



LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Éducation nationale,
de l'Enfance et de la Jeunesse

Service de la formation professionnelle

2016

Country Report: Grand-Duchy of Luxembourg

Content

1. Country context.....	3
1.1. Economic context	3
1.2. Political and social context of the apprenticeship system	5
1.3. The overall education system and the VET system	7
2. Key features.....	9
2.1. Governance & Regulations.....	9
2.2. Social Partners & Companies	13
2.3. Financing	15
2.4. Programmes & Pathways	17
2.5. Standards & Matching.....	23
2.6. Training & teaching	26
2.7. Attractiveness/Excellence	31
3. Recent developments.....	35
4. Sources and further reading.....	36

1. Country context

1.1. Economic context

Working population

The Grand-Duchy of Luxembourg has a population of 563 000 inhabitants (1st of January 2015) with a population growth of 0.23%. The growth since 1991 is more than 43%. The proportion of foreigners is about 45.9% of the total population. 70 nationalities live in Luxembourg with 86% of the foreigners coming from another European country. 69.1% of the population is in the working age, between 15 and 64 years. The unemployment rate is 6.9% (June 2015). The total domestic employment is composed of 392 131 employees (March 2014) with around 70% of the country's workforce composed of immigrants or cross-border employees. The ratio of cross-border employees grew from 3% in 1961 to 44% in 2010.

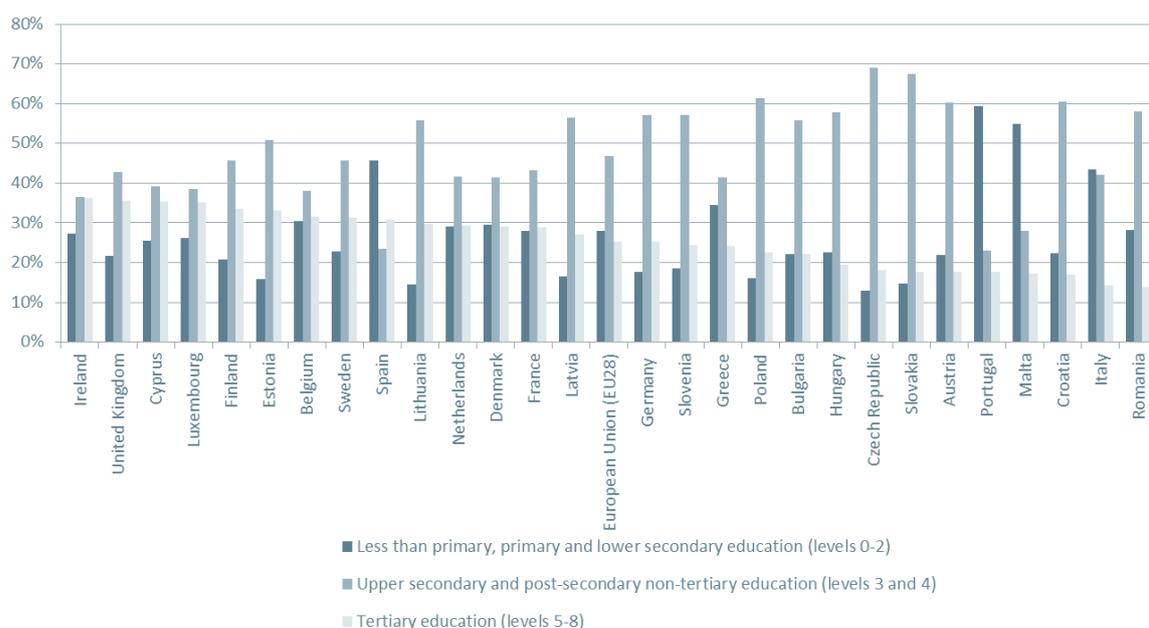
Sectors of the economy – how well does the VET offer mirror the sectors of economic activity?

The VET offer reflects the needs of the Luxembourgish economy as the social partners, represented through the professional chambers for employers and employees, are closely involved in the definition of the VET offer and the suggestion of new trades and professions. The curricula framework of new VET programmes are elaborated by curricular teams (*équipes curriculaires*) and national vocational committees (*commissions nationales de formation*). A curricular team is composed of experts from the educational side and from the labour market and is in charge of a specific trade or profession or a group of trades or professions. Hence, through labour market experts the economic sectors closely cooperate in the definition of the learning outcomes to be developed and assessed in a specific VET programme.

Labour market structure and development – skills levels of the population

Luxembourg's economy has undergone intensive structural changes in the last decades. From an industrial economy, it evolved into an economy where the tertiary sector prevails. Comparing the 1994 data with those of 2014 (IGSS, 2014), the shift from sectors continues: in 1994, the industrial sector still accounted for almost 20% of employment, while in 2014 it represented only 8.4%. Moreover, the sectors grouped under "Others", the "Services" and the "Professional, scientific and technical" sector experienced the strongest growth. Wage employment in the "Services" sector almost doubled going from 5.4% in 1994 to 8.2% in 2014. The employment in the "professional, scientific and technical" sector has more than doubled, from 3.3% in 1994 to 8.0% in 2014.

Graduates from technical secondary education account for 58% of the total number of graduated learners in 2013, among which the graduates from vocational programmes are the most numerous, followed by graduates from the technical programmes.



As shown in the above figure (Source: Eurostat, 2015, Table: Ifsa_pgaed – 26/02/2015), the share of the population that has completed tertiary education is amongst the highest in the European Union. The share of the population with a level of education below primary and lower secondary education is close to the EU28 average. Finally, the share of population with an upper secondary level is lower than the EU28 level.

Business environment, the relative importance of SMEs

Luxembourg’s economy ranks high on the ease of doing business index of the World Bank compared to the neighbouring countries and the regional average. It also ranks higher than France and Belgium on the ease of starting a business index, but slightly lower than Germany.¹

As the following figure shows, Luxembourg’s economy is characterized by small and medium sized enterprises with less than 249 employees.

0 employees	1-4	5-19	20-49	50-249	Over 250
14365	10196	5284	1294	709	158

(STATEC 2015²)

Regional differences

No real differences exist in the Grand-Duchy of Luxembourg because of the limited area of 2’586 square kilometres. The Grand Duchy of Luxembourg extends from north to south over a maximum distance of 82 km and 57 km from east to west. Regarding education and training programmes, there are no regional differences as the system is centralised and regulated by the Ministry of Education, Children and Youth.

¹ Economy profile: Luxembourg, 2013.

<http://documents.worldbank.org/curated/en/263741468271547788/pdf/828970Luxembou0Box0382100B00PUBLIC0.pdf>

² <http://www.statistiques.public.lu/>

1.2. Political and social context of the apprenticeship system

Competences

The Grand-Duchy of Luxembourg is a constitutional monarchy functioning as a parliamentary democracy with no division into federal or regional competences. Only one central administration exists. The Ministry of Education, Children and Youth (*Ministère de l'Éducation nationale, de l'Enfance et de la Jeunesse*, MENJE) is responsible for VET and all other types of education and child care except higher education. In cooperation with the Ministry of Labour, Employment and the Social and Solidarity Economy (*Ministère du Travail, de l'Emploi et de l'Économie Sociale et Solidaire*, MTE), it is also responsible for training measures for the unemployed.

Higher education lies in the responsibility of the Ministry of Higher Education and Research (*Ministère de l'Enseignement Supérieur et de la Recherche*, MESR).

History of the apprenticeship system

The apprenticeship system has been regulated for the first time in 1929, with constant evolution in 1945, 1979 and 1990. The VET system in Luxembourg is inspired from the German dual system and is organised similarly. In 2008 a new law reforming the whole VET system has been adopted by the Parliament. This law brought changes in the description of the VET programmes (learning outcomes), the structure of the courses (units and modules instead of subjects) and also in the assessment of the learnings (competence based assessment).

The image of VET and apprenticeship in society

After having accomplished the primary education at the age of 12, children are oriented, depending on their results and capacities, towards general secondary education or into technical secondary education. Vocational education and training is included and provided by the technical secondary schools. The VET and more specifically the apprenticeship system is mostly seen by the society as a social and educational setback of the student. VET programmes are seen as second choice pathways for learners that do not have access to other learning pathways. General secondary studies which lead to an access to academic studies are generally considered to be the more prestigious choice. This is partly a consequence of the structure of the labour market where the biggest demand is for highly qualified profiles with academic degrees (tertiary economy).

What is the overall apprenticeship policy of the Government? What is the "Philosophy" of the system? What is the overall aim of apprenticeship?

The MENJE and the professional chambers develop together the standards for VET. Thus, there is a direct link to the actual needs of the labour market, through the development of curricula based on labour market standards and the qualifications needed by Luxembourgish companies. The partnership with the social partners, which is stipulated by the VET law, results in the development of high quality VET programmes.

