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Education and Culture DG
Lifelong Learning Programme

WORK PACKAGE 3a

**COMPARATIVE ANALYSIS OF THE DEVELOPMENT
OF APPRENTICESHIP
IN GERMANY, FRANCE, THE NETHERLANDS AND THE UK**

**Apprenticeship in France: Institutional patterns, organisation and methods
(with specific reference to the construction and machinery sectors)**

REPORT

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INTRODUCTION

After the general compulsory education, the VET (IVET and CVT) system constitutes nowadays (starting basically at the age of 16 years old) the dominant component of the whole educational and training system in France. Within IVET (dominated by a school-based system) about 40% of students opt for a dual system of alternating vocational training through apprenticeship where 60% to 75% of the training time is spent at workplace within the enterprises and the remaining training time within the Training Centres for Apprentices called CFAs (*Centres de formation d'Apprentis*).

This third work-package (WP3a) report on “Apprenticeship in France: Institutional patterns, organisation and methods (with specific reference to the construction and machinery sectors)” integrates within the framework of the Project DEVAPPRENT (2010-2012) concerning the “development of apprenticeship in Lithuania referring to experience from Germany, France, UK and Netherlands”. As in input to the first stage of its implementation, this research report is conducted on the basis of desk research and documentations, completed by a set of interviews (10 interviews with teachers/trainers/tutors, governmental institution, training providers, employers) connected with the industrial, commercial and service sectors with specific reference to the construction and machinery-engineering branches of activity. The outcomes of this investigation are presented through the following three basic sections:

- Institutional patterns;
- Organisation of training;
- Methods of training.

Section I - Institutional patterns

1 Legal and institutional background developments and reforms:

Apprenticeship development in France goes back historically to the period between the ninth and thirteenth centuries where it finds its roots in the medieval guilds with their strict hierarchy of apprentices, journeyman and master craftsmen. It continued in this way until 1791, when the guilds were suppressed. Then it came, in 1851, the Act of the 22nd of February which was simply limited to regulating contracts binding apprentices to their masters.

In 1919, the Astier Act of July the 25th marked an effective direct intervention by the French State. This Act gave the local authorities the responsibility of organising compulsory vocational training courses for youngsters from 14 to 17 years old employed in industrial companies.

Then it followed during the period before the 2nd World War, the introduction of the “apprenticeship tax” of 0.20% of total wage bill (through the Finance Act of the 13th July 1925) and the organisation of apprenticeship in terms of creating apprenticeship guidance offices within the chambers of trades and crafts (via the 1937 Act of Wallter-Paulin of the 10th March).

Following the Inter-professional Agreement signed on the 16th May 1961 between the employers’ organisations (CNPE and CGPME) and the trade unions (CFDT, CFTC, CGT, CFT-FO) the nowadays existing training centres for apprentices appeared under the acronym CFA (Centres de Formation d’Apprentis). This agreement also included the definition of an apprenticeship renovation policy where the State was committed to guaranteeing its financial contribution in addition to levied apprenticeship tax.

Then in 1971 the “Apprenticeship Act n° 71-576 called “Guichard’s Act” established legally the status of apprenticeship as part of initial vocational training (IVET). On the 7th January 1983, the Decentralisation Act (n° 83-8) extended the regions’ competences in connection with apprenticeship organisation and funding management, followed as logical consequences by raising the age limit for beginning apprenticeship to 26 years old. Since the 1987 Act of 23rd July (called Séguin’s Act) concerning apprenticeship, the range of qualifications acquired through apprenticeship has been widened to include starting from the professional aptitude certificate (*certificat d’aptitude professionnelle – CAP*) through Professional Baccalaureate (*Bac. Pro.- Baccalauréat Professionnel*) to high technician diploma (*Brevet de Technicien Supérieur – BTS*), engineering diplomas, professional bachelor and master degrees.

In 1992, the Act 92-675 of July the 17th attempted to make apprenticeship more attractive to youngsters and to encourage companies to be more actively involved in apprenticeship. It also upgraded the role played by the social partners, enterprises, and the apprenticeship training centres (CFA), including giving the go-ahead for apprenticeship experimentation in the public sector. This was followed by the “Five-Year Act 93-1313 of the 20th December 1993 which



was designed for, among other things, to improve the apprenticeship system through, for instance, opening up the school-based initial alternating basic training classes to youngsters of 14 years old and over.

Then, the 1996 Act n° 96-676 of the 6th of May came, which modified the apprenticeship funding via apprenticeship tax where instead of the previous 29%, 40% of the levied apprenticeship tax will be devoted to apprenticeship financing.

As an experimentation project launched through the Act of 17 July 1992, the opening of apprenticeship within the non-industrial and non-commercial public sector was formally established in terms of the 1997 Act (n° 97-970) of October the 16th. According to this Act, the concerned bodies include mainly:

- Central administrations and decentralised institutions of the State;
- Local authorities (regions, counties and municipalities);
- Public healthcare operators;
- Chambers (chambers of commerce and industry, chambers of trades and crafts, chambers of agriculture);
- Other public administration institutions.

The Social Modernisation Act of the 17th January 2002 contained some measures concerning apprenticeship such granting new guarantees granted to the apprentices mainly in connection with working duration, security and wage remuneration of the apprentices. Moreover, it reorganised the funding of the training centres for apprentices (CFAs) by reducing the inequalities in terms of funding and guaranteeing a minimum of financial resources for each apprenticeship centre (CFA). It also rationalised the process of collecting apprenticeship tax.

The Act 2006-396 of 31 March 2006 on “Equality of Chances” created the apprenticeship employment contract called “Junior Apprenticeship” for youngsters as early as 14 years of age. Accordingly, pupils are allowed to leave the compulsory general education system in order to quickly learn about a vocation. At the age of 16 years old, the beneficiary of this measure, can stop the training as a “junior apprentice” and join his or her initial college or another educational or training institution.

2 Apprenticeship institutional setting: Involved institutions, stakeholders and their roles

2.1 Apprenticeship institutions:

The off-the-job training within the French dual system of alternating training through apprenticeship is provided within the “Training Centres for Apprentices” called CFA (Centres de Formation d’Apprentis). The CFAs provide polyvalent and specialised alternating training to apprentices from 16 to 26 years old in all vocational and technological domains leading to the same vocational certifications awarded by the school-based IVET on both:

- the upper secondary level starting from the EQF level 3 to EQF level 4 such as the CAP (Professional Aptitude Certificate), the BEP (Vocational Studies Diploma) and the Bac. Pro. (Professional Baccalaureate)
- and the higher education from EQF level 5 to EQF level 7 such the BTS (High Technician Diploma), the DUT (University Diploma in Technology), the Professional Bachelor's and Master's degrees, and the engineer's diploma.

This CFA network is completed by that of the “The Training Units of Apprentices” (Unités de Formation d’Apprentis) which are connected with the local public institutions for training called EPLE (Etablissements Publics locaux d’Enseignement) and EPLEA (Etablissements Publics locaux d’Enseignement Agricole).

The CFAs are establishments set up through an agreement either between the State (for the national recruitments centres) or between the regional authorities’ councils and the CFA managing bodies. So, in terms of their agreed on status, there three types of CFAs:

- Private CFAs managed by professional unions, associations and other organisations (including enterprises) which possess the necessary means and competences for training provision within their own sector of activity. They are the dominant category in terms of the number of the managing organisations as well as the beneficiary apprentices.
- CFAs managed by public bodies other than the State such as the local authorities’ CFAs, the Chambers’ CFA (CCI-Chambers of Commerce and Industry, CMA-Chambers of Trades and Crafts and the Chambers of Agriculture). They constitute the second largest type of apprenticeship providers of off-the job training in terms of apprentices although they come third after the local public CFAs if the number of their management bodies is taken into consideration.
- Public CFAs linked traditionally to the State ministries such as the Ministry of National Education, the Ministry Higher Education and the Ministry of Agriculture. They enjoy a relatively large financial and pedagogical autonomy as they are locally managed apprenticeship providers either by EPLE (local public educational and training providers), EPLEA (local public educational and training providers in agriculture), or the local authorities/regional councils or by higher education institutions/providers.

Whatever their status, the CFAs are classified by the Labour Code in its volume 1 as alternating vocational training providers vested with the mission of public service provision. Due to this mission of public service provision, the CFAs benefit from public authority funding which covers part of their pedagogical functioning.

