



2016

ANNUAL REPORT



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The **European Centre for the Development of Vocational Training** (Cedefop) is the European Union's reference centre for vocational education and training.

We provide information on and analyses of vocational education and training systems, policies, research and practice.

Cedefop was established in 1975 by Council Regulation (EEC) No 337/75.

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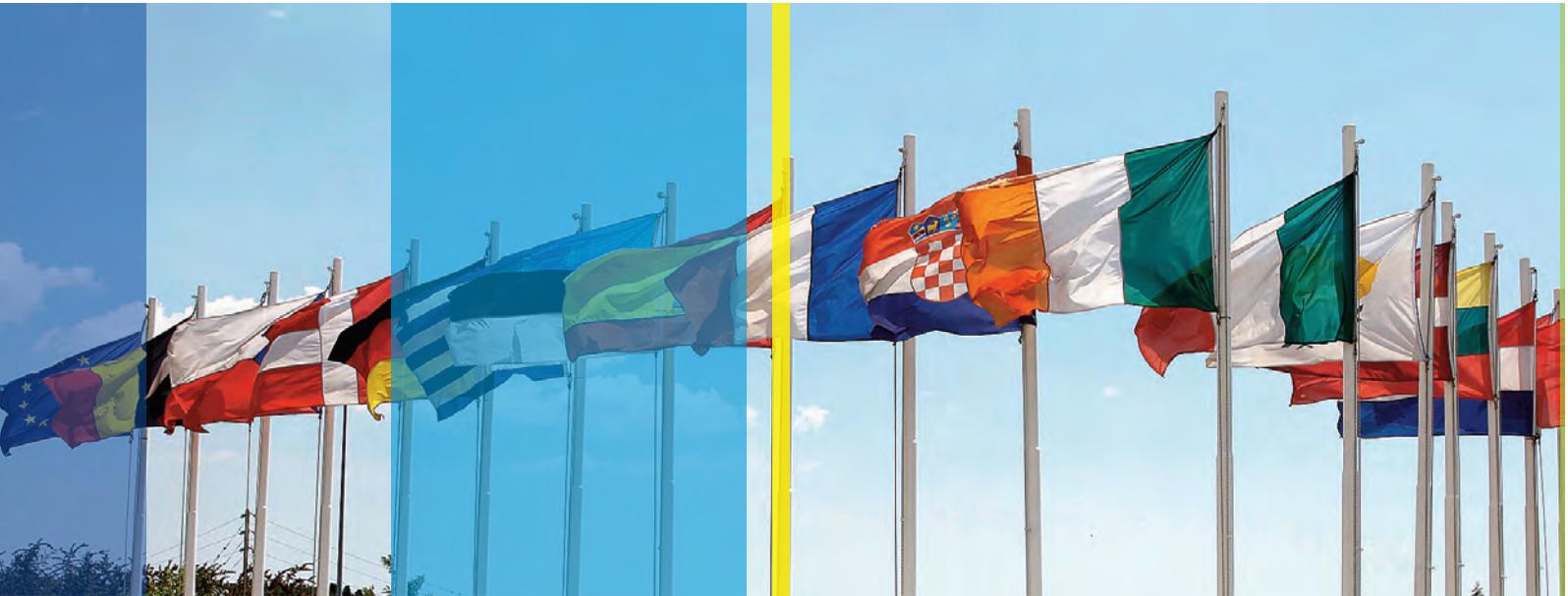


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FOREWORD

2016 was a year of new challenges for Cedefop. As the Agency gears up for changes in European vocational education and training (VET) policy it aims to support the European Union's ambition to transform the *New skills agenda* and the Council recommendation *Upskilling pathways: new opportunities for adults* into actions at Member State level. As well as its young people, Europe needs to recover low-skilled adults and reintegrate them into the labour market. Cedefop worked closely with the European Commission's DG Employment on these initiatives, providing the evidence and data on which they were based.

2016 was also the last year of the three medium-term priorities that have guided Cedefop's work since 2012: modernising VET systems, citizen's careers and transitions, and analysing skills and competences. Cedefop produced pioneering work in 2016 under each of these priorities to support European VET policy-making. Cedefop's study *Application of learning outcomes approaches across Europe* covered 33 countries, highlighting how learning outcomes are acting as catalysts for VET reform. The two-volume study, *Leaving education early: putting vocational education and training centre stage* provides, perhaps, the most comprehensive review yet on how VET can reduce numbers of young people leaving education with no or low qualifications. Cedefop's latest skill supply and demand forecast for 2025 also brought new evidence of the influence of demography, access to learning and technology on future job prospects, occupations and qualifications in Europe.

As well as information at European level, Cedefop support to national implementation of European VET policy provided more country specific information in 2016. Following publication of reviews of apprenticeship arrangements in Lithuania and Malta in 2015, in 2016 Cedefop worked on reviews in Greece, Italy and Slovenia and was invited to conduct reviews in Croatia and Cyprus; all this was part of Cedefop's support to the European alliance for apprenticeships. Cedefop's European skills supply and demand forecasts were complemented by detailed analysis of jobs and qualification trends across sectors. In December 2016, during Europe's first vocational skills week, Cedefop and the European Commission (EC) launched an online mobility scoreboard to help Member States to identify where best to invest their efforts to ensure successful mobility in initial VET. These multiple initiatives, backed by evidence-

based research, are strengthening the base for a European approach to making VET a first choice among learners.

Successful implementation requires not just information but also interpretation. What are the implications of study findings for different Member States? What can be learned from others to address the problems faced? To help answer these questions, Cedefop hosted more of its policy learning forums in 2016 to encourage exchanges between Member States and social partners on implementing specific aspects of European VET policy. Policy learning forums in 2016 provided Member States and social partners with a platform to discuss issues such as operating the European qualifications framework, including recognition of migrants' skills, and writing and applying learning outcomes. A seminar on skill mismatch and another on vocational qualifications were organised in Brussels by Cedefop, in cooperation with the Netherlands and Slovakia Presidencies, for permanent representations and other Brussels-based stakeholders. More will follow in 2017.

New priorities will guide Cedefop's work for 2017-20, but 2016 was also a year of transition as it saw another piece added to the European VET policy jigsaw, with the European Commission's launch of the *New skills agenda for Europe*, in June. Backed by evidence and data provided by Cedefop, the *New skills agenda* outlines the need to help the 70 million Europeans who lack adequate reading and writing, numeracy and digital skills – the people most vulnerable to change – by improving the quality and relevance of skill formation, by making skills and qualifications more visible and comparable, and by improving skills intelligence.

Cedefop's expertise in helping develop VET policies to help low-skilled adults, promote work-based learning and deliver labour market and skills intelligence is important to the *New skills agenda*. During 2016, Cedefop adjusted its planning for 2017-20 to take account of these needs. The European Commission's proposal for a new Europass portal, as part of the *New skills agenda*, has implications for the Europass and the Skills Panorama websites that Cedefop has managed since 2005 and 2014 respectively. In 2016, both websites continued to strengthen their presence. There were more than 27 million visits to the Europass website in 2016, compared to 23.9 million in 2015. The Skills Panorama also increased its value by making available labour market and skills

intelligence from various sources, including Cedefop and other international and national studies.

That 2016 was a year of new challenges is further evidenced by the fact that Cedefop's work and discussion about the *New skills agenda* took place against the background of the debate on its new Founding Regulation, the proposal for which was published by the European Commission in August 2016. The new regulation will reflect more accurately the broader range of activities and responsibilities Cedefop has assumed since its foundation in 1975 and provides scope for new ones.

Cedefop's work is destined to change in the coming years. Reduced resources require services to be rationalised while maintaining regularity, legality and accountability. Cedefop has strengthened cooperation with EU-OSHA, Eurofound and the ETF to avoid overlaps and ensure complementarity. Further cooperation between the agencies will be explored in 2017. 2016, has seen some notable achievements. Information and data in this report show Cedefop was equal to its challenges, has a clear vision and strong administrative backup; such achievements are part of the foundations for Cedefop's further development.

In 2016, Cedefop has produced high-quality work; it has outlined parameters for change in VET, despite reductions in its financial and human resources. These achievements are due to its dedicated staff. I should like to commend them for their commitment and hard work, as well as their talent in identifying and commenting insightfully on the issues that matter to developing European VET. I should also like to thank the Chair and members of Cedefop's Governing Board for their unfailing support, and my Deputy Director and heads of department for their sound management and invaluable advice during another productive and very busy year. Lastly, I wish to thank DG Employment for a year of constructive and open collaboration. Working with all stakeholders is the only way to realise a better future for VET and for the millions of European citizens who need our insights and our decisions to improve their lives through education and training.

Joachim James Calleja
Director

CEDEFOP

Cedefop is one of the EU's decentralised agencies. Founded ⁽¹⁾ in 1975 and based in Greece since 1995, Cedefop supports development of European VET policies and contributes to their implementation. The Agency is helping the European Commission, EU Member States and the social partners to develop the right European VET policies.

Cedefop's activities are guided by its strategic objective and medium-term priorities. The strategic objective is to contribute to designing and implementing policies for attractive VET that promotes excellence and social inclusion, and to strengthening European cooperation in developing, implementing and analysing European VET policy. This objective is supported by three medium-term priorities ⁽²⁾:

- (a) supporting modernisation of VET systems;
- (b) careers and transitions; continuing VET, adult and work-based learning;
- (c) analysing skills and competence needs to inform VET provision.

The medium-term priorities steer the activities of Cedefop's annual work programmes and ensure continuity of its work, allowing the necessary flexibility to respond to changing needs.

CEDEFOP GOVERNANCE

GOVERNING BOARD

Cedefop is governed by a board comprising three members from each Member State representing the Government, employers' and employees' organisations; and three members representing the European Commission.

Member State representatives are appointed by the Council for three years (renewable). Commission's representatives are appointed by the Commission.

The Governing Board convenes once a year.

BUREAU

To operate and be more closely involved in the monitoring of the Agency's activities, with a view to reinforcing supervision of administrative and budgetary management, the Governing Board establishes a smaller-sized Bureau. The Bureau usually meets three to four times per year. The Governing Board may decide to enlarge the Bureau for meetings with strategic issues for future Governing Board decisions.



⁽¹⁾ Council of the European Union. Council Regulation of 10 February 1975 establishing the European Centre for the Development of Vocational Training (Cedefop) EEC No 337/75, *Official Journal of the European Communities*, L 39, 13.2.1975 as last amended by Council Regulation EC No 2051/2004. http://www.cedefop.europa.eu/EN/Files/Consolidated_version_Founding_Regulation_EN_01975R0337-20041221-en.pdf

⁽²⁾ 2012-14 prolonged to 2016.



Cedefop Governing Board

2016 AT A GLANCE



Promoting talents’ and ‘tackling the skills challenge’ – two sides of the same coin – set the frame for Presidency and European Commission initiatives and events during 2016. They demonstrated that Cedefop’s work matches the current and future European policy agenda, and that its expertise is valued. This is a sign of trust as well as a challenge for the Agency in times of financial and human resource constraints.

In 2016, the Commission announced the *New skills agenda for Europe* ⁽³⁾. The communication, supported by a comprehensive policy package, sets out the key policy priority for the European Union in 2017 and beyond. It centres around three strands of work and 10 lines of action to promote skills development and better use of citizens’ skills and competences: improving quality and relevance of skills formation; making skills and qualifications more visible and comparable; and improving skills

intelligence and information for better career choices. Cedefop was heavily involved in drawing up the policy package and participated in the launch and press event ⁽⁴⁾.

Information on labour market trends and their impact on skill needs and mismatch, as well as the findings of Cedefop’s work on empowering young people and adults, **underpinned the skills agenda communication** ⁽⁵⁾. The Agency contributed significantly to preparing the agenda documents by pooling evidence generated in-house. Analysis of

⁽³⁾ *New skills agenda for Europe*. <http://ec.europa.eu/social/main.jsp?catId=1223&langId=en&moreDocuments=yes> [accessed 15.2.2017].

⁽⁴⁾ <http://skillspanorama.cedefop.europa.eu/en/blog/what-are-skills-future> [accessed 15.2.2017].

⁽⁵⁾ <http://ec.europa.eu/social/BlobServlet?docId=15621&langId=en> [accessed 15.2.2017].

PERFORMANCE

44 PUBLICATIONS

62 MEETINGS/EVENTS
ORGANISED

1 699 EXTERNAL PARTICIPANTS
AT CEDEFOP EVENTS

47 CONTRIBUTIONS
TO EU-LEVEL DOCUMENTS; **4** TO DOCUMENTS
BY INTERNATIONAL ORGANISATIONS

27 million VISITS
TO EUROPASS WEBSITE

438 000 VISITS
TO CEDEFOP WEBSITE



483 REFERENCES
TO CEDEFOP'S WORK IN

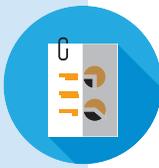
167 EU-LEVEL POLICY DOCUMENTS AND

184 REFERENCES IN

88 DOCUMENTS ISSUED BY INTERNATIONAL
ORGANISATIONS: OECD, UNESCO, ILO,
WORLD ECONOMIC FORUM

KEY EU POLICY USERS

■ EUROPEAN COMMISSION	56%
■ EUROPEAN PARLIAMENT	15%
■ EU AGENCIES	8%



191 CONTRIBUTIONS
TO EU SENIOR STAKEHOLDER MEETINGS
THAT SUPPORT POLICY IMPLEMENTATION

- Review of employment and social developments in Europe
- 'New skills agenda for Europe' seminar
- 'The result orientation: cohesion policy at work', 7th European evaluation conference
- 'Digital skills and jobs coalition' launch conference
- Vocational skills week events at EU level:
 - European business forum on VET
 - 'Adult skills: empowering people' conference

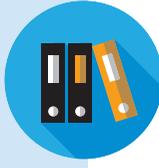
78 CONTRIBUTIONS
TO OTHER CONFERENCES AND MAJOR EVENTS

including keynote speeches and participation in discussion panels such as:

- Global symposium for career guidance and counselling organisations
- Labour market, economic and social outcomes of learning
- INES network meeting (OECD)
- UNESCO working group on world reference levels for qualifications
- Employer engagement in education and training 2016
- 'Inspiration: colleges and institutes Canada' 2016 conference
- Annual HRD forum organised by the Korean Government and KRIVET



472 200
DOWNLOADS OF CEDEFOP
PUBLICATIONS



591 CITATIONS
IN ACADEMIC LITERATURE
IN 2015-16

Most frequently quoted topics are those related to skills supply and demand, validation of non-formal and informal learning, lifelong guidance and learning outcomes.



98% OCCUPATION RATE OF THE
ESTABLISHMENT PLAN

BUDGET IMPLEMENTATION RATE **99.99%**

AVERAGE PAYMENT TIME
FOR INVOICES **14.01 DAYS**

WELL BELOW THE TARGET
OF 28 DAYS



EU-level documents citing Cedefop work proves ample take-up of these contributions, which included original papers: *Labour market intelligence: a valuable tool for policy*; *Skills intelligence and guidance in Europe*; *Making skills work – assessing performance of EU Member States*; and *Investing in skills pays off: the economic costs of low skilled adults*.

To help people make informed choices for their learning and career paths, the skills agenda proposes to set up a platform offering web-based tools to document and share information on skills and qualifications, together with data on skill needs and trends. Using the well-known Europass brand, this platform would bring together the current Europass and Skills Panorama services, enriched with sector-based and real time data as well as information on learning opportunities in the Member States. Cedefop commented extensively on the proposed revision of the Europass decision and the corresponding staff working document. In this context, Cedefop's prototype tool for web crawling

and big data analysis, to understand better the skills that employers demand, also appears well in line with needs both at policy and individual level, and has attracted interest from Eurostat's big data task force and national statistical offices.

Adults with a need to strengthen basic skills, or more generally with a low level of knowledge, skills and competences, are at the heart of the recommendation on *Upskilling pathways: new opportunities for adults* ⁽⁶⁾ adopted at the end of the year. This Council recommendation aims to ensure that adults with a low level of knowledge, skills and competences are offered access to upskilling pathways. These will provide them with the opportunity to acquire a minimum level of literacy, numeracy and digital competence and/or acquire a wider set of skills, knowledge and competences,

⁽⁶⁾ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOC_2016_484_R_0001 [accessed 15.2.2017].

MAKING VALIDATION OF NON-FORMAL AND INFORMAL LEARNING A REALITY

Valuing learning that occurs outside formal education and training ranks high on Europe's policy agenda today: 200 participants from the European Commission, the European Economic and Social Committee and 32 countries attending Cedefop's conference in November clearly testify to this.