The Luxembourgish VET system has three main features aiming at reducing failures and drop-outs from VET:

- teaching by units and modules replaces teaching by subjects. Each module is focused on concrete professional situations;
- for each module, the competences (learning outcomes) to be acquired are defined;
- assessment and certification in apprenticeship are based on the learning outcomes. The acquisition of the competences is assessed and documented for each module.

Apprentices, Companies and VET schools involved in apprenticeship

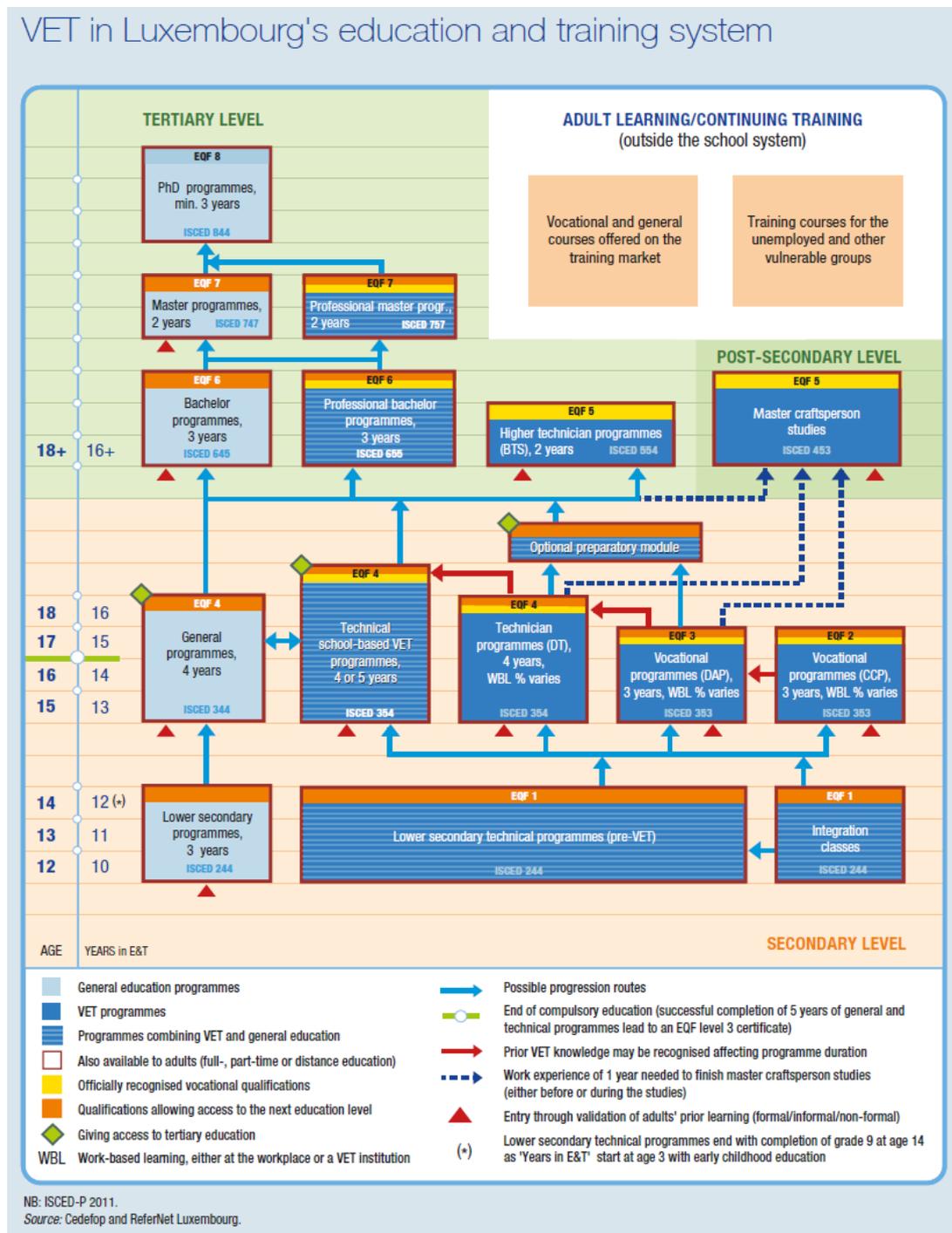
In the Grand-Duchy of Luxembourg around 3000 companies of all sizes have the right to train apprentices. Out of 42 secondary schools (37 public, 5 private)³ in Luxembourg, 23 are technical secondary schools which offer 118 crafts and professions with an additional 34 as trans-border programmes. Out of 20.998 students aged 15 or more, registered in upper secondary education, a total of 7.399 students follow training in the VET. This represents 35.2% (2014/2015)⁴.

³ <http://www.men.public.lu/catalogue-publications/themes-transversaux/statistiques-analyses/enseignement-chiffres/2014-2015-depliant/fr.pdf>

⁴ <http://www.men.public.lu/catalogue-publications/themes-transversaux/statistiques-analyses/enseignement-chiffres/2014-2015-depliant/fr.pdf>

1.3. The overall education system and the VET system

Graphic representation of the education system of Luxembourg (standardized, e.g. CEDEFOP Spotlight on VET, 2015)



Structure of the education system in general and the VET system

School attendance is compulsory between the ages of 4 and 16 years. Pupils have to attend school for at least 12 years. This period involves primary school (*école fondamentale*) and secondary education (*enseignement secondaire*). Primary school comprises four learning cycles (*cycles d'apprentissage*) with a two-year duration each. Secondary education includes two

branches of education (*ordres d'enseignement*): General secondary education (*enseignement secondaire classique*) and Technical secondary education (*enseignement secondaire technique*).

Higher education involves a range of Bachelor and Master programmes as well as Doctoral studies. In addition, short-cycle programmes leading to Higher Technician Certificates (BTS – *Brevet de technicien supérieur*) are offered by technical secondary schools. Post-secondary non-tertiary education mainly consists of preparatory courses for a Master Craftsperson certificate (*Brevet de maîtrise*).

The medium and upper cycles of technical secondary education offer four different programmes:

- technical programmes (*régime technique*) leading to a Technical secondary school leaving diploma (*diplôme de fin d'études secondaires techniques*) (ISCED 354 – EQF 4);
- vocational programmes leading to a Vocational capacity certificate (*certificat de capacité professionnelle - CCP*) (ISCED 353 – EQF 2);
- vocational programmes leading to a Vocational aptitude diploma (*diplôme d'aptitude professionnelle, DAP*) (ISCED 353– EQF 3);
- technician's programmes (*formation de technicien*) leading to the Technician's diploma (*diplôme de technicien, DT*) (ISCED 354– EQF 4).

Learners in the technical programmes represented 45.6% of the population of medium and upper cycles of technical secondary education in 2013/2014. 28.9% of learners chose one of the vocational programmes (DAP or CCP) and 25.5% a technician's programme (MENJE, 2015⁵).

⁵ <http://www.men.public.lu/catalogue-publications/themes-transversaux/statistiques-analyses/enseignement-chiffres/2014-2015-depliant/fr.pdf>

2. Key features

2.1. Governance & Regulations

Stakeholder cooperation

Teaser: The Ministry of Education, Children and Youth (MENJE) is responsible for VET in collaboration with the social partners represented by the professional chambers. Cooperation between the State and the social partners is a core principle of the VET system. As stated in the law, the social partners are essential stakeholders who contribute to the organisation and implementation of VET. A VET Committee is responsible for providing advice to the Government about all matters concerning VET.

VET in Luxembourg is regulated by the law of the 19th of December 2008 concerning the reform of the VET system and defining the goals and structure of IVET and CVET as well as the responsibility for its organisation and implementation. According to this law, the organisation of the VET system relies on a partnership between the public institutions and the Chambers representing employers and employees (Chamber of Commerce, Chamber of Trades and Skilled Crafts, Chamber of Agriculture, Chamber of Employees, Chamber of civil Servants and Clerks) who are carrying the system. All decisions concerning IVET and CVET are being taken in the frame of this partnership and require a general consensus between the partners. In case of opposite positions between the Chamber of employers and employees, the Minister of Education, Children and Youth is authorised by law to take a decision.

In the context of the VET reform of 2008, the VET Committee (*Comité à la formation professionnelle*) has been created as a consulting institution of the Government for all matters concerning the planning and implementation of the VET system. It is composed of representatives of all concerned ministries and administrations as well from the professional chambers, the trade and occupational unions, the guidance services and the parental and pupil associations.

Competent bodies

Teaser: The Department for Vocational education of the Ministry of Education, Children and Youth (MENJE) is responsible for the implementation and coordination of VET on a central level. Employers and Employees are represented by five professional chambers. The chambers are among others responsible for the award of training authorisations to companies and the administration of apprenticeship contracts. The Guidance Service of the Agency for the Development of Employment (ADEM) is responsible for the recording of apprenticeship positions and for the placement of young people and adults into a contract with a training company.

