

CREATING COLLABORATIVE TRAINING

Methodological guide



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PREFACE

Occupations evolve. Vocational training needs to adapt to many changes, one of which being the organisation of the company's activities on the perspective of the whole production. Many years ago, manufacturers of wooden wheels used to choose the woods in the forest themselves to ensure the best quality of the products and managed every step of the activity, from this choice up until the sale. Today, the markets are very segmented. And most wheels are no longer made of wood...

A one-company model in dual training faces difficulties in educating to all of the activities that make up an occupation, as the company has to cover all of the required activities. Often, social partners and training/education authorities (and/or employment authorities, trade authorities... depending on the country) define occupations. This limitation of the one-company model is accentuated in economic fabrics mainly constituted by small and very small companies.

To remain in the wood sector – a fresh change from the usual bricklayer example – education and training stakeholders, including social partners, believe a carpenter should at least be able to manufacture doors, stairs and window frames. It is obvious to social partners that youths will have a more promising career and an easier entry into the professional world as a complete carpenter, especially in this highly technological and changing world. However, companies in the wood sector have segmented their market and, among SMEs, few of them manufacture all three products together. In a one-company vocational training system, either SMEs cannot train apprentices, or if they train them, part of the training programme will not be covered on a real production line, with the necessary time to practice, repeat gestures and acquire skills. The COTRAIN project addresses this concern and experiments another training model to strengthen training quality within the companies and contribute to increasing the number of companies involved in vocational training and decreasing skill mismatches. The availability of better-qualified employees who are also more adaptable is also beneficial to companies.

The COTRAIN project shows that the possibilities are not only found on the scale of a company. There is a strong potential for networks on the scale of several companies, and even sectors. In Italy, the COTRAIN partner initiated a cotrain network of companies active on different steps of a production line, from conception (Computer-Aided Design) to production, including 3D printing. The benefit for training and hiring is that the trainees develop complementary skills they would not have learned in a one-company training model: trainees in CAD received part of their training in a 3D printing company, and trainees in maintenance trained for a period in a CAD company. This allowed the former to gain a better comprehension of the production line downstream, and the latter of the production line upstream.

In the automotive/mobility sector, changes in the market could lead the Belgian social partner training funds to initiate collaborative training on the scale of the sector, promoting collaborations between several small companies and a few big companies. Changes in the product could also lead to a reflexion on collaborative training with the arrival of electric engine manufacturers.

It is to these realities that the legislative framework must be adapted, making it both more demanding and more flexible in order to strengthen the quality of training and meet specific needs in the field.

From the youth's perspective, the benefits of the collaborative training model go further than the vocational skills. In collaborative training, some of them can gain a better understanding of the core activities of the companies in which they are learning, the market differences, different company cultures, or even their own professional project.

So many reasons and promises, which should lead to the support and development of the collaborative training model.

Sabine Libert, Deputy general secretary, FGTB wallonne

PARTI - INTRODUCTION

How to use this Guide

Writer, CEPAG

1 This COTRAIN methodological Guide is accompanied by a COTRAIN video

To facilitate understanding of what a cotrain is, the COTRAIN video presents the perspectives of:

- employers and apprentices directly involved in a collaborative training, in different fields of activity;
- ▶ people who implemented the change within the training centres and training institution;
- ▶ policy makers and ministry representatives, as the legal framework plays an important part in making the current system more flexible and "cotrain-inclusive".

This symbol indicates when the Guide refers to the content of the video.

2 This Guide presents the results of an Erasmus+ project and is divided into five main sections

The first section is a general introduction of what collaborative training is, what the purpose of the project was and how it has been achieved. It also covers how bedt to use this large number of pages in your hands or on your screen. The Guide is thick because the results of the project are very rich and the partnership wishes to transmit (practically) all of them to the reader.

The second section — the national collaborative training frameworks — offers an overview of collaborative training as it is found in the four countries of the partnership. In Germany and Austria, companies have been joining networks and/or collaborating to train for several decades. The collaborative training tested in Italy and Belgium (French speaking part — BeFr) is one type of possible collaborations.

As a wide literature is already available on dual training in European countries, especially Germany and Austria, the four presentations will focus on the collaborative training model that was experimented. For Italy and BeFr, the presentations address how the partners found a way to test the collaborative training model within their respective VET fields.

As there are two Belgian VET partners (IFAPME and CEFA CST), the three Belgian partners (with the CEPAG) tried to find a balance between certain rules: the smallest common denominator and a European benefit for non-Belgian VET experts.

A short reflexion ends these national overviews and underlines how different the models are between Austria and Germany on the one hand, and Italy and BeFr on the other. Despite these differences, Belgian and Italian partners carried out pilot projects. The partnership also worked on the design of a common methodology that includes differences, but is based on a very wide common foundation.

The third section presents an Austrian and a German example of collaborative training, then some of the collaborative trainings carried out during the project. Both the second and third parts of the Guide offer a good overview of the contexts in which the different partners evolve. For Italy and BeFr, this section also shows how the partners carefully thought about what kind of collaborative training they would develop, for which training sections and level. The reader will also find the recapitulative tables

of all the pilots each partner organised during the project. Depending on the partners, the beginning and the duration of the dual training, some of the collaborative trainings are still going on in September 2019.

The fourth section is the core of the methodological tool the partnership created. The tool is presented in two subsections, the first focussing on *why* to develop collaborative training, the second on *how* to do so.

The "why" section is essential in many regards. COTRAIN partners debated often and in detail "why" they should be doing this or that, a certain way in this country and another in that country or VET centre... Because they did not rush into "how" to implement collaborative training, and because from the beginning of the project they agreed to avoid the "copy paste" approach, they progressively found a common ground and were finally able to produce a methodology. Going in-depth on the reasons why to do this or that is an important and fruitful choice the partners made.