What started in the education and training sector in the 1990s, specifically in VET, has expanded to other areas, as recent policy documents prove. Building on all forms of learning is seen as essential in the recommendations: youth guarantees; upskilling pathways; and policies to (re)integrate the long-term unemployed and migrants into the labour market. This reinforces the need to help citizens make their hidden knowledge, skills and competences visible and obtain a qualification – or parts of it – through validation. It also requires increased efforts by Member States to meet the Council's target and have adequate arrangements in place by 2018.

The conference reflected on developments and progress to date as well as challenges and work that lie ahead. Inspired by approaches from

Sweden, France and Poland, the debate focused on:

- the overall vision of validation in current practices;
- the need for stakeholders to get engaged;
- how to assure trust in validation;
- how it can be funded;
- who should benefit.

It is time to move from development to implementation: conference participants confirmed the message of the 2016 European validation inventory update. Most countries have validation arrangements, usually within the framework of



Pavel Trantina, President of Section for Employment, Social Affairs and Citizenship, European Economic and Social Committee

relevant for the labour market and active participation in society, by making progress towards a qualification at EQF level 3 or 4. It complements the Youth Guarantee and the measures endorsed to support the long-term unemployed.

Making the case for targeted guidance and validating the knowledge skills and competences people have, the recommendation and the related staff working document reflect Cedefop findings in these areas as well as its work on low-skilled and work-based learning for adults more generally. At the same time, it proposes that the Agency 'could develop further relevant research, expertise and analysis' ⁽⁷⁾ to improve the evidence-base for policy-making; this is the purpose of Cedefop study on labour market information and guidance and particularly its work on the inventory and the conference on validating non-formal and informal learning.

Collaborating closely with the European Commission, the Agency also helped prepare the proposal for a review of the EQF ⁽⁸⁾ which is integral

to the *New skills agenda*. Its purpose is to ensure that the EQF objectives can be fully achieved: to make qualifications transparent, comparable and portable. Cedefop helped draft the staff working document supporting the EQF revision ⁽⁹⁾. The substantial contribution of the Agency is rooted in its long-standing and internationally acknowledged expertise on qualifications, learning-outcomes-based approaches and qualification frameworks. Evidence on how learning outcomes approaches influence education and training and related policies, and the challenges they pose, supported this work as well as informing discussions at

⁽⁷⁾ [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016H1224\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016H1224(01)&from=EN) [accessed 15.2.2017].

⁽⁸⁾ <http://ec.europa.eu/social/BlobServlet?docId=15686&langId=en> [accessed 15.2.2017].

⁽⁹⁾ <http://ec.europa.eu/social/BlobServlet?docId=15694&langId=en> [accessed 15.2.2017].

education policies. They help obtain access to programmes or qualifications through validation. Initiatives in the labour market or by civil society organisations also exist, though the different arrangements require better coordination and stakeholder involvement.

'Social partner and employer engagement is crucial to make validation an accepted route to qualifications', Pavel Trantina from the European Economic and Social Committee stressed. Awareness of how they and society at large will benefit, is essential to get them on board. This requires adequate data, cost-benefit analyses and impact assessment. The work on national qualification frameworks (NQFs) based on learning outcomes is another way of involving stakeholders. Joint reflections on how to relate non-formal and informal learning to formal qualifications in a country's NQF contribute to making all learning valuable.

Better understanding of how validation benefits citizens is essential; this is more so as outreach to disadvantaged groups needs improving. Guidance and counselling is paramount: it should be easy to reach, tailored to the specific target groups but also closely linked to national and international structures.

Even well designed arrangements require

further political back-up and resources, both human and financial. Guidance and validation staff need to be well trained and work in a coherent system as a prerequisite to ensuring quality and building trust in validation as a viable path to qualifications.

Cedefop's conference was another step in building a community to exchange practices, challenges and solutions. Its findings will inform European policies in the coming years. The conference concluded: work to make validation a reality in Europe has advanced considerably, but there is still a long way to go.



LEAVING EDUCATION EARLY: PUTTING VOCATIONAL EDUCATION AND TRAINING CENTRE STAGE

VET toolkit for tackling early leaving

Source of support to policy makers and education and training providers

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What is the VET toolkit for tackling early leaving?

A Europe-wide toolkit inspired by successful VET practices in helping young people to attain at least an upper secondary qualification.

It provides practical guidance, tips, good practices and tools drawn from VET to feed into activities and policies aiming at:

- helping young people at risk of becoming early leavers to remain in education and training and qualify;
- helping early leavers to reintegrate into education or training and the labour market.

[Read more>](#)

✕ Good practices, tools and quick wins

📄 Self-reflection tool for policy makers

👤 Submit good practices

📁 Browse by action area



Identify



Intervene



Evaluate

In 2016, Cedefop released the outcomes of its three-year project on the role that VET can play in addressing early leaving from education and training. This is the first European study of its kind exploring quantitative and qualitative data and assessing VET measures designed in response to the challenge.

The study offers guidelines to help stakeholders develop quantitative and qualitative national monitoring systems, to support targeted decisions and empower their VET systems/programmes to tackle early leaving. These guidelines draw on extensive data analysis investigating the magnitude of early leaving from VET and the factors persuading learners not to continue.

The study also assessed measures to tackle this challenge: 921 policy-makers, educational and other practitioners, learners, and experts in 16 European countries were interviewed; 337 policies designed to reduce early leaving from or through VET were examined across Europe. Analysis revealed 44 practices with evidence of success. An evaluation framework has been developed to measure the progress and impact of VET-related measures which will allow policy-makers to set improvement priorities.

Cedefop has designed the prototype of a *VET toolkit for upskilling pathways: tackling early leaving from education and training*. This web-based tool translates many of the study findings into practical guidance and tips. It aims at supporting policy-makers and practitioners in developing VET-related activities and policies. It allows users to navigate the content according to their profiles and interests: policy-makers; institutional leaders and VET practitioners; and non-pedagogical staff providing support to young people.

Cedefop's second policy learning forum on defining and writing learning outcomes for VET qualifications.

The skills agenda includes support to Member States in their efforts to integrate the large numbers of refugees and recently arrived migrants into society and the labour market. Cedefop's support to the Commission and national initiatives that aim at devising effective policies included the design of a template for documenting migrants' skills, and joint organisation of two events: a peer learning activity together with the European Commission and the Dutch EQF national coordination point, which focused on effective and efficient ways to identify and record their skills and competences; and a joint Cedefop-OECD expert forum on upskilling, reskilling and employing adult refugees.

Young people with migrant background are among the most likely to leave education and training without being sufficiently qualified to succeed on the labour market. Generally, despite progress, there are still too many young people who are neither in education and training nor in jobs, and this group is heterogeneous: those without EQF level 3 or 4 qualifications and others who have some or completed higher education. Cedefop undertook a comprehensive study to understand VET's role as driver and response to this challenge. Its outcomes, which became available in the course of the past year, enrich the evidence-base for more effective policies.

Work-based learning schemes, particularly apprenticeships, play a key role in helping young people, and adults, acquire knowledge, skills and competences needed on the labour market. Cedefop continued its contributions to related Commission and international initiatives: the European alliance for apprenticeships, the DGVT conference on apprenticeships, the ET 2020 adult learning working group, and its contribution to the inter-agency working group on work-based learning.

Expanding work-based learning schemes requires sufficient numbers of well-trained staff. Snapshots on teachers and trainers in school-based VET and apprenticeships for young people, provided by Cedefop's ReferNet, informed a policy learning forum held in November. Following discussions on a wide range of themes related to teaching and training staff and their competence development, Cedefop hosted the meeting of the ET 2020 working group on vocational education and training.

To support its intention to make VET a first choice for young people and promote lifelong skills development for all, the Commission organised a European vocational skills week, to encourage young people and adults to 'discover their talents' through VET. Cedefop contributed actively to this first event of its kind. It also provided a stage for winners of Cedefop's photo competition on initial VET. The series of events organised for policy-makers, researchers and practitioners provided the opportunity to present the Agency and its work to a wide audience. Cedefop's mobility scoreboard for IVET was officially launched at this event, together with EACEA's higher education scoreboard.

Continuing to reinforce its direct support to individual Member States, Cedefop focused its work on apprenticeships and skills anticipation. Reviews of apprenticeship schemes centred on Greece, Italy and Slovenia. The Agency also continued its assistance to Greece on its work on a skills diagnosis mechanism and organised a peer learning event for Malta and Iceland on skills forecasting.

Enhancing its knowledge broker role, Cedefop organised two seminars jointly with the Presidency countries in Brussels: the event during the Dutch Presidency discussed policies to match skills and jobs in a better way, while learning outcomes and a comparative view of qualifications were at the centre of the seminar with the Slovak Presidency. Such events, as well as cooperation with individual Member States and international organisations, are mutually beneficial and also provide Cedefop with the opportunity to look beyond its boundaries. The joint Cedefop-UNESCO conference on global trends and local challenges for skills jobs and sustainable development was one of these opportunities. It allowed Cedefop to discuss trends in skills and qualifications in a global perspective and offered valuable insights in a context of globalised economies and migration.

The take-up of Cedefop's work on skills continues to support the Agency role as the 'EU's skills research agency' ⁽¹⁰⁾: its demand and supply forecasts and the results of the European skills and jobs survey are widely used; the approaches and

⁽¹⁰⁾ European Commission staff working document on employment and social developments in Europe 2015. <http://data.consilium.europa.eu/doc/document/ST-5451-2016-ADD-7/en/pdf> [accessed 15.2.2017].

A MOBILITY SCOREBOARD FOR IVET

One's destination is never a place, but rather a new way of looking at things'. This statement by Henry Miller still holds true today ⁽¹¹⁾: learning and working abroad can be enriching, not only in terms of skills but also personally, and help people feel more European. Cedefop's IVET mobility scoreboard ⁽¹²⁾ aims to inspire policies that enable more VET learners to gather experience abroad.

In the middle ages, it was common for journeymen to be on the road. Today, VET learners, particularly apprentices, are less likely than university students to live, learn and work for a time in another country. EU Member States have committed to promoting mobility and set themselves the goal for 2020 to enable at least 6% of all 18- to 34-year-olds with a VET background to spend some time abroad ⁽¹³⁾.

The scoreboard illustrates the measures countries have taken in recommended areas to accomplish these goals. It is not a tool to compare achievements but to identify common concerns and support VET development. It also helps share practices to make experience acquired abroad more visible and valued.

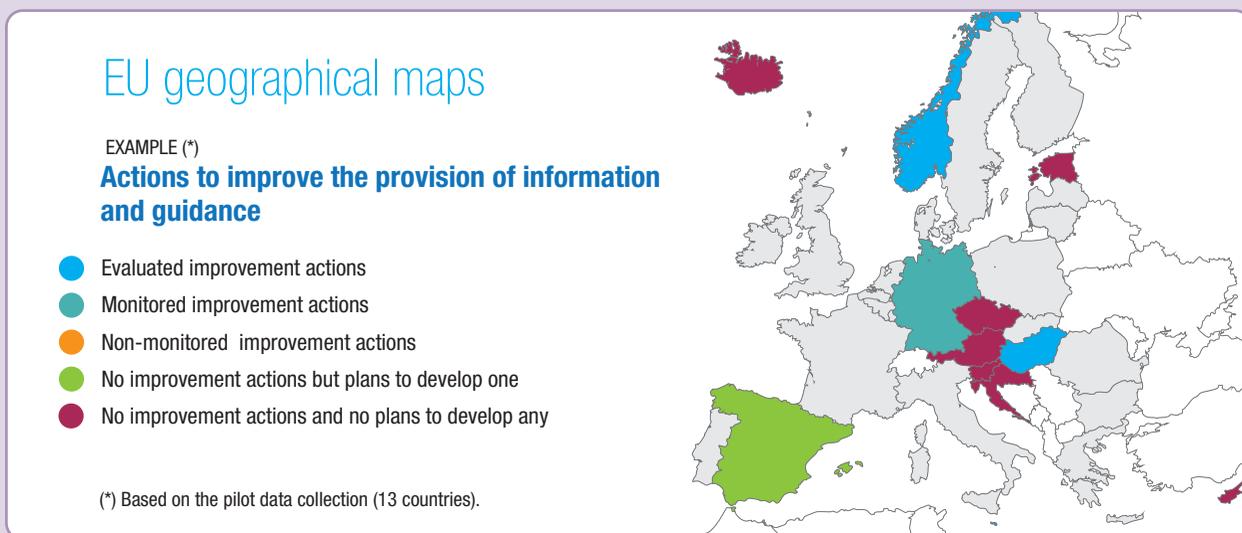
Maps and overviews across countries allow users to identify, at a glance, the variety of country situations in – currently – 26 Member States, Iceland and Norway. Snapshots indicate a single country's situation across the board.

Initial scoreboard findings indicate a mixed picture of policies and structures that are available to support VET learners who want to go abroad. Some insights are encouraging: most countries have coordinated policies to inform young people in VET about international mobility opportunities, ensure their quality, and evaluate them; countries also support cross-European partnerships between IVET institutions and companies.

27 countries fund learners to stay abroad, 26 also granting financial support to the organisers. However, evidence suggests this may be ascribed to EU programmes such as Erasmus+. Often, these are the only mobility schemes available in VET but some countries do not offer sufficient places and funding. Initiatives may also suit the needs of learners in school-based VET better than those of apprentices and enterprises. Most countries do not subsidise companies to compensate them for the costs incurred in arranging places and salary payments during their apprentices' stays abroad. Despite some progress, visa or residency issues may make it difficult for third country nationals to participate in mobility initiatives; also minors may face obstacles. Better coordinated measures are the minimum required to address these barriers more effectively.

The potential of mobility activities may remain underexploited as result of governance and lack of policy targets. Devolved decision-making with little coordination nationally risks overlaps, inconsistent approaches and gaps in (access to) mobility actions. Information on mobility opportunities is well developed; less so guidance on how best to benefit skills and personal development. Closely linked is recognition of knowledge, skills and competence acquired abroad, which remains a major area for improvement.

The IVET mobility scoreboard is also presented jointly with that for higher education on a common online platform hosted by EACEA/Eurydice. Aiming to help make mobility a reality for more VET students and apprentices, it reinforces Cedefop's role as a knowledge broker. The new perspectives it offers could also serve another purpose: to make VET more appealing to youth and 'a first choice' for many, one of the aims of Europe's *New skills agenda*.



methods developed to anticipate skill needs are discussed in several documents. A closer look at scientific journals and literature in 2015-16, going beyond identifying the most frequently cited sources, reveals interesting trends. Recurring themes that referred to Cedefop work or took up its findings included those related to green skills, working and ageing, and validation of non-formal and informal learning. Journal articles also included references to Cedefop's work on (national) VET systems.

The 'skills agenda package', the 2015 *Employment and social developments in Europe* report (published in 2016) and the Commission study on VET in higher education account for a large share of Cedefop's citations. While this is partly related to contributions that Cedefop has been asked to provide, it also demonstrates the

relevance of its work to the EU policy agenda. Documents by the Council, the EESC and European Parliament acknowledge the Agency's expertise by proposing to involve Cedefop in various activities or rely on its support, such as countries' efforts to integrate recent migrants. In addition to the Commission (91), the Parliament (25) and the EESC (10), the European social partners, the ETF and Eurofound, the Committee of the Region and the Court of Auditors referred to or used Cedefop work.

Analysis of the citations confirms a trend that has become visible in the past few years: Cedefop findings and outputs are taken up or referred to in a wide range of Commission documents whether they relate to all Member States or are country-specific. These include in-depth reviews of macroeconomic imbalances or sector-specific reviews in several countries. Citations and references cover all Cedefop activities, from its information on VET systems, policy analysis, European tools, qualifications and learning outcomes, to empowering young people and adults and its work on analysing skills.

A similar trend is also visible in the 65 OECD documents that used Cedefop sources.

⁽¹¹⁾ Henry Miller (1957). *Big Sur and the Oranges of Hieronymus Bosch*.

⁽¹²⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/mobility-scoreboard/>

⁽¹³⁾ *Bruges communiqué* (2010); *Council recommendation on youth on the move* (2011); *Council conclusions on a benchmark for learning mobility* (2011).







