time a more efficient interplay between the labour market and VET/HE providers, based on a biunivocal relationship of improvement and integration between the two parts.

SURVEY KANEP-GSEE

A good example of the above-mentioned research is a survey by KANEP-GSEE (Development Centre for Education Policy) of 2013, which was considered by Nikos Mouzelis - professor at the London School of Economics-LSE and chairman of KANEP-GSEE) as the most systematic and in-depth research related to education and occupation at that time. He also added that the lack of interconnection between education and market shown by the results of the survey was not necessarily related to a supposed weakness of the educational system or of the institutions, but rather and mainly to the world crisis, to the austerity and, broadly, to the structure of the post-industrial society. Therefore, special attention should be paid to all factors when taking into consideration educational, institutional and unemployment matters.

More specific details about the research and its results can be found below, where VTI: Vocational training institutes (I.E.K.) and VTC: Vocational Training Centers (K.E.K.):

Specimen: 2401 students graduated by public or private VTIs and VTCs

Period: 2008-2009

How: Survey over telephone

Occupation: VTI: 21,8%; VTC: 15,7% + Lost Job within 18months: VTI: 82,2%, VTC: 81,5%

Lost job within 6 months: VTI: 37,7; VTC: 29,3%

Found job within 2 months: VTI 21 out of 100; VTC: 15 out of 100

Pertinence of the occupation (to the studies): VTI: 31%, VTC: 21% + exploitation skills acquired (connection school-work): VTI: 32%, VTC: 21%

In addition, VTI: 62,3% didn't get the final certification

Generally speaking, the study stressed the necessity for an improvement in professional education, stating in particular that the following measures should be implemented:

- Support people with low level of education, who cannot access sufficient/adequate life-long programs and professional education.
- Development and application of a quality system to be applied in the institutions in exam.
- Abandoning of abusive methods which make internships a mechanism of substitution and replacement of employees/workers, as well as of reduction of the salaries (voucher programme).

SURVEY PVTI PATRAS (PUBLIC VOCATIONAL TRAINING INSTITUTE)

In the following years more studies – even if not many (Kalogeratu 2010, Manatakis 2005) - were conducted, showing – especially regarding PVTIs - a particular focus on the educational needs of the students (Thimiopoulou 2014, Tsakiridis 2012) and proving the importance and the need for data and better tracking methods. Among the most recent ones, a research based on a questionnaire survey which was run in 2017 by Patras PVTI. The target were 303 students (132 female, 171 male) enrolled at the PVTI in Patras. The research was integrated by a theoretical part – in which the relevant legislation was taken into account – that aimed at identifying the pros of the existence of the PVTI institutions themselves. Both private and public VTIs were established by the 2009/1992 law, they were supervised by the then existing O.E.E.K. (Organization for Professional Education and Training) - now replaced by the E.O.P.P. (The National Qualifications Certification Authority) – and they attracted, since the very beginning, both students - graduates from general high schools, who did not have the chance or the desire to continue their studies, as well as from professional high schools, namely T.E.L. (Technical High Schools) and EPA.L (Professional High Schools) - and adult workers or unemployed, offering either a specializing course or a refresher course. Therefore, they play an important role in responding to the constantly changing market's requests (Voutsinos et al., 1994), both within and outside the national context (Kostikis, 2000). The gathered data showed that the choice of specialization is closely related to the gender of the students – who are inclined to choose jobs and specializations considered more proper to the respective gender - and, despite of the fact that half of them showed pessimism regarding their future occupation – 54.7% stated that they were sure to be hired immediately after graduation, while 45.3% remained convinced of the opposite, of which 89% believed that to be related to the high unemployment rate -, the majority of them expressed satisfaction with their studies (38.4 % overall satisfied and 37.7% fully satisfied). According to the students, the following aspects should be improved:

- Abolition or less strictness regrading absences and permissions (16.57%)
- Free books rather than notes (15.98%)
- Remuneration of traineeships (13.02%)
- Better behaviour and more dedication by teachers (10.65%)
- Better organization (8.28%), logistical infrastructure (7.10%) and communication (5.33%)
- A placement office to find jobs (6.50%)
- Same rights as the AEI (7.10%)
- More frequent exams for the certification (5.92%)

It should also be noted that 14 students (4.62%) were graduates from postsecondary education – who enrolled, with the only exception of one among them, in courses not related to their previous studies - who heard about the specialization and liked it (57.14%) and who couldn't find a job related to their degree (50%).

RELEVANT POLITICAL INSTITUTIONS AND DECISION MAKERS

GOVERNMENT

The government, mainly through the Ministry of Education, Research and Religion, is involved in and concerned about education. Law 3879 on Lifelong learning and other provisions, whose purpose is, in fact, to develop lifelong learning, by identifying alternative paths, promote networking among lifelong learning institutions and ensuring transparency and quality, as well as to achieve the interconnection of lifelong learning to employment, resulting in a wider social and economic development, states among its aims:

- to systematize and coordinate the investigation of the educational and training needs of adults in relation to the needs of the labour market and social development
- to establish the standards and tools for the development and qualitative improvement to lifelong learning
- to establish a coherent national framework for the evaluation and certification for all forms of training and general adult education
- to create a uniform national framework for the recognition of qualifications and the certification of knowledge, skills and abilities.

As stated by the same law, the operators of the National Network for Lifelong Learning are the lifelong learning governing bodies and service providers, which are:

- **The General Secretariat for Lifelong Learning** (article 27, paragraph 2 section (iii) pursuant to Law 1558/1985, OGG137 A, in conjunction with article 3 paragraph 1 pursuant to Law 2909/2001, OGG90 A, and article 33 paragraph 1 pursuant to Law 3699/2008, OGG199 A);
- **The Regional department units that are responsible for lifelong learning matters**(article 186 paragraph II, sector VIII, cases 1, 2 and 3 pursuant to Law 3852/ 2010);
- **The departmental units at the Municipalities that are responsible for lifelong learning matters**(article 75 paragraph I section vi, passage 13 in the Municipalities and Communities Code, pursuant to Law 3463/2006, OGG114 A, as it has been amended by article 94 paragraph 4 pursuant to Law 3852/2010);
- **The National Accreditation Centre for Lifelong Learning Structures (E.KE.PIS)** (article 22 paragraph 1 pursuant to Law 2469/1997, OGG38 A, in conjunction with article 14 paragraph 2 pursuant to Law 3385/2005, OGG210 A and article 10 paragraph 1 under this law);
- **The National Qualifications Certification Authority (E.O.P.P.)** (article 11);
- **The National Centre for Vocational Guidance (E.K.E.P.)** (article 16 paragraph 1 pursuant to Law 2224/1994, OGG112 A), in relation to the competent department for counselling and professional orientation within the context of lifelong learning;
- **The National Centre for Public Administration and Self Administration (E.K.D.D.A.)** (article 1 paragraph 1 pursuant to Presidential Decree 57/2007, OGG59 A).