The "how" part is based on a structuring exercise that the three BeFr partners began as follows. Suppose that next Monday, we sign a collaborative training. What do we have to think about, considering the day of the signature as day one? Who are the main and secondary stakeholders involved? What has to be done before day one? What has to be done to prepare the company change? ... This exercise became the backbone of the "how" section, as it seemed to work for each COTRAIN partner country, and does.

As far as possible, the why and how parts are written in an explicit and practical manner. Three words could resume this part on creating collaborative trainings: why, how, and explicitly.

The fifth section concludes the Guide and the project, as a step back based on a SWOT (Strength, Weakness, Opportunity and Threat). Partners used a SWOT approach from the beginning of the project.

The first three parts of the Guide offer the context and dynamic of the project and the pilots. They help to understand what a collaborative training is and how it has been developed. All sections can be used independently. The reader will also find smart links when deemed necessary, marked with this symbol: [∞ .

3 Keys to understand the Guide

- Training alliance refers to the term commonly used in Austria to refer to collaborative training.
- ▶ BeFr: French speaking part of Belgium. Belgian readers know the institutional differences between the education field and the training field. To keep all of the readers on board, this guide will not enter into detailed institutional explanations.
- ► cotrain in lowercase letters is an abbreviation for collaborative training, and refers to the model Italian and BeFr partners developed in the project.
- COTRAIN in capital letters refers to the project itself.
- ► CTN refers to collaborative training networks. In Germany and in Austria, several dozen companies will join in such networks to share training resources. CTN includes collaborative trainings as developed in the COTRAIN project. The COTRAIN Italian partner, Centoform, started to create a CTN based on its current portfolio of companies. Belgian VET partners invited companies to collaborate in cotrain, but it is difficult to speak of networks at this time.
- VET stands for vocational education and training.

II. What is collaborative training

Writer, CEPAG

1 The principle of a collaborative training

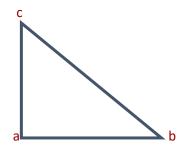
Collaborative training implies that one company provides vocational training in collaboration with another company, or other companies. Entrepreneurs or SMEs will train apprentices together, based on the complementarity of their activities.

The objectives of a cotrain are:

- ▶ to ensure that the activities of the collaborating companies will cover the complete occupation profile.
 - A cotrain will, for example, avoid training youngsters as electricians only in an alarm systems company or as a chef de cuisine only in a snack bar;
- ▶ to train youngsters in companies that are complementary, considering the entire production chain. A cotrain will make it possible for a youngster following an industrial design training to also benefit from dual training in a company with a production chain;
- ► to train youngsters with a higher level of expertise in (very) specialized tasks.

 A company that could cover all of the occupational profile can collaborate with another company, with a higher level of expertise for a part of the profile.

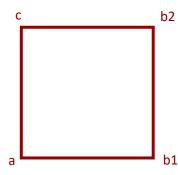
In a **one-company model**, the relationship between the different parties resembles a triangle.



Dual training one-company model

- a One apprentice
- b One company
- c An intermediate organisation between them, such as a training centre or Chamber of Commerce, which provides an accreditation and authorizes the training.

In a **collaborative training model**, this relationship resembles a square.



Collaborative training model

a One apprentice

b1 + b2 Two companies

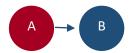
c An intermediate organisation between them, such as a training centre or Chamber of Commerce, which provides an accreditation and authorizes the training.

2 Two models of collaborative training

There are several possible models, depending on the stakeholder's requirements regarding the time line. During the COTRAIN project, pilot partners developed two principal cotrain models: a successive model, and a simultaneous model.

2.1 The cotrain successive model

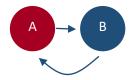
▶ In a cotrain **successive model**, training periods within the companies will follow each other.



A cotrain is organised between two companies. After a first training period exclusively with company A, the trainee will finish his dual training exclusively with company B.

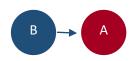
We call this the A-B model.

The A company will be the company with a more important role in the cotrain. This implies a more important number of training hours, or taking over retribution for the full duration of the dual training.



The trainee can also return to company A.

We call this the A-B-A model.



A cotrain can also begin with a company B. In this case, the cotrain may begin with the company giving fewer training hours.



A cotrain can be organised between 3 companies, A-B-C, or even more.

Using letters makes it easy to understand which kind of model we are referring to, what it implies in terms of organization, training plans or administrative obligations.

2.2 The cotrain simultaneous model

▶ In a cotrain **simultaneous model**, the timeline is different. The cotrain is organised in both companies at the same time, at least for a certain training period.

For example, the dual training begins on the 1st of September in company A. From the 1st of November until the end of January, the cotrain will take place following a weekly schedule. Every Tuesday and Wednesday, the trainee will be in company A. Every Thursday and Friday, he will be in company B.



On Monday, the trainee will be in the training centre.

During the project, this successive model raised interest in restauration companies, as well as with bakeries. In BeFr, these are regulated professions in which pastry and charcuterie skills can best be trained in pastry shops or butcheries. Regarding charcuterie, certain employers found the cotrain model interesting, but only for specific periods of the year. These periods are the ones during which they prepare specialties. In order to hire an apprentice, they offered to organize their production differently, concentrating the work on two days a week. However, two days a week is too short for "normal" dual training. Therefore, the idea was to develop a cotrain in order to cover this specific period during which the tasks within the company are most interesting for the trainee. Outside of these periods, interested employers felt that there was not enough work to hire an apprentice.

Others employers (with a company A role) found this to be a good idea, as it contributes to a better training. Keeping the quality of the training in mind, they were open to a certain flexibility.

III. What is COTRAIN, and what is the purpose of the COTRAIN project

The idea behind developing the COTRAIN project was to contribute to increasing the quality of dual training, knowing that depending on the socioeconomic fabric, a "one-company one-training" model cannot always avoid skills mismatches.