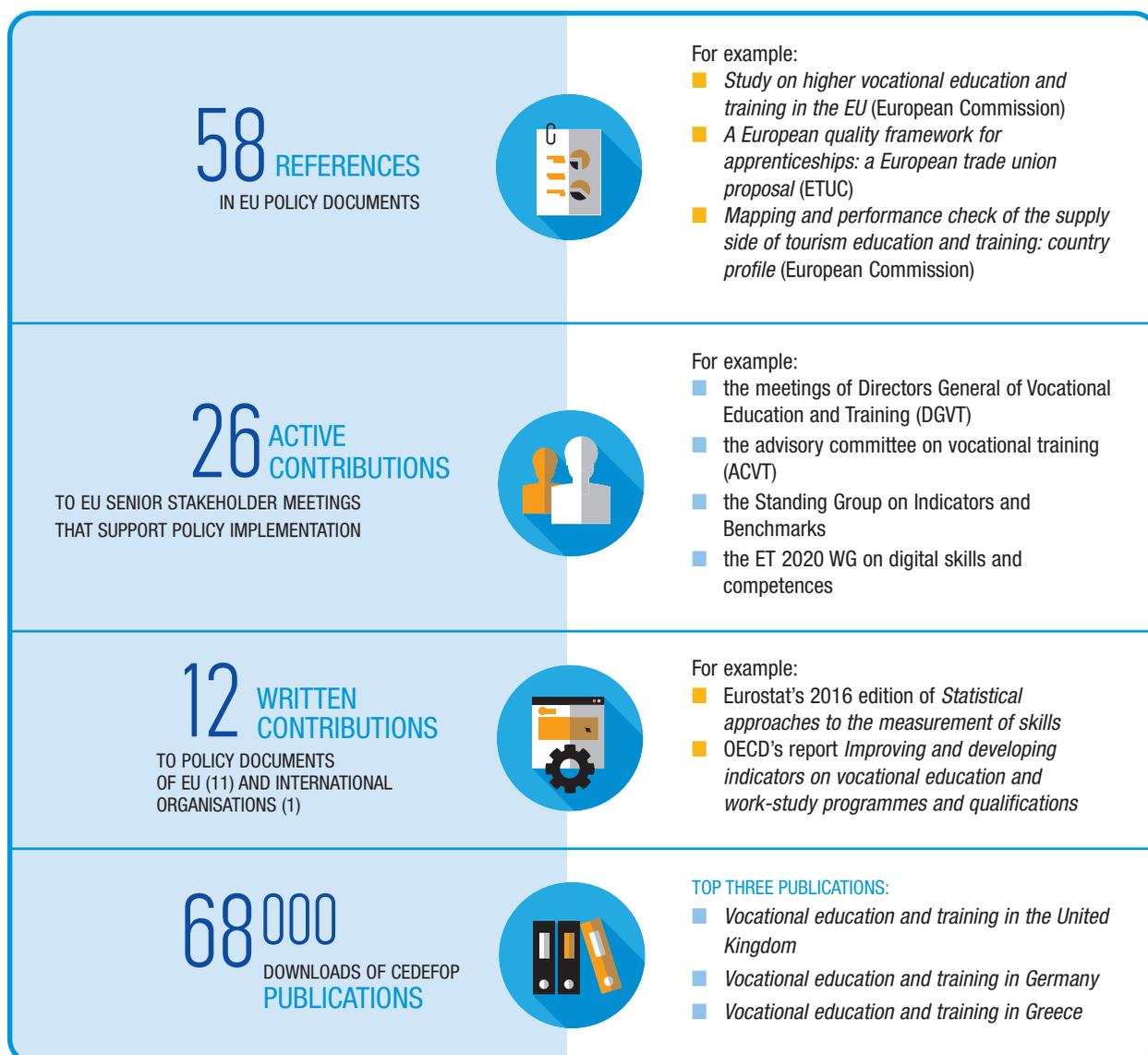
RESULTS ACHIEVED

2.1. SUPPORTING MODERNISATION OF VET SYSTEMS

2.1.1. ACTIVITY: POLICY ANALYSIS AND REPORTING

In 2015, in Riga, ministers in charge of VET confirmed Cedefop's mandate ⁽¹⁴⁾ to **monitor and analyse Member States' progress in five commonly agreed priority areas for VET** for 2015-20 ('medium-term deliverables'): to promote work-based learning, further develop quality assurance and feedback loops based on learning outcomes, strengthen key competences in VET, and develop initial and continuous professional

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development of VET teachers and trainers, while enhancing access to VET for all ⁽¹⁵⁾. The priorities outlined in the Riga conclusions are also central to the *New skills agenda* adopted by the European Commission in spring 2016 ⁽¹⁶⁾.

Cedefop's reporting on VET policies and systems, as well as the varied publications and deliverables that stem from it (described in this section) could not be realised without the active and precious support of **ReferNet** – Cedefop's network for VET in the EU-28, Iceland and Norway. These national partners ⁽¹⁷⁾ – renewed for the 2016-19 period – regularly collaborate with the Agency to provide the information needed in various formats: reports, questionnaires or thematic articles.

EU-level policies increasingly focus on fostering individual countries' progress and improvements. This has required Cedefop to redesign its monitoring approach, in consultation with the main stakeholders, ACVT and Director Generals for VET (DGVT). To guide this work, DGVT were invited to select among the 'Riga deliverables' their national priorities and indicate the measures (intended to be) used to address them. Taking this input into account, Cedefop deployed a questionnaire and tool to collect information on countries' policy priorities and progress in VET from ReferNet; this followed extensive work to familiarise the network with the instrument. The network's responses, in Cedefop's questionnaire and other sources, allowed the Agency to carry out preliminary analysis of trends since 2015; this was presented to ACVT and DGVT, and shared with the European Commission in the form of country-based analysis. It confirmed that promoting and extending work-

based learning remains – as in 2011-14 – a priority for nearly all countries. Strategic and legal frameworks for work-based learning are strengthened, often in combination with revised funding streams. Promoting access to VET and qualifications for all, as well as the professional development of teacher/trainer, follow suit. Integration of key competences tends, according to the first round of reporting, to centre on initial VET.

Cedefop also collects thematic articles from ReferNet to help deepen the information collected on VET policy and to complement VET systems descriptions. Published in early 2016, articles on innovation in and through VET ⁽¹⁸⁾ helped inform debates during the Luxembourgian, Dutch and Slovakian Presidencies. They illustrated different ways in which VET helps learners tap into their potential and fosters innovation skills, as well as how VET itself is becoming more innovative. During 2016, two further series of articles offered an overview of the state of play in two Riga deliverables: teacher and trainer professional development ⁽¹⁹⁾ and key competences in initial VET ⁽²⁰⁾. The latter articles also informed Cedefop's contribution to the ET 2020 working groups on digital skills and competences and promoting citizenship. Cedefop shared initial findings in an expert group invited by the European Commission to discuss how the Council recommendation on key competences should be reviewed to meet 21st century needs.

⁽¹⁴⁾ In this exercise, Cedefop cooperates closely with the ETF, which is responsible for reporting on the developments in the candidate countries.

⁽¹⁵⁾ Since 2002, the EU, the EEA and candidate countries have jointly worked on common priorities to improve VET quality and promote transparency, trust and recognition of competences and qualifications within and across countries. They committed to making mobility for work and learning and access to lifelong learning easier (the so-called Copenhagen process). Since 2004, a series of communiqués have guided this voluntary process and identified common challenges and objectives across countries. The findings of Cedefop's reviews have informed the debates. Aligned with the education and training 2020 framework, cooperation in VET has created stronger links between VET and Europe's economic, employment and social-policy agenda. The latest communiqué, agreed in Bruges in 2010, combined a long-term vision for 2020, with a series of short-term actions. The current deliverables and proposed policy options to achieve them were set out in the 2015 Riga conclusions.

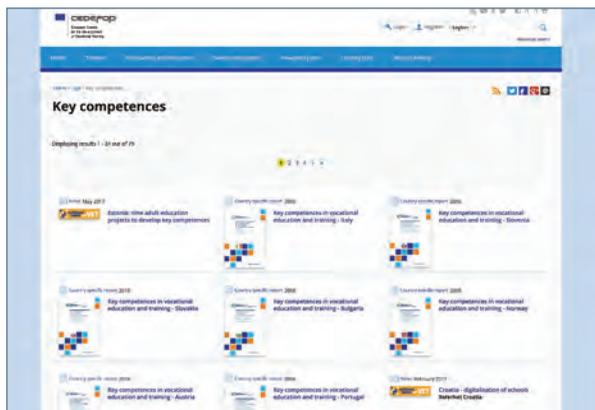
⁽¹⁶⁾ European Commission (2016). *Communication on a new skills agenda for Europe. Working together to strengthen human capital, employability and competitiveness*. COM(2016) 381 final. <http://ec.europa.eu/social/BlobServlet?docId=15621&langId=en> [accessed 7.11.2016] and Council of the European Union (2016). *Council resolution on a new skills agenda for an Inclusive and competitive Europe*. 2016/C 467/01. [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016G1215\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016G1215(01)&from=EN) [accessed 20.12.2016].

⁽¹⁷⁾ <http://www.cedefop.europa.eu/en/events-and-projects/networks/refernet/national-contacts>

⁽¹⁸⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/innovation-in-vet>

⁽¹⁹⁾ <http://www.cedefop.europa.eu/en/events-and-projects/projects/teachers-and-trainers-professional-development>

⁽²⁰⁾ <http://www.cedefop.europa.eu/en/country-report-types/key-competences-vet>



National news on VET ⁽²¹⁾, provided by ReferNet and edited by Cedefop showed that national and EU level priorities are closely related, and illustrated the variety of policy approaches used across the EU. Themes covered included: VET programmes for refugees, improving digital skills among VET learners, adoption of qualifications frameworks, VET as an attractive alternative for higher education students, apprenticeship-related measures, forthcoming VET reform in Finland and Sweden's year of VET.

As in past years, ReferNet's contribution was also used to prepare **short descriptions** ⁽²²⁾, **spotlights** ⁽²³⁾ and **videos** ⁽²⁴⁾ on VET systems, informing DGVT and other stakeholders from across the EU on VET in the EU Presidency countries, the Netherlands and Slovakia. For up-to-date information on VET developments, updates of **Spotlights on VET** in the EU-28, Norway and Iceland were published throughout the year.

Cedefop developed the European **mobility scoreboard for initial vocational education and training (IVET)**. The IVET scoreboard and the one for higher education (HE), developed by EACEA/Eurydice, were launched by the European Commission on 8 December on the occasion of the first European vocational skills week. Notes on the IVET mobility scoreboard were prepared for the DGVT meeting in February, the ACVT meeting in June and a briefing note ⁽²⁵⁾ was published in October, taking stock of policies and structures in place to support mobility of students and apprentices in VET across EU countries.

A comprehensive study on the **changing role of VET** is in progress. Work in 2016 focused on the way VET is defined and conceptualised in the

⁽²¹⁾ <http://www.cedefop.europa.eu/en/events-and-projects/networks/refernet/news>

⁽²²⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/4142>
<http://www.cedefop.europa.eu/en/publications-and-resources/publications/4150>

⁽²³⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/8090>
<http://www.cedefop.europa.eu/en/publications-and-resources/publications/8102>

⁽²⁴⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/videos/vocational-education-and-training-netherlands>
<http://www.cedefop.europa.eu/en/publications-and-resources/videos/vocational-education-and-training-slovakia>

⁽²⁵⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/9114>

different countries and how external factors (such as demographic developments, changing labour market needs and technological developments) influence IVET at upper secondary level and VET as part of lifelong learning. The study starts with analysis of developments during the preceding two decades, seeking to understand the changing and dynamic character of VET. Building on early data from the study and Cedefop's studies on VET at EQF level 5 or higher, a contribution was provided to a Commission document on VET in higher education for the June ACVT meeting. Cedefop also contributed to the Presidency note *Stepping stones towards a future-proof VET* for the Dutch presidency conference on VET in February 2016.

To support the development of more and better **indicators on VET, adult learning and skills**, a review of recent developments in EU and international surveys, data and statistics has been initiated. In parallel, cooperation with the European Commission and Eurostat continued. Thanks to the contribution of Cedefop, Eurostat's education and training statistics working group in June discussed and approved important points for VET data. This included improving comparability of data and monitoring developments in VET over time, following revisions of classification for education and training data (ISCED), and obtaining data on labour market outcomes and continuing learning for all VET graduates from the labour force survey. Cedefop also supports the working group set up by the European Commission to produce better European data on skills.



2.1.2. ACTIVITY: COMMON EUROPEAN TOOLS, QUALIFICATIONS AND LEARNING OUTCOMES

In 2016, Cedefop continued its policy analysis and support to EU countries and the European Commission on **qualifications and learning outcomes**. Cedefop's long-standing expertise in the field, as well as its work on the EQF and national qualifications frameworks, directly supported the definition of proposals and actions for the *New skills agenda for Europe* (26); it helped draft the staff working document supporting the revision of the EQF, an integral part of the Commission's communication.

To help countries and stakeholders implement learning outcomes principles and design NQFs, in 2016 Cedefop helped shape and supported four peer learning activities organised by the Commission (27): validation in enterprises (Paris, January); how can QF support recognition of qualifications? (Luxembourg, March); identification and documentation of migrants' skills and competences (Den Haag, April); and school leaving certificates (Belfast, June). Cedefop's analytical work also fed into the EQF referencing reports from FYROM, Liechtenstein, Kosovo and Sweden.

In 2016, two briefing notes took stock of progress on **qualifications frameworks in Europe**. One, published in January, presented the state of play as of 2015. A second, published in December, focused on the visibility of the EQF through the inclusion of NQF and EQF levels on certificates, diplomas, Europass documents and databases, and the areas where NQFs already make a contribution to national education and employment policies (28).

Following initial development and formal adoption, NQFs are now increasingly becoming operational. Promoting the principle of learning outcomes, qualifications frameworks are, in some countries, evolving from a tool to describe qualifications systems into a means to help reform

(26) <http://ec.europa.eu/social/main.jsp?catId=1223>

(27) Jointly drafting the background notes, giving presentations and chairing sessions.

(28) <http://www.cedefop.europa.eu/en/publications-and-resources/publications/9109>
<http://www.cedefop.europa.eu/en/publications-and-resources/publications/9117>





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REFERENCES

IN EU
POLICY DOCUMENTS



For example:

- *Study on obstacles to recognition of skills and qualifications* (European Commission)
- *Skills development and employability in Europe: the New skills agenda*. Workshop proceedings, Brussels, 8 September 2016 (European Parliament)
- *The Erasmus+ programme (Regulation EU No 1288/2013): European implementation assessment* (European Parliament)
- *Study on higher vocational education and training in the EU* (European Commission)

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ACTIVE CONTRIBUTIONS

TO EU SENIOR STAKEHOLDER
MEETINGS THAT SUPPORT
POLICY IMPLEMENTATION



For example:

- EQF advisory group and its subgroup on international sectoral qualifications
- ECVET users and steering groups and forum
- EQAVET steering committee, thematic groups and forum
- ESCO board, maintenance committee and cross-sectoral reference group
- several peer learning activities on topics like the recognition of qualifications and integration of refugees

20

WRITTEN CONTRIBUTIONS

TO POLICY DOCUMENTS
OF EU (19) AND INTERNATIONAL
ORGANISATIONS (1)



For example:

- the legal texts and the corresponding Commission's staff working documents on the proposed revisions of the European qualifications framework and of Europass under the *New skills agenda for Europe* initiative
- technical referencing reports of the qualification frameworks of FYROM, Liechtenstein, Kosovo and Sweden to the EQF
- UNESCO's guidelines for the quality assurance of TVET qualifications in the Asia-Pacific region

53 000

DOWNLOADS OF CEDEFOP PUBLICATIONS



TOP THREE PUBLICATIONS:

- Briefing note – *Qualifications frameworks in Europe*
- *Typology of knowledge, skills and competences*
- *Vocational education and training at higher qualification levels*

27 million

VISITS TO THE EUROPASS WEBSITE



- AVAILABLE IN 27 LANGUAGES
- 27 million VISITS IN 2016 (13% INCREASE COMPARED TO 2015)
- 153 million VISITS SINCE LAUNCH IN 2005
- 19 million CVS COMPLETED ONLINE IN 2016 (5% INCREASE COMPARED TO 2015)
- 85 million CVS COMPLETED ONLINE SINCE LAUNCH



and modernise them. European countries are also starting to take stock of their experiences, as the multiple roles and benefits of the frameworks are gradually emerging: offering policy-makers a more comprehensive picture of the qualifications landscape in their countries; acting as a reference point for identifying, documenting, assessing and recognising learning acquired in non-formal and informal settings; acting as a bridge to the huge variety of learning activities taking place outside formal education and training; and a platform for cooperation of stakeholders in education and training and labour market. Framework levels, reflecting countries' classification of qualifications, are making their way into diplomas and certificates and qualifications databases: 20 countries now award diplomas and certificates bearing a reference to the corresponding national qualifications and the European qualifications framework levels.

Cedefop took part in the working group set up by UNESCO to address the recommendation of the Shanghai 3rd International Congress on technical and vocational training to explore the feasibility and added value of world reference levels for qualifications. While there still are divided opinions on the relevance of world reference levels, the group has turned into an important platform for cooperation between regions. The global situation was discussed in meetings in Cape Town in May and Brussels in November. Cedefop also participated in the ETF conference 'Getting organised for better qualifications' in Brussels in November.