RESPONSIBLE INSTITUTION FOR QA IN VET

At the national level, the institution devoted to QA (VET) is the National Organization for the Certification of Qualifications & Vocational Guidance (E.O.P.P.E.P.), **which** develops and implements the National Accreditation & Certification System for non-formal education, including initial and continuing vocational training and adult education, and provides scientific support to Vocational Guidance & Counseling services in Greece.

E.O.P.P.E.P.'s principal fields of activity and responsibility are:

Providers and Educational Framework:

1. Accreditation/Licensing of Providers of non-formal education (Free Studies Workshops (EES), Private Vocational Training Institutes (IIEK), Vocational Training Centres (KEK), Special Centres for vulnerable social groups)
2. Accreditation of Occupational Profiles
3. Accreditation of Curricula (in terms of standards and specifications)

National Qualifications Framework (NQF)

- Development and implementation of the National Qualifications Framework (NQF) in correspondence with EQF & National Coordination Point for EQF (NCP)
- National Reference Point for **ECVET**
- National Centre for **EUROPASS** in Greece
- Equivalencies & Occupational Rights for VET education title holders

Certification of Qualifications:

- Development of the National System for the Certification of Qualifications
- Accreditation of Vocational Training & Certification of Vocational Training Institutes (IEK) graduates
- Certification of qualifications of "Trainers for candidates for car & motorcycle driver's license"
- Certification of teaching qualification of Trainers for Adults of non-formal education
- Certification of private security personnel
- Licensing of Providers for the certification of qualifications & Providers for computer skills certification

Vocational Guidance and Counseling

- Scientific and technical support of vocational guidance and counseling services
- Networking of providers and vocational guidance professionals
- Career development for youth & adults
- National Centre of Euroguidance
- National delegate in the European Lifelong Learning Guidance Policy Network (ELGPN)

Quality Assurance in LLL

- Cooperation in the development and implementation of the National Framework for Quality Assurance in LLL (π3)
- National Reference Point in EQAVET

As it may be inferred, E.O.P.P.E.P. aims at implementing a national quality system in the area of non-formal education drawing upon European and international experience, being the **National Reference Point for Quality Assurance in VET and the Greek representative in the European network for Quality Assurance in Vocational Education and Training (EQAVET)**. Availability of adequate and consistent data and indicators is the key to understanding the components of Vocational Education and Training, in order to strengthen lifelong learning and to assess in qualitative terms the progress in LLL development and promotion.

The design of the National Framework for Quality Assurance in Lifelong Learning (π3) is in alignment with the recommendation of the European Parliament and Council 2009 / C 155/01 of June 18 in order to establish a European Reference Framework for quality assurance in Vocational Education and Training.

E.E.P.E.K.

Another significant association at the national level is the E.E.P.E.K. (Scientific Association for the Promotion of Educational Innovation), whose main purpose is to promote innovative actions in the

educational community and the development of appropriate support structures that can be applied to the wider Greek educational system.

Among the various objectives are the following:

- The development and promotion of technological and educational services for finding and implementing the most appropriate educational activities.
- Developing partnerships to conduct scientific studies and research both among its members and with organizations and persons belonging to the educational community or in connection with it.
- To inform its members on the developments in the implementation of the Educational Innovation.
- The development of collaborations with similar unions and associations in other states as well as participation in community initiatives and/or international organizations designed to inform teachers, develop studies, design, implementation and evaluation of programs relating to the dissemination and use of innovation in education.
- The free flow and shaping of scientific ideas among members and friends of the Association.
- The creation and cultivation of closer links of solidarity and communication among members of the Association.

To achieve the above objectives, EEPEK is active in the following areas:

- Organization conferences (independently or in collaboration with other institutions), workshops and other events that contribute to the training of its members and the entire educational community.
- Create and maintain a website for the promotion of the Association's activities and to inform the educational community.
- Creating links, relations and / or partnerships with relevant bodies and associations within and outside the Greek territory.
- Participation (independently or in collaboration with other institutions) in national or European programs.
- Issuing electronic (or printed) magazine of the Union on issues related to the design, development and implementation of innovative actions to the Primary and Secondary Education.
- Organization of student or educational competitions and exhibitions related to innovation in the educational environment and the school community.

SURVEY AND INTERVIEW

SURVEY RESULTS

As part of the project's initial phases, we submitted a survey on VET tracking systems to a recipient list of VET providers at the national level, in order to gather information on the current status and - in case they had been implemented - on existing tracking systems. We submitted the above-mentioned survey to a recipient list of 811 Institutes – more specifically, initial VET both at the secondary (EPAL) and post-secondary (IEK) level and continuing VET (KDVM) - and, parallelly, posted a link in the FB group of Certified Adult Trainers, inviting them to take the survey. We gathered responses from 41 institutions and the results prove to be totally in line with the initial national report that have been compiled, which stressed the need for the development of a tracking system, as no systematic one is to be found.

In fact, only one out of the 41 institutions, has run a tracking system which was initiated in 2014 and which, allowing to keep track of only a limited number of students - less than 100, is far from being systematic and thorough.

INTERVIEW RESULTS

Following the initial survey, a more detailed interview has been organized with the only VET provider that runs a tracking system, in order to acquire specific information about its implementation.

The institution is a level 5 Vocational Training Institute (private IEK) that offers 53 different VET specializations in five occupational areas: engineering and information technology, tourism and culinary arts, beauty and health, arts and education, business and communication.

The IEK tracks in a non-systematic way, a small sample of their graduates, through telephone, sms and email surveys which aim to gather information from the students on the following main topics: job offerings, career days, certification of qualifications, exams, seminars, events and so forth.

This tracking system, which targets all graduates up to seven years since graduation, is repeated once per year on the occasion of the invitations for the career days – while graduates are constantly contacted once new job proposals are available. The tracking system doesn't focus on a specific topic and it doesn't include enquiries on further educational/training paths yet, being it among the planned implementations for future developments of the system. Despite some issues and difficulties related to the incomplete or incorrect contact details available to the institution - which in turn affect the efficiency of the system itself in terms of response rate, with consequential mean-related differences: 75% telephone, 10% sms and 3% email - , the system offers many benefits, mainly related to job offerings, employment prospects (two way process), evaluation of the institution's services and educational program in respect to the requirements of the labour market, identification of new

educational needs (two way process) and so on. In fact, the main use of the results and data acquired is as a feedback to reengineer the programmes. Even if many students reach out to the institution for more information, no information on the results is provided, but the system allows the students to upgrade the data provided at any given time.