COTRAIN took shape based on two main dynamics:

- COTRAIN is an action-research project: putting the pilots in action fed our research and its conclusions, the finality being to present them in this Guide and in the video.
 The objective of the action-research was also to test collaborative training networks and to evaluate the benefits this type of tool could generate for companies, employers, youngsters and training centres;
- ▶ COTRAIN is a project based on coaching: coaching partners gave in-depth explanations regarding the collaborative training model in their dual training system. They organized study visits, and gave the pilot partners advice and assessments. They also learned from the pilots, for example encountering practices "unknown" in their own systems. Coordination ensured partners understood their needs and received the necessary support.

Partners shared a common conception that fed these dynamics. They considered that in each COTRAIN country, and probably in many other countries:

- ▶ there is a sufficiently strong common interest for a better correspondence between the occupation profiles and the activities in the training companies;
- beyond their differences, the socioeconomic fabric and labour organisation within companies all share common characteristics. Shedding light on this issue makes it easier to understand the reasons why a "one-company model" often cannot cover the complete occupation profile, and how cotrain can improve the situation.

COTRAIN itself was an opportunity to find out whether this idea was truly common to the partnership. The answer is yes. The diversity of the experiences and teachings reflects this.

The partnership produced this Guide and the video in a limited field of experimentation. However, considering the common interest and common "core characteristics" mentioned above, as well as the in-depth research carried out, the partnership truly believes this Guide and the video offer a valid tool to help understand why and how a cotrain should be carried out, in a very practical manner.

IV. The reason behind the action-research

An action-research was an efficient way to build and achieve the project. The conclusions not only reflect what was done, but also the reason why we did it, each step of the way. Partners believe that understanding why we did something is as important as what we did. This perspective offers the possibility of making choices based on each partner's particular context. COTRAIN is not simply a "copy-paste" project, and was never conceived as such.

To identify, verify and formulate teachings is not an easy exercise. Parallel to the linear development of the project, each step of the project brought new learnings.

The coaching phase, a coordination from the early beginning

Why and how does cotrain work in Germany and Austria...

- in-depth explanations, study visits, meeting experts, employers, social partners, trainers, collaborative training networks representatives...
- requests and needs of the pilot partners, overcoming comprehension gaps, exchanges, debates...

The pilot phase

- Preparing the pilots in Italy and Belgium: meeting the employers, the youngsters, the training staffs...
- Beginning the pilots, experimenting the model, creating fit-for purpose tools...
- Overcoming difficulties: legal and administrative research...

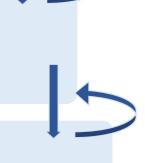
The cotrain methodology Guide and the Video

Progressive identification of learnings

- while the pilots were running
- based on the feedback and questions following dissemination

<u>Promotion and dissemination of the project to social</u> partners, VET institution, at national and european levels

 Presenting the project to parties from the VET field, social partners and ministry representatives made the project known and contributed to defining the content of the Guide, thanks to questions and contributions of the people we met





V. The partnership

COTRAIN is based on an action-research, the aim of which is to implement cotrain pilots in order to elaborate a methodology on how to create cotrain models, based on the teachings of the pilots.

The cotrain company-to-company model is inspired by the models found in Germany and Austria, where the collaborative training model has existed for several decades. Partners from these countries had a coaching role in the project.

Partners from Emilie Romagna, Italy and the French speaking part of Belgium tested the model, "in real life". They integrated the cotrain model in youngsters training.

The coordinating partner managed the action-research and piloted the implementation of the project, while also offering specific support to Belgian partners.

Coaching partners built their support based on their expertise in the VET field and on the identified needs of the pilot partners.

Inab and oïbf shared their expertise in dual training and collaborative training and assisted the other partners in carrying out the cotrain pilots, as well as in the intellectual outputs.

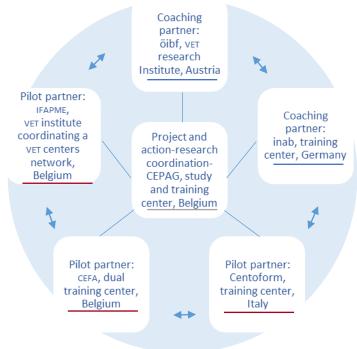
inab organised a training week on collaborative training, with study visits to Maas Fabric, VET centres, meeting with experts, including participation of the BIBB (German federal VET office).

inab (Jugend, Bildung und Beruf) is a 100 % daughter company of the bfw group (Unternehmen für Bildung). The bfw group is one of the leading providers of training and education in Germany, owned by the German trade union confederation DGB (Deutscher Gewerkschaftsbund).

inab is involved in nearly all branches such as metal, wood, food and household, electronics, business and health.

öibf organized a study visit in ÖBB, the Austrian railway company that has its own training school and organizes collaborative trainings with other companies, such as Kremsmüller. Thanks to öibf, the video team met with Austrian youngsters, employers and trainers.

öibf (Österreichisches Institut für Berufsbildungsforschung) is a non-university research institute. Öibf's mission is to carry out high-quality research and development in order to support and promote activities and policies concerning vocational education and training (VET). In its work, it focuses particularly on innovation in education and the interrelation of education and the labour market. Öibf is active on both the national and international level and delivers services for various organizations in Austria and Europe.



As coordinator, CEPAG managed the action-research, the video and the coordination of the Guide, supervised and supported the Belgian partnership in the implementation of the pilots, and promoted the project to VET and social partner organisations, Unions, companies and ministry representatives.

CEPAG (Centre d'Education Populaire André Genot) is a continuing education centre, which includes study and training services. It deals with different issues, including but not limited to the fields of education, training, culture, employment, economy, citizenship... CEPAG publishes studies and brochures; organizes conferences, communication campaigns; co-organizes a certificate with the Free University of Brussels, and broadcasts videos on the public TV channel. Its activities are built along with the FGTB Trade Union (Fédération Générale du Travail de Belgique) and its various institutions.

As pilot partners, Centoform, CEFA and IFAPME organised everything necessary to make the implementation of at least 10 pilots each a reality, including the promotion of the model to VET stakeholders, companies and policy makers.