In the first half of 2016, Cedefop has further deepened its research on learning outcomes, leading to the **second policy learning forum on defining and writing learning outcomes** in October. The forum explored the way forward, which will involve setting up a practitioner network



and a handbook, the first draft of which was presented to participants. Cedefop has also started compiling a database with methodologies, handbooks and guidelines for writing national learning outcomes and research projects.

Cedefop reference publication *Application of learning outcomes approaches across Europe* (29) maps and analyses the shift to learning outcomes in education and training policies and practices across Europe. Bringing evidence on the development of national policies from 33 countries, the study examines progress made in recent years (2009 onwards) and aims to capture the character of political reform at national, institution and local levels. Findings show how learning outcomes approaches increasingly feature as catalysts for policy and practical reform, influencing education and training practice, revealing also the diversity of uses of the learning outcomes approaches being applied. It highlights also the complexity of implementing learning-outcomes-centred policies and developing appropriate strategies at both systemic and sub-systemic levels.

Cedefop currently carries out a comparative study of 10 learning-outcomes-based VET qualifications in 26 countries, inside and outside Europe (in cooperation with the ETF and UNESCO). The study allows for systematic discussion on strengths and weaknesses of existing ways of defining and writing learning outcomes for VET. Initial findings demonstrate that the profile of qualifications differs significantly between countries, for example in the way occupation-specific and transversal skills and competences are combined and balanced. Initial findings also show that countries differ in the (broad/narrow) scope of their qualifications, meaning that the expectations of VET candidates varies significantly, potentially influencing their future role as skilled workers. These results were discussed in a seminar jointly organised with the Slovak Permanent Representation to the EU under the auspices of the Slovak Presidency. Discussions focused on how learning outcomes and competence requirements have been defined in different countries; demonstrating similarities as well as differences in requirements and priorities.

Cedefop continued its work with the European Commission and Member States in supporting

(29) <http://www.cedefop.europa.eu/en/publications-and-resources/publications/3074>

implementation of the ECVET recommendation, providing analytical support to the ECVET users' group and the ECVET forum. The **ECVET in Europe 2015 monitoring report** was published ⁽³⁰⁾, based on national responses provided by the ECVET users' group from 28 EU Member States and four EFTA countries. The report examines whether existing credit systems provide conditions for individuals to have their learning accumulated or transferred towards a qualification. Issues examined include: whether qualifications are based on learning outcomes and organised in units; whether individual units are assessed and validated for further transfer and accumulation; whether units are assigned credit points; and whether VET providers use memoranda of understanding and learning agreements to understand better the learning outcomes they provide and better prepare mobility. The report also focuses on the ways ECVET is promoted among stakeholders and beneficiaries, and on examples of support materials that can be useful to ECVET promoters throughout Europe.

As part of the continuous development of the Europass website, a template for recording **skills and qualifications of refugees and asylum seekers** has been prepared at the request of the Commission; an animation video has also been produced to promote interoperability with Europass. Cedefop provided extensive comments on the proposed revision of the Europass decision under the *New skills agenda* and the corresponding staff working document. The Agency offered conceptual support and advice to the European Commission on the design of the new Europass.

Cedefop **provided advice and expertise to the EQAVET** steering committee, the EQAVET working group on complementing the EQAVET recommendation, the peer learning activity organised by the EC in Poland on the quality assurance of qualifications and learning outcomes approach, and the quality assurance workshop organised during the business forum. Several initiatives were taken to promote the results of a Cedefop study on quality assurance of certification in IVET: offering key note speeches in events (in Poland, the Philippines and Portugal), and supporting Member States in developing quality assurance systems when designing their

qualifications and implementing the learning outcomes approach. Cedefop participated twice in the meeting of the platform of European associations of VET providers monitored by DGEMPL and built, with them and several experts, a community on promoting quality in learning delivery. Cedefop is also a member of the Education and training 2020 working group on schools education which met three times in 2016. Cedefop contributed to an expert group organised by UNESCO to develop guidelines on the quality assurance of TVET qualifications in the Asia-Pacific region.



⁽³⁰⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/5556>

3. Assessment

FOR SYSTEMIC
Cooperati
levels:
1. System Lev
2. Provider

OVER

3

POLICY
- national
- sectoral
- school

TERANCE

5

7

8

How to establish trust
between teachers and
trainers?
- How are there common values?
- Do they have a common training?

APPROACH
on on different
el ↔ Social Part
Level ↔ Enterprise
EST

CONTINUE

How to relate
training systems
to the labor market
to reform education
and training systems

How to relate
training systems
to the labor market
to reform education
and training systems

Learning
with a focus
on the
to include
a wide range
of
learning from

OVER

↔ PRACTICE
↔ regional
↔ regional
T provides
employer

10

9

FR

2.2. CAREER AND TRANSITIONS: CVET, ADULT AND WORK-BASED LEARNING

2.2.1. ACTIVITY: EMPOWERING ADULTS AND YOUNG PEOPLE

As developing **apprenticeships and work-based learning** (WBL) continues to be high on the EU policy agenda, there is a growing need for policy-makers to explore different approaches and more effective implementation. To support this

PERFORMANCE

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REFERENCES

IN EU POLICY DOCUMENTS



For example:

- EESC opinions on :
 - *Integration of refugees in the EU*
 - *Continuing education and training (CVET) in rural areas*
 - *Validation of skills and qualifications acquired through non-formal and informal learning – The practical input of organised civil society*
 - *Improving the performance of national dual training systems*
- *Employment and social developments in Europe 2015*, Chapter 1.1.: Self-employment and entrepreneurship (European Commission)
- *Study on obstacles to recognition of skills and qualifications* (European Commission)

57

ACTIVE CONTRIBUTIONS

TO EU SENIOR STAKEHOLDER MEETINGS THAT SUPPORT POLICY IMPLEMENTATION



For example:

- Direct support to countries to review their apprenticeship systems (Italy, Greece, Slovenia)
- ET 2020 working groups on VET (focused on teachers and trainers) and adult learning
- OECD meeting of the group of national experts on VET and adult learning
- TVET inter-agency working group on work-based learning

10

WRITTEN CONTRIBUTIONS

TO POLICY DOCUMENTS OF EU AND MEMBER STATES



For example:

- the *Council recommendation on upskilling pathways: new opportunities for adults proposed by the European Commission and related staff working documents under the New skills agenda for Europe initiative*
- the Eurydice report for the Education and training monitor 2016 *Structural indicators for monitoring education and training systems in Europe*

74 000

DOWNLOADS OF CEDEFOP PUBLICATIONS



TOP THREE PUBLICATIONS:

- *European guidelines for validating non-formal and informal learning*
- *Apprenticeship review: Malta*
- *Briefing note – Professional development for VET teachers and trainers*

effort, Cedefop started a cross-national overview of apprenticeships in Member States and of their commitments under the EAfA ⁽³¹⁾. For the country reviews in Greece, Italy and Slovenia, Cedefop carried out the first two rounds of stakeholder interviews and organised a second validation workshop with members of the steering groups in the respective countries. A third round of surveys was organised in Slovenia. Cedefop also contributed to the inter-agency working group on WBL at its meeting in February in Paris (hosted by the OECD), and the conference calls of June and November, organised by UNESCO, on the advocacy tool, the analytical framework, and the mapping of agencies' methodologies for country reviews. The Agency provided continuous advice and expertise to the ET 2020 working group on adult learning, which focuses on adult workplace learning. Cedefop prepared three background papers for the DGVT conference on apprenticeships in Bratislava in October, under the Slovak Presidency. The topics of Cedefop's papers were: apprenticeships for adults; getting employers on board; and better training: a clear regulatory framework for apprenticeships. Cedefop also organised a working dinner on work-based learning and apprenticeships as an asset for employability and business competitiveness. The objective of the dinner was to discuss issues high on the agenda of the European Parliament's EMPL Committee: the fight against unemployment, especially youth unemployment, striving to improve the European economy's competitiveness, and creating jobs.

In 2016, Cedefop finalised its three-year study 'Leaving education early: putting vocational education and training centre stage' focusing on the

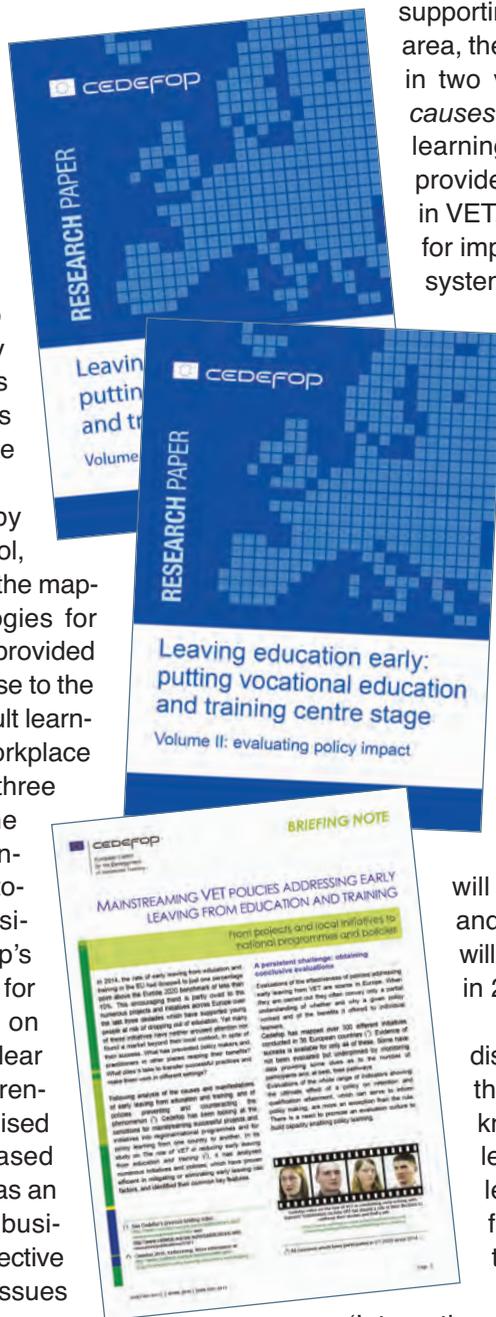
contribution that VET can make to **reducing early leaving from education and training (ELET)**.

Aimed at improving evidence and supporting national decision-making in this area, the study's outcomes were published in two volumes. Volume I, *Investigating causes and extent* ⁽³²⁾ examines the learning pathways of young students, provides measurements of early leaving in VET, and formulates recommendations for improving the national data collection systems and the EU indicator. Volume II, *Evaluating policy impact* ⁽³³⁾ reviews VET-related measures to tackle ELET, either by preventing learners dropping out and/or by bringing those who have already left back to education and training.

A briefing note summarised the key features of successful policies and practices and the conditions necessary to evaluate and upscale successful practices ⁽³⁴⁾. Cedefop started developing an electronic toolkit for professionals designing and implementing measures to tackle early leaving. The toolkit will offer guidelines, evaluation tools and good examples of practice and will be available on Cedefop's website in 2017.

As part of the study's outcomes dissemination activities, Cedefop and the World Bank organised knowledge sharing seminar 'Early leaving from education and training: lessons for Romania' ⁽³⁵⁾. Study findings were also debated during the Cedefop-Fundation Jaime Bofill seminar in Barcelona,

'International perspectives on education – An unsolved problem: how to address early school



⁽³¹⁾ European alliance for apprenticeships.

⁽³²⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/5557>

⁽³³⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/5558>

⁽³⁴⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/9110>

⁽³⁵⁾ <http://www.cedefop.europa.eu/en/events-and-projects/events/knowledge-exchange-seminar-early-leaving-education-and-training>



GOVERNANCE AND FINANCING OF apprenticeships

CEDEFOP
EVENT

BRUSSELS
8 and 9 February 2016

Fostering partnerships for continuing training: cooperation between higher education institutions and enterprises.

Expert workshop ‘Fostering partnerships for continuing training: cooperation between higher education institutions and enterprises’⁽³⁹⁾ took place at Cedefop in February and was attended by policy-makers, researchers and practitioners. The event showed that there are innovative models of continuing professional development, which build on cooperation between higher education institutions and enterprises and link WBL in the world of work to higher education.

leaving?’⁽³⁶⁾, and the European conference in Florence organised by the Fondazione CR Firenze in cooperation with the Italian Ministry of Education, University and Research⁽³⁷⁾.

Investing in skills pays off: the economic and social costs of low-skilled adults summarises the main outcomes of Cedefop work in this area⁽³⁸⁾. The study provides an estimate of the individual and social value in monetary terms of a faster increase of the general level of skills in the Member States compared to the current trend. Investigating the economic and social disadvantages of being low-skilled, the study clearly shows the potential benefits of any public policy aimed at reducing the share of low-skilled adults in the EU over the next decade. This study confirms that formal education alone cannot explain all the different dimensions of the low-skilled phenomenon and calls for effective policy actions targeting the different needs and characteristics of low-skilled subpopulations.



However, practices in Europe are still few and fragmented. There is a clear need for more systematic analysis in this field to promote access and participation and to foster excellence in and through CVET.

The Cedefop research paper **Governance and financing of apprenticeships**⁽⁴⁰⁾, which has already been cited in scientific literature, analyses VET governance structures and financing arrangements in Spain, Italy, Latvia, Portugal and Sweden. It identifies governance structures and financing arrangements that support sustainable implementation of high-quality appren-

⁽³⁶⁾ <http://www.cedefop.europa.eu/en/events-and-projects/events/unresolved-problem-how-address-early-school-leaving>

⁽³⁷⁾ <http://www.fondazioneconfirenze.it/magnetica/>

⁽³⁸⁾ <http://www.cedefop.europa.eu/en/news-and-press/news/executive-summary-investing-skills-pays-economic-and-social-cost-low-skilled>

⁽³⁹⁾ <http://www.cedefop.europa.eu/en/events-and-projects/events/fostering-partnerships-continuing-training-cooperation-between-higher>

⁽⁴⁰⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/5553>

ticeship; findings were disseminated and discussed during a dedicated event in February in Brussels (41), which discussed countries' current challenges in this area and the need for further support and information sharing on actions already taken by countries.

Cedefop's opinion survey on VET in Europe aims at investigating European citizens' opinions on awareness, attractiveness and effectiveness of VET in Europe: 3 646 interviews were conducted among the citizens of all EU Member States and preliminary results indicate that most Europeans (68%) consider that initial vocational education at the upper secondary stage has a positive image in their country. The two main reasons given by respondents for choosing initial vocational education are the likelihood of finding a job (46%) and interest in the subjects (41%). Almost nine out of 10 graduates (87%) who have gone through VET are happy with the job-related skills they have acquired, while only 62% of general education graduates report being satisfied with their acquired job-related skills. These and many other findings were discussed during an international workshop in Thessaloniki in February 2017.

Cedefop finalised analysis of the wealth of information provided by ReferNet partners in 2015 (42) on **supporting teachers and trainers for successful reforms and quality of initial VET and mapping their professional development in the EU** (43). A first overview was shared with the ET 2020 working group on vocational education and training while a briefing note (44) summarised the outcomes of the report published online.

The report provides snapshots of the situation in each Member State of teaching and training professionals who work in initial VET, both in school

and work-based settings, including apprenticeship schemes. It also describes how countries support initial and continuing professional development of teachers and trainers, as well as how they organise cooperation and partnerships between the worlds of education and work.

Cedefop's support to the ET 2020 working group on vocational education and training consisted of advice and expertise, including active participation in all meetings. The third plenary of the group was hosted by Cedefop in Thessaloniki in November, back-to-back with the policy learning forum 'Professional development of teachers and trainers – a guarantee of quality in VET'. (45) This brought together about 70 participants from 29 countries for intensive discussions on the role of VET teachers and trainers in enterprises in ensuring the quality of work-based learning and apprenticeship. The

participants sought answers on how to develop a systemic approach to professional development of teachers and trainers throughout their careers, including support measures and incentives. Participants also shared and discussed examples from practice on qualifications and CPD programmes, use of IT, school development processes, cooperation between schools and companies,

involvement of all stakeholders in shaping policies, and implementation of professional development of VET teachers and trainers.