The Luxembourgish VET system, leading to the officially recognised qualifications (vocational capacity certificate - CCP, vocational aptitude diploma - DAP, technician's diploma - DT), is centralised and hence also organised on a national level. The administration of the IVET and CVET system lies within the responsibility of the Department for vocational training of the Ministry of Education, Children and Youth (MENJE). Its main tasks consist in the implementation and coordination of the IVET and CVET system as well as the organisation of a system for the recognition of formally, informally, and non-formally acquired competences (*Validation des acquis de l'expérience, VAE*). It is also responsible

for implementing measures to improve the transition of young people from VET to the labour market via its regionally organised Local Action for Youth services (*Action locale pour jeunes*). The administration of the education offer of public secondary schools lies within the responsibility of the Department of general and technical secondary education of the MENJE.

Employers and employees are represented in Luxembourg by five professional chambers (*chambres professionnelles*). The chambers are public institutions financed by the mandatory membership fees of companies and professional persons from the sectors they represent as well as by the services and the continuous training courses they provide. The professional chambers have the right to submit suggestions to the government which in return must analyse them and, as the case may be, forward them to the Parliament. The Government is also bound to ask the professional chambers for their advice about laws and decrees.

Furthermore, the professional chambers play an important role in supervising and administrating the VET system. Thus the chambers of employers and the Chamber of Employees are responsible for assigning training authorisation (*droit de former*) which is a prerequisite for companies to offer apprenticeship or internship positions. For courses that do not belong to any chamber of employers' responsibility the MENJE represents the employers.

Besides, the professional chambers are also responsible for administrating the apprenticeship contracts of the apprentices belonging to their respective field of responsibility, i.e. they register and archive them and take care of changes, cancellations, or prolongations.

The offer of apprenticeship positions is being administered by the Agency for the development of employment (*Agence pour le développement de l'emploi*, ADEM) which is subordinated to the Ministry of Labour, Employment and the Social and Solidarity Economy (*Ministère du travail, de l'emploi et de l'économie sociale et solidaire*). The competent Department for professional orientation (*Service d'orientation professionnelle*) registers the offer of apprenticeship positions and is responsible for assigning them to apprenticeship candidates. Furthermore it gathers data and creates statistics regarding the ratio between offer and demand of apprenticeship positions.

Legal framework

Teaser: The Luxembourgish VET system is regulated by the law of 19th December 2008⁶ concerning the reform of the IVET and CVET system. Hence, this law also covers the regulations regarding the apprenticeship system. The code of labour law⁷ includes specific disposals about the protection of young workers and apprentices in companies.

The main law regulating VET has been voted on 19th of December 2008 with some small modifications afterwards. This law replaces any older VET law and regulates the whole organisation, implementation and evaluation of the IVET and CVET system leading to the officially recognized qualifications (vocational capacity certificate - CCP, vocational aptitude diploma - DAP, technician's diploma - DT) including a system of training under an apprenticeship contract. It also covers the organisation of the Department for vocational education and training inside the Ministry of Education, Children and Youth (MENJE). It finally disposes a system for continuous vocational training

⁶ <http://www.legilux.public.lu/leg/a/archives/2008/0220/2008A3274A.html>

⁷ http://www.legilux.public.lu/leg/textescoordonnes/codes/code_travail/

and occupational retraining as well as a procedure for the recognition of formally, informally and non-formally acquired competences.

The strong cooperation between the State and the social partners is one of the core principles of the VET law of 2008 and social partners are considered to be essential stakeholders who contribute to the organisation and implementation of VET. The professional chambers' opinion is systematically sought on laws and regulations on economic, financial and social policy: labour law, social security, taxation, the environment, IVET and CVET, education, etc.

As mentioned beforehand, the VET law of 2008 also creates the legal basis and includes important disposals concerning the structure and organisation of the apprenticeship system in IVET and CVET. It stipulates the obligation for companies to hold a training authorisation and fixes the associated requirements for companies to train apprentices. Moreover, it defines the obligation, contents and modalities of an apprenticeship contract between an apprentice and a training company. The procedure for the cancellation and litigations related to the apprenticeship contract are also regulated by this law. Finally, the law obliges companies to declare vacant apprenticeship positions to the Guidance service of the Public Agency for the Development of Employment (OP-ADEM)

Other regulations relevant to the VET system and the apprenticeship system in particular include the code of labour law with a section concerning the protection of young workers, general laws about the organisation of schools, the compulsory school law, and financial laws.

Monitoring & Research

Teaser: Several organisations, associations, committees and exchange networks research and monitor issues related to the VET system and the labour market in general. The Training Observatory of the National Institute for the Development of Continuing Vocational Training (INFPC) for instance has been established in 2012 to treat questions related to the identification of training needs on the labour market and to the transition of young people from VET to the working life.

The Ministry of Education, Children and Youth (MENJE) works with the Ministry of Labour, Employment and the Social and Solidarity Economy (MTE) through the Permanent Committee of Labour and Employment (*Comité permanent du travail et de l'emploi*). This committee is responsible for regularly reviewing the labour market situation in terms of employment and unemployment in order to prevent mismatches and to increase the employment rate. Its working methods include analysis of job offers and skills demanded by employer profiles and other relevant information in relation to employment, unemployment and VET.

The National Institute for the Development of Continuing Vocational Training (*Institut national pour le développement de la formation professionnelle continue* - INFPC) has legally established a Training Observatory in 2012. Its mission is to meet the needs of the Government and the social partners, to develop detailed statistical information and to produce and publish reliable qualitative analysis on training issues. The goal is to offer useful insights for public policy and private strategies in the lifelong learning domain. The training observatory also performs a longitudinal study on the transition of VET learners in the final year of a VET programme to the labour market (TEVA study).

The Labour and Employment Market Research Network (*Réseau d'étude sur le marché du travail et de l'emploi* - RETEL), is an initiative of the MTE, which aims to produce studies from existing data in order to improve the overall knowledge base of the labour market situation. The RETEL regularly publishes a dashboard of the labour market. It also organises annual conferences on relevant issues related to the labour market and employment.

In order to support the improvement of the initial and continuing training offer, the Competence observatory of the Luxembourg International University Institute (*Institut Universitaire International Luxembourgeois* - IUIL), in cooperation with companies of different sectors, works on the identification and anticipation of competence needs in sectors and occupations. The competence observatory has already performed analyses in several domains: the trade, law, health, food and catering sectors, as well as in management, socio-professional integration and green professions. The participating companies will thus be enabled to improve their performance or even to follow new managerial approaches or enhance their current one.

Since 1997, the Business Federation of Luxembourg (FEDIL) conducts a bi-annual survey, in the industrial sector and in the sector of information technology and communication, to explore companies' skill needs and to balance the vocational training supply and demand. The survey is the basis for the publication 'Qualifications of tomorrow' (*Les qualifications de demain*) which covers a two-year horizon and contains forecasts of companies' skill requirements in terms of replacements and new positions and the associated qualification levels required. The objective of the study is to provide advice to parents and young persons in their educational choices and to encourage public authorities, professional chambers and other actors in VET to take account of companies' training needs and to adapt their continuous vocational training activities accordingly.

2.2. Social Partners & Companies

Involvement of social partners

Teaser: In Luxembourg the social partners are represented by five professional chambers representing the employer's and the employee's side. The partnership between the State and the professional chambers is a legally fixed requirement. Accordingly, the professional chambers are consulted on all major decisions regarding VET and their advice is sought prior to the elaboration of all legislative and regulative proposals concerning VET.

In Luxembourg the social partners are represented by five professional chambers representing the employer's and the employee's side. The chambers are public institutions financed by the mandatory membership fees of companies and professional persons from the sectors they represent as well as by the services and the continuous training courses they provide.

The employers are organised in three professional chambers:

- The Chamber of Commerce (*Chambre de Commerce*) competent for the industrial and financial sector;
- The Chamber of Trades and Skilled Crafts (*Chambre des Métiers*);
- The Chamber of Agriculture (*Chambre d'Agriculture*).

The employees are represented by two professional chambers:

- The Chamber of Employees (*Chambre des Salariés*);
- The Chamber of Clerks and Civil Servants (*Chambre des fonctionnaires et employés publics*).

The decisions taken within the frame of the partnership between the State and the professional chambers fixed by the VET law of 2008 cover the following areas:

- Identification of the qualification and training needs and definition of the IVET and CVET offer;
- Definition and provision of career advice and information offers regarding VET;
- Organisation of IVET and CVET in technical secondary schools, training companies, public CVET centres, the different chambers, etc.;
- Elaboration and revision of the curricula frameworks and the assessment criteria for the VET training programmes;
- Certification of IVET and CVET programmes and organisation of a recognition procedure for formally, informally, and non-formally acquired competences;
- Assessment of the quality of the VET-system.

The professional chambers do also play an important role in the administration of the apprenticeship system: they award training authorisations to companies and administrate the apprenticeship contracts, i.e. they register and archive them and take care of changes, cancellations, or prolongations. They also contribute to the promotion and marketing of the VET system by organising different measures including information campaigns, web portals and vocational guidance services.