Centoform developed COTRAIN in the mechanical sector (technical maintenance and design). To develop the cotrain model with younger trainees, Centoform collaborated with Futura. At the time of the edition of this Guide, Centoform completed 12 cotrains. After this first round, for the 2019-2020 training year, Centoform is organizing new cotrains within the framework of the new IFTS course edition in mechanical design and within the framework of the ITS course (tertiary non-academic course) in the field of building and construction. The implementation of 10 more cotrains at least is expected. Centoform is receiving a strong support from the regional authority, which believes the model is very interesting in order to increase the quality of training and can support innovation in training.

Centoform is a private VET provider created in 2001, with 18 years of experience. 1.500 people are trained each year. Its mission is to develop relevant and modern VET trainings in partnership with other stakeholders (such as companies, high schools, universities and research centres aiming to improve innovation and increase technical culture).

The CEFA of Court-St-Etienne developed pilots in the fields of restauration, office work and sales. At the time of the edition of this guides, the CEFA completed 25 cotrains. The CEFA managed to extend the model in electricity and wood training sections.

The CEFA CST is a dual training education centre, located near Brussels.

In BeFr, the 43 CEFAs relate to the Secondary school level.

A CEFA organizes initial vocational education for youths 15 to 25 years old.

- ▶ Average work-based learning: 60 % (2 days a week at school 3 days a week in a company).
- ► Average apprenticeship duration: 3 years.
- ► Contract types for apprenticeships: dual training contracts (mainly), social partners' contracts (known as "CAI"), and Labour contracts (few).

The CEFA CST organizes dual training in the fields of restauration, carpentry, building, electricity, metal, health, office work, sales and care services. It counts around 500 youngsters.

As a VET Institute coordinating a network of VET centres and establishing a minimum framework of administrative and pedagogical rules, **IFAPME** (Institut wallon de Formation en Alternance et des indépendants et Petites et Moyennes Entreprises) worked on the transposition of the model to its own structure, and worked on implementing a number of pilots. At the time of this Guide's edition, IFAPME achieved 12 cotrains in the sales, hairdressing, restauration and bakery sectors.

As a Regional Institute and central administration, the IFAPME coordinates 16 decentralized units organising the training provision at the local level all over the Walloon Region.

Initial and Continuous vocational training:

- apprenticeship from 15 to 25 years old;
- ▶ work-based learning = 80 % (1 day a week in a training centre 4 days a week in a company), compulsory for apprenticeship;
- average duration: 3 years;
- self-employment training and leadership and management training for youths 18 years old and over;
- contract types: for apprenticeship, dual training contracts; for self-employment training or leadership and management training, IFAPME specific conventions;
- ▶ 5.223 youngsters in apprenticeship (15 to 25 years old) and 12.325 people in entrepreneur training (18 years old and over).

PART II – THE NATIONAL COLLABORATIVE TRAINING FRAMEWORKS

This chapter provides an overview of the collaborative training models in each country of the partnership. Austrian and German partners provide the descriptions of the framework and rules which currently apply in their countries, and Italian and Belgian partners explain how they managed the implementation of the cotrain pilots within their respective existing VET regulations.

At the end of these four presentations, the reader will find a conclusion in which the main differences between the systems are underlined.

Complementarily to this section, the reader will find detailed information in [∞ Collaborative training convention, p.116.

I. Collaborative training in coaching countries

1 The Austrian model of collaborative training

Writer, öibf

1.1 The Austrian system of vocational education and training

Austria has a differentiated system of initial vocational education and training from upper secondary level up to tertiary education. Young people can choose whether to become apprentices in the so-called dual system or to attend a school of middle or higher vocational education.

The apprenticeship system (dual system) is characterized by two places of learning:

- ▶ the work-based learning in the company constitutes about 80 % of the learning period and focuses on job-specific knowledge and skills;
- ▶ the school-based learning in a part-time vocational school, which binds about 20 % of the learning time and focuses on basic subject-related theory and general education.

The training may last from two to four years depending on the apprenticeship, though the norm is three years.

There are currently more than 200 recognized trades in the following categories: construction — office, administration, organization — chemistry — printing, photography, graphics, paper processing — electrical engineering, electronics — catering — health and hygiene — commerce — wood, glass, plastics, ceramics — information and communications technologies — food, beverages and tobacco — metallurgy and mechanical engineering — musical instrument building — textiles, fashion, leather — animals and plants — transportation and warehousing.

An apprenticeship-leave exam is taken in front of a board of professional experts. The focus of this exam is on the skills required for the specific profession (simulation of day-to-day tasks).

Apprentices sign an apprenticeship contract with their training company. They are employed and in a training relationship with the training company, and study in a part-time vocational school at the same time (this is compulsory).

Because the apprentices are employed, they receive an apprenticeship remuneration, which rises up to approximately 80 % of the income of skilled workers during the last year of apprenticeship (the amount of the apprenticeship remuneration depends on the profession).

The Legal framework for the apprenticeship system is the Vocational Education and Training Act (Berufsausbildungsgesetz-BAG). Each apprentice profession has its own training regulations, which are negotiated by the social partners at the Federal Advisory Board on Apprenticeship and made public by the Federal Minister for Science, Research and economy, thus obtaining the force of law.

The apprenticeship offices govern and control the apprenticeship contracts. These offices are a part of the Chamber of Commerce.

Governance of the dual system

	Work-based learning	School-based learning
Federal Level	Federal ministry of Digital and Economic Affairs	Federal ministry of Education, Science and Research
	Federal Advisory Board on Apprenticeship (social partners)	
Provincial Level	Apprenticeship Offices	Regional school inspectors
	Provincial Advisory Board on Apprenticeship (Social Partners)	Federal provinces
	Federal governors	
Local Level	Company, Trainer	Part-time vocational school, teacher
	Apprentice	

Figure: Governance of the apprenticeship systems

Currently, more than 120,000 young people are in apprenticeship contracts with about 35,000 training companies (13.3 % of all companies).