The study **Labour market information and guidance** (46) analyses the role of guidance in enabling citizens to use LMI successfully to make



(41) <http://www.cedefop.europa.eu/en/events-and-projects/events/governance-and-financing-apprenticeships>

(42) <http://www.cedefop.europa.eu/en/events-and-projects/networks/refernet/thematic-perspectives>

(43) <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers>

(44) <http://www.cedefop.europa.eu/en/publications-and-resources/publications/9112>

(45) <http://www.cedefop.europa.eu/en/events-and-projects/events/policy-learning-forum-professional-development-teachers-and-trainers>

(46) <http://www.cedefop.europa.eu/en/publications-and-resources/publications/5555>



decisions about learning and their careers. Important policy messages are extracted, dealing with stakeholder cooperation, quality of LMI, appropriate use of LMI in schools and employment services, new technologies and the skills of practitioners and teaching staff. The workshop **'Labour market intelligence in lifelong guidance'** ⁽⁴⁷⁾ (May 2016) gathered LMI and guidance experts from across Europe to discuss the results of the study. Discussions informed the practitioner toolkits Cedefop is developing to support guidance practitioners, teachers/trainers ⁽⁴⁸⁾, employment advisors and counsellors in using ICT and LMI tools.



Cedefop organised a major European conference on **validation**: 'How to make learning visible, Strategies for implementing validation of non-formal and informal learning' ⁽⁴⁹⁾ which attracted more than 200 participants. The conference served to reflect on current progress and engage Member State policy-makers, social partners, practitioners and other stakeholders in a discussion on what needs to be done in the run-up to the 2018 'deadline' of the 2012 Council recommendation and beyond. Input from the conference will feed the finalisation of the 2016 European inventory update, to be published in 2017.

⁽⁴⁷⁾ <http://www.cedefop.europa.eu/en/events-and-projects/events/workshop-labour-market-information-lmi-lifelong-guidance>

⁽⁴⁸⁾ This refers to dedicated career teachers of curricular subjects (e.g. Finland, Czech Republic) and to other subject teachers/trainers who have teaching duties in careers education (curricular modules or embedded career competence learning outcomes, which are becoming common in Europe).

⁽⁴⁹⁾ <http://www.cedefop.europa.eu/en/events-and-projects/events/how-make-learning-visible>

Four reports were published as part of the 2016 European inventory: *Validation in the care and youth work sectors* ⁽⁵⁰⁾, *Monitoring the use of validation of non-formal and informal learning* ⁽⁵¹⁾; *Validation and open education resources (OER)* ⁽⁵²⁾ and *Funding validation* ⁽⁵³⁾.

Following publication of **European guidelines for validation** in 2015, a data visualisation tool was created on the Cedefop website to present links between the guidelines and the European inventory. The current version ⁽⁵⁴⁾, which is being piloted, contains data from 2010 and 2014 and further improvements should be made in 2017 to include 2016 data.

Cedefop collaborated with the international expert group on recognition, validation and accreditation of basic youth and adult education as a foundation of lifelong learning, set up by UNESCO (section of partnership, cooperation and research) and the UNESCO Institute for Lifelong Learning (UIL). The group met in June and November.

Contributing to the identification of **effective policies for the labour market integration of migrants and refugees**, Cedefop the European Commission and the EQF Dutch national coordination point together organised the peer learning activity 'Making visible and valuing skills and qualifications of refugees' (April 2016).

The Cedefop-OECD expert forum '**Upskilling, re-skilling and employing adult refugees**' ⁽⁵⁵⁾ discussed the role of VET and VET-related measures to help adult refugees, including those in clear need of international protection, to integrate quickly into the labour market. Important conclusions were derived on how to accelerate integration processes, increase stakeholder cooperation and assure awareness of upskilling solutions for refugees, as early in their asylum claiming procedures as possible. During the forum,

the Italian authorities proposed to Cedefop to develop a pilot project in the framework of the relocation mechanism and test how skill strategies could support asylum applicant eligibility for relocation, but not in the category of vulnerable groups, and those with family and social ties in EU countries. A survey on the same theme was implemented with the cooperation of national ReferNet partners and the information gathered was disseminated during the forum.



Active contributions were provided to the ET 2020 working groups on promoting citizenship and the common values of freedom, tolerance and non-discrimination and on adult learning.

Relying on in-house expertise, and using the evidence generated across the above activities, Cedefop provided significant input to the *New skills agenda*, in particularly to the preparation of the new *Council recommendation on upskilling pathways: new opportunities for adults*, proposed by the European Commission and related staff working documents.

⁽⁵⁰⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/4147>

⁽⁵¹⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/4148>

⁽⁵²⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/4149>

⁽⁵³⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/4146>

⁽⁵⁴⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/european-database-on-validation-of-non-formal-and-informal-learning>

⁽⁵⁵⁾ <http://www.cedefop.europa.eu/en/events-and-projects/events/upskilling-reskilling-and-employing-adult-refugees>



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LATVIA





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REFERENCES

IN EU POLICY DOCUMENTS



Cedefop work on skills analysis cited, for example in:

- *Statistical approaches to the measurement of skills: 2016 edition* (Eurostat)
- *Connecting education, the labour market and society – Towards a New skills agenda for Europe* (Council of the European Union)
- *Matching skills and jobs in the European Union* (European Parliament)
- Commission staff working document: *Impact assessment accompanying the document proposal for a directive of the European Parliament and the Council on the conditions of entry and residence of third-country nationals for the purposes of highly skilled employment and repealing directive 2009/50/EC: Part 1/6* (European Commission)

31 ACTIVE CONTRIBUTIONS

TO EU SENIOR STAKEHOLDER MEETINGS THAT SUPPORT POLICY IMPLEMENTATION



For example:

- DG Employment working group on digitalisation
- Task forces on big data and on labour market statistics
- Field visits to countries to help them review their skills forecasting systems (Iceland, Malta)
- Social partners conference on skills mismatches

5 WRITTEN CONTRIBUTIONS

TO EU POLICY DOCUMENTS



For example:

- the *Communication of the European Commission and related staff working documents on working together to strengthen human capital, employability and competitiveness under the New skills agenda for Europe* initiative

46 000

DOWNLOADS OF CEDEFOP PUBLICATIONS



TOP THREE PUBLICATIONS:

- *Trends and skill needs in tourism*
- Briefing note – *Skill mismatch: more than meets the eye*
- *User guide to developing an employer survey on skill needs*

50 000 VISITS

TO THE EU SKILLS PANORAMA WEBSITE



- The total number of page views was over 200 000 (with an average of five minutes and four page views per visit).
- The sections with quantitative data and indicators (dashboards) and analytical highlights are the most visited.

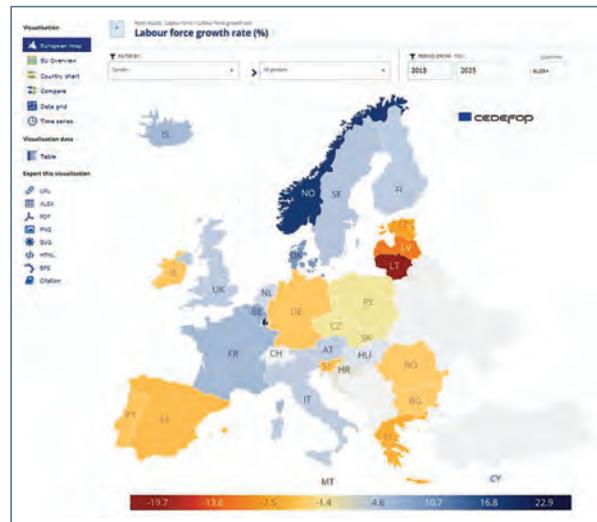
2.3. ANALYSING SKILLS AND COMPETENCE NEEDS TO INFORM VET PROVISION

2.3.1. ACTIVITY: SKILLS ANALYSIS

Inform VET provision, and ensuring that it is responsive to labour market developments and occupational changes, requires a plethora of data and analysis, focusing on present and future mismatches between supply and demand. The same data can also be used to inform individuals' career, education and training choices.

The **EU Skills Panorama**, relaunched by Cedefop in December 2015, is a unique web portal for labour market and skills intelligence in Europe. It is designed primarily for policy-makers and policy experts and brings together data from various sources to inform on labour market trends and resulting skill needs in countries, sectors, and occupations. In 2016, new sections and indicators were added to the site: matching skills and jobs, providing exclusive access to the results of Cedefop's European jobs and skills survey (16 indicators from the survey); 30 new highlights on changes affecting skills needed in occupations and a list of high priority mismatch occupations in each EU country; the 'making skills work' index, which summarises the performance of each country using a set of indicators, gathered around the three pillars of developing skills, activating skills and matching skills. A comprehensive update of all indicators based on labour force survey and forecasting data took place in June, together with improvements in site navigation and layout. A workshop was organised with EURES advisors and guidance practitioners to assess how the site should evolve to meet the needs of practitioners better. Throughout the year, the EU Skills Panorama portal has attracted more than 50 000 visits. The quality of the traffic to the portal is excellent and improving as visitors stay in the website, indicating that they find the content of interest.

As well as developing and maintaining the EU Skills Panorama, Cedefop carries out a number of projects and activities to collect more and better



Employment trends – 2016 Skills forecast

data and insights on skill needs in the EU. The outcomes of these activities are summarised below.

Cedefop **skill supply and demand forecasts** aim to act as an early warning mechanism to help alleviate potential labour market imbalances and support different labour market actors in making informed decisions. The 2016 forecast results⁽⁵⁶⁾ were published to coincide with the announcement of the skills agenda.

European sectoral trends: the next decade⁽⁵⁷⁾, published in May to promote new forecasting results and the skills agenda, synthesises trends across sectors and drivers of change up to 2025. Future trends in skill demand and supply across the EU are being driven mainly by demographic change, better access to education, technological advances and climate change. These drivers are expected to impact employment, occupations and qualifications in all sectors across the EU between now and 2025, particularly by encouraging employment growth in services and

increasing the need for high level qualifications; the latter is due to new jobs being created and also changes in job content and tasks 'pushing the level



⁽⁵⁶⁾ <http://www.cedefop.europa.eu/en/events-and-projects/projects/forecasting-skill-demand-and-supply/data-visualisations>

⁽⁵⁷⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/8093>

up' in existing jobs. However, ageing and high replacement demand across occupations mean that the labour market will continue to require people with low and medium levels of qualifications, albeit fewer than in the past. Further, automation and robots will affect the type of skills required across occupations, as they will replace routine tasks requiring qualification renewal and continuing VET. A conference was organised in collaboration with UNESCO to disseminate the new Cedefop forecast and debate trends in the EU in light of global changes.

the world were debated by experts, representatives of governments and social partners, in a series of plenary discussions and parallel sessions.

Although making progress, labour markets in many EU Member States are still not fully recovered from the economic crisis that started in 2008. But today's European labour markets are already challenged by changes in the demographic composition of the labour force, as well as the increase in work complexities and processes. Skills forecasting is a useful tool to inform decisions by policymakers, experts and individuals in this complex environment. The research paper *Future skill needs in Europe: critical labour force trends* ⁽⁵⁸⁾ not only presents Cedefop's latest skills supply and demand forecasts but also offers an explorative analysis of the impact of an alternative skills supply scenario on future labour market imbalances. The analysis aims to draw attention to the tensions that may be generated in the near future (in most EU countries after 2025) due to decreased labour supply, and the role that targeted activation and migration policies, deployed now, could play in alleviating such tensions.

Cedefop met, as it does every year, in a workshop with national forecasting and labour market experts from all EU countries, Norway and Iceland to validate national results and debate future methodological developments of the forecast. Immediately following this November workshop, **at the request of Malta and Iceland, Cedefop organised a two-day peer learning event to support the development of national skills anticipation and forecasting** in the two countries. The event offered representatives from these countries the opportunity to benefit from the insights of international and national experts on macro-economic, employment and skills forecasting.

As well as engaging with these two countries, in 2016, Cedefop strengthened the foundation needed to work with individual countries and help develop **skills anticipation and skills**

SKILLS, JOBS AND SUSTAINABLE DEVELOPMENT: global trends and local challenges



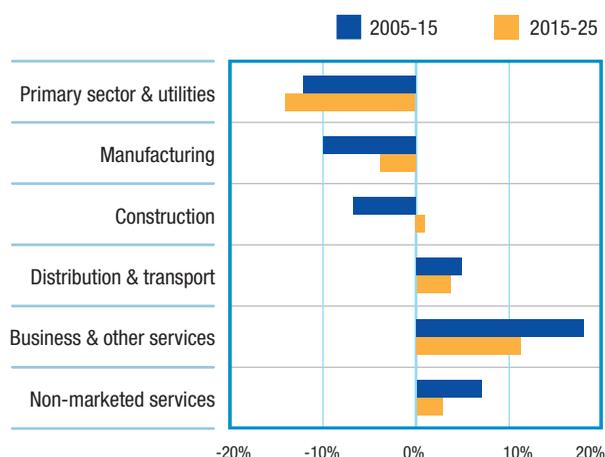
The joint Cedefop-UNESCO conference 'Skills, jobs and sustainable development: global trends, local challenges' ⁽⁵⁸⁾ held on 20 and 21 October in the UNESCO headquarters in Paris, debated the implications of global economic trends and market forces for anticipated skill needs and mismatches, and the responses of education and training, building on labour market intelligence. The conference also focused on how countries use information on trends in skill needs to review and renew their education and training provision. There was consideration of qualifications frameworks (at sector, national, regional and global levels) and their active role to support coordination and dialogue between education and training and labour market actors. Global policy priorities, challenges and applicable solutions that can be applied in different regions of



⁽⁵⁸⁾ <http://www.cedefop.europa.eu/en/events-and-projects/events/skills-jobs-and-sustainable-development-global-trends-local-challenges>

⁽⁵⁹⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/5559>

Employment trends by sector in EU-28+



Source: Cedefop skills forecasts (2016).

governance in the EU; this is fully aligned with the skills agenda as it invites EU countries to develop their capacity to anticipate and react to skill needs in the labour market. To assess the **performance of skills systems** across countries, Cedefop finalised the development of a composite **'making skills work'** index. The index relies on a number of indicators grouped across three dimensions: skill development, focusing on participation in (formal, non-formal and informal) education and training, attainment levels in education and learning outcomes; skills activation, the ease of transition by young graduates and participation in the labour market; skills utilisation, capturing the extent to which employers' skill needs are effectively met by workers' skills and the degree to which the skills of the available labour force are left idle. The index allows comparisons across countries and permits rapid identification of each country's strengths and weaknesses. It can be used to trigger discussions among stakeholders over possible needs for reforms.

Since 2014, Cedefop has been **supporting Greece in its effort to develop a national skills diagnosis mechanism**. So far, cooperation with Greek authorities has taken the form of participation in meetings of the steering and scientific committees and other events, as well as input to documents. In the first semester, a meeting was held in Athens where progress made was presented to the steering committee by the leading authority (E.I.E.A.Δ.) and a one-day dissemination conference was organised where the results of the skills diagnosis mechanism were presented to a wider audience. Cedefop contributed with a

keynote speech that discussed how the results can be used for policy-making. The Greek Minister of Employment visited Cedefop during June and possibilities for further support in implementing the skills diagnosis mechanism were discussed, after which the Greek authorities formally asked Cedefop to carry out a thematic country review on the governance of skills anticipation and matching in the country. This will start in 2017.

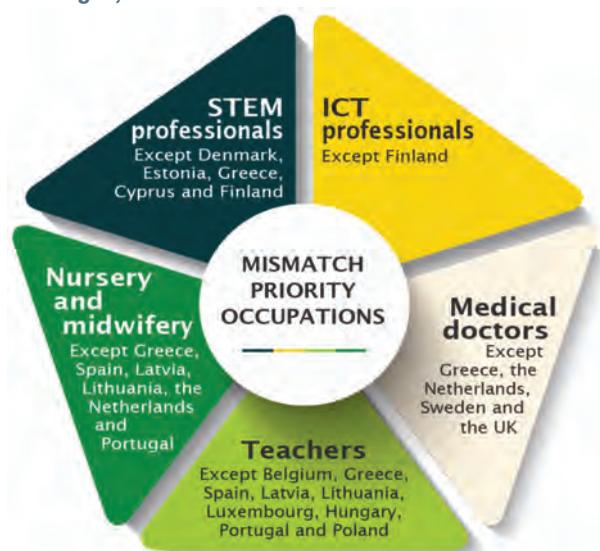
Cedefop was invited to give a keynote speech 'Anticipating and governing skills needs: Cedefop's support to EUMS' at the **European Commission (DG EMPL) mutual learning programme**. The programme focused on methods for forecasting skills needs for the economy, and took place in Dublin. Discussions highlighted methodological difficulties and statistical challenges, as well as institutional requirements to allow a country to have a well-running skills anticipation system. Cedefop demonstrated its leading role in methodological developments for skills anticipation, especially its recent work on linking skill forecasts with skill data from the Cedefop European skills and jobs survey, and exploring real-time LMI techniques. The Agency is also moving towards provision of country-specific assistance if requested.