2.2 Cooperation and interactivity between all involved stakeholders:

As apprenticeship is the second basic component of IVET system, there is a variety of stakeholders directly involved (through a networking of cooperation and partnerships) in the qualification formation processes within the whole educational and training system in general



and especially within VET (including apprenticeship) at national, sectoral, intersectoral and regional levels:

2.2.1 State institutions:

The State is involved through the following ministries and inter-ministerial institutions:

- *The ministries*: they include basically:
 - *The Ministry of National Education* which is responsible for the educational policy, governing education and training in schools and apprenticeship. The CFAs connected with this ministry are placed under its overarching pedagogical responsibility through an apprenticeship inspection department called SAIA (*Service Académique d'Inspection de l'Apprentissage*) at the level of the academy (*académie*) under the rector on regional level.
 - *The Ministry of Agriculture and Fisheries* has a parallel responsibility for vocational education and training in agriculture, and it also exercises an overarching pedagogical responsibility over the CFAs connected with it through an apprenticeship inspection department (SAIA - *Service Académique d'Inspection de l'Apprentissage*) on regional level.
 - *The Ministry of Higher Education* which is responsible for general, vocational education (including higher education apprenticeship centres) and research.
 - *Other ministries* (such as the Ministry of the Economy, Industry and Employment and the Ministry of Youth and Sport) which are in charge respectively of vocational qualifications formation processes within VET in the areas for which they are responsible.
- *The National Commission for Vocational Qualifications (CNCP- Commission Nationale de la Certification Professionnelle)* created by the Social Modernisation Act in 2002 to deal with:
 - Creating, managing and maintaining updated the NQF repertory for vocational qualifications and related certifications (including those delivered through apprenticeship) called RNCP (*Répertoire Nationale des Certifications Professionnelle*, created as well in 2002). For each deliverable qualification/certification through the VET system (including apprenticeship), there are two types of documents (which can be consulted on the website of the CNCP-RNCP): the “RNCP-Fiche” (the registered qualification/certification-sheet) and a Europass Certificate Supplement (supplement descriptif du Certificat) in French and, in some cases, in other European languages (basically in English, German, Spanish...).
 - Incorporating designed vocational qualifications in the NQF repertory and securing their coherence and best fit with labour market skill contents and needs.

- Keeping pace with the European developments concerning “qualification transparency” and building a new qualifications classification grid.
- *The National Council for Lifelong Vocational Learning (CNFPTLV-Conseil national de la Formation Professionnelle Tout au Long de la Vie)* which was set up in 2004 with the aim of:
 - Promoting cooperation at national and regional levels between involved stakeholders;
 - Acting as an advisory institution about legislations and regulations concerning lifelong vocational training and apprenticeship;
 - Assessing regional policies for apprenticeship and lifelong learning and training;
 - Compiling related data and annual report to the parliament on financial uses for lifelong VET and apprenticeship development.

2.2.2 Social partners:

In cooperation and partnerships with all other involved stakeholders, the social partners play an important consultative and decision making role in the qualification formation processes (including the design/updating of qualifications’ and their occupational and certification referential standards) and their implementation on national, sectoral, inter-sectoral and regional level within both the initial vocational education and training (IVET including apprenticeship) and continuing vocational training (CVT) through basically the following institutions (CEDEFOP, 2008 & 2009; OECD, 2003; Dif, 2010):

- *Vocational Consultative Commissions (CPC- Commissions Professionnelles Consultatives)* attached to different ministries awarding national qualifications through VET (including apprenticeship) in the upper secondary vocational certifications (such CAP, BEP, BTn, BT and Bac Pro.) including BTS (Bac + 2: a two-year university level diploma). For the ministry of national education alone, there are 14 CPCs which are in charge of the development (creation and updating, including the design/re-design of related “referential standards”) of over 700 certifications connected within about 14 sectors of activity.
- *The National Pedagogical Commission (CPN- Commission Pédagogique Nationale)* which establishes the qualification system for higher education technological and vocational institutes at the level of baccalaureate plus two-year-higher education studies (NQF3 = EQF5). The CPN is in charge here of 25 specialities of the DUT certifications.
- *The National Expertise Commission (NEC-Commission Nationale d’Expertise)* responsible for the establishment of the “professional Bachelors” (L3- Licences Professionnelles, Bac. +3 years: NQF2=EQF6).



- *National Council for Higher Education and Research (CNESER-Conseil National de l'Enseignement Supérieur et de la recherche)* responsible for all higher education qualifications and certifications.
- The Commission for Engineers' Grades (CTI-Commission des Titres d'Ingénieurs) which is an independent body, mandated by French law since 1934 to accredit all engineers' qualifications (including those obtained through apprenticeship), to develop the quality of training and to promote the engineer's grade and profession in France and abroad. About 800 specialties are taken in charge by it.
- *Boards of Apprenticeship Training Centres (CFA-Centres de Formation d'Apprentis):* the social partners are fully represented within these boards.

2.2.3 Regional networking institutions:

Since the launch of the decentralisation process in the 80s leading to the creations of 26 regions, each region is run by a regional council composed of political representatives directly elected by the population of the region. In order to implement their responsibilities as regional public authorities responsible primarily for vocational training (for young people and job-seekers) and apprenticeship management and funding, the regions have created their own dedicated administrative structures and instruments in the form of vocational training committees, departments/directorates and vocational training development plans, namely the following:

- *The Regional Employment and Vocational Training Coordination Committees (CCREFPs)-Comités Régionaux de l'Emploi et de la Formation Professionnelle)* responsible for coordinating vocational policies and measures in coherence with employment policies, and promoting cooperation between different actors involved in vocational training and apprenticeship. Specifically, their functions include the policy analysis, research, monitoring and evaluation activities. They are made up of representatives of the following involved stakeholders: The Government, the regions, the social partners (employers' and employees' organisations) and the regional chambers of agriculture, industry, commerce, trades and crafts.
- *The Regional Economic, Social and Environmental Councils (CESER-Conseil Economique, Social et Environnemental Régional)* which act as consultancy bodies for the regional policymakers. In this connection, they are consulted within the process of preparing the regional plans for vocational training and apprenticeship development.
- *The Regional Vocational Training Development Plan (PRDFP-Plan Régional de Développement des Formations professionnels)* with the aim of coordinating various strands of VET provisions such as initial and continuing vocational training for young people and job-seekers. Its preparation is based on the concept of active cooperation and partnership between all involved stakeholders: the Government, the Social partners, the regional education-authority chief administrators (recteurs d'académie) and employment insurances agencies.

- *Regional Employment and Training Observatories (OREF-Observatoires Régionaux Emploi-Formation)*: The regions rely on these observatories to carry out the necessary prior analysis of the main employment and training issues on the ground (including their likely developments in the future), which is needed for the preparation, implementation and follow-up of The Regional Vocational Training Development Plan.

2.2.4 Chambers:

The Chambers of Commerce of Industry (CCI – Chambres de Commerce et de l’Industrie), Chambers of Trades and Crafts (CMA – Chambres de métiers et de l’Artisanat) and Chambers of Agriculture (Chambre de l’Agriculture) are highly involved in apprenticeship connected with their domains/sectors of activity as they intervene in validating the apprenticeship contracts and other issues connected with the follow-up of apprenticeship in cooperation with the employers, the CFAs and the regions (as the regions are involved in funding and undertaking decisions concerning apprenticeship opening and organisation).

2.3 Apprenticeship contractual and funding arrangements:

2.3.1 Access conditions, contract and duration:

Any individual aged between 16 and 26 years old have the right to take up an apprenticeship. For those under the age can also be accepted if they have completed the lower level of secondary education. Disabled individuals over the age of 26 years old may also be allowed to take apprenticeship.

The Labour Code (in its volume I) specifies that undertaking an apprenticeship is subject to a special type of work contract between the apprentice and the employer. The duration of this contract is usually equivalent to the required period for obtaining the qualification through apprenticeship, which can vary between one and three years depending on the occupation and the type of the qualification to be obtained. The apprenticeship contract can be terminated by the employer of the apprentice within a two-month trial period. Once this trial period is passed, the contract can only be terminated by both sides for any of the following reasons: serious misconduct, repeated breaches of duty, proved inaptitude of the apprentice, certification obtained in advance of the expected date. In terms of this contract the apprentice follows usually one week training courses within the CFA followed by two to three weeks of work-based training within the enterprise. Within the CFA, two thirds of given curriculum concern general transversal courses (French, maths, law studies, introduction to economics and management) and technical vocational courses (such as technology, technical drawing, etc.) while the remaining third of curriculum is devoted to practical technical and vocational training connected with the speciality of the apprentice in the CFA’s workshops.