Involvement of companies

Teaser: The companies are responsible for the in-company training of apprentices. The companies are not directly involved in the process of elaborating the VET legislative framework and vocational standards, although they are closely involved in elaborating the training curricula for each trade or profession as members of the curricular working groups.

The training companies (*organismes de formation*) are responsible for the in company training (internships and apprenticeships). Apprenticeship training can be offered either by companies, administrations, public institutions, foundations, associations or freelancers. Companies are obliged to hold a training authorisation (*droit de former*) in order to train apprentices which is assigned by the competent chamber of employers in accordance with the Chamber of Employees. This authorisation is subject to certain conditions regarding the professional qualifications of the company leader (*patron formateur*) and sets his minimum age to 21 years. It is also subject to a maximum quota of apprentices a company is authorised to train which is fixed by a decree.

If the company leader is not personally in charge of the training of the apprentice, he or she is obliged to designate a training tutor. Training tutors do have to follow a train the trainer course of a minimum duration of three days which aims to develop the trainer's pedagogical and social competences and role as a trainer.

Training companies are obliged to conform to the terms fixed by an apprenticeship contract and to assure training as prescribed by the curricula and assessment frameworks fixed at national level by the Ministry of Education, Children and Youth for all VET programmes.

2.3. Financing

Funding arrangements

Teaser: Public and private technical secondary school offering VET programmes leading to the officially recognised certifications are financed by the State. Training companies offering apprenticeship pay a monthly allowance to an apprentice which is fixed by a decree and varies according to the pursued VET programme. Part of this apprenticeship allowance as well as the employer's share of the social security contributions for the apprenticeship allowance paid is refunded to the companies by the State in the context of a programme aiming to promote the apprenticeship system.

Public and private technical secondary schools offering courses that lead to officially recognised VET qualifications (vocational capacity certificate – CCP, vocational aptitude diploma - DAP, technician's diploma - DT) are funded by the State. The public technical secondary schools are listed as public services in the annually voted Budget Act. They can dispose of their funds autonomously (*Services de l'Etat à gestion séparée*). The funds are usually used to cover running expenses as well as to acquire didactic material and workshop or laboratory equipment. The creation and sustenance of school buildings and infrastructures as well as the payment of bigger investments in equipment or furniture is financed in large parts by the Administration of Public Buildings (*Administration des bâtiments publics*) – subordinate to the Minister for Sustainable Development and Infrastructures – and in smaller parts by the Ministry of Education, Children and Youth. The teaching staff as well as the administrative and the technical staff of public schools are considered to be clerks or civil servants and accordingly their salary is covered by the State.

Private schools offering IVET and CVET are also mostly funded by the State. They receive state grants if they fulfil certain conditions, such as conforming their VET programmes to the official curricula and assessment frameworks of the Ministry of Education, Children and Youth.

For apprentices, initial apprenticeship allowances vary (from EUR 400 to 1200) depending on the trade or profession chosen. They are fixed annually by decree. Adult apprentices receive allowances equal to the minimum wage for unskilled workers (EUR 1922.96 by 1.01.2016) as defined in a 2010 Regulation (SCL, 2010b).

If the learning year is successful, a learning bonus is attributed to apprentices by the State as an addition to the apprenticeship allowance (SCL, 2012b). It amounts to EUR 130 for CCP (*certificat de capacité professionnelle*, vocational capacity certificate) and EUR 150 for DAP (*diplôme d'aptitude professionnelle*, vocational aptitude diploma) or DT (*diplôme de technicien*, technician's diploma) per month of apprenticeship, subject to the successful completion of the apprenticeship and passing of the final apprenticeship examination.

Incentives

Teaser: In order to encourage companies to hire apprentices, an initiative to support the creation of apprenticeship positions was created in 1999. It provides reimbursement of 27% of the apprenticeship allowance for a DT (technician's diploma) or DAP (vocational aptitude diploma)

training and 40% for a CCP (vocational capacity certificate) training, as well as a refund of the employer's share of social security costs for the apprentice (SCL, 2012b).

Apprentices receive an apprenticeship allowance (*indemnité d'apprentissage*) which varies depending on the VET programme they follow and which is fixed by a decree. This allowance is paid by the employer, although to encourage companies to hire apprentices (*aide à la promotion de l'apprentissage*), they may apply to the governmental employment fund to be reimbursed a part of the apprenticeship allowance: it covers all the non-wage labour costs as well as 27% of the allowance for DT (*diplôme de technicien*, technician's diploma) or DAP (*diplôme d'aptitude professionnelle*, vocational aptitude diploma) apprentices, and 40% for CCP (*certificat de capacité professionnelle*, vocational capacity certificate) apprentices.

Apprentices following their in-company training at the Public National Centre for Continuing Vocational Education and Training (*Centre National de la Formation Professionnelle Continue*, CNFPC) only receive 60% of the designated allowance which is paid by the employment fund.

Apprentices following an apprenticeship for adults (*apprentissage pour adultes*) receive the minimum wage for unskilled workers as defined by law (EUR 1922.96 by 1.01.2016). The training company in this case only pays the designated apprentice allowance fixed by decree, the difference being assumed by the employment fund. Furthermore, the company will be refunded the non-wage labour costs for unskilled workers.

In order to further promote vocational training, apprentices receive a bonus for each accomplished year of their apprenticeship, paid by the employment fund.

Company Costs

Teaser: Companies that engage an apprentice do have to pay a monthly allowance fixed by decree. However, a system for the promotion of apprenticeship allows companies to ask for a partial refund of their apprenticeship costs.

Companies pay a monthly allowance to the apprentice which is fixed by a decree. In IVET, the apprenticeship allowance is fixed according to the trade or profession and varies between EUR 400 and 1200. In apprenticeship for adults, the allowance equals the minimum wage for unskilled workers which amounts to EUR 1922.96 (reference period 1.01.2016).

However, companies are entitled to receive a financial aid in the frame of a programme aimed at the promotion of apprenticeship which covers 27 % of the apprenticeship allowance paid to the company for an apprentice who is aiming a DAP (vocational aptitude diploma) and 40 % of the apprenticeship allowance for an apprentice aiming a CCP (vocational capacity certificate) certification. Moreover, companies are reimbursed the employer's share of the social security contributions for the apprenticeship allowance paid.

2.4. Programmes & Pathways

Programmes

Teaser: The Luxembourgish VET system leads to three officially recognized qualifications: The vocational capacity certificate (CCP), the vocational aptitude diploma (DAP) and the technician's diploma (DT). All three qualifications enable a direct access to the labour market. Moreover, the DAP and the DT offer the possibility to access higher education after the successful completion of optional preparatory modules in languages and mathematics followed either during or after completion of the initial training.

Vocational programmes - CCP (ISCED 353 – EQF 2)

The normal duration of the programme leading to the Vocational capacity certificate (*Certificat de capacité professionnelle*, CCP) is 3 years (classes 10 to 12). The programmes prepare learners for the labour market and give access to the minimum salary for qualified workers after 5 years of working experience in the field. They are organised in modules where each module is assessed individually.

Apprenticeship in a training company is at the core of the CCP. In accordance with the amended law of 2008 on the reform of VET, an apprenticeship leading to CCP includes:

- practical training under the guidance of a tutor in a training company or in a Public training centre;
- general education and professional theory courses in a school setting;
- pedagogical support aimed at the development of the social competences of the apprentice required for his social and professional integration.

CCP programmes are designed for learners who do not have access to the Vocational aptitude diploma (*Diplôme d'aptitude professionnelle*, DAP) or the Technician's diploma (*Diplôme de technicien*, DT). After completion of the CCP, the student can continue education in a Vocational aptitude diploma programme (DAP) of the same specialty field.

Vocational programmes - DAP (ISCED 353 – EQF 3)

The Vocational programmes leading to the Vocational aptitude diploma (*Diplôme d'aptitude professionnelle* – DAP) prepare learners for entry into the labour market as a qualified worker and accordingly gives access to the minimum salary for qualified workers. The normal duration of the programme is 3 years (classes 10 to 12). The programme gives the opportunity to follow further studies to become a master craftsperson (*Brevet de maîtrise*, ISCED 453) or to get an access to higher education studies (*études techniques supérieures*, ISCED 550 or 650) on successful completion of supplementary preparatory modules in languages and mathematics which can be followed after the completion of the VET programme.

Vocational programmes leading to a DAP always alternate periods of school based and work based learning, however different forms of organisation exist according to the VET programme:

- in dual track (*filière concomitante*) VET programmes, part of the competences are acquired in a technical secondary school and the other part is acquired in a training company under an apprenticeship contract. Learners normally spend one or more days per week in school while the other days of the week, they are in a training company;

- mixed tracks (*filière mixte*) are organised for some professions and usually offer full time training in school for the first year of the programme while the following years are organised as a dual track schemes with an apprenticeship contract where part of the training takes place in a technical secondary school and the rest of the time the learner is in a training company;
- in full time school tracks (*filière de plein exercice*) training occurs in an technical secondary school and includes internships in companies totalling at least 12 weeks over the whole training period.