Problems posed by skill shortages and surpluses are of particular concern to European and national policy-makers. To help identify occupations that should receive policy-maker priority attention, Cedefop has developed an innovative risk-based approach that also provides insights into why skill mismatches arise. This uses a range of indicators that uncover skill mismatches in the labour market and combines it with qualitative insights from national experts. It can identify **mismatch priority occupations (MPOs) for each Member State**, a vital piece of the skills anticipation puzzle helping identify shortages in occupations due to lack of skills rather than other recruitment difficulties. The briefing note ***Skill shortage and surplus occupations in Europe*** ⁽⁶⁰⁾ published in October, addresses the reasons for shortages in selected occupations ⁽⁶¹⁾, as well as the reasons for skill surpluses. The findings only provide a snapshot of the wealth of results produced to identify MPOs. More comprehensive findings for

⁽⁶⁰⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/9115>

⁽⁶¹⁾ ICT and STEM professionals, healthcare professionals, teachers.

Top five mismatch priority occupations: shortages, EU-28



Source: Cedefop.

each EU Member State can be found in the Skills Panorama ⁽⁶²⁾.

In 2014, Cedefop initiated a feasibility study to assess whether good quality and useful data on **skills demand by employers** can be retrieved from online vacancies. Gathering such information would fill a significant gap in available data on skill needs in the labour market; using new technologies to retrieve data from the web would be much cheaper and effective than other methods, such as employers' surveys. Data on skill needs by employers will be useful to VET providers revising training programmes, to employment services and career counsellors, as well as directly to individuals to guide career and training choices. Cedefop's feasibility study was finalised in the first semester of 2016 and proved that retrieving data that add value to the currently available evidence from online vacancies is worthwhile and promising. The main outcome of the project is Cedefop's own IT instrument to gather and classify such data. This tool has been successfully applied across five countries (CZ, DE, IRL, IT, UK) and has collected data on occupation-specific and generic skills demand that has been classified by country, regions, sectors, and occupations. Project outcomes were highly appreciated by members of Eurostat's task force on big data, which Cedefop

has been invited to join. Cedefop has undertaken exchanges with national statistical office members of the task force that have requested access to Cedefop's tool to inspire national efforts to collect big data.

Cedefop has engaged in two projects to gather stronger evidence on **skills strategies and learning cultures in organisations and their link to business performance and innovation**. The first has collected eight in-depth **case studies** of organisations in four sectors across five countries that have enjoyed sustainable and long-term business success, to investigate their learning culture and how they devise and implement their skills strategies. During 2016, fieldwork was finalised and all case studies completed. Analysis and synthesis will take place in 2017.

The second project relies on collaboration with Eurofound: the agencies have agreed to join forces to organise the next **European company survey**. This survey will collect data from a representative sample of European companies, using a standard questionnaire, and will provide a unique European data set on skills strategies of companies and their link to business performance. The proposed topics and features of the survey have been discussed with a joint steering group consisting of representatives of the governing boards of both Cedefop and Eurofound and with a group of experts. The survey will focus on companies' skills strategies (recruitment, skills utilisation and development, training and learning), considered together with other HRM practices, workplace social dialogue, sustainable work and careers, job design, work organisation, and digitalisation of work. The survey should allow linking these issues to business innovation and competitiveness. Cooperation between the two agencies is beneficial to the project, cost-effective and will demonstrate the synergies and complementarities between them.

Throughout the year, efforts were made and several initiatives taken to promote and disseminate the results of the **Cedefop European skills and jobs survey** (ESJS). Analytical highlights and blogs were written both for the Cedefop web portal and the Skills Panorama, based on new analyses of the data set. To disseminate the results further into policy circles, Cedefop held a dedicated skill mismatch Brussels-based seminar together with the Dutch Permanent Representation to the EU under the auspices of the Dutch Presidency.

⁽⁶²⁾ <http://skillspanorama.cedefop.europa.eu/>

Degree of (recent and anticipated) change in skill profiles across jobs, 2014, EU-28

TOP 5 OCCUPATION GROUPS			
with rapidly changing skills profiles		with stable skills profiles	
1	ICT professionals	1	Subsistence farmers, fishers or hunters
2	ICT associate professionals	2	Cleaners or helpers
3	Production or specialist services managers	3	Food preparation assistants
4	Health professionals	4	Personal services workers
5	Electronic and electronic trades workers / Science and engineering professionals	5	Personal care workers

Source: Cedefop European skills and jobs survey.

In 2016, 11 **Skillsnet e-bulletins** ⁽⁶³⁾ were published and shared with Skillsnet members. They offer network members the latest news, publications and events in the field of skills anticipation and governance. Cedefop has also pursued active collaboration with the ETF, to finalise the publication of the guides on skills anticipation methods; with the ILO, to carry out a comparative analysis of national systems of skills governance based on information collected together by the OECD, Cedefop, the ETF and the ILO in 2014; and with the World Economic Forum (WEF), to contribute to the dissemination of the report on the Future of jobs.

Significant contributions were made in 2016 on monitoring trends in the labour market and their impact on skill needs and mismatches on the preparation of the **New skills agenda**. Following requests by the EC, original papers were provided on skills intelligence and guidance in Europe; making skills work, assessing performance of EU Member States; and labour market intelligence, a valuable tool for policy. Inputs and comments were also provided on the role of the EU Skills Panorama and particularly the Europass revision, on the blueprint for sectoral collaboration on skills, and the key staff working document of the communication analysing skills supply, demand and mismatch in the EU. Cedefop was also present at the launch and press event for the *New skills agenda*, making an intervention and press statement titled 'What are the skills for the future?' ⁽⁶⁴⁾.

⁽⁶³⁾ One double issue.

⁽⁶⁴⁾ <http://skillspanorama.cedefop.europa.eu/en/blog/what-are-skills-future>

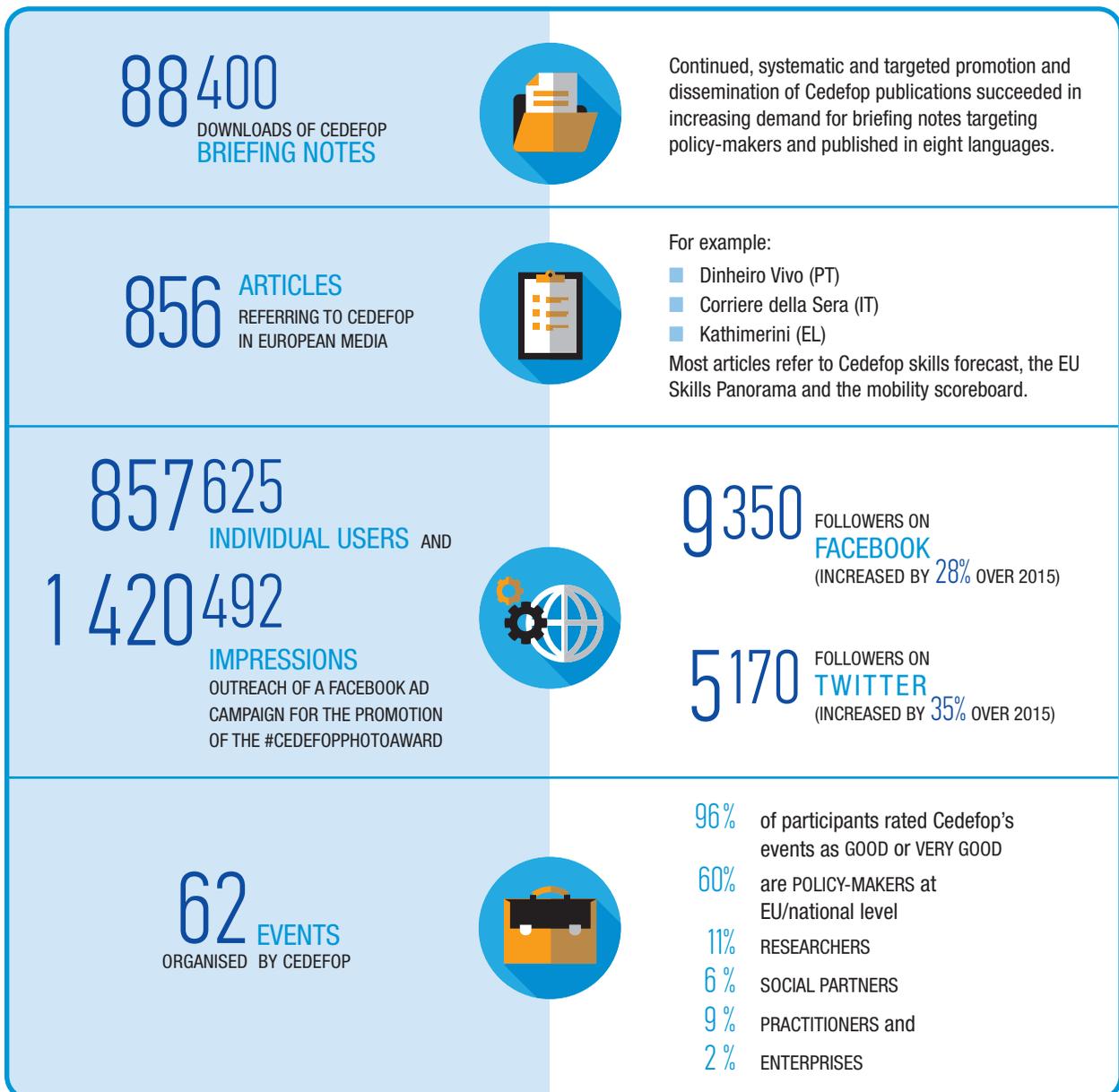
4





COMMUNICATION, INFORMATION AND DISSEMINATION

PERFORMANCE



It is vital for Cedefop to communicate efficiently key messages to stakeholders and to promote a positive image of the Agency at European, national and local levels. To this end, Cedefop organised events and visits to keep key accounts and other stakeholders up to date with VET issues and Cedefop's role. Among other visits, a delegation of the EMPL Committee of the European Parliament came to discuss closer cooperation with Cedefop. The Agency also welcomed visitors from various countries and institutions, including: the Hannover region in Germany which is planning to take in Greek apprentices; the Athens College; school directors from Crete; academics from Greece, Finland and France; and two institutions dealing with validation and recognition of qualifications, the Norwegian Agency for Quality Assurance in Education and the Ankara Chamber of Commerce from Turkey. In October Cedefop played an active role (presentations and exhibition) in the 'Jobs and mobility' road show, organised by Europe Direct and supported by the representations of the European Commission and the European Parliament in Greece.

Throughout 2016, Cedefop also intensified its collaboration with DG EMPL by organising joint social media activities, support to the media seminar on the skills agenda, and the opening of the #CedefopPhotoAward⁽⁶⁵⁾ exhibition at the European Youth Event 2016 (EYE2016) in Strasbourg. European Commissioner for Employment, Social Affairs, Skills and Labour Mobility Ms Marianne Thyssen opened the event, attended by 7 000 young Europeans from all 28 EU Member States. Commissioner Thyssen congratulated Cedefop on this initiative and encouraged Europe's youth in education and training to contribute to the competition, which gives 'more visibility to vocational education and training, showing that it is a first choice, not a second option'. In the second semester Cedefop focused on promoting the DG EMPL's first European vocational skills week ((see box on page 51)⁽⁶⁶⁾ with dedicated social media activities, online news, eight video productions and four local events, including the photo exhibition Europe's youth in education and training, at the 57th Thessaloniki international film festival in November. The winners of the #CedefopPhotoAward were



Opening of #CedefopPhotoAward exhibition by European Commissioner for Employment, Social Affairs, Skills and Labour Mobility, Marianne Thyssen

invited to the official closing ceremony of the European vocational skills week in Brussels in December, where they received their award from Commissioner Thyssen. Thanks to excellent collaboration with DG EMPL's communication unit, an accompanying campaign for raising the visibility of VET and engaging younger audiences via social media networking exceeded all expectations: the estimated outreach via Facebook was 857 625 individual users, with 1 420 492 impressions counted. More than 70 organisations posted news about Cedefop's photo award initiative.

Cooperation between the Greek employment and education authorities and Cedefop to help equip Greek people with the skills needed to find and stay in employment was the topic of a seminar organised in June 2016 in Thessaloniki⁽⁶⁷⁾, jointly with Thomas Händel MEP, Chair of the Employment and Social Affairs Committee. Cedefop has been supporting the Greek authorities by reviewing the existing apprenticeship system, monitoring the development of the national qualifications framework and contributing to the national skills anticipation mechanism for identifying emerging skills and labour market needs and their match to VET supply.

Further, with the support of the Brussels liaison office, Cedefop organised three stakeholder events

⁽⁶⁵⁾ <http://www.cedefop.europa.eu/en/tags/cedefopphotoaward>

⁽⁶⁶⁾ <http://www.cedefop.europa.eu/en/tags/european-vocational-skills-week>

⁽⁶⁷⁾ <http://www.cedefop.europa.eu/en/events-and-projects/events/making-learning-work-greece-bringing-together-world-employment-and>



in Brussels: an EP-Cedefop working dinner on work-based learning and apprenticeships, in January, an event in collaboration with the Dutch Permanent Representation to the EU on policies for matching better skills in better jobs, in June and a joint seminar with the Slovak Permanent Representation to the EU on competitiveness and strong vocational qualifications, in December.

In 2016, Cedefop published seven briefing notes, 19 press releases, three issues of the *Skillset and match* magazine, 17 video clips and interviews, 10 issues of Cedefop's electronic newsletter, and 71 website headlines. The press service facilitated 16 interviews with international media for Cedefop staff, including with *Compass* magazine, the Italian daily *Corriere della Sera* and the Brazilian newspaper *Fohla S. Paulo*, as well as with various Greek broadcasters, MEGA channel, TV 100, ERT 3, ERT 3 radio, Thessaloniki municipal radio FM 100, Athens 984 municipal radio, Real FM radio and the Macedonian News Agency radio station. A continuous flow of social media postings (135 Facebook posts, 1 670 tweets and retweets) complemented Cedefop's communication activities. By the end of 2016, Cedefop counted 9 350 Facebook likes (an increase of 28% compared to 2015) and 5 170 twitter followers (an increase of about 35% compared to 2016).

The publication service (linguistic support, production, dissemination) supports all communication and public relation activities.

According to Cedefop's publication policy, most publications, such as briefing notes and research papers, are published online only, but printing-on-demand continues to play an important role. E-book production is also a standard online publication format. Video animations for Presidency country VET systems are now produced regularly, as with the animations on VET in the Netherlands, published in the first quarter, and on VET in Slovakia, in October. Following revision of Cedefop's publication policy, a pilot for granular publishing was successfully launched and the research paper *Leaving education early: putting vocational education and training centre stage* is now downloadable as a whole or granular, with executive summary and chapters individually available ⁽⁶⁸⁾.

2016 was the year during which Cedefop's web portal ⁽⁶⁹⁾ focused on data visualisation, with three large data visualisations projects successfully implemented. First, the *European database on validation of non-formal and informal learning* ⁽⁷⁰⁾, available online since March, provides an overview of validation arrangements in the EU, allowing cross-country comparisons for different time periods.

Forecasting skill demand and supply ⁽⁷¹⁾, presented at the launch of the *New skills agenda* in May 2016, provides an overall picture of labour market trends and skill developments in the EU. Using the online forecast allows data comparison and aggregation across countries.

The mobility scoreboard for IVET ⁽⁷²⁾ is a tool designed for assisting policy-making in international learning mobility in IVET and provides relevant information, analysis and suggestions. The online tool was delivered in two phases. Phase 1 displayed data for the 2015 for four indicators and was presented to stakeholders during an event in June 2016. Phase 2 displays a new data set for 14 indicators. The mobility scoreboard was officially launched during the European vocational skills week in Brussels in December 2016.

⁽⁶⁸⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/publications/5557>

⁽⁶⁹⁾ <http://www.cedefop.europa.eu/>

⁽⁷⁰⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/european-database-on-validation-of-non-formal-and-informal-learning>

⁽⁷¹⁾ <http://www.cedefop.europa.eu/en/events-and-projects/projects/forecasting-skill-demand-and-supply/data-visualisations>

⁽⁷²⁾ <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/mobility-scoreboard>



CEDEFOP CONTRIBUTION TO EUROPEAN VOCATIONAL SKILLS WEEK

In 2016 the first European vocational skills week, involving more than 900 events across Europe and more than 650 000 people, took place from 5 to 9 December. Cedefop contributed to this successful European Commission initiative with speakers, workshops, conferences and a communication campaign. Support also involved organising five dedicated Cedefop events in Thessaloniki:

- ‘Learning outcomes for VET qualifications: the next step’⁽⁷³⁾, a second policy learning forum on learning outcomes;
- the ‘ReferNet partners and national representatives plenary meeting’⁽⁷⁴⁾, where challenges and opportunities of working together in Cedefop’s network for VET were debated;
- ‘Professional VET teacher and trainer development: key to quality learning’⁽⁷⁵⁾, a policy learning forum;
- a Cedefop conference on validation of non-formal and informal learning, which concluded that ‘validation fights exclusion and makes employability possible’⁽⁷⁶⁾;
- #CedefopPhotoAward 2016⁽⁷⁷⁾, whose winners were honoured with an exhibition at the Thessaloniki international film festival.