Although the apprenticeship favours basically young people’s transition to work, the risk of these young apprentices’ failing to complete their training contracts remains non-negligible issue, especially during the trial period. Related available data are rather scarce and partial. In this connection, two surveys can be used (Cart and & Toutin-Trelcat, 2010; Arrighi, & Mora, 2010). The first is Céreq’s “Génération 2004” which can be considered as one the few



nationwide surveys providing some data about broken apprenticeship contract and the reasons why they were breached. According this survey, the rate of these breaches was estimated then at 17%. The other survey was a specific one as it concentrated on the reasons of broken contracts and the analysis of apprenticeship (DRTEFP) files registered in the Nord-Pas-de-Calais region from 2002 to 2005. The outcome of these broken contracts is not in all cases negative, as the CFAs succeeds in most of them in helping the concerned apprentices to contact new firms and finally signing new apprenticeship contracts. However, the reasons for broken contracts can be summarised as follows:

- Dominantly breaches by the apprentices themselves (about one out of two) for the following reasons:
 - Change in the apprentice's learning/career track such as moving to more attractive apprenticeship contract, or to a school-based training in a vocational lycée (instead of apprenticeship) or even finding a proper job.
 - Personal reasons (counting for about a quarter of the breaches) such a health problems and personal conflict with apprenticeship master or with other trainers in the company.
 - Dissatisfaction with working conditions, environment and relations: This is variable form one sector to another. Unpleasant working conditions and environment were quoted more frequently in food trades (such in the bakeries and butcheries) but rarely mentioned in connection with certain industrial trades (such as machinery-engineering). As for the construction sector, the main reasons given for some dissatisfaction were more or less connected with the nature of training provided and economic factors specific the enterprise and its activity. However, the sectors in which most of the apprentices gave-up and even changed their training track were services to persons such hotels - restaurants and other services such hairdressing.
- Certification is obtained in advance of the expected date.
- Economic situations where some contracts are ended prematurely because the company was obliged to close down.
- Unsatisfactory trial period for the employer.

It is also important to underline that the prematurely breached apprenticeship contracts are less pronounced in higher education apprenticeship than in those connected with upper secondary levels such as EQF levels 3 and 4. This basically, due to the fact the apprentice's level of commitment to the chosen learning track through apprenticeship is relatively higher for higher education apprentices than for those in the upper secondary CFAs. This can also be explained by the observation that at the NQF level 5 (EQF level 3) for instance, apprenticeship provides youngsters in difficulties at schools (upper and especially lower secondary colleges) with a second chance for vocational inclusion, while those who reached higher educational levels choose this training track (i.e. through apprenticeship) more deliberately (and with more commitment) as it enables them effectively to combine theoretical knowledge and work-based experiential learning as well becoming more familiar

with the world of working life. In this connection, one might even say that apprenticeship track is chosen as a “route of excellence” for higher education apprentices, especially engineers’ apprentices as well as a good investment for involved enterprises (Cart and & Toutin-Trelcat, 2010).

2.3.2 Funding arrangements:

Financial arrangements for the apprentices:

For the whole duration of their apprenticeship contracts, the apprentices are subject to the same rules and regulations within the employing enterprises like the rest of the employees. They have the right to a minimum apprenticeship salary paid by the employer as percentage of the minimum guaranteed wage (SMIC) in France, which varies according to the age of the apprentice and the year of the undertaken apprenticeship as described in the exemplary table below:

| Apprenticeship year | Under 18 years old | 18 to 20 years old | 21 years and over |
|---------------------|---------------------------------------|---------------------------------------|---|
| First year | 25% of SMIC (about €35.95 per month) | 41% of SMIC (about €50.95 per month) | 53% of SMIC (about over 712.20 per month) |
| Second year | 37% of SMIC (about €49.19 per month) | 49% of SMIC (about €58.45 per month) | 61% of SMIC (about €19.70 per month) |
| Third year | 53% of SMIC (about €712.20 per month) | 65% of SMIC (about €873.45 per month) | 78% of SMIC (about €1048.14 per month) |

Tab. Nr.1

However, the collective agreements might fix even higher wages for the apprentices.

Financial arrangements for the CFAs:

Apprenticeship is financed basically through two basic sources: the apprenticeship tax and the regional apprenticeship fund. These two, are completed by other two complementary sources: transfers from financing alternating vocational training and European Social Fund (ESF) in some cases.

a) Apprenticeship tax:

With the exclusion of free-lance professions (“professions liberals”) and agricultural occupations, this tax is levied on all enterprises exercising industrial, commercial, and craft and service activities irrespective of their size. This tax amounts in total to 0.5% of each enterprise’s gross wage bill for enterprises with less 250 employees and 0.6% for those with over 250 employees. Quota of 52% of this tax is devoted to exclusively to apprenticeship financing and its development: where 30% go to CFAs and 22% to the national fund for the development and modernisation of apprenticeship (FNDMA-Fonds National de



Développement et de Modernisation de l'Apprentissage). The remaining 48% go to financing all other types of technological and vocational training within the IVET system. Exemption from the tax is conditioned by a specified number of apprentices recruited by the beneficiary enterprises. Although there is an apprenticeship tax collector, the firm can choose to pay the tax (or part of it) to an education establishment of its own choice (including universities). This is why there is a considerable competition among education and training providers for firms' contribution to this tax. To deal with this issue, one of the proposals put forward by the Apprenticeship Charter (signed in June 2005 by 1300 basically medium and large firms) is that apprenticeship tax has to be used directly to finance apprenticeship.

b) Regional fund for apprenticeship and CVT (FRAFP):

On the level of each region, the regional council manages the fund for apprenticeship and CVT (FRAFP – Fonds Regional de l'Apprentissage et de la Formation Professionnelle) which is fed, in addition to the regional council own resources, with those financial resources transferred by the State in conformity with the principle of transferring the necessary funds which accompanied the transfer of responsibilities to regional authorities concerning VET and apprenticeship. Thus, this fund constitutes a financial instrument which enables the regions to implement their apprenticeship related policies and strategies. In this connection, the regional councils set up a provisional apprenticeship programmes specifying which CFAs can receive financial support. For a better coordination of their efforts in promoting apprenticeship, the State, the regional councils and the professional bodies and organisations conclude targeted contracts running over a period of three to five years, which fix objectives and lay down guidelines for their achievement.

c) Alternating vocational training contribution:

Funds collected by the joint funds collectors for financing alternating vocational training can be used to finance operational expenses of the CFAs' contracted by the State or the regions up to 35% of these collected funds in accordance with the sectoral collective agreement. In this connection, this compulsory contribution (as an alternating training tax) of enterprises which are also subject to apprenticeship tax amounting to 0.40% of the annual gross wage bill. As for the enterprises which are not subject to apprenticeship tax have to make a contribution to alternating vocational training amounting to 0.30% of the their annual gross wage bill.

Moreover, it is important to distinguish between two categories of CFAs in connection with state direct financing:

- CFAs created through regional agreements (which is the dominant category) are mainly, as explained above, financed through the apprenticeship tax completed by the regional subsidies (including part of the mandatory contributions to alternating training)
- The CFAs created through national agreements, they are partially or completely financed by the State (by the ministry of national education). Given that apprenticeship is decentralised, the state intervenes only exceptionally in cases where there is dispersion or a low number of apprentices requiring heavy and costly infrastructures or

in cases of specific type of apprenticeship such as CFAs in energy production and provision (including nuclear energy).

Section II - Organisation of training

1 Organisation of alternating training curriculum between CFAs and enterprises

Apprenticeship is different from the school-based IVET in its organisation and its training procedures and rules which are the result of the apprentice's specific status. As specified in details in section I, the apprentice is an employee with a specific work contract called apprenticeship contract, according to which he/she works for an employer and receives a salary. The duration of the contract is usually from one to three years depending on the duration of the targeted qualification. At the beginning of the contract, the apprentice must be aged from 16 to 26 years old. Combining an alternating pedagogy between training with an employer (within an enterprise) and subject-based educational and training within an apprenticeship centre called CFA are the basic characteristics of apprenticeship.

The enterprise plays a prominent role in the training process via apprenticeship as the apprentices spend 60% to 75% of their time within the firm. There are about 1400 accessible qualifications (certifications) within 500 craft trades (métiers). As presented in section I, employers and employees are represented at national and regional levels and additionally within sector-based bodies and corporations which determine the training contents. At national level, the National Joint Committee for Vocational Training has a decision-making role on the governmental contribution to apprenticeship funding and other matters related to education and training. This committee has counterparts at regional levels. Sector-based bodies such as consultative professional commissions (CPC-Commissions Consultatives Professionnelles) operate at national level (with correspondent CPCs at regional level) are consulted on decisions concerning introducing, updating or closing down apprenticeship programmes and on training contents for apprenticeship (as it is the case for full-time vocational training courses in schools). Employers are closely involved in off-the job training centres for apprentices (CFAs) through the Chambers of commerce and industry, chambers of trades and crafts and chambers of agricultures.