CONCLUSIONS

The results of both the initial desk research and the subsequent survey/interview confirmed the absence of a systematic tracking system for VET graduates in Greece, for no relevant data on the existence of such systems have been gathered, with the only exception of a single tracking system which, on its turn, is far from being systematic and thorough. As a consequence, Greece remains one among those countries where the stage of development of such measures can be classified as non-systematic, making it an urgent matter to be dealt with.



LATVIA



Tracking Learning and Career Paths
of VET graduates to improve quality
of VET provision

IO 1 ONTRACK NATIONAL REPORT

LATVIA



CONTEXTUAL BACKGROUND

Latvia is still one of the few EU countries that do not have a centralized approach to graduate tracking in secondary VET, which hinders efforts to improve quality and labor the market relevance of the training offer. Data on graduates of higher and vocational education institutions are compiled by educational institutions, annual reports are published by the Ministry of Education and Science (MoES) and the Central Statistical Bureau (CSB).

The education system in Latvia is administered at three levels - national, municipal and institutional. The Parliament (Saeima), the Cabinet of Ministers and the Ministry of Education and Science are the main decision-making bodies at national level. The Ministry of Education and Science is the education policy development and implementation institution that oversees the national network of education institutions, sets educational standards and determines teacher training content and procedures.

The State Education Quality Service survey

From April 2016 to March 2017 the State Education Quality Service (the EQAVET national reference point in Latvia) implemented its Erasmus+ program. The work focused on introducing the EQAVET indicators and basic principles into the Latvian VET system. They developed a set of surveys as part of an Erasmus+ project (EQAVET NRP) which among other issues seek to find out the first destination of graduates and the satisfaction of graduates and employers with the skills acquired in VET. The questionnaires were designed in cooperation with five VET schools and one sectoral expert council (transport and logistics). Those responding to the questionnaires included learners, graduates, traineeship supervisors, employers and industry representatives. The questionnaires produced 622 responses - 49% of those who were invited to reply to one of the questionnaires.

The second part of the project (the development of recommendations) was informed by discussions in a series of seminars where participants could discuss draft proposals.

All the findings from the project (the proposals from the project's external experts, conclusions from the discussions in the seminars, and the analysis of the questionnaire results) were used to develop a set of policy recommendations which are set out in 'Working for Quality Assurance in Vocational Education and Training'⁹. These recommendations explain EQAVET and include a set of questions for VET providers to consider.

EQAVET Indicators – Latvian report (2017)

Indicators	Organization(s)	Observations
<p>No 1: Relevance of quality assurance systems for VET providers:</p> <p>(a) share of VET providers applying internal quality assurance systems defined by law/at own initiative</p> <p>(b) share of accredited VET providers</p>	The State Education Quality Service	<p>In accordance with regulation of the Cabinet of Ministers only accredited education institutions are entitled to implement licensed vocational education programmes and to issue a State-recognised document certifying vocational education or a vocational qualification. Education institutions are accredited for six years, while programmes are accredited for six years or two years. In the accreditation process programmes are evaluated in terms of their correspondence to the state education standards, occupational standards, occupation register as well as in terms of implementation and allocation of resources to ensure that they deliver the necessary knowledge, skills and competences. Education institutions and programmes are assessed based on an integrated list of criteria, including education content, teaching and learning, student achievement, support for students, school climate, school resources and organisation, management and quality assurance. The State Education Quality Service is the body which grants accreditation to education institutions and their programmes.</p>
<p>No 2: Investment in training of teachers and trainers:</p> <p>(a) share of teachers and trainers participating in further training</p> <p>(b) amount of funds invested</p>	<p>The State Education Quality Service</p> <p>VET providers</p> <p>The founder of VET providers</p>	<p>The necessary education and professional qualifications for teachers and their professional competence development procedures are established in Regulations No.662 of 28 October, 2014 by the Cabinet of Ministers. It is said that teachers are responsible for the development of professional competence, accomplished within three years and in not less than 36 hours, and it is planned in co-operation with the heads of educational institutions in which the teacher performs his or her teaching activities.</p>
<p>No 3: Participation rate in VET programmes: Number of participants in VET programmes, according to the type of programme and the individual criteria</p>	<p>The State Education Quality Service</p> <p>Sectoral Expert Council</p> <p>VET providers' founder</p>	<p>In accordance with Section 2 of Article 12 of the Vocational Education Law, Sectoral Expert Council proposes the number of students in VET institutions required by the sector. Indicators on participation of students in vocational education and training programmes and participation rate are calculated. Indicators are collected at the national level. Each initial VET provider reports about the planned and real situation to the Ministry of Education and Science.</p>
<p>No 4: Completion rate in VET programmes: Number of persons having successfully completed/abandoned VET programmes,</p>	<p>The State Education Quality Service</p> <p>National Centre for Education</p> <p>VET providers</p>	<p>Data is collected about students having successfully completed or abandoned vocational education and training programmes. Results of qualification examinations are collected by the National Centre for Education. Each initial VET provider reports on the situation to the Ministry of Education and Science.</p>

according to the type of programme and the individual criteria		Results of qualification examinations are included in institutional self-assessment reports.
No 5: Placement rate in VET programmes: (a) destination of VET learners at a designated point in time after completion of training, according to the type of programme and the individual criteria (b) share of employed learners at a designated point in time after completion of training, according to the type of programme and the individual criteria	The State Education Quality Service VET providers	VET providers monitor first destination of graduates. National placement rate data is available. Further occupation descriptions of learners after completion of VET programmes are included in institutional self-assessment reports.
No 6: Utilisation of acquired skills at the workplace: (a) information on occupation obtained by individuals after completion of training, according to type of training and individual criteria (b) satisfaction rate of individuals and employers with acquired skills/competences	The State Education Quality Service VET providers	VET providers monitor first destination of graduates and satisfaction of employers. To get feedback loops the State Education Quality Service designs a survey focusing on information obtained by individuals after completing training and a satisfaction rate of individuals and employers with the skills and competences that have been acquired during training. In accordance with Article 17.1 of the Vocational Education Law, the aim of the Convent is to promote the development of vocational education institutions according to the needs of labour market.
No 7 Unemployment rate according to individual criteria	The State Education Quality Service State Employment Agency	Data is collected at national level. The State Employment Agency of Latvia (NVA) is under the supervision of the Ministry of Welfare of the Republic of Latvia and is responsible for implementing government policy in the area of reducing unemployment and providing support for unemployed and persons seeking employment. The NVA provides services, consultancy and assistance to persons in the area of reducing unemployment and the provision of support for unemployed and persons seeking employment, and to national and local authorities and non-governmental organisations.