Technician's programmes – DT (ISCED 354 – EQF 4)

The Technician's programme (*Régime de la formation de technicien*) covers classes 10 to 13 (4 years) and prepares learners for the Technician's diploma (*Diplôme de technicien, DT*). Technician's programmes focus on a training enabling an access to the labour market with a high and diverse profile of competences. Learners in DT programmes can also acquire access to higher education upon successful completion of optional preparatory modules in languages and mathematics which can be followed either during or after completion of the VET programme. The Technician's programmes are mostly organised as full time school tracks with internship periods in companies totalling a minimum of 12 weeks over the whole training period. Some Technician's programmes are organised as dual or mixed tracks and the Government is aiming to increase the number of programmes organised as such.

Access & Guidance

Teaser: Learners usually access VET after completion of the lower cycle of technical secondary education. The level and type of programme they get access to are based on their performances in class 9 of the lower cycle and are decided by the class council. Since 2012, all major guidance services in Luxembourg have been regrouped in one single structure called the Guidance house in order to increase their effectiveness for citizens. Access to adult apprenticeship is decided by a commission under the authority of the Ministry of Education, Children and Youth (MENJE).

Guidance starts at the end of primary school where learners are oriented either to the lower cycle of general secondary education or the lower cycle of technical secondary education, the latter leading to the VET programmes.

The lower cycle of technical secondary education (ISCED 244 – EQF 1) consists of three classes, 7, 8, and 9. Upon successful completion learners can continue in technical, technician's or vocational programmes. The decision on the level and the type of programmes the learner is admitted to in class 10 of the medium cycle is taken by the class council, depending on the student's achievements and performance in class 9 in key subjects such as languages or mathematics.

Inside technical secondary school, the Psychology and school guidance service⁸ (*Service de psychologie et d'orientation scolaires, SPOS*) is responsible for the guidance of the learners for their future education choices and may also provide psychological support.

⁸ <http://www.cpos.public.lu/>

Information and guidance about trades and professions as well as the placement in apprenticeship contracts is assured by the Vocational guidance department of the Public Agency for the Development of Employment (ADEM).

An initiative launched in 2012 was aimed at the coordination and enhancement of the effectiveness of the different existing counselling and guidance services by regrouping them into one single structure called the Guidance house (*Maison de l'Orientation*). It aimed at offering a coherent and centralised service for citizens seeking guidance in their education and working life and includes:

- The vocational guidance service of the Public Agency for the Development of Employment (ADEM) that gives information and guidance about the different trades and professions and is responsible for the placement of young people and adults into apprenticeship contracts;
- The Psychology and School Guidance Centre (CPOS) that is responsible for giving guidance to learners for their future education choices and may also provide psychological support through their Psychology and School Guidance Services (*Service de psychologie et d'orientation scolaires, SPOS*) located inside technical secondary schools;
- The National Youth Service (*Service national de la jeunesse*) that supports the acquisition of practical skills and competences through the participation in voluntary programmes;
- The Local Action for Youth (*Action locale pour jeunes*), a regionally organised service offering individual coaching for young people to achieve their professional prospects and also assures a systematic follow up of early school leavers ;
- The National Agency for the European Education and Lifelong Training Programme (*Agence nationale pour le programme européen d'éducation et de formation tout au long de la vie*) that manages the European education and training programmes and can offer opportunities for training periods in other European countries.

The web-portal "Anelo"⁹ aims at giving young people comprehensive information about the different professions and trades and career possibilities as well as the different counselling services available. It also includes a digital portfolio where young people can gather important documents and certificates supporting their skills and competences.

Adults who have not been attending school or who have not been under an IVET apprenticeship contract for at least 12 months as well as those who want to upgrade their existing qualification to a higher level diploma can access adult apprenticeship programmes. A specific commission under the authority of the Minister of Education, Children and Youth decides on the access to adult apprenticeship programmes. The conditions of access and the contents of the programmes are identical to those in IVET. Adult apprenticeship programmes were introduced in the context of the "PAN Law"¹⁰ from 1999 which created a national action plan for the promotion of employment.

The VET law of the 19th of December 2008 (SCL, 2008b) stipulates that every person has the right to validate his or her prior learning and occupational experiences with the aim to obtain an officially recognized VET qualification. The validation of formal, non-formal and informal learning (*Validation des acquis de l'expérience*) is a procedure that recognises the value of school and work experience in

⁹ <http://www.anelo.lu>

¹⁰ <http://www.legilux.public.lu/leg/a/archives/1999/0013/a013.pdf#page=2>

the certifying process. Individuals who have at least three years (equivalent of 5000 hours) of practical experience in a particular working field may apply to the recognition procedure at the MENJE. The experience must be directly related to the requested certification. An ad hoc evaluation commission decides on the recognition of prior learning for a specific qualification for each applicant. If the conditions are met, the candidate may receive a partial or complete validation of the certificate or diploma he granted for. All vocational diplomas or certificates as well as the technical programmes and the master craftsperson studies are concerned by this validation procedure.

Pathways & Permeability

Teaser: Learners who have successfully accomplished a VET programme have a legal right to access the next highest level of VET. Holders of a DAP and DT certification can get access to higher education by successfully completing optional preparatory modules in languages and mathematics. Master craftsperson studies are organised and accessible to holders of a DAP or DT qualification. Higher technician certificates are VET programmes at tertiary level accessible to holders of DT diploma that have followed the preparatory modules.

Permeability

Holders of a DT (*diplôme de technicien*, technician's diploma) or DAP (*diplôme d'aptitude professionnelle*, vocational aptitude diploma) qualification can continue towards higher education by successfully accomplishing optional modules in languages and mathematics. In Technicians programmes, the optional modules can be followed either during or after completion of the training, while in programmes leading to a DAP, it is possible to follow these modules only after completion of the initial training.

Furthermore learners having acquired a CCP (*certificat de capacité professionnelle*, vocational capacity certificate) are granted a direct access to the second year of a DAP programme in the same speciality field. They can also be granted a conditional access to the third and final year of a DAP programme by decision of the class council.

Learners having accomplished a DAP programme can get an access to the third year of a Technicians programme in the same speciality field. After the first semester, the class council decides if the learner can pursue the DT programme based on his results.

Learners certified with a DT qualification are granted access to the third year of a technical school based programme. The access is also conditional and the class council decides after the first semester if the learner can pursue the programme based on his first results.

Master craftsperson studies (ISCED 453 – EQF 5)

Some trades offer the possibility to obtain a Master craftsperson certificate (*brevet de maîtrise*; ISCED 453 – EQF 5) after completion of the initial education. It entitles the holder to settle in the craft industry as self-employed and to train apprentices. Obtaining a Master craftsperson certificate confers the title of Master craftsperson in the particular trade.

Preparatory courses to the master craftsperson are organised by the Chamber of Trades and Skilled Crafts. To access the Master craftsmanship programmes, learners are required to have reached at

least a DAP or DT qualification. Learners are also required to have at least one year of working experience in the field in order to participate in the final practical examination of the Master craftsman programmes. The programmes are modular and the number of hours to follow may differ from one trade to the other. However, the maximum duration to accomplish all modules is 6 years.

Higher Technician Certificate (ISCED 554 – EQF 5)

Furthermore, in VET at tertiary level, a Higher technician certificate (*Brevet de Technicien Supérieur*, BTS; ISCED 550 – EQF 5) is awarded to students who completed two years of studies. BTS programmes are offered in the study fields of applied arts, commerce, health, industry, services and craft.

In order to attend the programme, learners are required to possess a Secondary school leaving diploma (*diplôme de fin d'études secondaires*) or a Technical secondary school leaving diploma (*diplôme de fin d'études secondaires techniques*) or a Technician's diploma (*diplôme de technicien*, DT) and the certification of additional optional modules in languages and mathematics preparing and giving access to higher education.

BTS programmes provide both theoretical instruction and work based learning at alternating periods. They are offered in public and private technical secondary schools accredited by the State.

Lifelong learning

All adults have a legal right to get access to lifelong training opportunities regardless of their age, education and employment status. Adult education and CVET allows all interested persons at different stages of their lives to receive training, be it to obtain a first qualification, to develop or to enhance their knowledge and competences, to change careers or to adapt to new technologies. Due to the limited size of the country, not all VET certificates and diplomas can be obtained through adult education and CVET.

The portal "lifelong-learning.lu", managed by the National Institute for the Development of Continuing Vocational Training (*Institut National pour le développement de la formation professionnelle continue*, INFPC), is the Luxembourgish reference website for training throughout life. It is a platform of contact between individuals and training bodies which presents an extensive catalogue of more than 6.000 courses offered by 138 registered training providers. The portal also centralises information on training: news, law, practices, training environment, studies and analyses.

Dealing with diversity

Teaser: In VET, specific classes are organised where all courses are held in French for learners who don't have sufficient language skills in German or Luxembourgish. In the lower cycle of general and technical secondary education, specific language classes are organised for immigrants with the aim to integrate them into the regular classes of the Luxembourgish education system.