Although the CFAs (including their educational and training staff) have a large autonomy in choosing their own teaching/training methods and supporting instrument at all NQF levels, the degree of their autonomy in designing their educational and training programmes remains dependent on whether they are higher education CFAs or upper secondary ones. If higher education's CFAs are autonomous in designing and implementing their own educational and training programmes, the upper secondary apprenticeship centres have to implement the training programmes as they are set in the qualifications' related referential standards. In both cases, the programmes are composed of two categories of educational and training units: professional units and general/technical/vocational units. The latter is exclusively taken in



charge by the CFA. As for the practical knowledge, skills and competences connected with the professional training units, they are basically acquired on-the-job within the enterprise. However, it is important to underline that the depth and the width of acquired practical knowledge and skills in the field of the targeted qualification are dependent on the size and the nature or range of the activity of the enterprises (i.e. the depth and width of its exercised activities/production processes and the degree of their concordance with the qualification's programme or its referential standards). For this reason, there are cases where these professional units are jointly taken in charge through a complementarity-based alternating training within the enterprises and the CFA (as it is observed within certain CFAs within the construction and machinery sectors).

2 Organisation of training time

Off-the job training within the CFAs is shorter than that provided within the school-based IVET (in vocational lycées), conversely the time spent in the workplace within the enterprise is far greater (representing 3/5 to 3/4 of the whole apprenticeship time). Training time in the CFA is, for instance, about 900 cycle hours for the Professional Aptitude Certificate (CAP-Certificat d'Aptitude Professionnelle: NQF5=EQF3), 1000 hours for the Vocational Education Certificate (BEP-Brevet d'Etudes Professionnelles: NQF5=EQF3) and from 1350 to 1850 hours for the Vocational Baccalaureate (baccalauréat Professionnel: NQF4=EQF4) depending on whether it is a two or a three-year process. During off-the-job training within the CFAs, the apprentices retain their employee status and consequently the same salary received while they are in the enterprise. Two thirds of CFA training time is devoted to general subjects (such as French, mathematics, modern language, history-geography, physical education and sports) and technical/vocational education (such design, technology, etc.). The remaining third is dedicated to practical education and training in the domain of targeted qualifications.

3 Alternating pedagogy in CFAs

While in the vocational training schools (vocational lycées), the enterprises completes and uses the learning and training received in the educational institution, the CFA completes and uses the on-the-job learning and training received in the company. This pedagogical approach is referred to as "alternating pedagogy" specific to an apprenticeship characterised by (according to Circular n° 2005-204):

- Focussing on company training at workplace where the teachers/trainers use the workplace experience to design the vocational educational and training progress;
- Dividing and distributing the learning and training activities between the company and the off-the-job training centre (CFA) based on specific schedule;
- Securing a complementary role of the CFA in terms of off-the-job provided learning and training where the CFA covers what cannot be done at workplace within the company. This is due to the fact that the size and the nature or range of the activities of

the enterprise (especially if it is small and/or has a limited range of exercised activities connected the professional units) does not allow it sometimes to cover the professional units as programmed in conformity with the established training curriculum and the requirements of the occupational referential standards in the domain of the targeted qualification.

- Securing management and continuing communication between the CFA, the company and the apprentice through well established coordination, communication, control and follow-up intermediaries (training master and pedagogical tutor) and tools (liaison document, apprenticeship control book and check-up sheets) as described in next heading.

4 Coordination and follow-up between the CFA and the company

4.1 The apprenticeship master (maître d'apprentissage) and the pedagogical tutor:

4.1.1 The apprenticeship master (maître d'apprentissage):

The apprenticeship master may be the head of the company or a qualified employee. The appointed master has to meet the following qualifying requirements:

- The supervising master has to hold a diploma in the domain which is at least equivalent to that targeted by the apprentice's candidature through apprenticeship;
- Additionally, he/she has to have at least three years of occupational experience in the domain.

However, in the case the candidate master does not hold a diploma at least equivalent to that targeted by the apprentice, he/she has to prove possessing an occupational experience in domain or having acquired two years of supervisory experience including skills in pedagogy and tutoring.

4.1.2 The pedagogical tutor:

The pedagogical tutor of the apprentice is appointed by the person in charge of the pedagogy and training programme in which the apprentice is enrolled within the CFA. The tutor takes in charge the responsibility of the follow-up of the apprentice's training and progress within the CFA and the enterprises through the coordination and follow-up documents such as the liaison document, the control book or check sheets, including regular visits to the company and meetings with the apprenticeship master.

4.1.3 Coordination and follow-up instruments:

The smooth functioning of the apprenticeship alternating training between the CFA and the company requires a continuous coordination between the apprentice, the company and the



CFA. In this connection, three types of coordination and follow-up tools are used, namely: the liaison document, the apprenticeship liaison/control book and the check-up sheet.

Liaison document:

This liaison document is drawn up at regional level at the instigation of the regional/local Education Authority Directorate (Rectorat) which is responsible for setting up a working group for each type of certification which can be obtained through apprenticeship training. This group is composed of representatives of the CFAs, the vocational trainers and expert-consultants. The established liaison document specifies the competences and skills which apprentice has to acquire during his/her apprenticeship training. It allows the apprenticeship master to carry out regular assessment of the progress in acquired vocational knowledge and skills by the apprentice.

The Liaison book CFA-enterprise:

It is usually established by the CFA in collaboration with the concerned sector body: chamber of commerce and industry / chamber of trades and crafts/ chamber of agricultures. It contains identification information concerning the trainee, the training time-table, planned visits to the enterprise, and detailed training programme units and their contents (including implementation follow-up sheets) within the training centre and within the enterprises. This book is extremely useful coordination, follow-up and control instrument as it has the following uses:

- It enables the apprentices to coordinate the practical training they receive in the enterprises with the general and technical training they undertake at the CFA. It also allows them to prepare better their examinations.
- It is used as a source of reference for monitoring progress archived by the apprentices at both the CFA and the enterprise.
- It allows the apprenticeship master and the CFA's trainers to link the practical and theoretical knowledge as they can easily see and follow the individual progress made by each apprentice?
- It is also used by the apprenticeship inspector who advises the apprenticeship masters and monitors training progress within the enterprise by looking at the control books during his/her visits to the company and when talking to the concerned apprentices and their follow-up supervisors and tutors.

CFA check-up sheets:

The check sheet is also designed and used to establish a link between the CFA and the enterprise. It has the following advantages:

- It allows the apprentices to make notes about their workplace and look into the various aspects of the occupation in close collaboration with the person in charge of their training.

- It enables the apprentices to be largely the agents of their own training by encouraging them to discover their occupational environment by appealing individually to their powers of observation, analysis, reflection and expression.

5 Assessment and certification

The apprenticeship follow-up instruments presented above such as the liaisons document, the liaison book or the check-up sheets are simply formative control tools enabling carrying out the assessment of the progress and the level achievement made by the apprentices in the course of their training activity. However, these tools cannot provide material for credit units leading to certification. In order to obtain the targeted certification through apprenticeship, the apprentices have to take the required examination for the diplomas or the titles laid down in their apprenticeship contracts, given that the undertaken tests and the examination constitute the purpose and the end of their contracts. In this connection there are, during the cycles of the apprenticeship duration, two types of assessment methods in use: continuing assessment during the course of undertaken training called CCF (contrôle en cours de formation) and punctual assessment method (contrôle ponctuel) (see more details in section III). The examination jury awards the diplomas to successful apprentices in accordance with the frame of reference for the examinations as set up in the qualification's referential standards. This referential framework of standards for examination determines for each occupation (within the overarching framework of its qualification referential standards) the competences and skills that have to be obtained by the candidate. It is drawn up by the sectoral Professional Consultative Commissions (CPCs – Commissions Professionnelles consultatives) which are connected with several ministries (basically with the ministry of education) and composed of representatives of the concerned ministry, the social partners, experts and sector bodies such as chambers).

6 Sectors, levels and progression through apprenticeship

6.1 Qualification levels, fields of speciality and sectors of activity:

In terms of the statistics concerning the academic year 2008/2009 (MEN-MESR, 2010), the 427,650 apprentices following their apprenticeship at all NQF levels (from level V =EQF3 to level I =EQF7/8) remain directed towards the technico-professional production sectors and related fields of speciality with 60.5%, followed by 39.2% in the technico-professional service provision sectors and related specialisation fields, leaving only about 0.4% for core disciplines (such as mathematics and sciences, human sciences and law, literature and arts) whose weight is relatively increasing over higher education levels). These 427,650 apprentices are distributed per qualification level (according to the French five-level-NQF) and related main specialties and sectors of activity, in a decreasing order in terms of the importance of their relative weight, as follows:

- First, 231659 apprentices are following their apprenticeship at the NQF level 5 (EQF 3) representing over half of all the apprentices (i.e. 54.15%). Most of them (42.30%) opt



for the professional aptitude certificate (CAP–Certificat d’aptitude Professionnelle) followed by the vocational education certificate (BEP) with 10.66%. At this level, they are dominantly distributed over the following fields of speciality and sectors of activity: construction (23.3%), process industries (21.7%), engineering-machinery (18%), social services (16%) and business services (11.3%).