1.2 Training alliances

If a company cannot convey the set of knowledge and skills for a profession to the full extent, the Vocational Training Act (BAG) provides for a compulsory training alliance: the training is permitted if additional training takes place in another company or in any other suitable educational institution.

However, the essential parts of the profession's skills and knowledge must be trained within the training company itself. If any additional training costs emerge from this training alliance, they must be covered by the training company.

The **accreditation** as a training company is obtained through a licensing procedure, which is carried out by the social partner institutions (Chamber of Commerce, with the participation of the Chamber of Labour). Through this procedure, the suitability of company facilities for in-company training are verified, as is the availability of training providers. Accreditation is always given with reference to a specific profession. If a company wishes to receive accreditation as a training company for several apprenticeships, the suitability of the company and the presence of appropriate instructors for all occupations will be examined.

If a company cannot prove its suitability for all required elements of the training occupations, there is a process to determine which job profile positions will be met by a training association with another company (or several companies), or a certified training institution.

However, training networks can also be created voluntarily when companies wish to impart specific qualifications - possibly going beyond the job description - to their apprentices (e.g. special computer programs, foreign languages, soft skills etc.). Many companies offer their apprentices the opportunity to attend special training modules in other businesses or educational institutions. These modules are usually limited to six to eight weeks and the costs are borne by the training company. They are usually specialized training module for specific machines or in special manufacturing techniques.

For the concrete formulation of the training alliance, there are no binding guidelines from the legislator. The contract between the training company with which the apprentice signs an apprenticeship contract and the company or training institution providing the supplementary training is a **private contract** that determines the training content, duration, period and cost of the training.

In apprenticeship contracts (or in an appendix), the curricula taught outside of the actual training company and the "alliance partners" (with suitable establishments or facilities) have to be settled upon. In addition, it should be mentioned when the training with the "network partners" will be performed (at least in the form of the specific year of apprenticeship) and how long it will last.

If the supplementary training does not take place in appropriate facilities under public tendered and regularly offered course measures, the agreement has to be signed by the "associated partner(s)" within the apprenticeship contract.

If the agreed training is not given without justified reason in the appointed training year, this entitles the trainee to prematurely withdraw from the apprenticeship. If the apprentice does not fulfil the agreements according to the arrangements of the training alliance, the apprenticeship may be prematurely dissolved by the instructor.

Decisive criteria for the cotrain model 1.3

The following criteria are decisive for the acceptance of a cotrain by the legislator or the apprenticeship office responsible for supervising the training contracts.

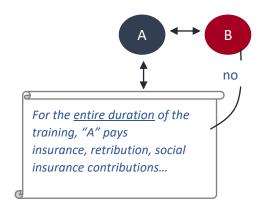
- ▶ There is a regular training contract between a qualifying company and the apprentice, which sets out:
 - the occupation;
 - the duration of the entire apprenticeship;
 - the apprenticeship allowance;

 - the location of the training.
 - the labour law provisions;

"A" company – Apprentice occupation, duration, retribution, labour law provision, location of training...

▶ The apprentice must be informed regarding the training in another establishment or training facility in terms of content and duration of the training alliance.

► The apprentice remains in the apprenticeship contract of the company of origin (A) during the entire apprenticeship, i.e. also during the time in which he is being trained by another company (B). The company of origin is also responsible for social security and apprentice compensation during training in another company.



► The company that has concluded the apprenticeship contract with the apprentice is ultimately responsible for compliance with all statutory provisions and the provisions of the applicable collective agreement.

This also applies to the periods during which the apprentice is being trained in another company. This applies in particular to the observance of working and rest periods, and other protective provisions for apprentices.

- ► The apprentice must have the opportunity to attend vocational training during the entire training period, including during training at another company or training institution.
- ► The responsibility for the quality of training and the completeness of the training in relation to the professional profile specified in the training regulations lies with the company of origin.

In Austria, several variants of a CTN are possible and carried out:

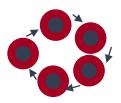
- ▶ a training network between two companies (A-B);
- a training network between one (usually larger) company and several (usually smaller) companies, in which a company takes on the training of a specific training module for the apprentices of several companies (A-several B);



 a training network between a company (or several companies) and a training institution (several A-B);



▶ a training network between several companies that train their apprentices alternately in different areas of the profession, whereby the apprentices go through different companies in a kind of rotation principle (several A-several B).



The advantages for companies that train their apprentices in other companies are manifold:

- ▶ the company is able to train apprentices, even though they cannot cover the entire spectrum of the training regulation themselves;
- ► CTNs allow companies to concentrate on their strengths in training apprentices (in regard to specialized skills and activities) because other partners of the CTN can compensate their lack of training abilities;
- ▶ the apprentices receive training wherever the best quality of training can be guaranteed. This increases the qualification level of the apprentices, which in turn can bring more to the company;
- as part of the training network, apprentices get to know other business conditions, thus increasing their flexibility and adaptability to changing conditions;
- ▶ the company can outsource parts of the training for which it would have had to invest (in machinery, equipment or training staff).

The companies that carry out training for other companies also benefit from the training network:

- ▶ the company can make the training of its own apprentices more cost-effective by including additional apprentices from other companies, because a part of the fixed costs (for equipment, machinery, personnel) is covered by the cost contributions of the other companies;
- ► the company's own resources can be better utilized within the framework of a training network;
- ▶ the inclusion of apprentices from other companies makes it possible to set their own training standards as guidelines. By training apprentices from other companies, it can be ensured that future specialists (who, among others, are recruited from the apprentices of other companies) are trained according to their own requirements;
- ▶ by training apprentices from other companies, business cooperation is sustainably secured and strengthened.