The multilingual setting of Luxembourg's education system is one of the biggest obstacles for the integration of immigrants. To tackle this issue, the MENJE organises specific classes in VET where all courses are held in French (RLS classes - *classes à régime linguistique spécifique*). These classes are

addressed at those learners who don't have sufficient language skills in German or Luxembourgish. In the last years, the number of VET programmes offered as RLS classes has been constantly increasing.

Insertion classes in the lower cycle (classes 7, 8, and 9) of technical secondary education have been created for students who have acquired a good grade in their country of origin, but with little or no knowledge of the instruction languages in Luxembourg. They receive intensive courses in French or German (determined according to their gaps in language skills).

Students who arrive in the country with no language skills in German or French are placed in so called "welcome classes". They follow intensive courses in French and introductory courses in Luxembourgish. The class council assesses the skills of the learner and decides on the right time for him/her to integrate either a regular class of technical secondary education, an insertion class of the lower cycle or a specific language class of the medium cycle.

The second chance school (*École de la deuxième chance – E2C*) was set up in 2011 and is mainly addressed at early school leavers who have difficulties finding a new apprenticeship position in a training company. It offers the first year of a certain number of VET programmes organised as full time school tracks with the aim to reintegrate the learner into a regular class in a technical secondary school and an apprenticeship contract with a company. The second chance school has a specific pedagogical approach where learners are closely accompanied and supervised by tutors and classes are usually of smaller size.

2.5. Standards & Matching

Matching supply and demand

Teaser: The VET offer is defined and updated annually in the frame of the partnership between the State and the social partners. The close cooperation of the representatives from school and the world of work in the curricular working groups elaborating the VET programmes guarantee a close match between the learning outcomes of the VET programmes and the needs of the labour market.

The VET offer leading to the officially recognised certificates and diplomas (vocational capacity certificate - CCP, vocational aptitude diploma - DAP, technician's diploma - DT) is updated and fixed annually in a decree by the Ministry of Education, Children and Youth (MENJE) following consultation of the advice of the social partners represented by the professional chambers. Usually, the employer's chambers take the initiative to propose new trades and professions to be offered in VET but the MENJE or other stakeholders can also propose new programmes based on a concrete demand of the labour market.

The curricula frameworks of new VET programmes are elaborated by curricular teams (*équipes curriculaires*) composed of representatives from the school side, proposed by technical secondary schools and representatives from the labour market proposed by the professional chambers. Hence, a close collaboration with the economic sectors in the elaboration of curricula frameworks is guaranteed and makes sure that the VET programmes correspond closely with the specific needs of the labour market.

The Guidance Service of the Agency for the Development of Employment (*Orientation professionnelle de l'ADEM*) monitors the relation between the apprenticeship position demand and offer on the labour market. The reports of this monitoring are transmitted annually to the MENJE and to the social partners and are used for the revision of the VET offer.

Since 2012, the Chamber of Trades and Skilled Crafts has introduced a "Matcher". This person has the mission to inform learners about existing unbalances between the apprenticeship offer and demand and to assign learners with suitable skills to specific trades and professions in need of skilled workers.

Developing qualifications

Teaser: The curricula and assessment framework of VET programmes are elaborated by curricular teams composed of representatives of the school and the labour market side. This composition makes sure that the learning outcomes of the VET programmes closely correspond with the demand of the labour market. The curricular teams also elaborate the integrated projects which are national tests organised at the end of DAP and DT programmes and evaluated by a tripartite assessment commission.

The curricula frameworks of the different VET programmes are structured into units and modules with each module leading to the development of a certain number of competences (learning outcomes) of the concerned trade or profession.

The elaboration of the curricula frameworks (*programme-cadre*) for each VET programme is in the responsibility of curricular teams (*équipes curriculaires*) composed of representatives from the school side, proposed by technical secondary schools and representatives from the labour market proposed by the professional chambers. The curricula framework of each trade or profession consists of a job profile (*profil professionnel*), a training profile (*profil de formation*) and a training framework (*programme directeur*). Curricular teams also elaborate assessment frameworks (*référentiel d'évaluation*) for each module of a VET programme defining the assessment criteria and methods applicable. The curricular and assessment framework cover both the school based and the work based learning part of a VET programme. Hence, one important mission of the curricular teams consists in guaranteeing the coherence between the learning outcomes of the school-based and work-based learning part of a VET programme. The curricula and assessment frameworks are binding for the VET teachers as well as for the trainers in companies offering apprenticeship or internship positions.

Curricular teams are also in charge of elaborating the integrated projects for the DT (technician's diploma) and DAP (vocational aptitude diploma) programmes that replace the former theoretical and practical final exams in VET. Integrated projects are national tests assessed by a tripartite commission (*équipe d'évaluation*, assessment team) where the learner has to successfully cope with a simulated or real working situation in order to be eligible for the certification of a specific VET programme.

The curricular teams are also in charge of revising the curricula frameworks every time needed, since there is no specific timeframe or cycle fixed for revision. However, revisions of curricula are subject to the authorisation of the minister.

The training programmes defining the contents of the school based modules are elaborated by National VET programme commissions (*commissions nationales de formation*) based on the assessment frameworks delivered by the curricular teams. The national VET programme commissions are composed of teachers proposed by each VET school offering the concerned VET programme as well as by representatives of the professional chambers.

The training programmes define the learning situations, the contents and the learning methods of each module of a VET programme. While the curricula and assessment frameworks are mandatory and binding for the VET teachers, the training programmes on the other hand are not. Hence, VET teachers are not obliged to comply with the training programmes when developing the competences of the learners, they rather use them as a resource when designing their courses.

Assessment/examination and certification of training

Teaser: The Luxembourgish VET system is organised in a unit and modular based system where each module's competences are assessed individually by the VET teacher or in-company trainer in charge. VET programmes leading to a DT or a DAP include a final national test organised as an integrated project corresponding to a real or simulated working situation. The official VET certifications are issued by the National Authority for Vocational Certification.

The curricula frameworks of the VET programmes are structured into units and modules where each module leads to a predefined set of competences (learning outcomes) of a trade or profession. Each

module is assessed individually by the VET teacher or in-company trainer in charge of the teaching or training of the module according to the nationally fixed and binding assessment frameworks of the Ministry of Education, Children and Youth (MENJE).

Since the VET reform of 2008, the so-called integrated projects replace the former theoretical and practical final exams in the VET programmes leading to a DT (technician's diploma) or a DAP (vocational aptitude diploma). The integrated project corresponds to a simulated or real working situation that the learner has to successfully cope with in order to meet the conditions to be certified. Integrated projects have a maximum duration of 24 hours and are subdivided into an intermediate integrated project (*projet intégré intermédiaire*) organised at the middle of a VET programme and a final integrated project (*projet intégré final*) organised at the end of a VET programme.

The elaboration of the integrated projects and their assessment is assured by assessment teams (*équipes d'évaluation*) composed of experts proposed by the professional chambers and VET teachers proposed by the technical secondary schools. Additional assessors (*experts assesses*) can be nominated to assist in the assessment process. However, those assessors are not allowed to validate the results of the apprentices, this task may only be performed by the regular members or their replacements.

In order to be admitted to the final integrated project test the apprentice has to successfully pass a fixed percentage of mandatory modules of the VET programme he followed. If he passes the final integrated project, he is granted the certification of the VET programme.

The certification of IVET and CVET leading to the officially recognised qualifications (DT, DAP and CCP(vocational capacity certificate)) is in the responsibility of the National Authority for Vocational Certification (*Autorité nationale pour la certification professionnelle*). It is composed of the director of the Department for VET of the MENJE, representatives of the professional chambers, and five directors of the technical secondary schools.

2.6. Training & teaching

Company training

Teaser: Training companies offering apprenticeship positions must be in possession of a training authorisation awarded by the competent Employer's chamber in accordance with the Employees chamber. It is subject to a certain number of requirements relating among others to the age and qualification of the company's holder and training tutors. Apprenticeship advisors are responsible for supervising the apprenticeship in companies and to mediate in the case of litigations between the company and the apprentice.

Training companies (*organismes de formation*) offering internship or apprenticeship positions must be in possession of a training authorisation (*droit de former*) which is awarded by the competent Employer's chamber in accordance with the Employees chamber. The delivery of this authorisation is subject to a certain number of requirements. It obliges the training company to fulfil the obligations defined by an apprenticeship contract and to ensure training for the apprentice in the respective trade or profession as prescribed by the curricula and assessment frameworks of the Ministry of Education, Children and Youth. The leader of a company offering an apprenticeship or internship position needs to be at least 21 years of age and is required to be in possession of a qualification equivalent to a DAP (vocational aptitude diploma). In some trades and professions, the leader also needs to be in possession of a master craftsman certificate, while the tutors in charge of the apprentice need to have a certification equivalent to a DAP. However, company leaders or tutors who are not in possession of a craftsman certificate need to attend a train the trainer course of a minimum duration of three days where their pedagogical competences and role as a tutor are developed. A decree fixes the maximum number of apprentices a company is authorised to train.