- Secondly, 98470 apprentices are registered at NQF level 4 (EQF 4) representing over quarter of all the apprentices (i.e. 23%). Among the apprentices at this level, 47.6% go for the vocational baccalaureate (Baccalauréat Professionnel), leaving 52.4% to be shared by those opting for other level IV’s certifications such technological baccalaureate (BTn) and the Technician or a Vocational Certificate (BT and BP). The mainly concerned sectors of activity and related fields of speciality at this level are: social services (26.7%), engineering (including machinery) (24.3%), business services (14.1%), construction (12.3%), process industry (10.4%) and agriculture (8.8%).
- Thirdly, 58572 apprentices (representing 13.7% of all apprentices) are enrolled at the NQF level 3 (EQF 5) which corresponds to the baccalaureate plus two years of higher education at the university (120 ECTS). Out of enrolled apprentices at this level, 80.6% opt for the high technician certificate (BTS–Brevet de technicien Supérieur) and about 10% for university diploma in technology (Diplôme Universitaire de Technologie). The basic fields of speciality and sectors concerned by these qualifications at this level are: business services (41.2%), multi-technology specialties for the production sector (11.4%), engineering (including machinery) (11%), social services (10.3%), ICT (9.4%) and agriculture (7.8%).
- Fourthly, it comes the effective number of 22928 apprentices following their apprenticeship at the NQF level 1 (EQF 7) representing 5.4% of all apprentices. 44.8% of these enrolled apprentices at this level opted for the engineer’s diploma (300 ECTS), followed by 30.6% for the professional Master degree (300 ECTS), leaving 24.5% for other types of diploma at this level. At this level, they are dominantly distributed over the following sectors of activity and related fields of speciality: business services (37.3%), engineering (including machinery) (19.3%), multi-technology specialties within the production sector (13.8%), ICT (12.4%), construction (4.4%) and social services (3%).
- Lastly, 16021 apprentices are registered at the NQF level 2 (EQF 6) representing only 3.7% of all the apprentices in 2008/2009. Out of the apprentices following their apprenticeship at this level, 62.3% go for professional Bachelor’s degree (180 ECTS). The remaining 37.7% are shared between other types of professional diploma of level 2 (EQF level 6). The mainly concerned fields of speciality and sectors of activity at this level are: business services (57.4%), ICT (12.5%), multi-technology specialties within the production sector (9%), process industries (7.1%), social services (4.3%) and engineering-machinery (3.1%).

6.2 Progression through qualification levels:

6.2.1 Success rates:

The completion (success) rate for apprentices taking up examination in NQF level 5 (EQF level 3) was 79.3% for CAP and 74.8% for BEP (more or less the same as within school-based system) in 2009. While at the NQF level 4 (EQF level 4), the success rate for the apprentices taking the vocational baccalaureate examination was, with a success rate of 89.5%, slightly higher than that within the school-based system at the same level. In higher education apprenticeship, the success rate is on average relatively higher than the school-based general educational track (MEN-MESR, 2010).

6.2.2 Progression through apprenticeship:

Given that each level of the training programmes and associated qualifications offered to apprentices are designed to act as a preparation for the subsequent level, the progression through apprenticeship from one level to the next one is facilitated. The available statistical evidence (MNE-MESR, 2010) on progression through apprenticeship levels shows the following:

- Among the apprentices in their first year of apprenticeship at the NQF level V (EQF 3), 43.3% come from the last year of the lower secondary colleges and 11.7% from the upper secondary vocational education.
- Concerning the apprentices following their apprenticeship at the NQF level V (EQF 3) in 2008/2009, most of them come from the previous level V: 47.6% from the apprenticeship centres (CFAs) and 30.7% from the upper secondary colleges (lycées).
- 50.3% of apprentices at level III of the NQF (EQF 5) are originally holder of vocational or technological baccalaureate (representing 37%) and holders of general baccalaureate (with 13.3%) from upper secondary lycées at the NQF level 4 (EQF 4).
- Among the first year apprentices preparing an engineer's diploma at the NQF level I (EQF level 7), 34.3% were during the previous year following their studies at a university institute of technology (IUT), followed by 20.1% who followed an apprenticeship during the previous year.
- As for the other apprentices (with the exclusion of engineers) preparing their apprenticeship at the NQF levels II and I (EQF 6 and 7), 26.1% of them were apprentices in the previous year.

On the whole, as compared with the other school-based general and VET tracks, apprenticeship is characterised by the existence of relatively a high level of progression and learning path fluidity and complementarity within and between all its own track levels and those of the whole educational and training system.



7 Career guidance

The French learning and guidance system has existed for many years, although until recently guidance provision and supporting structures were better developed in general education for junior and senior high school pupils. However for a number of years now, the labour market has been increasingly characterised by a shortage in qualified labour in certain sectors, less employment among early school leavers without qualifications, transition (with people moving from a job to another or in and out for work) and by rapid socio-economic and technological changes. As a result, numerous structures have been put in place to support individuals through these changes with guidance and counselling provision services adapted to their individual situations and choices. The government provides most of these services and plays a major role in funding them. The two ministries most particularly involved are those in charge of education and placement in the labour market.

Concerning education and training including apprenticeship, there are about 574 Information and Guidance Centres connected with the Ministry of Education, called CIOs (Centres d'Information et d'Orientation). These countrywide CIOs employ about 4300 managers and counsellors who work closely with training institutions and those in charge of helping young people to find work. The counselling and guidance takes place either in schools or colleges or the universities or within these centres themselves. Additionally this process is also supported by important national career guidance organisation called ONISEP (Office National d'Information sur les Enseignements et les Professions) which produces and publishes guidelines and other materials setting the choices available about learning and career paths to which they may lead. The ONISEP also staffs and maintains information centres in all major towns and one or guidance counsellors are attached basically to all the educational and training institutions and schools. Moreover and more specifically in connection with apprenticeship provision, the chambers provide, in cooperation with CFAs and employers, information and guidance to potential apprenticeship candidates concerning the possibilities of their placement within the enterprises.

Given that France has experienced for many years relatively high rates of youth unemployment (of about 24% among 15 to 24 year old youngsters), the promotion of apprenticeship has given more employment chances to this age group of individuals especially those with low or without qualifications. In fact, as confirmed by most of the investigations, completed qualifications through apprenticeship offer (in shorter waiting periods) better chances for employment than those obtained at same levels from the school based system.

8 Quality assurance

There are in France three overarching basic categories of quality assurance evaluation in education and training (including apprenticeship): Evaluation of providers, evaluation of the educational and training system (including teaching methods) and the quality assurance of certification process of learning outcomes

8.1 Evaluation of VET providers

The evaluation of education institutions was gradually implemented in France from the mid-1980s internally and externally (EURYDICE, 2010).

8.1.1 Internal evaluation:

Upper secondary VET providers:

At the end of each school year, the school council carries out the assessment of the educational institution's operations, via the assessment of the "school project". There is a set of indicators enabling involved institutions to measure their specific characteristics and the context within which they are situated, and to compare themselves with the other institutions in their regional education directorate (académie) as well as the entire territory. This analysis helps in defining the pedagogical and educational projects that the institutions must devise and carry out in order to enhance the development and success of their pupils/students. Moreover, the "contract of objectives" between each regional/local educational and training providers and the academic authority defining the objectives to be met by the institution, is subject to internal evaluation every year. Each year, the head of the institution issues a report, based notably on the work carried out by the pedagogical council, on the running of the institution and its material operational conditions. This report (to be sent to the academic authority) gives an account of the implementation of the institution's project, the tests carried out by the institution and the contract of objectives.

Higher education:

Since 1989, each higher education institution is required to carry out a self-assessment of its strengths and weaknesses, which constitutes a preliminary phase in the negotiation relative to the definition of the four year contract signed between the State and the educational institution. For more than 20 years, the contractual policy has been placed at the heart of the dialogue between the State and higher education institutions. It enables these institutions to assert their identity and autonomy while complying with an overarching consistent national policy. In conjunction with the principles of the Bologna Process, the contractual policy with universities and other higher education institutions has, since 2004, focused primarily on the reinforcement of internal evaluation processes.