No 8: Prevalence of vulnerable groups: (a) percentage of participants in VET classified as disadvantaged groups (in a defined region or catchment area) according to age and gender (b) success rate of disadvantaged groups according to age and gender	The State Education Quality Service VET providers	In accreditation process differentiation of the teaching process is evaluated according to the needs of each individual and support to disadvantaged groups. Results are included in institutional self-assessment reports and external evaluation reports.
No 9: Mechanisms to identify training needs in the labour market: (a) information on mechanisms set up to identify changing demands at different levels (b) evidence of their effectiveness	The State Education Quality Service VET provider The founder of VET providers	To get feedback loops the State Education Quality Service designs a survey focused on information on mechanisms to identify training needs in the labour market by determining the training needs in the labour market and evaluating the teaching, learning and training process in VET. In accordance with Article 17.1 of the Vocational Education Law, the aim of the convention is to promote the development of vocational education institutions according to the needs of labour market.
No 10: Schemes used to promote better access to VET: (a) information on existing schemes at different levels (b) evidence of their effectiveness	The State Education Quality Service VET providers The founder of VET providers	Different activities and public venues are used to promote the VET system. Various learning opportunities are offered in Latvia. People have an opportunity to engage in educational activities, which correspond to their interests and needs, and are organised in a non-formal way parallel to formal education that implies the structured and systematic acquisition of educational programmes, which are approved by state recognised educational or professional qualification certificates. The professional competency acquired in non-formal education is also formed by knowledge, skills and abilities gained through personal life and job experience. The evaluation of professional competencies of an applicant mastered in the process of the non-formal education is based on a test of the corresponding professional standard at the professional qualification examination.

EQAVET education quality indicators address the following priority education policy and practice issues in vocational education and continuing vocational education at EU level:

- provision of employment,
- alignment of supply and demand for competencies, qualifications, ensuring access to inclusive vocational education.

EQAVET indicators are interrelated, and each one affects the other. They aim to address the priorities of education policy and practice in vocational education. At present, education quality indicators cannot be used as EQAVET national comparison criteria, however, they provide a good reference point in the process of vocational education quality improvement.

Article 25 of the Cabinet of Ministers Regulations No. 831 stipulates that a self-evaluation report of a vocational education institution or an education institution that implements a vocational education program (with the exception of an educational institution that implements a vocationally-oriented education program) must contain information on the following educational quality indicators:

- participation of teachers in the improvement of professional competence;
- participation rate in VET programs;
- completion rate in VET programs;
- placement rate in VET programs;
- using acquired skills at workplace;
- prevalence of vulnerable groups in vocational education;
- mechanisms to identify training needs in the labor market;
- schemes used to promote better access to VET.

An educational institution must include the information on education quality indicators in its self-evaluation report in accordance with quality assessment areas and criteria specified in the Cabinet of Ministers Regulations No 831.

Statistics on education and labor

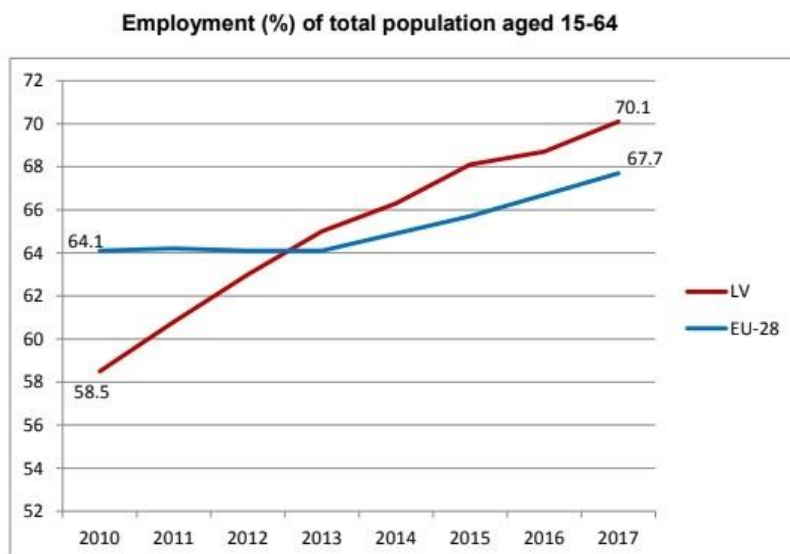
Various aspects of the graduate's professional activity so far are analyzed in the CSB's Labor Force and Occupational Surveys, as well as in several other sample surveys conducted mainly by small institutions. According to Regulation of the Cabinet of Ministers No. 788 on 17th August 2010 "Content, Maintenance and Updating of the State Education Information System" <https://likumi.lv/doc.php?id=215853> article 13.1 after processing data of the State Revenue Service (SRS) about employment of persons, employment and income, and data of the State Employment Agency of the person with an unemployed and job seeker status, the Central Statistical Bureau (here in after - data provider) prepares and submits to the Ministry of Education and Science the monitoring data on the employment and income of graduates and graduates who have been granted the status of unemployed or job seeker.

According to the above-mentioned regulations of the Cabinet Regulation article 13.3, the data provider shall be submitted to the Ministry of Education and Science by 31st December of each year. Summary data is broken down by higher education institutions, including on graduate employment, unemployment and income:

- number of employees;
- number of unemployed and job seekers;
- number of economically inactive persons;
- number of emigrants;
- number of persons who do not have data;
- average monthly income (euro).

Compared to other OECD (The Organization for Economic Co-operation and Development) countries, the share of Latvian students attending vocational education remains limited. Only 27% of students were expected to graduate from vocational upper secondary programs over their lifetime (compared to the OECD average of 46%) as of 2014. In 2014, 38% of 20-24-year-olds who were enrolled at upper secondary level followed a vocational education program (below the OECD average of 66%). In Latvia, the term 'vocational education' is generally used, rather than 'vocational education and training (VET)'. This is because most vocational education is implemented through school-based programs that include practical learning at schools and in enterprises, although work-based learning is also part of VET. Latvia's post-secondary non-tertiary education programs are considered part of the upper secondary level.