Training alliances exist mainly in technical professions, but also in traditional craft professions. Very often we find large companies which undertake training in basic skills (e.g. filing, turning, milling) or in specialized areas (e.g. specialized welding techniques, CNC manufacturing) for suppliers and businesses with which they operate in a similar market segment.

From a macroeconomic perspective, cotrain brings the following benefits for the Austrian economy:

- more skilled workers with a better correspondence to employer's needs;
- ▶ sharing their knowledge allows companies to improve their HR;
- increase the competitiveness of all involved;
- ▶ increase the number of companies (especially SMEs) involved in apprenticeship training;
- strengthen innovation in companies;
- contribute to reduce drop out.

2 The German model of collaborative training

Writer, inab

2.1 The dual education system as it works in Germany

The dual education system in Germany is still the most important vocational education system, even though it is under pressure. The dual system can be seen as the backbone of the German industry. Approximately 54 % (2014) of all employees started a dual education during their career. Due to societal changes and the demographic change, more and more youngsters decide to go for higher education/university degrees. As the demographic change implies a decrease of younger people, many companies face difficulties in finding young professionals.

The dual system in Germany is similar to the Austrian model.

2.1.1 Two learning locations

There are two learning locations:

- ▶ 80 % (4 days a week) of the training is spent within a company where the apprentice will receive practical experience;
- ▶ 20 % (1 day a week) will be spent studying at a state owned vocational school (Berufsschule) for theoretical instruction in the respective job profile and general subjects (e.g. math, social sciences, language skills).

2.1.2 Registration

Companies must be registered at the Chamber of Commerce (or chamber of craft or chamber of agriculture, according to the respective responsibility). Without registration, a company cannot be a contractual partner in any form of education within the dual training system.

Almost any company can register if they meet the following requirements:

- ▶ the company must be suited to impart the skills of the chosen job profile;
- ▶ the staff must be suited to educate for the job profile, proof of which is given by their own education and degree (master's degree or trainer aptitude examination and experience in the job for more than 1,5 times the duration of the education);
- a reasonable proportion of employees/trainer and apprentice must be respected:
 - 1-2 employee/1 apprentice;
 - 3-5 employees/2 apprentices;
 - 5-8 employees/3 apprentices;
 - 8 + 1 employees /3 + 1 apprentices;
 - and so forth...

The registration is requested in writing, and will be confirmed by the Chamber in written form¹.

Example: https://www.stuttgart.ihk24.de/blob/sihk24/Fuer-Unternehmen/Fachkraefte-und-Ausbildung/Ausbildung/downloads/4271100/cd81c1ab3777c846d6aa3f074cd851e6/Antrag-auf-Anerkennung-Ausbildungsstaette-Ausbilder-data.pdf (19.04.2019)

2.1.3 Training regulation

For occupational training, the occupational competences to be acquired are set in a training regulation, which is specified by the training company in an individual training plan. Vocational training can only be carried out according to the training regulations, which are set for each individual profession. This ensures a uniform and comparable occupational training throughout Germany. These occupational training occupations are state-recognized training occupations. They guarantee the same standard of training and quality in every federal state.

The vocational training system contributes to a smooth transition from school to working life. It has a high degree of social acceptance and a great international recognition. In addition, the excellent employability of graduates is a key success factor of the dual training system, which also receives great international attention.

The registration allows the company to educate in a specific profession. The occupation of a seller in a bakery, for example, cannot be educated in a butchery or garden market – and vice versa. The registration is part of a quality security system in favour of the apprentice, which guarantees that the education will be carried out according to the content of the frame of education, by qualified trainers, in an environment in which the general rules of working place security are met.

The Chamber verifies the conditions and their respect during regular visits. In case of neglect of the rules, the company may lose the right to educate, which would also imply a loss of reputation.

The dual system in Germany offers the following educational possibilities:

- ▶ full education (Vollausbildung), taking place in one company during the full period of education, and one company only;
- ▶ the combination between full education in one company and cooperation with an external institution where the apprentice is offered additional education;
- ▶ part-time education, which is possible when the apprentice can prove, through exams (e.g. Abitur), that he is able to accomplish his education in a shorter period of time (usually 1 year less);
- collaborative training (collaboration between two or more companies and/or training institutions).

2.1.4 Vocational education contract

When a company decides to educate an apprentice, the company and the apprentice have to agree on a Vocational Training Agreement, which must be handed out to the chamber in charge. The contract must be handed out with a request to sign into the roll of craft of the chamber. The chamber provides the company with a template. The minimum content of the transcript of the Vocational Training Agreement is binding (federal vocational Act-Section 11).

The educational content is not part of the contract, as the Vocational Act relating to the specific vocation already defines it. Only certain topics, which are subject to free choice, must be defined by the contract.

The apprenticeship contract establishes the rights and obligations of the company, the trainer and the apprentice. The general obligations of the trainers are also laid down in the BBIG (subsection 3. § 14).

2.2 Collaborative Training as it works in Germany

Nevertheless, due to specificities of the company, or lack of specific knowledge or resources, it may happen that a company does not have the capacity to educate for the full occupation. In this case, the company can cooperate with another company and agree on sharing parts of the education. This cooperation is a collaborative training and is possible with any company as long as it is also registered as a company entitled to perform an education in that specific profession.

In Germany, there are several forms of cotrain models, the first one being the object of the COTRAIN project:

- apprenticeship in a lead company with a partner company: the lead company is in charge of the apprenticeship, the partner takes responsibility for a limited time and certain training modules;
- ▶ training on a contractual basis: collaboration between an institution with unused training capacities and companies (SMEs) that make use of these capacities as a paid service;
- apprenticeship in a consortium: several companies collaborate equally within a network, based on an agreement between them. The apprentice is contracted with one of the companies, and all involved companies exchange apprentices (rotating system);
- ▶ apprenticeship in a training association: several companies are incorporated in a training association, in compliance with association law. The association is only founded for the purpose of managing the collaboration. The association is in charge of the administration and organisation of the apprenticeship, and the companies pay the association fees for its services.