8.1.2 External evaluation:

A distinction is established between: regional and national/European levels:

On regional level:

Academic correspondents of national education general inspectorate services set up, within the regional academic directorate (académie), the permanent duties and annual work schedule of the inspection authority. They determine, along with the rector of the "académie", the work schedule of inspection authorities with pedagogical responsibility as well as their contribution to general inspection services in the accomplishment of their tasks.



At regional level, the regional councils, which are now in charge of apprenticeship and vocational training for young and adult people, have adopted “quality charters” (Chartes qualité). These charters are negotiated and co-signed by the vocational bodies representing particular sectors or by the training provider that enters into contractual agreement with the region. They cover various aspects of training such as:

- Improving the quality of training provision to apprentices, placing workers (including qualified apprentices) in jobs and qualifications in specific sectors;
- Enhancing the quality of services offered by training bodies, including the way trainees are treated on work placement as well as training methods, follow-up and help with job search.

On national level: Upper secondary VET providers and HE institutions

On Upper secondary level:

The external assessment, on national and European levels, of educational institutions, is part of the function of three major assessment bodies – IGEN, IGAENR and DEPP.

IGEN (Inspection Générale de l’Education Nationale) has three major duties concerning the entire education system with the exception of higher education:

- o Participating in the assessment of inspection, management, teaching, educational and guidance personnel while taking part in their training and recruitment (participation in examination panels) as well as the monitoring of their activity.
- o Taking part in the overall assessment of the education system (as specified by the framework Act of 10/7/1989). This assessment applies to educational and training institutions, types of training, teaching contents, programmes, pedagogical methods, resources involved and the educational and training outcomes. As well as these permanent duties, specific work guidelines are set each year by the ministry of education. National Education general inspection services also provides information concerning innovative practices, particularly in pedagogical terms, included in an annual, published report on the state of education.
- o Providing the Ministry for National Education with advice and proposals, within the scope of its jurisdictional competences.

IGAENR (Inspection Générale de l’Administration de l’Education Nationale et de la Recherche) has the mission of controlling, assessing and advising. It conducts assessments, according to an annual work schedule established by the ministry. It also carries out local and regional assessments.

DEPP (Direction de l’Evaluation, de la Perspective et de la Performance): its evaluation related missions can be summarised as follows:

- Awareness: It takes in charge the design and management of the statistical information system concerning the whole educational and training system over the entire public and private research fields.
- Assessment: it designs and implements the assessment procedure of the education system via work carried out in terms of learners' acquired knowledge, public policies, understanding of the education system and involved stakeholders' actions. The DEPP takes part in European or international projects designed to compare the performance and operating methods of the different education systems.
- Planning: it prepares projections and scenarios concerning short, medium and long-term evolutions of the education system.
- Reporting: on the condition of the training, education and research system through data collection and the publication of the results of its survey, assessment and planning work.
- Support: by providing all education system stakeholders with tools designed to help in the guidance and decision-making process, notably indicators, to help them define their policy, monitor its implementation and measure its results. With its publications, guidance and decision-making tools, it intends to improve the professional practices of the different stakeholders.

On higher education level:

Public higher education:

The French Agency AERES (Agence d'Evaluation de la Recherche et de l'Enseignement Supérieur) is created to provide the French higher education system (including research) with the required assessment tools within an international and European context marked by the importance of the evaluation and quality assurance issues. It has been created to enable the French higher education system to play a leading role in the progressive implementation of a European policy in terms of evaluation.

This agency is notably responsible for the evaluation of research institutions and organisations, higher education and research institutions, scientific cooperation institutions and foundations as well as the national research agency, taking into account all their missions and activities. The evaluations are based on the choice of recognised experts at national, European or international level, and common evaluation methods for each type of evaluation carried out. The quality of the evaluation is also based on procedures which guarantee objectivity. The conclusions of the evaluations are taken into consideration in the policy of the institutions and their contractual relationships with the State.

Furthermore, a national teacher training evaluation Committee was created, under the authority of the ministers in charge of national education and higher education. The



National Teacher Training Evaluation Committee is made up of twenty members appointed for their competence. It includes teachers, researchers, primary and secondary education teachers, and members of the inspectorate services of the ministry in charge of national education, managers representing the ministry of national education within the educational directorates (académies) and other French and foreign qualified personalities. The members of the National Teacher Training Evaluation Committee are appointed for three years, renewable once, by joint order of the ministers in charge of national education and higher education. The national teacher training evaluation Committee audits the training plans established by the institutions as part of the contractual policy.

Private technical higher education institutions and providers under the authority of a Chambers of Commerce and Industry:

The policy of the National Education Ministry is to promote the quality of provided education and training via periodic monitoring and assessment system in order to ensure its coherence with national and international contexts and quality assurance standards. This system is based on setting up specialist assessment committees, namely:

- *Committee of engineers' grades (CTI- Commission des titres d'ingénieurs)* which carries out a systematic and assessment of engineering courses. This committee, founded in 1934, is made up of 32 highly qualified members, representing higher education and the corporate sector. 80% of the curricula assessed by the CTI are authorised for six years.
- *Committee for the vocational Master's degree:* In conformity with the article 15 of the order of 25 April 2002 relative to the national master's degree, the engineering schools can, in addition to their traditional courses resulting in the acquisition of the engineering diploma, set up new curriculum promoting their competences at master's level, and making it possible to achieve new primary objectives such as the development of an international cooperation with educational institutions. While respecting the specific characteristics of engineering schools (including their pedagogical autonomy), the quality of the undertaken evaluation is secured by an assessment committee made up of twenty qualified individuals (from relevant higher education institutions as well from the economic world) selected for their pedagogical, scientific or industrial skills, within the domain of engineering curricula. It assesses the relevance of the projects connected with the vocational Master's degree with regard to the national or international economic, social and cultural environment, and expected benefits. More specifically, it assesses the quality of potentially implemented countrywide partnerships as well as that of the proposed pedagogical innovations.
- *"HELPER" committee for the assessment of management curricula and certifications:* Set up in April 2001 in partnership with the ministry of

Industry, this committee carries out a systematic and periodic assessment of management courses. It regulates the system while encouraging educational institutions to strongly commit to progress. It is made up of 16 members from the University, schools of management and the corporate sector. In the assessment process, closer attention is also paid to the evaluation of the scientific production within schools of management.

8.2 Evaluation of the educational and training system and methods

As explained in the previous section, different organisations take part in the assessment and inspection of the educational and training system including notably the High Council for Education (*Haut Conseil de l'Education*) set up in 2005 (Article 14 of the Framework and Programme Act for the future of the school of 23-4-2005). It makes proposals concerning the methods to assess pupils', apprentices' and the students' knowledge, and it makes recommendations regarding the organisation and the results obtained via the educational system and teachers' training and pedagogy. Each year, this council prepares and publishes a diagnostic evaluation report (EURYDICE, 2010).

8.2.1 Evaluation of upper secondary VET

National diagnostic evaluations are pedagogical tools and methods used to help teachers and trainers to organise differentiated progress rhythms for learners in their classrooms. They are primarily analytical. They should not be confused with the validation procedures of the foundation of knowledge, competences and skills to be acquired. The national diagnostic evaluations aim at detecting the learners who are experiencing difficulties. The analysis of these difficulties enables the teachers/trainers to determine more specifically the responses required as part of a differentiated pedagogical treatment. These responses can be completed, if necessary, by interventions of the members of the specialised supporting networks for learners experiencing difficulties or professionals from outside the school system.

8.2.2 Evaluation of higher education and training

Major efforts have been made to reinforce the assessment of the training devised by educational institutions (including higher education CFA). The contractual policy has been the main tool of this process, both internally and externally.

Internally, the educational institution defines, via its project, its priorities in various performance areas: training and research policy, international development, student life, documentation, human resources etc. This project and its underlying priorities are assessed with regard to the national policy by the departments in charge of the different aspects of higher education, and the assessment process as a whole must be coordinated and arranged consistently via the contract. However, from a pedagogical point of view, the contractual approach provides a more global vision on the institution's educational provision regarding multiple interactions: interaction with the overall strategy of the institution, interaction between the supply and demand of learning, interaction between courses, interaction between



education and research, interaction between pedagogical policy, resource policy and human resources. Moreover, the implementation of the European area for higher education and research reinforced the assessment process, which is becoming, even on a regulatory level, the compulsory counterpart of the freedom granted to universities in the selection of their provided educational and training programmes within the framework of the “LMD” (Licence-Master-Doctorate) system. At the same time, over the last three years, the qualification accreditation procedures have been better suited to the contractual process.

Externally, the assessment of the contractual policy has been strengthened by better co-ordination with the national assessment council (whose works are undertaken by the AERES) and the general inspection services of the national Education and research administration (IGAENR). The work schedules of these two authorities are now co-ordinated within the contractual procedure. The objective is to use the obtained results of the assessments (including the conclusions and the proposed recommendations) which were carried out by these two authorities in the negotiation of the new contract.