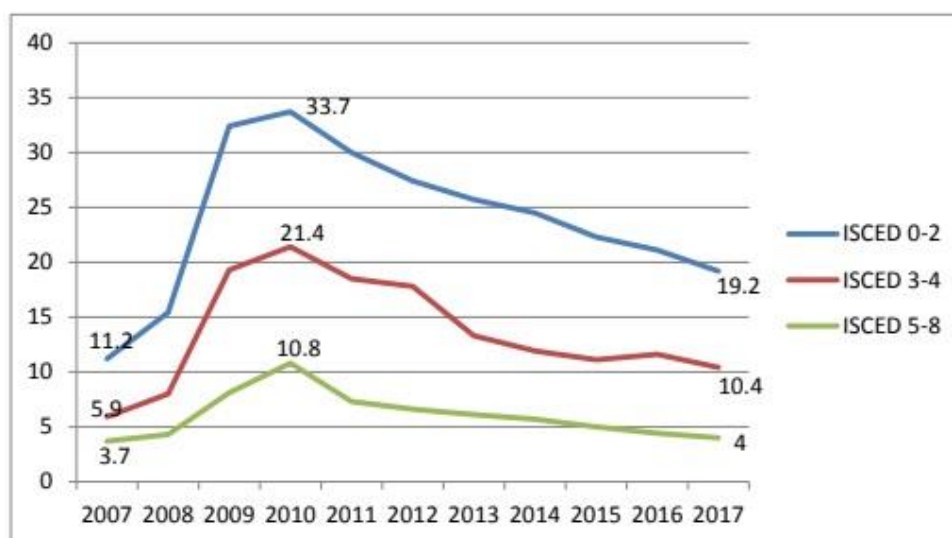
Labor market perspectives can play an important role on the employment or deciding to stay in education. Since 2013, the employment rate in Latvia of the 15 to 64 age group has been above the EU-28 average.



Source: Eurostat, lfsi_emp_a [extracted on 3.5.2018]

The unemployment rate depends on educational attainment. The gap has increased during the crisis as unskilled workers are more vulnerable to the unemployment. In 2017, the unemployment rate of people with low- (ISCED levels 1 and 2) and medium-level qualifications (ISCED levels 3 and 4) was still higher than in the pre-crisis years.

Unemployment rate (aged 15-64) by education attainment level in 2007-17



Source: Eurostat, lfsa_urgaed [extracted on 26.4.2018]

According to the public employment service (State Employment Agency), the share of young people (aged 15 to 24) in total numbers of registered unemployed has gradually decreased from 14.3% in 2010 to 6.6% in 2018. The employment rate of recent VET graduates increased from 71.5%

in 2014 to 74.8% in 2016 but then decreased to 69.1% in 2017 while, the proportion of students enrolled in VET programs remains below the EU average.

HE graduates tracking

At the present, the data on the HE students are available only in aggregated form, limited to an analysis, and it is not possible to compare the contribution to the actual results and analyze them in conjunction with the general education data. Higher education institutions have been legally obliged to collect administrative data on their students and graduates and report annually to the Central Statistical Bureau of Latvia and the Ministry of Education and Science. This data includes the number of newly enrolled students (by sex, level of study program, state budget or tuition fee, and year of birth), the total number of students (by study program and level, sex and year of birth), and the degrees or qualifications awarded (by sex, study program, state budget or tuition fee, and year of birth). It contains no information on the progression of students or graduates. At least some HE institutions use the data to track their own students and graduates. Several universities also conduct individual surveys to follow them. But the introduction of a Register of Students and Graduates in 2017 has created an instrument for tracking employment of HE graduates. The first information for the register is gathered starting for 2017 graduates by processing data on employment by the end of 2018, starting one year after graduation. The information will be publicly available from the end of 2019 onwards for 10 years for each group of graduates. The databases of the Central Statistical Bureau (CSB), the State Revenue Service (SRS) and the State Employment Agency (SEA) will be used to obtain this information. Personal data on HE students will be collected and stored and used to produce data on employment of graduates, aggregated by study programs and by institution. Data gained from graduate tracking will be used to support targeted funding of higher education and to provide guidance to prospective students in their choice of study program.

CONCLUSION

Latvia has initiated a full overhaul of its VET curriculum with the support of ESF (The European Social Fund). The reform had begun between 2010 and 2015 and has now moved into its second phase. The aim is to complete curriculum modernization by 2022. There are several policies of aim to improve the quality, attractiveness and labor market relevance of vocational education in Latvia. These include optimizing the network of vocational education and training institutions, modernizing VET infrastructure, reforming VET curricula by transitioning to learning outcomes and introducing modular VET programs, implementing work-based learning, and strengthening co-operation with employers in the VET sector. While good progress has been made in the reorganization of school networks, progress on curriculum reform, a fair amount of work is still ahead, therefore implementing a system for monitoring VET graduates would be a great tool to improve quality of VET provision.

Analysis of surveys and interviews show that that there is only partial graduate tracking system and the existing indicator systems for studying graduates after graduation does not provide comprehensive monitoring of the impact of their life events, career paths, professional development, education and employment policy changes. The measures and resources of VET institutions are limited. There is no financing for monitoring graduates and monitoring is provided by school staff, mainly by teachers and educational advisors. The data about graduates are conducted through surveys over the telephone or via email in collaboration with group educators. The data on graduates of the previous year are summarized after graduation and analyzed annually by the deputy director in the educational institution's self-assessment reports, as well as analyzed in the pedagogical council meetings and mostly data is not updated in subsequent years. The educational institution can only carry out a survey. They have no access to official data, for example, to the SRS database to verify the veracity of the information. Therefore, using established tracking methodology and database, the professional activity of graduates of vocational education institutions after the graduation should be carried out regularly in Latvia in order to find out their compliance with the needs of the labor market, to increase the quality of educational programs and increase the efficiency of teaching.



SLOVAKIA



Tracking Learning and Career Paths
of VET graduates to improve quality
of VET provision

IO 1 ONTRACK NATIONAL REPORT

SLOVAKIA



NATIONAL REPORT SLOVAKIA

1) Information on the national context for VET graduate tracking

The New Skills Agenda for Europe has declared its ambition to introduce graduate tracking systems in the labour market across the Member States. The Council Recommendation No. 2017/C 423/01 of 20 November 2017, concerning the tracking of graduate employment, has been agreed. This recommendation has defined that, in order to achieve the objective, it is necessary to have useful information on what graduates are doing after they have acquired qualifications or after finishing their education and training.

The value of such information is highlighted in standards and guidelines for quality assurance in the European Quality Assurance Reference Framework for Vocational Education and Training (EQAVET). Under the conditions of the Slovak Republic, the competence of the Central Office of Labour, Social Affairs and Family was adjusted in order to collect data on secondary school graduates also with regard to their employment (§ 30 par. 1 of Act no. 61/2015 Coll. on Vocational Education and Training and the amendment of certain acts, hereinafter referred to as the “VET Act”). (1)

The tasks of developing a proposal on how to track secondary school graduates were assigned to The State Institute for Vocational Training (SOVI). A development project is foreseen to verify the methods of collecting data on graduates by the relevant school, which would then be evaluated by the SOVI.