The winners of the #CedefopPhotoAward 2016 were invited to join the European vocational skills week and received their awards from Commissioner Marianne Thyssen at the official closing ceremony on 9 December.

During the week, Cedefop experts were involved in various activities, demonstrating the Agency’s expertise and adding value on matters such as costs and financing of adult learning (adult skills conference), quality and trends, and developments in VET-business cooperation (European business forum on VET).

Another Cedefop highlight was the launch of the IVET mobility scoreboard⁽⁷⁸⁾ during the European business forum on VET, while EACEA/Eurydice presented the mobility scoreboard for higher education (HE).

⁽⁷³⁾ <http://www.cedefop.europa.eu/sk/news-and-press/news/learning-outcomes-vet-qualifications-next-step>

⁽⁷⁴⁾ <http://www.cedefop.europa.eu/en/news-and-press/news/refernet-partners-and-national-representatives-brought-together-plenary-meeting>

⁽⁷⁵⁾ <http://www.cedefop.europa.eu/en/news-and-press/news/professional-vet-teacher-and-trainer-development-key-quality-learning>

⁽⁷⁶⁾ <http://www.cedefop.europa.eu/hu/news-and-press/news/validation-fights-exclusion-and-makes-employability-possible>

⁽⁷⁷⁾ <http://www.cedefop.europa.eu/en/news-and-press/news/cedefopphotoaward-winners-honoured-special-exhibition>

⁽⁷⁸⁾ <http://www.cedefop.europa.eu/en/news-and-press/news/mobility-scoreboards-launched-brussels>



RELATIONS WITH EU AGENCIES

In 2016, Cedefop maintained cooperation with other agencies working in related spheres, in particular the ETF and Eurofound (see below). This cooperation is not only focused on making sure that the work of the agencies is complementary other but that synergies and shared resources add value to them and their stakeholders. This is achieved by building on each other's strengths and areas of expertise and administration; it will continue during 2017.

The inter-agency report *Towards age-friendly work in Europe: a life-course perspective on work and ageing from EU agencies* coordinated by EU-OSHA, includes contributions by EIGE, Eurofound and Cedefop. It reviews ageing trends, reflects on recent policy responses, mostly focused on increasing retirement ages and limiting early access to pension, and proposes ways forward to ensure that active ageing can support longer and healthier working lives. Each agency focused on a different aspect of demographic change and its implications for employment, working conditions, workers' health and education and training. Cedefop's chapter focused on the role of VET for active ageing. It presents recent demographic and labour market trends, including employment, skills and lifelong learning, and shows how VET and other policies can contribute to keeping older workers employed, active and skilled. The chapter also covers guidance and counselling for mature learners, the role of suitable learning approaches, validation, and comprehensive age-management strategies in enterprises.

Another example is the ITC-ILO/Cedefop/ETF/AFD⁽⁷⁹⁾ joint **workshop/training course on financing skills development**, which took place in March in Turin⁽⁸⁰⁾. This focused on sharing knowledge about systems and mechanisms of

financing training and the conditions that need to be in place to provide appropriate funding for skills development.



4.1. COOPERATION WITH THE ETF

Collaboration between the two agencies is long-standing. Since its outset in 1997, the ETF and Cedefop have aimed at creating synergies in areas that are relevant to both agencies, taking into account their different mandates, geographic scope and stakeholders. This has led to increased efficiency, economies of scale and increased service levels. The current framework (2014-17) aims at more structured cooperation in thematic areas, projects and activities of common concern to the Commission and to each of the agencies' stakeholders and regulatory functions. Joint activities of Cedefop and the ETF in 2016 were based on this cooperation framework.

In 2016, Cedefop and ETF experts were involved in events and projects of mutual interest organised by both agencies. The ETF actively participated in the Cedefop-UNESCO conference 'Skills, jobs and sustainable development' in October in the UNESCO headquarters, Paris. Cedefop contributed to the ETF conference 'Getting organised for better qualifications' in November in Brussels. A joint meeting was convened in July to ensure knowledge-sharing and complementarity in the activities of the two agencies. The meeting, in Turin focused on quality assurance of certification in IVET, the impact of globalisation on VET, the IVET mobility scoreboard, and VET monitoring

⁽⁷⁹⁾ International Training Center-International Labour Organisation (ITC-ILO) / European Training Foundation (ETF) / Agence Française de Développement (AFD).

⁽⁸⁰⁾ <http://www.cedefop.europa.eu/en/events-and-projects/events/training-workshop-financing-skills-development-0>

through partnership (Cedefop ReferNet).

The two agencies continued joint work on a revised approach to reporting on VET policies and systems. Background papers for the June ACVT and the October DGVT meetings on monitoring countries' progress towards the commonly agreed priorities for VET 2015-20 (Riga conclusions) were jointly prepared and presented.

Cedefop and the ETF are also cooperating on a comparative study of 10 learning-outcomes-based VET qualifications, which is currently being carried out in 25 countries inside and outside Europe (in cooperation also with UNESCO). The study allows for systematic discussion on strengths and weaknesses of existing ways of defining and writing learning outcomes for VET.

Preparatory work on the third edition of the global inventory on national and regional qualifications frameworks also features cooperation of Cedefop, the ETF and UNESCO. The first outline of the inventory, which will be available in 2017, has been agreed, including the outline of the thematic chapters and structure of the national and regional cases.

The two agencies continue their collaboration on work-based learning and adult learning, in the frame of the inter-agency working group on work-based learning together with the OECD, the ILO, UNESCO and other major international organisations.

The ITC-ILO-Cedefop-ETF-AFD common workshop/training course on financing skills development took place from 7 to 11 March 2016 in Turin. The workshop provided an opportunity for knowledge sharing about systems and mechanisms of financing training and necessary conditions to provide appropriate funding for skills development.

Since 2013, Cedefop, the ETF, and the ILO have engaged in a joint endeavour to promote methods for skills anticipation and matching. Part of this effort was the preparation of six guides on methods and approaches to be used to anticipate skill needs. The guides take a very practical stance and are aimed at national/regional authorities, sector organisations and public employment services. Five of the six guides to anticipating and matching skills and jobs were published in 2016: *Using labour market information*; *Developing skills foresights, scenarios, and forecasts*; *Working at sectoral level*; *The role of employment service providers*; and *Carrying out tracer studies*.

There was also cooperation with the Brussels offices of the ETF and Eurofound.



4.2. COOPERATION WITH EUROFOUND

Cooperation between Eurofound and Cedefop takes place in the framework of a collaboration agreement renewed in 2016. Each year, based on early analysis of the respective work programmes, activities of common interest are identified. This helps to structure the exchange of knowledge and sharing of expertise between the two agencies, to avoid overlaps and to identify promising areas for collaboration, such as in the case of the European company survey.

In 2016, Cedefop and Eurofound explored the possibility of organising together the next round of the **European company survey**. To do so, both agencies considered a thematic focus for the survey that would be policy-relevant, answer key questions about European companies' strategies, and tap the respective expertise of both agencies. The resulting proposal for a survey was presented to an ad hoc consultative group composed of representatives of the governing boards of both agencies (EC, government group, employers' group and trade unions' group). The consultative group endorsed and refined the proposal, which was then adopted by the governing board of each agency.

The joint Cedefop/Eurofound European company survey will focus on the links between company skills and business strategies – including the response to digitalisation – and how they affect business outcomes. The joint European company survey will add to the available evidence and draw on each agency's strengths, while increasing efficiency and cost-effectiveness. The project leading to the survey will start in 2017 and first results will be available by end-2019.

Knowledge sharing between the two agencies continues. Topics of specific exchanges in 2016 were the future of manufacturing (with a focus on apprenticeship) and NEETS.

4.3. COOPERATION WITH THE EU AGENCIES' PERFORMANCE DEVELOPMENT NETWORK

In 2016, Cedefop continued to benefit from, and contribute to, the work of the EU agencies' performance development network (PDN). The PDN work directly supports the common approach of EU decentralised agencies for more balanced governance, improved efficiency and coherence between them.

The network develops templates, guidelines, and toolkits as follow-up to the European Commission's roadmap. In 2016 Cedefop contributed to several activities of PDN work. It participated in two meetings of the network, contributed to the EC roadmap revision, and shared its experience with other EU agencies on developing key performance indicators for the EU agencies' directors.

The exchange of ideas and practices with other EU agencies on topics of common interest has been beneficial to Cedefop. This is especially so in relation to developing a new performance indicator on the quality of Cedefop's stakeholder consultation and on developing ex-post controls on procurement procedures. The PDN also provided a good forum for exchanging views on the preparation of the *Programming document 2017-20* especially with Cedefop's 'sister' agencies Eurofound, the ETF and EU-OSHA.

4.4. COOPERATION WITH THE EU AGENCIES NETWORK

In 2016, Cedefop has, again, actively cooperated with other agencies, both through the relevant networks and meetings under the aegis of the EU agencies network and directly with individual agencies, based on shared interest and need.

At EU agency level, Cedefop has extensively contributed to the shared services catalogue, offering support to agencies in all horizontal services (HR, IT, procurement, facilities). It has systematically contributed to inter-agency consultations launched by the network and participated in ad hoc working groups such as the mutual value creation task force and the inter-agency competence framework working group. It has pursued efficiency gains by joining, as appropriate, inter-agency procurement procedures, such as the call for tender on online language learning administered by EFSA.

Cedefop has also successfully leveraged synergies with individual agencies. For example, it participated in ENISA's pan-European cyber crisis cooperation exercise (CYBER Europe 2016) with a view to enhancing Cedefop's ICT security infrastructure, and hosted a visit from ENISA to exchange best practices in HR management. Cedefop also provided ad hoc support and fostered knowledge sharing with other agencies in areas ranging from health and safety to selection procedures. At EU level, Cedefop has become a constituent of the computer emergency response team (CERT-EU) for the EU institutions, agencies and bodies, which serves as a forum to share and exchange ICT security knowledge and data related to malware, cyber threats and cyberattacks.

These diverse strands of cooperation have enabled Cedefop to capitalise on sharing of knowledge and expertise. Against the background of increasing resource constraints, agency cooperation also provides a unique opportunity for synergies and sharing of resources in selected areas.

MANAGEMENT, RESOURCES AND INTERNAL CONTROLS

Despite disruptions and increased workload in key functions of the DRS (head of resources and support post vacant since April and head of finance and procurement post vacant until September 2016), services have been delivered efficiently and effectively in support of the core business.

5.1. MANAGEMENT AND RESOURCES

5.1.1. HUMAN RESOURCES

New rules on promotion were adopted by the Governing Board in September and the promotion round was launched in December after extensive preparations.

To improve employment conditions for staff, in June the Director adopted a decision on a measure of a social nature on the financing of schooling for children of Cedefop staff. The measure provides for increased financial support for schooling in fee-paying primary and secondary levels. HR implemented the decision through direct agreements with the schools concerned.

Learning and development activities focused on the professional development of experts, which takes place mainly through participation in external training and missions. Experts' professional development was also supported through in-house knowledge-sharing activities. Workshops on panel data methods and labour market statistics are in preparation. A mission report template was put in place. It streamlines mission reporting and provides an opportunity for reflection on the professional development aspect of missions. Internal and external training applications have been fully automated, in cooperation with ICT, resulting in further efficiency gains.

Cedefop's long-standing traineeship programme was complemented with the launch of a trainee alumni network, an interactive way for

trainee alumni to network and keep in touch with Cedefop activities, projects and events.

5.1.2. FINANCE AND PROCUREMENT

The procedure for paperless provisional commitment and its complementary commitments was launched in October as a pilot project and precursor for the gradual deployment of electronic workflows for all financial transactions.

All tender activities proceeded on track and Cedefop started preparatory work in anticipation of the launch of the use of e-Prior modules in 2017.

5.1.3. INFORMATION AND COMMUNICATION TECHNOLOGY

The ICT infrastructures and services are well maintained to ensure agreed levels of availability (key performance indicators) of core ICT systems and services. The ICT service continued to support directly Cedefop's core business. In addition to the continued running of operational projects (such as Europass and Skills Panorama) and the development of tools that enhance efficiency in data collection (extranets for guidance, VPS and mobility scoreboard), the ICT service supported specific projects such as real-time labour market intelligence. It has also contributed to further rationalisation of transactions and reporting in the administrative services.

5.1.4. FACILITIES

Cedefop building and facilities are operated in an energy-efficient manner. A computerised energy management system provides reporting and control of the building's energy-related activities and helps optimise start-up time, power-down time, and equipment sequencing. Optimum efficiency is achieved in the use of heating oil, electricity and water.

In response to deficiencies identified in glass windows and the main facade, risk assessments

were undertaken, followed by an accelerated open procedure to undertake the necessary repair works. These were completed at the end of September, under third-party inspection, for optimal quality control and compliance.

A new policy on office allocation was implemented to ensure physical proximity of departments, functional allocation of space and compliance with health and safety requirements.

Cedefop attaches great importance to protection of the environment and, despite the restrictions on human and financial resources imposed in recent years, has made a firm commitment in this field, particularly through a comprehensive and structured internal environmental management system (EMS).

As a result of the introduction of measures for the improvement of building insulation, optimisation of the energy programming of the building, optimisation of the maintenance programme, and improvements in irrigation systems, reductions were recorded, between 2012 and 2016, in GHG emissions (-8,11%), electricity consumption (-7,86%), heating oil consumption (-48,76%) and water consumption (-40,59%).

5.2. AUDITS AND INTERNAL CONTROL

5.2.1. EXTERNAL EVALUATION

The report on **Cedefop's external evaluation**, carried out by the European Commission in 2013, concluded that Cedefop had been highly successful in implementing its objectives and had played an important role in strengthening cooperation between VET policy stakeholders in Europe. The report also said that Cedefop's work on modernising VET systems and analysing skills was highly esteemed and that Cedefop is recognised as a leading centre of expertise worldwide on qualifications frameworks and skills. The evaluation also found that Cedefop did not duplicate activities of any other actors at European, national or international level.

The report made 23 recommendations on how Cedefop can develop and strengthen its role. A follow-up action plan was approved by the European Commission and presented to Cedefop's Bureau on 8 and 9 December 2014. All recommendations have been acted upon. At its meeting in September 2016, the Governing Board

agreed to close a number of recommendations. As a result, only one recommendation (6.1. 'GB self-assessment') remains open.

5.2.2. AUDIT RESULTS AND FOLLOW-UP OF AUDIT RECOMMENDATIONS

Cedefop's internal auditor is the Internal Audit Service of the European Commission (IAS) and the Agency is annually controlled by the European Court of Auditors (ECA). The Agency informs the European Parliament annually of the results of the audits through a note on audits. This information note was produced by October 2016.

Following each audit, Cedefop draws up an action plan for the implementation of all recommendations. Regular monitoring of actions is carried out by the Internal Control Coordinator. A consolidated action plan, updated at least biannually, is posted on Cedefop's intranet, accessible to all staff.

Cedefop is also following up closely on the recommendations received from the Discharge Authority.

In addition to the audits conducted by the IAS and ECA, Cedefop has also developed several procedures and tools to allow ex-post and ex-ante controls throughout the year, thus further ensuring that controls and actions are in place and implemented.

5.2.2.1. Court of Auditors (ECA)

The European Court of Auditors carried out its first visit from 14 to 18 November 2016 on Cedefop's annual accounts 2016. The audit concerned mainly procedures for commitments, payments and procurement. The visit led to one preliminary finding. The centre submitted its reply to the preliminary finding on 12 January 2017. Auditors will carry out the related desk review by end of March 2017.

According to the new audit arrangements for the annual audits under Article 208 (4) of the Financial Regulation and Article 107 of the Framework Financial Regulation, Cedefop contracted an external audit company⁽⁶¹⁾ to audit Cedefop's 2016 accounts, based on a DG BUDG framework contract. The audit of the external audit company will take place in April 2017.

⁽⁶¹⁾ MAZARS.

5.2.2.2. Internal Audit Service (IAS)

All recommendations of the agreed action plan resulting from the IAS audit on procurement, including fraud prevention and legal advice at Cedefop – carried out in 2016 – have been implemented and sent for review by the end of 2016. Four out of five recommendations were closed and one was recommended by IAS to be closed.