Concerning the assessment of teaching/training methods (which is different from the assessment of teachers and that of higher education institutions), a pedagogical committee organises the assessment of teaching by discipline and level. This assessment takes, notably, the form of an individual and anonymous questionnaire enabling the students and apprentices to assess the teaching methods and provided education and training by answering open-ended and closed questions, in accordance with the principles set out at the national level. This type of teaching assessment is intended for the use by the concerned teachers/trainers and also for the pedagogical committee. In the absence of a pedagogical committee, respecting the autonomy of educational institutions, teachers and students define together, within councils and the CEVU (University Life and Studies Council), the procedures for the teaching assessment.

8.3 Quality assurance of certification process of learning outcomes

The extent to which qualifications are trusted depends largely on how the process leading to the award of qualification (i.e. the process of certification) is organised and carried out as the value of obtained qualification is highly linked to the overall quality of this process. The quality assurance of used methods concerns the three basic stages of the certification process of learning outcomes namely: assessment, validation and recognition/certification awarding (CEDEFOP, 2009a):

- a. **Assessment:** methods and processes used to establish the extent to which a learner has attained particular knowledge, skills and competences. In France the qualification description defines in detail the assessment criteria for the expected learning outcomes as well as the expected level of performance (including the specification of the assessment methods per unit of qualification). This description is found in the occupational and certification standards established for the national vocational certifications for instance by the sectoral Consultative Professional Commissions (CPCs) connected with concerned

ministries (for instance, 14 sectoral CPCs, are connected with the Ministry of National Education). The assessment standards are defined as part of the qualification definition when it is registered in the NQF repertory (RNCP). The sectoral qualifications assessment is also based on assessment standards as specified in the certification referential standards. These standards also specify the way in which the learning outcomes are assessed, e.g. written, practical, oral or continuous assessment (Dif, 2010; CEDEFOP, 2009a).

- b. **Validation:** the process of confirming that certain assessed learning outcomes achieved by a learner correspond to specific outcomes which may be required for a unit or a qualification. The composition of validation committees is regulated and also specified in the registration sheet and the Europass certificate supplement as registered within NQF repertory (RNCP). Validation is based on the comments provided by the assessors on the grading grid. Validation takes place within the certification awarding institution, at regional or national level. One validation committee is established per qualification and validates assessment outcomes of all providers concerned for national vocational certifications like CAP, BEP and the Professional Baccalaureate, etc.
- c. **Recognition:** It is the process of formally attesting the achieved learning outcomes through the awarding of units or qualifications. This term refers to formal recognition by the education and training system which results in the award of a qualification (through issue of a certificate or a title). The validation committee issues a report to the certification awarding institution or the Rector (regional authority in charge of education) in the case for instance of national vocational certifications such as CAP, BEP and the Baccalaureate, etc. The Ministry of Education or any other ministry in charge delegates the competence to issue qualifications to the certification awarding institution or to regional authorities (the Rector for national certifications such CAP, BEP and the Baccalaureate, etc.)

Concerning the extent to which ISO/CEN approaches have been incorporated into the quality assurance practices for certification in France, the overall quality assurance principles reflect ISO principles. However, the training and assessment centres are not ISO certified, even though some establishments use ISO to inspire their internal management evaluations such as introducing a number of quality labels concerning the quality assurance of training organisation and trainers in the early 90s.

On the whole, given that quality assurance in VET certifications could be characterised as mixture of regulation and autonomy, there are three basic but inevitably overlapping models characterising this process in each country:

- The prescriptive model which can be broadly described as existing at one end of the continuum in which quality assurance of assessment, validation and recognition processes are all highly prescribed, usually by one or more awarding or regulatory bodies;
- the cooperative model which can be situated approximately at the mid-point of the continuum, in which awarding bodies retain the responsibility for some quality assurance in assessment and validation, but other quality assurance processes lie in the



hands of providers and other stakeholders. The model was seen to be essentially based on elements of cooperation and trust;

- the self-regulated model could be perceived as the antithesis of the prescriptive model. According to this model, the VET provider is also the awarder of the qualification certificates, and additionally takes the responsibility of quality assuring all aspects of the certification process without reference to any higher or external agency.

Among these three existing models, the quality assurance process of VET in general and that of certification in particular can be described in France by a mixed model of prescriptive and cooperative character. It is prescriptive if we refer to the established referential standards of qualifications, but it can be highly cooperative if we take into consideration the role and interactivity between involved stakeholder and especially social partners and their role in designing, cancelling, updating and implementing these referential standards and quality assurance procedures (including the design and implementation of teaching-training-assessment methods and used supporting instruments and tools).

Section III - Training methods and related assessment and quality assurance processes

Although the CFAs and their educational and training staff are highly autonomous in choosing their own teaching/training methods and used supporting instruments at all NQF levels, the degree of their autonomy in designing their educational and training programmes remains dependent on whether they are higher education CFAs or upper secondary ones. In higher education, the CFAs have a larger autonomy in designing and implementing their own educational and training programmes. While in the upper secondary, the CFAs have to implement the training programmes as they, are more or less, set in the qualifications' related referential standards. In both cases, the training programmes are composed of two categories of educational and training units: (a)- general/technical/vocational units exclusively taken in charge by the CFA, and (b)- professional units, connected with the acquisition of practical knowledge, skills and competences, which are basically taken in charge through on-the-job training within the enterprise. Based mainly on a synthesis of the results obtained through a set of conducted interviews, the following headings in this section deal with the practised “training methods and related assessment and quality assurance processes” (with specific reference to the construction and machinery-engineering sectors).

1 Training methods

The apprenticeship training centres (CFAs) and their teaching and training staff have a large pedagogical autonomy and flexibility in defining and using adapted teaching approaches and supporting instruments, tools and equipments. Although the teaching method can be either deductive, inductive or a combination of the two, the dominant practice as exemplified by VET curricula, especially through apprenticeship track, is the use of “inductive” and active

learner-centred teaching method. This adopted teaching method in apprenticeship goes from concrete and specific to general as it is based on specific experiments, case studies or experimental exercises in training provision by building-up progressively on the learner's individual experiences, knowledge, capacities, expectations and constraints.

In this connection, theoretical and technical knowledge which completes practical training is acquired within the classrooms and workshops of the CFA using adapted supporting instruments and tools such AutoCAD software (for apprentices in the construction curriculum) or computer assisted conception/design software (for apprentices in the engineering and machinery curriculum), video projectors and presentation screens, internet connection, interactivity and data exchange platforms, taught programme related documentations, etc.

Practical knowledge and skills are acquired basically on-the-job within the company through the programmed professional units (including the end of study professional project prepared by the apprentice under a joint supervision by the apprenticeship master within the enterprise and pedagogical tutor from the CFA) through periods of training within the enterprise adding up from 60% to 75% of the whole educational and training time per year.

During the whole apprenticeship period within a machine-tool production company for instance, the apprentice has direct access to the following types of informal and non-formal learning connected with the professional units at work-place:

- General transversal practical learning through rotation training between different work processes and machines within different departments and production workshops of the enterprise;
- On the job-specialised training in the apprenticeship undertaken domain(s) (general mechanics, metal turning, metal welding and milling, maintenance, etc);
- Product, process and assembly-line linked training at the company's suppliers;
- Training connected with customers' order placements.

Thus, the practical knowledge and skills connected with the professional training units are acquired basically on-the-job within the company. However, given that the depth and width of acquired practical knowledge and skills in the field of the targeted qualification are variable according the size and the nature or range of the activities of the enterprise (i.e. the depth and width of its activities/production processes and the degree of their concordance with the requirement of the established training programme and/or the qualification referential standards). For this reason, there is a large complementarity between the professional "immersion units" within the company and those provided within the apprenticeship centre. This complementarity and its quality assurance are reinforced in many cases of apprenticeship provision in the construction and the machinery sectors via for instance:



- Allowing for a large part of the training courses provided within the CFA to be taken in charge by external experts and professionals coming either from the construction or the engineering industries and their management;
- Having a large part of training provided within the CFA to be concentrated within the apprentice's specialty.