2.2.1 Contractual issues related to cotrain models

The contractual basis between companies or institutions under the model of collaborative training are **not** specified by the chamber. The apprentice will always be contracted by a leading company or training organizations which must be registered at the chamber. The leading company will be responsible for imparting the content of the specific job profile.

Generally, all companies or partners in collaborative training should agree on the content of the training the partners will provide the apprentice, including duration and objectives. The contractual partners can also relate to the job description (description of the education) as detailed by the Federal Vocational Act relating to the specific job profile. The cooperating partner must refer, in his education and training, to the job description of the recognized vocational act.

The cooperation contract must be concluded before the conclusion of the training contract, and after the application for network vocational training funding.

2.2.2 Advantages for all parties

There are advantages in the system for all parties – apprentices, companies and State.

- ► The apprentices:
 - acquire specific skills and qualifications for employment;
 - obtain an education remuneration;
 - learn under real operating conditions (machines/plants, work processes, etc.);

- identify with a training company and specialist;
- qualify for further education.

► The employers:

- obtain competent specialists which perfectly meet the requirements of the company (compared to external applicants);
- increase their productivity, and the quality of their products and services;
- achieve high returns, in the medium term, as a result of their training efforts;
- are involved in the development of training standards;
- save on recruitment and retraining costs;
- contribute to Corporate Social Responsibility (CSR).

► The State:

- addresses specialist requirements with the contribution of industry (company training);
- has a highly modernized vocational education and training system (technological change);
- can efficiently manage vocational training and ensure its quality;
- gains an early indicator of developments in the economy and in the labour market.

Therefore, cotrain strengthens the economic performance and competiveness of companies that cannot offer training in a one-company-model. As a side effect, it also helps to balance and harmonize the supply and demand between employers, employees and apprentices. In the end, it contributes to the social and economic integration of young people into the economic world.

3 Similarities and differences between the German and Austrian apprenticeship systems, and their use of collaborative training

Writer, oïbf

3.1 The apprenticeship system

In both countries, the law regulates apprenticeships for every profession regarding the accreditation of training companies, trainers, training content and competences to be trained, duration, and the way the final examination must take place. Social partner institutions are involved in the development and redrafting of training regulations, the accreditation of training companies, the conclusion of apprenticeship contracts, the control of training companies and the completion of the final apprenticeship exams.

However, whereas in Germany the training regulations are set up in a national institution responsible for vocational training (Berufsbildungsinstitut - BIBB) in which the social partners are involved, in Austria the social partners have a consultative role in the Federal Professional Training Advisory Council of the responsible ministry and — at the level of the federal states — in the state advisory councils. In Germany, the chambers of commerce, crafts and industry especially play a vital role, on a regional level, in elaborating the detailed training regulations.

In Germany, the final apprenticeship examination takes place in the training company; social partner institutions make up the examination board. In Austria the apprenticeship offices (Lehrlingsstellen), which are organizationally located in the Chambers of Commerce but accept subsidiary tasks from the Ministry, are responsible for organising the final examination on their premises. The examination commission consists of three members from social partner institutions, at least one of which has to be from an employee's institution (trade union or Chamber of Labour).

3.2 Collaborative training

In both countries, the law defines collaborative training as a part of the apprenticeship system. Therefore, companies can easily make use of it and do not have to concern themselves with legal, institutional or organisational issues. Although companies are free to set up a training alliance in the manner they prefer (regarding the type of cotrain model), regulations are clear in that:

- ▶ the apprentices must have a contract with one company throughout the whole duration of the training, wherever it may take place. This also includes the periods during which the apprentice has his training in another company or training institution. This includes insurances, remuneration and social security;
- ▶ a company, to be allowed to train, must train the complete professional profile. If this is not possible, the company has to build a cotrain with a company that is able to train the missing skills.

A difference is that in Germany the cotrain is already an (obligatory) part of the apprenticeship contract between the company and the apprentice, in which the companies that will take over the training in the cotrain have to figure. In Austria, this is not the case. Nevertheless, the apprentice has to be informed of the cotrain at the beginning of the apprenticeship, and has to agree to be sent to another company or training institution. The Austrian system allows companies more flexibility in choosing the partner company during the apprenticeship. In reality, most companies already do try to set a cotrain up at the beginning of the apprenticeship.

II. Collaborative training in « pilot » countries

1 The Italian model of collaborative training

Writer, Centoform

In recent years, new reforms have been carried out to make Vocational Education and Training more flexible and responsive to labour market needs. In 2015, the national Law n. 107/2015, the so-called "Buona Scuola", came into force with the aim of reinforcing the Italian dual system. The law is considered a powerful lever to strengthen the employability of future professionals in the face of youth unemployment.

In coherence with the multilevel governance that characterizes the country, the Regions are in charge of implementing the law at the local level, fulfilling their role of public administrations in charge of the regulation of VET systems.

Nevertheless, tools such as collaborative training networks have not yet been integrated in the VET system and represent a potentially strong innovation for the IFP Supply Chain. Today, cotrain are not a formalized "tool" but could offer a great potential of innovation creating, according to the European agenda, a real empowering knowledge structure including IFP providers, public authorities and companies.

Due to the complexity of the Italian legislative framework, it has not been possible to test the creation of cotrain within the apprenticeship system. In Italy, apprenticeships are work contracts that imply a long part of training on the job, up to the final qualification after 3 to 5 years, depending on the national work contract used by the hosting company.

Each national contract has specific regulations and peculiarities defined through a collaborative decision process carried out by the responsible social parties. The national contract is always the basic reference, but social parties can integrate it at regional/territorial/company level. This multilevel governance makes every change in regulation, even pilot actions, very long and difficult without the direct involvement of social parties. Furthermore, the Italian national legal framework does not allow, for apprentices, the implementation of mandatory training involving more than one company.