To prepare the strategic audit plan for 2017-19, the IAS carried out a risk assessment exercise at Cedefop from 7 to 11 March 2016. The prospective topics selected for future IAS audits of Cedefop in 2017-19 are:

- (1) Cedefop web-based services;
- (2) knowledge brokering in VET (support to Member States and social partners);
- (3) human resource management.

See below an overview of the status of IAS recommendations as of 31 December 2016:

Priority	RECOMMENDATIONS				
	Open on 31.12.2015	New in 2016	Implemented, sent for review and closure in 2016	Open on 31.12.2016	Comments
Very important	0	0	0	0	
Important	8	0	8	1 ⁽⁸²⁾	
Total	8	0	8	1	

5.2.2.3. Other sources of assurance

(a) ETHICS, INTEGRITY AND INTERNAL CONTROL

The action plan of Cedefop's **anti-fraud strategy** ⁽⁸³⁾ is updated yearly and is included in the annual management plan. Related actions are also included in the Agency's consolidated action plan.

Mandatory sessions on good governance are organised regularly for new comers. The sessions, which are open to all staff members, specifically addresses ethics, integrity and internal control issues. This year's session was held on 23 November.

Presentations on the 'dignity at work' policy are organised regularly for newcomers and are also open to all staff. This year's presentation was held on 7 December. A presentation to the directorate and middle managers on 'dignity at work – the role of a manager' took place on 7

June 2016. Short presentations on dignity at work policy are organised regularly in Department meetings.

(b) EVALUATION ACTIVITIES

Following the completion of the works of the inter-institutional working group on decentralised agencies (IWG) an action plan and a roadmap have been available since beginning of 2013. Cedefop will continue to follow the process closely and include all actions required from Cedefop in the consolidated action plan.

⁽⁸²⁾ Rec. 2 – Completing the communication strategy (IAS audit on external communication and stakeholder management conducted in 2014).

⁽⁸³⁾ DIR/RB(2014)02387 adopted on 22 October 2014.

Following the completion of a **staff survey** early 2013 and the endorsement of its action plan by the Bureau on 5 December 2013, Cedefop implemented the agreed plan and reported regularly on progress to the Governing Board/Bureau. The GB agreed to close the action plan at its meeting on 29 and 30 September 2016 as it considered that necessary actions had been taken on all recommendations.

In line with the provisions of Article 45 of Cedefop financial rules, **ex-ante evaluations** are been carried out for procurement procedures above EUR 200 000. In compliance with Article 29(5) of the financial rules adopted by the Governing Board on 9 January 2014, and with a view to improving decision-making under the principle of sound financial management, Cedefop carries out **ex-post evaluations** for programmes/activities which entail a spending of above EUR 500 000.

An ex-post evaluation working party was appointed by the Director on 21 March 2016. Performed with the support of an external company selected on the basis of a framework contract of DG BUDG for audit activities, 2016 evaluations covered the following activities:

- ReferNet framework partnership agreements 2012-15;
- skills obsolescence and mismatch among EU workers;
- travel agency services – Eurostar ATEBE.

The three ex-post evaluations will be finalised by the second quarter 2017.

(c) AUDIT ACTIVITIES 2016

As part of the **ex-post controls** plan, five Cedefop payments are audited. The five payments selected at random by the internal control coordinator were reviewed by Cedefop's accountant who checked that all procedures have been followed and that the supporting documentation was in place and in line with Cedefop's financial rules. The report was delivered on 30 November 2016.

Following the decision in 2013 not to move to ABAC, Cedefop has been requested to conduct an annual internal **technical review of the Agency's financial and budgetary (Fibus) operating platform**. The second technical review was conducted in October 2015 concluding that there was no immediate technological threat in Fibus. A third technical review was conducted in October 2016. The review confirmed that there was no immediate technological threat in Fibus

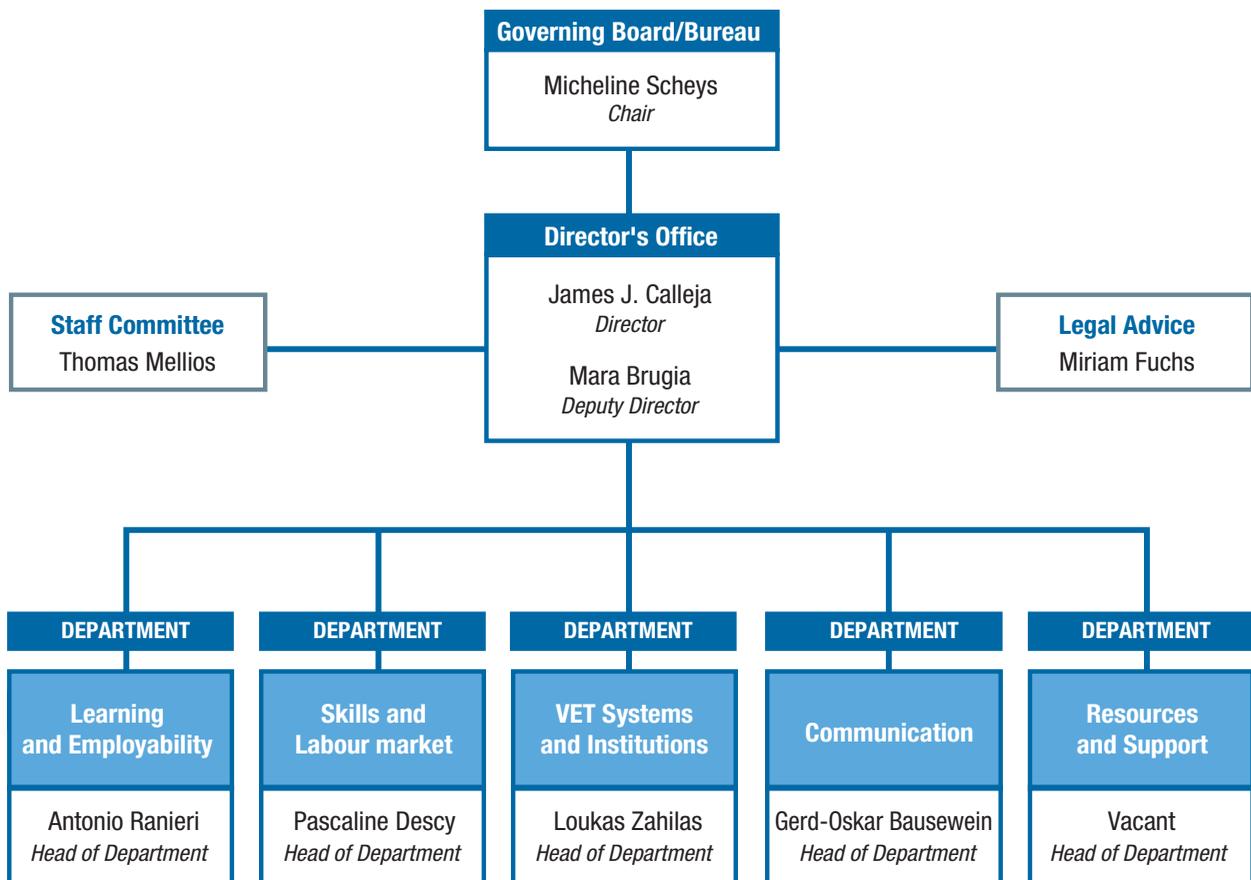
As foreseen in the *Note on internal controls ex-post*, of 12 December 2012, and as recommended by the Internal Audit Service, Cedefop drafted a procedure and introduced on 23 September 2016 **annual ex-post controls on a sample of its procurement procedures**. A working group on ex-post controls was appointed by the Director on 28 September. The results of the ex-post controls were scheduled for the end of March 2017.

LIST OF ABBREVIATIONS

ACVT	Advisory Committee on Vocational Training
CPD	continuing professional development
CVET	continuing vocational education and training
DG BUDG	Directorate General for Budget
DG EMPL	Directorate General for Employment, Social Affairs and Inclusion
DGVT	Directors General for Vocational Education and Training
EACEA	Education, Audiovisual and Culture Executive Agency
EEA	European Economic Area
EEfA	European alliance for apprenticeships
EESC	European Economic and Social Committee
EC	European Commission
ECA	European Court of Auditors
ECVET	European Credit system for Vocational Education and Training
EFTA	European Free Trade Association
EIGE	European Institute for Gender Equality
ELET	early leaving from education and training
EMS	environmental management system
EQAVET	European quality assurance in vocational education and training
EQF	European qualifications framework
ETF	European Training Foundation
ETUC	European Trade Union Confederation
EU-OSHA	European Agency for Safety and Health at Work
HE	higher education
HRM	human resource management
ICT	information and communication technology
IAS	audit service of the European Commission
ISCED	international standard classification of education
IVET	initial vocational education and training
ILO	International Labour Organisation
LMI	labour market information
MEP	Member of the European Parliament
MPOs	mismatch priority occupations
NEETS	not in education, employment or training
NQF	national qualifications framework
OER	open education resources
PDN	performance development network
STEM	science, technology, engineering and mathematics
TVET	technical vocational education and training
VET	vocational education and training
WBL	work-based learning

ANNEXES

I. ORGANISATION CHART SITUATION ON 31 DECEMBER 2016



II. SELECTED PERFORMANCE INDICATORS – 1 JANUARY TO 31 DECEMBER 2016

OUTCOME INDICATORS	2014	2015	2016	
Evidence to inform policies and their implementation	Policy documents citing Cedefop work			
	by EU institutions	97	107	167
	by international organisations	31	56	88
	Policy documents which Cedefop has helped prepare			
	of EU institutions	127	114	48
	of international organisations	7	13	3
Participation in Presidency events and meetings of senior stakeholders or which support policy	164	172	191	
New knowledge and insights generated	Downloads of Cedefop publications ⁽⁶⁴⁾			
	All publication downloads		469 000	472 200
	of which briefing notes		71 800	88 400
	Citations of Cedefop publications/studies in the literature	479	604	591
	Participation in conferences and events	78	70	78
Quality of events organised by Cedefop (participants rated event as very good or good)	92%	95%	96%	
Raised awareness among stakeholders	Website traffic			
	Visits	331 000	393 000	438 000
	Page views	929 000	1 266 000	1 269 000
	Media coverage, take-up of articles and press releases	745	544	856
	Europass outcomes among citizens			
	Visits to Europass website	21.75 m	23.90 m	27.01 m
	Downloads of Europass documents	15.98 m	16.24 m	14.96 m
Europass CVs generated online	12.49 m	18.31 m	19.28 m	
Efficient and effective support services	Internal support services – resources			
	Percentage of establishment plan filled	97%	98%	98%
	% of budget executed	99.10%	98.55%	99.99%
	Timeliness of payments (number of days to make payments)	12.5	16.28	14.01

⁽⁶⁴⁾ For comparability purposes, 2015 figures have been revised following a new improved methodology.

III. REFERNET

ReferNet, Cedefop's reference network on vocational education and training, was created in 2002 to meet the growing demand for comparative information on national vocational education and training (VET) systems and policies in the EU Member States, Iceland and Norway.

Each ReferNet member is a key national institution, involved in VET-related issues, well placed to collect first-hand information from different stakeholders on VET's role, governance and structure. (see <http://www.cedefop.europa.eu/en/content/national-contacts>).

ReferNet's annual work plans include:

- (a) reporting on national policy measures and actions which countries have agreed to carry out. This input informs detailed country fiches and cross-country overviews of developments, and helps building the evidence base for Cedefop's review of progress in implementing the Bruges communiqué;
- (b) national news stories informing on the latest developments in vocational education and training, and employment and labour market issues in all partner countries. They complement the news in Cedefop newsletters;
- (c) VET in Europe country reports, which describe the key features of countries' VET systems in their socioeconomic contexts. They are validated at national level and peer-reviewed before being published online on Cedefop's website and in hard copy for Presidency countries;
- (d) Spotlight on VET flyers, which summarise key features, challenges and developments of the national VET systems and are meant for readers who need a concise introduction. They are published online for all countries and in hard copy in several languages for Presidency countries;
- (e) providing current country data on mobility policies in initial VET. This input informs detailed country fiches and monitoring instruments within the framework of the mobility scoreboard, a recently established tool for policy-making in learning mobility in initial VET;
- (f) thematic information on issues featuring high on the VET agenda of the EU Presidencies (early leaving from VET, apprenticeships, innovation, teachers and trainers, key competences). This information complements the general context provided in country reports and Spotlights for policy analysis;
- (g) maintaining and updating national ReferNet websites, which helps raising the visibility of Cedefop, its products and more generally VET issues in the Member States, Norway and Iceland. ReferNet partners act as multipliers and dissemination channels in their countries.

ReferNet activities are jointly financed by Cedefop and Member States annually under a four-year framework partnership agreement (2016-19).

 **AUSTRIA**

ReferNet Austria (ibw, IHS, öibf)

www.refernet.at

 **BELGIUM**

IBFFP – Institut Bruxellois Francophone pour la Formation Professionnelle (Bruxelles formation)

www.refernet.be

 **BULGARIA**

NAPOO – Nacionalna agencija za profesionalno obrazovanje i obucenie

НАПОО – Национална агенция за професионално образование и обучение

www.refernet.bg

 **CROATIA**

ASOO – Agencija za strukovno obrazovanje i obrazovanje odraslih

www.refernet.hr

 **CYPRUS**

ΑνΑΔ – Αρχή Ανάπτυξης Ανθρώπινου Δυναμικού Κύπρου

www.refernet.org.cy

 **CZECH REPUBLIC**

NÚV – Národní ústav pro vzdělávání

NVF – Národní vzdělávací fond

www.refernet.cz

 **DENMARK**

Professionshøjskolen Metropol

www.phmetropol.dk/refernet

 **ESTONIA**

HTM – Haridus- ja Teadusministeerium

www.hm.ee/et/refernet

 **FINLAND**

OPH – Opetushallitus/Utbildningsstyrelsen

www.oph.fi/tietopalvelut/kansainvalinen_koulutusti_eto/cedefop/refernet

 **FRANCE**

Centre Inffo – Centre pour le développement de l'information sur la formation permanente

www.centre-inffo.fr/refernet

 **GERMANY**

BIBB – Bundesinstitut für Berufsbildung

www.refernet.de

 **GREECE**

EOPPEP – Εθνικός Οργανισμός
Πιστοποίησης Προσόντων & Επαγγελματικού
Προσανατολισμού
www.refernet.gr

 **HUNGARY**

NOVETAL – Nemzeti Szakképzési és
Felnőttképzési Hivatal
<http://refernet.nive.hu>

 **ICELAND**

Menntamálastofnun – The Directorate of
Education
www.refernet.is

 **IRELAND**

SOLAS – An tSeirbhís Oideachais Leanúnaigh
agus Scileanna
www.fas.ie/en/Refernet/Default.htm

 **ITALY**

ISFOL – Istituto per lo sviluppo della formazione
professionale dei lavoratori
www.isfol.it/isfol-europa/reti/refernet

 **LATVIA**

AIC – Akadēmiskās informācijas centrs
www.aic.lv/refernet

 **LITHUANIA**

KPMPC – Kvalifikacijų ir profesinio mokymo
plėtros centras
www.kpmc.lt/refernet

 **LUXEMBOURG**

INFPC – Institut national pour le développement
de la formation professionnelle continue
www.refernet.lu

 **MALTA**

Ministry of Education and Employment
<http://education.gov.mt/en/refernet/Pages/main-page.aspx>

 **NETHERLANDS**

ECBO – Expertisecentrum Beroepsonderwijs
www.refernet.nl

 **NORWAY**

SIU – Senter for internasjonalisering av utdanning
<http://siu.no/Videregaaende-opplaering/Samarbeid-med-land-i-Europa/ReferNet>

 **POLAND**

IBE – Instytut Badań Edukacyjnych
www.refernet.ibe.edu.pl

 **PORTUGAL**

DGERT – Direção-Geral do Emprego e das
Relações de Trabalho
www.dgert.mtss.gov.pt/refernet

 **ROMANIA**

CNDIPT – Centrul Național de Dezvoltare a
Învățământului Profesional și Tehnic
www.refernet.ro

 **SLOVAKIA**

SNO – Slovenské národné observatórium
odborného vzdelávania a prípravy –
Štátny inštitút odborného vzdelávania
www.refernet.sk

 **SLOVENIA**

CPI – Center RS za poklicno izobraževanje
www.refernet.si

 **SPAIN**

Fundación Estatal para la Formación en el
Empleo
www.refernet.es

 **SWEDEN**

SKOLVERKET – Statens skolverk
www.skolverket.se/refernet

 **UNITED KINGDOM**

UK NARIC
www.refernet.org.uk



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