2 Training assessment and related quality assurance

In general, there are two basic types of training assessment methods in use: on-going follow-up and assessment method (CCF-contrôle en cours de formation) and “punctual assessment” (CP-contrôle ponctuel). However there are CFAs which are accredited for the use of the CCF assessment method or a mix of both where the first is usually used for professional units and the punctual one for technical and general subject units. But there are CFAs which are not accredited (or just did not ask for accreditation) for the use of CCF, so they limit themselves to the use of punctual (written and oral) assessment. In this connection, it is important to underline, in the light of the conducted interviews (especially within the exemplary cases of the construction and the machinery-engineering sectors), that there are in practice some differences between upper secondary CFAs and higher education ones:

- In upper secondary CFAs (especially the providers of national vocational qualification such as CAP and Bac. Pro.), we find the practice of the three combinations of assessment methods: the use exclusive of punctual assessment (usually connected with national examination in the concerned qualification, as it is the case, for instance, of CFA-Corbusier-Illkirsh-Graffenstaden-76400 Strasbourg in connection with the “Bac. Pro.- Technicien du Bâtiment: organisation et réalisation du gros-œuvres); or the use exclusive of continuing evaluation in the course of training (CCF - contrôle en cours de formation) whose practice is very limited as it concerns basically continuing vocational training (CVT) within an accredited training institution (other than CFA), or the use of a mixture of both where the punctual assessment concerns the general and technical subject units taken fully in charge by the CFA , while the continuing assessment (which concerns usually the professional training units) is taken in charge jointly by both the CFA and the enterprise.
- Within the higher education's CFAs, the assessment practice is based on the use of both continuing and punctual assessment during each semester of the academic year. The academic knowledge related units are exclusively evaluated and validated within the CFA. As for the professional units (including the end of study professional project) connected with the operational vocational knowledge, competences and skills are evaluated and validated by the CFA in a joint collaboration with the enterprise (basically with the apprenticeship master) and professionals in the field as it is the case, for instance within:
 - University Apprenticeship Training Centre (CFAU: IUT Robert Schumann) for the Professional Bachelor in Civil Engineering: Construction works and

Planning (“LP-CA - Licence Professionnel Génie Civil Construction et Aménagements”).

- INSEA (Institut National des Sciences Appliquées - Strasbourg) – ITII (Institut des Technique d’Ingénieur de l’Industrie - Alsace)/CFAI(Centre de Formation d’Apprentis de l’Industrie -Alsace) for the preparation of the Engineer’s Diploma in Mechanical engineering.

As for quality assurance (and within the framework of the overarching quality evaluation process for national qualifications presented in section II) within upper secondary CFAs in all sectors (as exemplified, especially by case of the construction and machinery engineering sectors) it is taken in charge basically through the following:

- External inspection: The quality assurance of provided training by the teachers/trainers within the training institutions and the enterprise (including used methods and supporting instruments) is secured by an external inspector from the Ministry of National Education who, in the case of apprenticeship, visits and inspects both the training centre and the enterprises. However, in contrast with the rest of France, Alsace region is characterised by the existence of two different external inspectors: one for inspecting the quality of provided training within the CFA and another different inspector for inspecting the quality of on-the-job provided training within the enterprise. This process is further reinforced by the existence for each national qualification, provided within upper secondary colleges and CFAs , an overarching referential standards and programmes which are referred to in any undertaken inspection action.
- Quality assurance of potentially high risk training connected with exercising certain types of activities, is taken in charge by external insurance institution, as it is the case, for instance, the quality assurance of high height risks related training provision in structural construction works which is secured within certain CFAs (e.g. CFA-Corbusier-Illkirsh-Graffenstaden-76400, where it is externally secured by the CRAM - Caisse Régionale d’Assurance Maladie).
- The concerned sectoral body involvement in the assessment jury: as external evaluators, professionals from the federations of the concerned activity sector are regularly active participants in the CFA’s usual assessment juries.
- High rate of immediate and direct access to labour market: over 80% on average of holders of this type of qualification find jobs straightaway (within about 6 months on average) after the completion of their studies. Some are even recruited by the companies which were involved in their on-the-job training through the apprenticeship programme. In about 30% of cases on average within some cases of mechanical engineering companies for instance, the ended apprenticeship contracts are transformed into permanent work contracts.

Within the higher education apprenticeship training centres, the current organisation defines clearly, within the overarching process of quality evaluation provided training and its learning outcomes presented in section II, the role of each involved actor. The main assessment



measures in this connection as emphasised by the interviewees especially within the construction and machinery-engineering sectors are:

- Assessment of Apprentices' level of satisfaction according to regularly conducted evaluation of provided training;
- Assessment of the degree of satisfaction of the CFAs' concerned partners and sectors of activity through the evaluation of the apprenticeship training outcomes in terms of attained pedagogical objectives and direct applications of their acquired knowledge to the enterprise's projects.
- Assessment by the corporate sector: Within the mechanical engineering CFAs for instance, there is an accreditation commission of the engineer's grades/titles (CTI- Commission des titres d'ingénieurs) composed of up to 32 highly qualified members which carries out a systematic assessment of engineering training courses and their outcomes. The results of the assessment has an important effect on the renewal of the accreditation every 6 years.
- Allowing for a large part of the training courses provided (including their assessment) within the CFA to be taken in charge by external experts and professionals from the concerned sectors of activity.
- The rate of apprentices' access to labour market after obtaining the qualification: This rate is far higher than in the case of those students obtaining the same types of qualifications through the school-based system. Taking the example of the "Professional Bachelor's degree in Civil Engineering: Construction works and Planning" of the University Apprenticeship Training Centre (CFAU: IUT Robert Schumann), this rate was over 90% before 2008 and it remained higher even after the world financial crisis: 80% to 90%.

REFERENCES

Aublin, M. et al. (2001) : "Le projet pluridisciplinaire à caractère professionnel (PPCP)". Inspection Générale de l'Éducation Nationale, June 2001.

Arrighi, J.-J. & Josef, O. (2005) : "L'apprentissage : une idée simple, des réalités diverses", Bref n°223, Marseille, Octobre 2005.

Arrighi, J.-J. & Mora, V. (2010) : "Contrat de professionnalisation d'apprentissage: des usages diversifiés (Esquisse d'une cartographie des formations en alternance)", Net.Doc-66 (Groupe d'exploitation Génération 2004), Céreq, Marseille.

Billet, J.-C.; Cahuzac, R.; Perrin, J. (2002) : "Le contrôle en cours de formation: 10 propositions pour 2002". Rapport à Monsieur le Ministre de l'Éducation Nationale et Monsieur le Ministre délégué à l'enseignement professionnel. Paris: CNRAA.

- Cart, B. & Toutin-Trelcat, M.-H. (2010): “Apprenticeship contracts: why they are breached?” *Training & Employment*, n° 89, October-November 2010, pp.1-4.
- CEDEFOP (2010): “Learning outcomes approaches in VET Curricula: a comparative analysis of nine European countries”, Publication Office of the European Union, Luxembourg.
- CEDEFOP (2009a): “Relationship between quality assurance and VET certification in EU Member States”, Office des publications officielles des Communautés européenne, Luxembourg.
- CEDEFOP (2009b): “VET in Europe – Country Report: France”, CEDEFOP, REFERNET-France.
- CEDEFOP (2008): “Formation et enseignement professionnels en France: Une brève description”, Office des publications officielles des Communautés européenne, 2008.
- CEDEFOP (1999): “Apprenticeship in France: 1999 », Training village –ETV library.
- CNCP-Commission Nationale de la Certification professionnelle (2010): “Consultez le RNCP- Répertoire Nationale des Certifications Professionnelles”, <http://www.cncp.gouv.fr/>.
- CNCP-Commission Nationale de la Certification professionnelle (2010): “La base documentaire” du RNCP- Répertoire Nationale des Certifications Professionnelles. <http://www.cncp.gouv.fr/grand-public/explorerBaseDocumentaire>.
- DARES (2010) : “L’apprentissage en 2008 : hausses des entrées et du niveau de diplôme préparé”, Dares Analyse n° 024, Avril 2010, publication de la Direction de la Recherche, des Etudes et des Statistiques,
- Dif, M. (2010): “EQF effect on national and sectoral qualification processes”, paper presented for the VETNET programme of the ECER Conference 2010 : "Education and Cultural Change" in Helsinki (25 to 27 August 2010), <http://www.b.shuttle.de/wifo/vetnet/ecer10.htm>.
- EURYDICE (2010): “Organisation du système éducatif en France : 2009-2010”, EACEA, European Commission.
- MEN-MESR (2010) : “ Repères et références Statistiques sur les enseignements, la formation et la recherche (PERS 2010 ”, Edition 2010. http://media.education.gouv.fr/2010/16/9/PERS_2010_152169.pdf
- Simon-Zarca, G. (1996): “Apprenticeship in France: Between tradition and innovation”, *Training & Employment*, n° 25, autumn, Céreq - Marseille 1996.
- Steedmann, H. (2010) : “The State of Apprenticeship in 2011 - International comparisons: Australia, Austria, England, France, Germany, Ireland Sweden and Switzerland”, A Report for the Apprenticeship Ambassadors Network, Centre for Economic Performance, LSE, UK..