The 2017 Slovak Ministry of Education Action Plan contains the obligation to prepare the call for proposal for so-called “development projects „called "The footprint of our graduates - how our school graduates work". The aim is to support school projects to track the location of school leavers in the labour market. It will allow the most demanded disciplines to be analysed, in particular through the social networks and activities of the 'Graduate Clubs'.

STUDENTS AND GRADUATES:

In the long run, only statistical data on the number of students and graduates according to study programmes and schools / HEIs are collected. These statistics are also published as time series (Trends in quantitative development of regional education):

http://www.cvtisr.sk/cvti-sr-vedecka-kniznica/informacie-o-skolstve/statistiky/casove-rady.html?page_id=9724

LABOUR MARKET: Unemployment analysis of secondary school graduates.

http://www.cvtisr.sk/skolstvo/regionalne-skolstvo/aktualne-analyzy-nezamestnanosti-absolventov-strednych-skol.html?page_id=10648

Unemployment analysis of HEI graduates.

http://www.cvtisr.sk/cvti-sr-vedecka-kniznica/informacie-o-skolstve/skolstvo/vysoke-skoly.html?page_id=10266

The following institutions are involved:

- The Ministry of Education, Science, Research and Sport of the Slovak Republic,
- The Ministry of Labour, Social Affairs and Family of the Slovak Republic
- Slovak Centre of Scientific and Technical Information.

To some extent, the Ministry of Economy is involved, particularly in work-based learning education.

The most important subject of the interest of both ministries is the interconnection of the education and labour market. The Ministry of Labour is under the pressure of large employers, trying to make changes in the focus of schools and HEIs, so that they try to meet their actual needs with the required profiles of the graduates. However, secondary school competences have self-government regions, and they are not so willing to adapt to the demands of large employers. The whole system is inappropriately configured and does not collect tracking data on graduates. There are only two separate statistical data packages- either on the study or unemployment. The system is exceptionally static and lacks tracking dynamics. Vocational education and training emphasise the dual learning system in the current period, based on the cooperation of employers and VET schools. This is rather a top-down approach in which graduate tracking is not included.

Partial tracking of graduates exists only on the initiative of individual schools, or as a one-off initiative in several educational projects. Among them, the projects „The forecasts of labour market developments in the Slovak Republic“ I and II have been in operation, implemented by Trexima and the Ministry of labour. https://www.upsvr.gov.sk/statistiky/narodny-projekt-prognozy-vyvoja-na-trhu-prace-v-sr-ii.html?page_id=798175.

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Similarly, another important project named “Placement of the HEI graduates in practice” dealt with the HEI graduates employability. The project contributed to the preparation of the policy document “Description of development and analysis of the main problems of higher education” presented for the Government of Slovakia.

The significant risks of Slovakia are the drain of graduates abroad, especially to the Czech Republic. A high proportion of the Slovak secondary schools’ graduates move to study at HEIs in large numbers; others are looking for a job abroad. Approximately 20 per cent of Slovak HEI students study in the Czech Republic. Also, in the Slovak Republic, there is a lack of a strategy to anticipate changes in the

labour market, future jobs and implementation of adequate changes in secondary and higher education.

It can be concluded that the necessary tracking system of VET and HEI graduates is only partial and occasional.

Already in the past, it has been established to publish "information on the application of secondary school graduates to the labour market by region, secondary school, the field of study, and field of study". Such a requirement has been and still is difficult to achieve, as detailed data on graduates is not available.

At present, the several proposals for measures to anticipate labour market skills and graduate tracking were introduced, e.g. to prepare call for proposals to support the secondary schools in the developing of the framework for monitoring their own graduates in the labor market (by December 2018); to build on the results of Cedefop and to develop a proposal how to introduce a system of anticipation of skills in the labor market (by June 2019); to introduce a system of longitudinal research to track labor market graduates (by June 30, 2019).

In fact, there is no legal obligation to conduct VET or HEI graduate tracking in Slovakia.

2) Description of graduate tracking measures in place (based on survey and interviews)

In Slovakia, 100 VET and HE schools (from 150 schools in total) have been contacted by email. Twenty of them responded, from which 18 were secondary, and 2 were universities.

Respondents cover all regions in Slovakia and both, private and public schools and many different fields of education. At the secondary school level, respondents come from the automobile industry, polytechnic school, business and trade, construction services, electrotechnical, health. At university level, they cover business and economy and philosophy. The research showed that seven from 20 schools have at least a basic tracking system.

Based on the survey and interviews, the conclusion can be made that schools do not have a comprehensive system for tracking graduates. In particular, they use data published by the Office of Labor, Social Affairs and Family and also from the Statistical Office to ensure this monitoring. However, this information is not sufficient. An example of this is the Labor Office, which provides information on graduate unemployment. It means that the information obtained is more about graduates who are unemployed rather about those who succeeded in the labour market.

The monitoring is provided by school staff mainly by educational advisors or school psychologists. Graduates are contacted via email, questionnaire, or telephone. Classroom teachers also receive

information and they are later analysed by school management. Some data is obtained through close, friend contacts.

As far as universities are concerned, some have established so-called. Alumni Club. It is the most common way of tracking graduates after graduation. Universities mostly contact graduates by email which they have during the study. In many cases, the students are not reachable at the same email after leaving university. It is mostly done also by the fact that students have to use an email address which was given to them by the university and which is not valid after their study is finished. The biggest problem is that schools are not able to motivate graduates to answer questionnaires after their study which would help them significantly to track students and to increase the quality of education based on the feedback. During monitoring the school do not differentiate and they try to contact as many students as possible. However, the answers are not sufficient.

The data are used in internal evaluation reports; some of them are published on the website and /or during recruitment. Some schools have only recently applied this tracking, but few of them are practising tracking for years. The highest number of tracked graduates was 1186 students. Otherwise, the numbers range from 400 to 500 graduates.

3) Case study

Name of the school: **Secondary School of Jan Bocatia, Košice**

The mission of the school is through the education to prepare the students for their future professional life in adulthood for professions in gastronomic services, hotel business, tourism, business services and for further study at universities in the fields mentioned above.

The School has several strengths as follows:

- 60-year tradition and school reputation
- Good location
- Attractive study disciplines
- A positive image of the school to the public and the media
- Advanced material and technical equipment
- High qualified and experienced school management
- A stable teaching team with years of experience
- The established quality management system

- Innovative teaching methods
- Developed extracurricular activities
- Introduction of a new study field – “tutorage and nursing care”.