Official IVET and CVET programmes in the dual track system are organised under the disposals of an apprenticeship contract which conforms to the regulations set by the code of labour law. Having signed an apprenticeship contract with a training company is a prerequisite for apprentices in order to be authorised to enrol at a private or public school to follow the school based part of the vocational programme. Contracts must be concluded at the latest by the 1st of November, hence it is not allowed to sign up for the current year at a school or a training centre after this date.

Sharing an apprentice is possible and is applied if a company cannot train an apprentice in a specific part of a module, due to a lack of technical knowhow or facilities, the apprentice can then be sent to another company. A sub-contract has to be elaborated for the training period in another company.

The apprenticeship counsellors (*conseillers à l'apprentissage*) are subject to the authority of the Ministry of Education, Children and Youth. Their task is to supervise the apprentice's development in the training company and to mediate between both parties, i.e. they assist and advise both sides if they encounter issues or questions and conciliate in case of a litigation. If this conciliation fails, the case will be transmitted to a commission of litigation. The apprenticeship counsellor also represents the company leader or tutor at the class council taking place at the end of each semester in the technical secondary schools.

Companies offering positions for adult apprenticeship also underlie the rules of the training authorisation and must be holder of a ministerial authorisation. The authorisation to work as a 'manager of a continuing vocational training body' is strictly personal. It is issued nominative both for capital companies (legal entities) and partnerships (natural persons) by the Ministry of the Economy (*Ministère de l'Economie*) following the recommendation of the Ministry of Education, Children and Youth. Each body must comply with the conditions for worthiness and qualifications required in order to practise this business activity. Furthermore the instructor/trainer has to accomplish a train the trainer course and follow continuous trainings.

School based training

Teaser: School based training is organised according to the nationally fixed curricula and assessment frameworks. VET-teacher candidates do have to comply with specific qualification requirements and do have to follow a three-year induction phase. The Training Institute of National Education (*Institut de formation de l'éducation nationale*, IFEN) created in 2015 is responsible for the organisation of the induction phase as well as for the continuous professional development of VET teachers.

Public schools and training centres are bound to comply with the curricula and assessment framework fixed at national level by the Ministry of Education, Children and Youth (MENJE). However, technical secondary schools have a restricted autonomy in adapting the curricula framework to their specific needs in the frame of 10% of the total duration of a specific VET programme. All adaptations must be authorised in advance by the Council of Education (*Conseil d'éducation*) on the basis of the approval of the Minister of Education, Children and Youth. Private schools must respect the official curricula and assessment frameworks of the MENJE if they want to be eligible for governmental funding.

VET programmes also contain a general education part composed of language and civic education courses as well as physical education courses for full time VET programmes. The curricula framework of the general education modules are elaborated and fixed by the Ministry of Education, Children and Youth.

Future VET teachers recruited according to the conditions of the public agent career and have to be in possession of a Master craftsperson certificate, a Bachelor or Master's degree in a specific course of study and subsequently undertake initial teacher education courses in the frame of a three year induction phase. The induction phase consists of a pedagogical training, a probationary period and an application period. The induction phase is followed by a mandatory continuous professional development phase allowing teachers to further develop their competences. A law of 30th July 2015 created the Training Institute of National Education (*Institut de formation de l'éducation nationale*, IFEN) responsible for organising the induction phase as well as the continuous professional development of all public teachers in primary and secondary education. As of September 2016, adult trainers in VET are recruited and trained according to the same procedure as initial VET teachers.

A growing number of VET teachers are also recruited under the status of state employees with permanent contracts. Until now, their qualification and training requirements differ and are less exigent than those of the public agents. However a law of 30th July 2015 tends at progressively harmonising the status and requirements of both careers.

Linking learning venues

Teaser: The unit and modular based organisation of VET programmes guarantees the coherence and synchronisation between the school and work based learning part of a VET programme. Apprenticeship counsellors represent the in-company trainer at the class council held at the end of each semester at technical secondary schools and make the link between the school based and work based training part.

VET programmes are organised in a unit and modular based way with each VET programme including modules for the school-based as well as for the company-based learning part. When elaborating the curricula framework of a specific VET programme, the curricular teams do match the learning outcomes developed in a school setting with those developed in the company. Hence it is guaranteed that the process of competence development in both learning venues is synchronised and organised in a coherent way.

VET programmes organised as dual tracks with an apprenticeship contract usually include 1 to up to 4 days per week of training at school while the other days of the week, the apprentice is trained in a company. The amount of training days in school is usually higher in the first year and decreases in the following years of the VET programme. Some VET programmes are also organised in a so-called training period system. In these programmes, periods of several weeks of full time training at a technical secondary school (usually 3 to 9 weeks) alternate with periods of several weeks of full time training in a company.

The apprenticeship counsellors (*conseillers à l'apprentissage*), that supervise the apprenticeship in the training company and mediate in the case of litigations, also represent the in-company trainer at the class council taking place at the end of each semester in the technical secondary schools. Hence the training advisor guarantees the link between the teaching and training as well as the assessment in the school based and company based learning part of the VET programme.

Teachers and trainers

Teaser: VET Teachers are recruited either as public agents or as state employees and do have to satisfy to certain qualification requirements. Teacher candidates for the public agent career have to follow a three year induction phase. Companies offering apprenticeship training do have to be in possession of a training authorisation which is also linked to specific qualification requirements. Tutors in companies in charge of the training of apprentices do have to participate in a mandatory train the trainer course of a minimum of three days.

The initial qualification required to become a VET teacher in a technical secondary school is a Bachelor or Masters' degree for the teaching of theoretical classroom and laboratory courses and a Master craftsperson certificate and 5 years of professional experience for the courses organised at a school practical workshop.

Most VET teacher candidates are recruited under the status of public agents by the State and do have to pass an entrance examination in order to be admitted to a consecutive three year induction phase. The induction phase includes:

- a pedagogical training phase offering general and vocational training courses that intends to support candidate teachers at a personal, social, and professional level. It also includes an integration of the candidate to the teaching in a technical secondary school;
- a probationary phase accessible to the teacher candidates that successfully concluded the pedagogical training phase. During this phase, the candidate has to go through class inspections in front of a jury consisting of teachers and usually the school director of the establishment;
- an application phase of 18 months during which the candidates have to elaborate an application paper. If the application paper is accepted they are appointed according to their function.

The induction phase is followed by a phase of continuous professional development during which the VET teacher candidate has to further develop his competences.

A growing number of VET teachers are recruited under the status of state employees (*chargé d'éducation*). They also need to be in possession of adequate qualifications in order to be eligible for the VET teacher career. However the conditions for the public agents are usually higher than those of the state employees. A law of 30th July 2015 tends at harmonising the status as well as the qualification and training requirements of both teacher careers.

A law of 30th July 2015 created the Training Institute of National Education (*Institut de formation de l'éducation nationale*, IFEN) responsible for organising the induction phase as well as the continuous professional development of all public teachers in primary and secondary education.

The career of the adult trainer was created in the frame of the VET reform of 2008. Adult trainers will receive specific practice-oriented teacher training that takes account of the specific teaching needs of adults. As of September 2016, adult trainers in VET will be recruited and trained according to the same procedure as initial VET teachers.

Companies offering apprenticeship (*apprentissage*) or internship (*stage en entreprise*) positions must be holder of a training authorisation (*droit de former*) that is subject to specific qualification requirements. Thus, the company leader (*patron formateur*) respectively the tutor (*tuteur*) appointed by the company to take care of the apprentice's training must be holder of at least a DAP (*diplôme d'aptitude professionnelle*, vocational aptitude diploma) degree in the profession or craft for which the authorisation to train has been requested or an equivalent qualification. In some trades or professions the company leader also needs to be in possession of a Master Craftsperson certificate or equivalent. The company leader also needs to be of a minimum age of 21 years.

If the company leader is not in charge of the training of the apprentice, he or she needs to designate one or more tutors in charge of the training. The number of tutors necessary is fixed by decree according to the number of apprentices a company engages. The tutors are obliged by decree to participate in a train the trainer course of a minimum duration of three days where the pedagogical and social competences as well as the role of the tutor are developed. The train the trainer courses are organised by the Employers chambers (Chamber of Commerce and Chamber of Trades and Skilled crafts). Tutors that are holders of a Master craftsperson certificate, that dispose of many years

of experience as an in-company trainer or that have already followed a pedagogical training in the past are exempt from the train the trainer courses.

2.7. Attractiveness/Excellence

Marketing

Teaser: Initiatives targeted at the promotion of VET programmes are organised by the Ministry of Education, Children and Youth in cooperation with the professional chambers and other stakeholders. The professional chambers also receive specific funds by the State for the promotion and marketing of VET.