The School Strategic Vision is:

Ján Bocatia Secondary School, Košice is a school with a long term tradition. It is a high-quality school of its kind in our region. The school has the ambition to become a modern school over the next few years to build the highest quality status where education combined with education and increasing labour market demands resonate. The policy of the school is to use in full all skills and knowledge of school management and teaching staff, which should lead to the students and, their parents' satisfaction and increase the competitiveness of our students in the labour market compared to other schools with the same or similar focus.

The school offers the following study fields:

- nutrition and sport
- salesman
- regional tourism management
- waiter, waitress
- cook

Description of how graduates have been tracked

Graduates are contacted via regular mail, by emails or using questionnaire. School tracks all graduates in all fields of study. Last year, 19 students were contacted from one class, but 7 did not respond. Graduates are contact once a year at the end of September. School also communicates with the Office of Labour, Social Affairs and Family. Tracking graduates is not repeated for some period as there is no capacity for doing this.

School has contacts for the graduates that they gave them at the beginning of their studies (eg their email address). However, the response is very low and therefore does not allow them to track in desirable extend.. They try to get in touch with graduates, especially through their classroom teachers.

If they have the information that the graduates have changed work, they are interested in reason for change. They also monitor whether they are satisfied with the job. For example, if the best students were employed outside their field of study, they are also interested in why they did so. According to

the data available from majority of graduates, the low salary or unfavourable working conditions or team usually discourage them. But sometimes they simply realize that their work is not what they expected and it does not fulfil their requirements..

The questionnaires which are sent to graduates were significantly shortened as they do not want to burden them unnecessarily and want to get at least necessary information. Questions are, e.g. whether they are employed, studied or registered at the Labour Office as unemployed. Furthermore, whether they are satisfied with a job or with what kind of difficulties they have encountered. Finally, there is a question if there is anything else they would like to refer to (an open question). The school would undoubtedly welcome more profound and more detailed questions, but graduates might be discouraged from completing a questionnaire.

No extraordinary measures are applied regarding quality culture. The graduates tracking are considered a relevant part of quality assurance at school.

Of course, feedback is beneficial to them for information on teaching quality, applicability, and other information. The data they use is mainly used in presentations when they attend primary schools and try to attract future students. By the information obtained, they can provide students with the particular benefits of the study as well as the prospects for further application.

The most significant benefit is getting information about whether the field is meaningful and whether students find employment in the labour market. They do not have this problem with most study fields, but there is a problem with tourism management. Graduates have difficulty in applying themselves to the labour market and are not well financially valued.

The chosen school cannot estimate their further interest in graduates tracking as they are afraid of a lack of capacities and also lack IT support.

4) Recommendations

For most schools, introducing a graduate tracking system would be very difficult. This is due to time, financial and IT factors. Schools are not well equipped to track a large number of students. However, the biggest problem is not in the capacity of schools, equipment or funding but it is mostly connected to the unwillingness of graduates to answer questionnaires, phone calls or emails.

It is necessary to create a system that can connect graduates from school after graduation. In general, the schools are interested in a lot of information about students, but they are forced to shorten the questionnaires and also reduce the number of questions asked. They meet only with reluctance, and this is the main cause of failure.

One of the most import factors is to raise awareness of tracking systems and its value for higher quality school study programmes achievement or existing programmes improvement. Graduates do



not know how much this information is needed for schools. It is necessary to inform students during their studies at the school about the need for information about their further work and the benefits for the school and society as a whole. The creating such a system, it would significantly contribute to higher employability of graduates and complementarity if knowledge and skills gained during study and labour market requirements.





SPAIN



Tracking Learning and Career Paths
of VET graduates to improve quality
of VET provision

IO 1 ONTRACK NATIONAL REPORT

SPAIN



1. CONTEXTUAL BACKGROUND

In order to understand the background of the VET system in Spain, it is essential to analyse both and separately the Basque system and that regulated by the Spanish government. The fact that the Basque region has capacity and autonomy to establish their own strategic plans on education terms, makes in all the Spanish background different from those which can be found in other European countries.

Spain - Supporting the autonomous regions

Spain has a decentralised structure for education and training. It assigns roles and responsibilities to both the State and the Regions. One example of this is the way that national goals are set and monitored at the State level and decisions on standards, procedures of assessment, inspection and self-evaluation are made at a regional and institutional level.

The approaches used by the Autonomous Communities vary significantly. As such the following information focuses on the structural arrangements within the Spanish quality assurance system, rather than on the particular practice in one region. The national system creates vocational training, qualifications and accreditation that respond to social and economic demands. The 2002 legislation established:

- a national catalogue of occupational standards ;

- a procedure for recognising, evaluating and accrediting occupational qualifications acquired through on-the-job experience;

- information and guidance on vocational training;

- an evaluation system to support improvements in quality.

The catalogue includes 26 occupational groups with definitions for more than 140 professions. The catalogue was produced in collaboration with union and employers' associations. These national arrangements are used at a regional and institutional level to support quality assurance (see Spain - creating a three-tiered evaluation system.) [[hot link to other Spanish case study](#)]

Vocational Education and Training in Spain is understood as the practical path that leads the students to the labour market, through which they can acquire the soft skills and abilities needed to perform well in a real work situation. However, the strategic framework for Education and Training 2020 establishes some objectives from which Spain is still relatively far away, presenting a certain delay in solving problems that should shortly be addressed. Among them, there are especially two that can be interpreted as challenges for VET: school early dropouts and the transition from the training

centres to the world of work (employability) of young people. Regarding the first, it is noticeable that the current rate in Spain is around 28%, while the European average is currently set in 14%. Europe's target for 2020 is 10%. Regarding the employability of young Spanish graduates, the vocational training cycles can be understood as the preparation that the Spanish business world needs, whose objective is to offer the best training for the future workers and a better adequacy to the real needs of the companies, avoiding overskilled workers or a lack of specific profiles. Those two challenges are what organisms who track VET students have been focusing on by making periodical polls and questionnaires in order to reflect the real situation of the VET system in Spain.

Nevertheless, the situation is different when we talk about the Basque Country. There is still a long way to go in order to fully meet the companies' needs, but still, the Basque system has been a world reference, mainly thanks to the great achievements in cooperation with the companies, consolidation of the Dual VET as a fundamental pillar of the system, excellence and innovation and establishing applied innovation, entrepreneurship and internationalisation as complementary elements to training that reinforce the students' learning experience and favor the creation of new opportunities and employment. In the Basque Country, not only the training centres, but also local organisms take part in the tracking of the students, usually by the filling in of questionnaires after 3 and 6 months when it comes to general VET graduates (EQ-VET level 3 and EQ-VET level 5), and every 6 months during the immediate first year regarding the Dual VET students.

For this report, and given the fact that Politeknika Ikastegia Txorierri is located in the Basque Country, the data gathered will be focused and analysed according to the Basque system.

2. TRACKING MEASURES

Tracking measures of VET graduates in the Basque Country are made by different organisms and using different methods. For instance, Politeknika Ikastegia Txorierri has its own way of tracking the former students, which will be presented on the *Case Study* later on this report.

Usually, schools and entities in charge of education and employment dependant to the Basque Government are connected in terms of the sharing of information, in order to obtain results that reflect in a more real way the situation of the region. LANBIDE is a public organism that belongs to the department of Social Policies and Employment of the Basque Government. It is the organism in charge of the Basque Employment Service, and has as main objective to guide people in their job search or to improve their competences in order to become more employable by offering several funded courses. LANBIDE has created a useful method to track VET graduates which consists on a telephonic research focused on the following topics:

- > Obtaining information on the employment situation of the graduates in Vocational Training after one year of finalising their studies;
- > Knowing various aspects of their labour insertion process, that is, whether they have gained access to the labor market or not;
- > Obtaining information about the employability rates of each VET cycle;
- > Gathering indicators of the quality of the training by the assessment of the acquired competences and their usefulness in the workplace;
- > Creating a tool to provide information for education and labor orientation;
- > Analysing the results from a gender perspective.

Between November and December 2016, for instance, out of the total number of graduates (11.251), 71.6% answered the survey.

3. CASE STUDY

We will analyze the information gathered at Politeknika Ikastegia Txorierrri in 2017-2018. First of all, I would like to mention that the Basque Government has a systematic measure to track students that take part in the dual system. These measures are basically to track students during their apprenticeship but the procedure also includes a questionnaire once they are done with their apprenticeship in the company, after 6 months and after 1 year. In this questionnaire, the Basque Government just wants to know whether they are working or not.

Employability in the DUAL system

Name of the cycles	GVyEC	ECA	ARI	STI	DFM	PP	MEC.	TOTAL
% of students that keep working where they did their apprenticeship	66.6%		Study	100%	100%	80%		86%
% Employability after 6 months	66.6%			100%	100%	100%		91,50%
% Employability after 1 year	66.6%			80%	100%	100%		86,50%

At our school we want to go a bit further. We also do 3 questionnaires. One has soon as they finish, another one after 3 months and the last one after 6 months. We ask whether they are working or not, if it so, if they are working in the same company where they did their internship, the statistics taking into

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account the gender and if they are working in a field related to their studies or in the contrary in something not related to their studies.

Employability after the apprenticeships

Name of the cycles	GVyEC	ECA	ARI	STI	DFM	PP	MEC.	TOTAL
% of students that keep working where they did their apprenticeship	47	29	42	64	50	80	46	51%
%Employability after 3 months	73	71	71	92	75	92	67	78%
% Employability after 6 months	92	57	84	100	83	96	60	82%
% Women working after 6 months	75	100	-	-	100	0	-	69%
% Working in something related to their studies	100	100	100	100	100	100	100	100%

Vocational Training Cycles:

*GVyEC: Higher Technician in Sales Management and Commercial Spaces EQF Level 5

*ECA: Higher Technician in Environmental Education and Control EQF Level 5

*ARI: Higher Technician in Industrial Automation and Robotics EQF Level 5

*STI: Higher Technician in Telecommunications and Computer Systems EQF Level 5

*DFM: Higher Technician in Mechanical Manufacture Design EQF Level 5

*PP: Higher Technician in Mechanical Production Scheduling EQF Level 5

*MEC: Technician in Machining EQF Level 3

4. RECOMMENDATIONS

The most complete report we found was the one done by Lanbide for the Basque Government. Therefore we would like to address their system in order to create a new Tracking system. The method they use in to gather the data is calling all former students. The problem we see about this public employment agency is that it takes too long to public all the data. The latest data they have published at the moment is from the school year 2016-2017. Therefore, VET centers also gather their own data and HETEL, the association of VET centers where we belong, publishes their own data, so that in case there is something is striking they can act and try to find a solution as soon as possible.

Aspects to analyze and include in the new Tracking system:

- Number of graduates per year
- Number of graduates per year per study field
- Number of women graduates per year and per field
- Number of people that studied EQF level 3 or 5
- Current situation once they finish
 - Employed
 - Temporary contract
 - Fixed Contract
 - Self employed
 - Unemployed
 - Studying
 - Looking for a job
 - Other
- Employment rates by gender
- Employment rates by study field
- Time between finishing the study and finding the first job
- Percentage of people working in the field they studied
- Average salary they earn in their first year by gender
- Percentage of people in each salary range
- Average salary earned in the first year by study field
- How did they access the job?
 - Same company where they did their apprenticeship, through the school
 - Family and friends
 - Handing out CV's
 - Internet
 - Employment public agency (Lanbide)
 - Self-employment

- Public employment
- Use of languages in their job
 - English
 - Basque
 - German
 - French
- Soft skills developed in the school and usage in the working environment (from 1 to 10)
 - Oral communication
 - Written communication
 - Teamwork
 - Leadership
 - Decision making
 - Creativity
 - Management
 - IT skills

<https://www.eqavet.eu/>

<https://www.fpeuskadidual.eus/centros-de-fp/tramites-y-documentacion/>

<https://www.fpeuskadidual.eus/aumenta-la-matriculacion-en-la-f-p-y-sigue-el-incremento-de-la-dual/>

SPAIN - CREATING A THREE-TIERED EVALUATION SYSTEM

The Spanish system of self evaluation combines activities at three levels:

- national (State level) organisations undertake a continuous monitoring and assessment role. This “general evaluation” keeps a check on the overall achievements of the system;
- the Autonomous Communities oversee assessment and inspection as well as contributing to the “general evaluation” and decision-making at a State level;
- institutions are supported by the education Inspectorates to complete a self evaluation.

The “general evaluation” is based on the National System of Education Indicators which has five main categories: context; resources; school attendance and performance; educational processes; and results.

The education administrations in the Autonomous Community use the National System of Education Indicators. By applying this indicator set at the community level it is possible to produce a nation-wide assessment of results. The education administrations' approach to quality assurance is through dialogue. The education administrations:

- provide advice and support for schools and VET centres through the inspectorates;
- analyse information from schools and VET centres in relation to the design, analysis and interpretation of results.

Institutional self-evaluation is voluntary in Spain – about 15 per cent of schools and VET centres are involved. For those schools and VET centres that participate, there are three groups which are particularly important for the annual self-evaluation and improvement:

- the school council which approves the annual school plan;
- the teachers' assembly which develops the curriculum plan and the criteria for self-evaluation;
- the commission for pedagogical coordination.