After primary education at the age of 12, learners are oriented towards general secondary education or technical secondary education depending on their results and capacities. Vocational education and training is included and provided by the technical secondary schools. The VET and more specifically the apprenticeship system is mostly seen by the society as a social and educational setback for learners. VET programmes are seen as second choice pathways when nothing else is possible anymore. General secondary education which leads to academic studies is generally considered to be the more prestigious choice. This, to some extent, is a consequence of the labour market structure where the biggest demand is for highly qualified profiles with academic degrees (tertiary economy).

The initiatives targeted at the marketing and promotion of the VET system are mainly organised by the Ministry of Education, Children and Youth in cooperation with the professional chambers and other stakeholders like the technical secondary schools, the Agency for the development of Employment and the guidance services. Some initiatives to increase young people's awareness of vocational training are:

- The 'Girls Day / Boys Day' that helps boys and girls discover trades and professions which are untypical for their gender. The aim of this day is to contribute to a more diverse representation of genders in the different trades and professions;
- The 'Lux skills' national competition for trades and professions, as well as the 'Village of trades' (*Village des métiers*) where trades and professions are presented to young learners. The national trades and profession competition takes place every 2 years and is a showcase for the best apprentices competing against each other in more than 17 different trades and professions. The best of those competitors are chosen to represent Luxembourg at international competitions like Euroskills or Worldskills.

The professional chambers also receive a specific fund from the State for the marketing and promotion of VET. Some initiatives of the chambers include:

- The Chamber of Trades and Skilled Crafts launched the IVET and Master craftsperson promotion initiative 'Hands up'. This informs young people about careers in craft trades: their value, richness and diversity, and showcases its innovative approaches. At the heart of the initiative is its website, which presents useful information about craft trades, and training necessary to access them, in a user-friendly way in French and German;
- to assist people (mostly adults) interested in the Master craftsperson qualification, the Chamber of Trades and Skilled Crafts organises annual information sessions;
- the Chamber of Commerce has developed a portal for supervisors of apprentices, with information on teaching and training methods;

- the Chamber of Trades and Skilled Crafts has created a ‘Training enterprise label’ to honour enterprises committed to the training of young people in apprenticeship or internship.

Quality assurance

Teaser: The improvement of the quality of the VET system was at the stake of the VET reform of 2008. Hence, the quality of the VET system is guaranteed by numerous legal disposals like the nationally fixed curricula and assessment frameworks and the requirements for accreditation and funding of technical secondary schools. Companies offering apprenticeship positions do have to be in possession of a training authorisation subject to specific requirements.

A major reform of the VET system was initiated with the vote of the VET law of 19th December 2008 with the aim to:

- improve the quality of VET;
- ease access to lifelong learning;
- promote personal and vocational education at individual level;
- improve collaboration between the State and the social partners.

Hence, the quality of VET is guaranteed by numerous legal disposals and structures like the nationally fixed curricula and assessment framework for all VET programmes elaborated by tripartite curricular working groups and published by the Ministry of Education, Children and Youth.

Quality standards for technical secondary schools offering VET programmes are part of legislation and used for accreditation and funding. The VET law of 2008 obliges training companies to be in possession of a training authorisation subject to certain requirements regarding among others the qualification of the company leader and the tutors in charge of the apprentices. The new VET law also introduced a mandatory three-day train the trainer course for in company tutors.

A national approach to quality assurance has been devised and evaluation and review procedures are in the development stage. The Ministry of Education, Children and Youth coordinates the implementation of the EQAVET recommendation. National indicators related to the 10 proposed by the recommendation are used and monitored nationally. While most are applied in IVET, their use for CVET, which is not monitored centrally, varies by sector or provider.

A common quality assurance framework for technical secondary schools is currently being developed and also applies to the associated work-based learning. A law that is in the process of being submitted to the vote of the Parliament aims to oblige all secondary schools, including those in VET, to elaborate quality development plans. The coordination of the implementation of the quality development plans in technical secondary schools will be under the responsibility of the Department for the Coordination of Educational and Technological Research and Innovation (SCRIPT) – under the authority of the education ministry – and its School Quality Development Agency (*Agence pour le Développement de la Qualité Scolaire, ADQS*). Secondary schools can use these plans to present their strengths and weaknesses, potential opportunities or obstacles that block the proposed school development, to identify priority needs and to establish objectives and concrete actions for a three-year period. The development of the plans is in the responsibility of the School development

committees (*Cellules de développement scolaire*, CDS) that bring together members of the school directorate as well as teachers and members from the guidance services at school level.

The ADQS has also developed a national reference framework for school communities' self-assessment. The current framework is the result of research at international level and discussions held nationally with the school community.

Excellence in VET

Teaser: The VET system has been adapted to the realities of society and economy in numerous ways in the frame of the VET reform of 2008. The study on the transition of VET learners to the labour market confirms the overall good performance of the VET system. However, reducing youth unemployment and early school leaving is still a big challenge that is tackled by many initiatives.

The VET reform of 2008 created the legal framework for the adaptation of the VET system to the current realities of the society and the labour market. The unit and modular based system of VET makes it possible to better respond to the skills needs of the labour market and update VET programmes more easily. The access to higher education has been widened with the possibility for DAP holders (vocational aptitude diploma) to follow optional preparatory modules in languages and mathematics and upon successful completion to be certified with an access to tertiary education. The requirements for training companies have been enhanced with the introduction of train the trainer courses for in-company tutors that are in charge of apprentices.

The longitudinal study on the transition of VET learners in their final year of training to the labour market and their professional career revealed an overall good performance of the VET system. Hence, from the cohort of learners in their last year of training in school year 2010/2011 leaving a VET programme with a certificate or diploma, 75 % have had access to employment in less than 4 months compared to only 60 % of those leaving VET without a certificate or diploma. The same trend applies to the employment rate where 83 % of those certified were in employment after three years on the labour market while this was only the case for 62 % of those leaving VET uncertified.¹¹

However, youth unemployment and investment in skills are still high on the policy agenda. There are continued efforts to reduce youth unemployment by reinforcing stakeholder involvement and by strengthening education and training measures. These measures aim to improve the match between young people's skills/qualifications and labour market demand. They focus on people with low education levels.

In line with the Europe 2020 headline targets, policies also focus on keeping early leavers from education and training below 10%. A systematic follow up of early school leavers by the Local Action for Youth service (*Action locale pour jeunes*, ALJ) aims at proposing concrete measures to early school leavers to reintegrate them into the education system or other measures favouring their employability. This measure made it possible to reduce early school leaving under the benchmark of 10 % in the last years but currently the numbers are rising again.

¹¹ TEVA study, trajectories 2011-2014 (summary). http://www.lifelong-learning.lu/bookshelf/documents/infpc_teva_indicateurs_2011-2014_resume.pdf (11/08/2016)

The Second chance school (*École de la deuxième chance*, E2C) has been created in 2011 to give young persons who have trouble finding a new apprenticeship position the chance to reintegrate the VET system.

3. Recent developments

With the vote of the VET law of 19th December 2008, the VET system of Luxembourg has been fundamentally reformed. As in most large-scale reforms, the implementation of the new VET system has revealed some inconsistencies and weaknesses. If the major principles and concepts of the 2008 VET reform are not questioned, some aspects needed to be adapted at the organizational level, especially in technical secondary schools offering VET. A revision of the VET law has therefore been voted by the Parliament in July 2016 and some regulations were adapted accordingly. The revised law and regulations will be applicable beginning of school year 2016/2017 and the major points of the revision concern:

- the introduction of a final integrated project for CCP programmes in order to raise the quality and recognition of those programmes on the labour market;
- the abolition of the intermediate integrated project for VET programmes in full time or mixed time tracks where it represented an organisational burden for technical secondary schools;
- the reintroduction of an annual decision regarding the progression of learners to the next education year in a VET programme based on a fixed the percentage of modules the learner has to successfully pass. This measure is aimed at reducing the number of repetition modules learners do have to pass and hence to facilitate the organisation of the modular based VET system in technical secondary schools;
- the possibility for learners to repeat failed modules in an additional year that can be added after each education year of the VET programme;
- the enhancement of the competences of the class council regarding the reorientation of VET learners that lack suitable skills for a specific VET programme to another programme or to a different qualification level.

An external qualitative and quantitative evaluation of the reform has been conducted by the University of Luxembourg in 2015 in order to provide the stakeholders with in-depth information allowing to further adapt the VET system. The external evaluation will be repeated in regular intervals.

In collaboration with the professional chambers, the Government will put special focus on the implementation of the quality assurance of work based learning. This implies defining a process that will ensure the best quality without discouraging companies and especially SME's from offering apprenticeship and internship positions.

4. Sources and further reading

<http://www.men.public.lu/>

<http://www.men.public.lu/fr/professionnel/index.html>

<http://www.men.public.lu/fr/actualites/publications/professionnel/formation-professionnelle-initiale/index.html>

<http://www.men.public.lu/fr/actualites/publications/themes-transversaux/statistiques-analyses/index.html>

<http://www.cpos.public.lu/>

<http://www.infpc.lu/>