1.1 Centoform developed the collaborative model within internship

This is the main reason why Centoform, together with a local VET provider (Futura) and the competent Regional VET Service, decided to test cotrain within 2 different training paths, investing on internship rather apprenticeship:

- ▶ the first path was reserved for youngsters engaged in the achievement of a Professional Diploma (EQF 3), under the IEFP framework (15 to 18 years old);
- ▶ the second one was tailored for graduated youngsters interested in the acquisition of a Technical Specialization (EQF 4), under the IFTS framework (19 years old or more).

Both training paths were financed by the Region through ESF Funds.

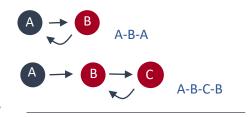
The IFTS training programme is a part of the national system for Higher Technical Specialization, established by the Law n. 144/1999, art. 69 with the aim of reinforcing business—education partnerships and answering the professional needs expressed by companies. Regions are in charge of programming the training offer, which is organized in 2 semesters (800-1.000 training hours).

IEFP, established by the Regional Law n. 5/2011, is a three to four year VET programme reserved to youngsters 14 to 16 years old, who have to acquire a professional qualification/diploma according to the Regional System of Qualifications (SRQ).

The training offer allows students, after 3 years, to obtain a professional Qualification for a successful insertion into the labour market. Corresponding EQF level: 3.

These modular programmes aim to develop basic transversal and technical occupational skills, and they include training on the job (through internship). IFTS programmes refer to the post-secondary level and offer a wide panel of opportunities including long-term internships as a part of the practical training.

Centoform offered to provide an ad hoc annex to the internship convention foreseen in both the abovementioned training paths, in order to carry out the cotrain, according to specific cotrain models of rotation (A-B-A and A-B-C-B).



The internship convention was validated by the VET centres, and by the regional authority.

The number of cotrains carried out in Italy is 12: 8 under the IEFP framework and 4 under the IFTS framework.

1.2 The cotrain leading company model

The internship convention developed thanks to the project was the formal reference for the cotrain experimentation, defining the roles and responsibilities of each company involved. [∞ Italian cotrain convention, p.137.

It has also defined the panel of activities each student/intern had to carry out during work-based learning, in order to achieve the expected key competences and learning outcomes, following the regional recommendations. These panels of activities were determined by Centoform, and shared with all of the companies and interns involved.

To ensure the adequate preparation of students for the internship, the training programmes include modules focused on safety and security, according to the Italian National Law (T,U, n. 81/2008)

1.3 Accreditation

In Italy, companies are not accredited for training and education, but VET centres are.

Thanks to their cotrain individual training plan, the students involved had the opportunity of developing a 360° vision of the company, including its organizational aspects and its work processes.

In the Italian pilots, the lead company was always the one that hosted the intern for the most important number of training hours.

The lead company was selected by taking into account:

- the structure of the training plan;
- ▶ the particularities of work processes in the company, and
- ▶ the expected professional profiles of the interns (in relation to the Specialization Certificate).

1.4 Apprenticeship contract and cotrain convention

In Italy, there is no compulsory template for internship conventions. Centoform decided to adopt a written convention, based on shared and validated templates for educational paths in which an internship or a work experience is foreseen.

1.5 Substructure for training centre-based systems

In Italy, VET Centres are accredited by the Regions and act on behalf of the regional public administration (subsidiarity). This implies that the quality of the in-company training context is evaluated and guaranteed by the accreditated VET centre in charge of the courses' deployment.

The Italian Vet System can be considered as a regional training-centre based system. In order to provide training services to citizens, it is mandatory for VET centres to receive a specific accreditation, after an in-depth audit carried out by regional inspectors.

Accreditations are given for lifelong, continuous learning and apprenticeship, training services for disabled people, e-learning and online learning, and initial VET (IEFP, according to the regional law n. 5/2011). This fundamental recognition implies that in Emilia Romagna, VET centres are authorized to act on behalf of the regional public administration, by verifying the quality and duration of situated learning, according to the law.

In order to guarantee the quality of the learning and training contexts, VET centres have to count, in their staff, different professionals:

- ▶ training coordinators, responsible for the overall management of the implemented training programme, in charge of managing the direct relation with the regional inspectors;
- tutors, professionals in charge of guaranteeing a positive and satisfying learning experience for all participants. They manage the relationship with teachers, experts and, in the case of internships, with the entrepreneur.

During the pilots, the training coordinators and the tutors played a crucial role starting with the identification of the companies that could be involved. Considering the particularities of each cotrain, the coordinators and tutors involved managed the relationship with the lead companies and the collaborative ones. Together, they determined the expected learning outcomes for interns based on their individual training plan and connected them to the work experiences offered by the company, taking into account possible training hours (see pilots' detailed description).

Training coordinators and tutors chose the companies that would become partners in the different cotrains based on some of the following key criteria:

SMEs belonging to the mechanical supply chain;

- ► coherence and correspondence between internal organization and work processes with the expected learning outcomes of the training programme/internship;
- commitment to welcoming and training the intern;
- presence of an in-company tutor;
- agreement to cooperate with other companies and experiment cotrain.

In order to guarantee a positive training experience for each student and a functional cooperation/integration between lead and collaborative companies, the VET centre identified, among its staff members, experienced tutors who would be responsible for relationship management and monitoring of the quality of the training. Each tutor was the referent for all questions and requirements of the students or entrepreneurs, in order to guarantee a positive training experience and a positive hosting experience.

1.6 Italian cotrain in the future...

The overall evaluation of the Italian pilots is very positive, exceeding the initial expectations.

An impact on educational policies:

At stakeholders' level, Emilia Romagna expressed its interest in adopting cotrain in order to reinforce its dual system, recognizing the added value for all of the involved actors (VET providers, companies, youngsters), and manifesting its readiness to change its educational policies following the COTRAIN project.

► A light impact on administrative procedures for the employers:

One of the most important differences observed between the beginning and the end of the implementation phase relates to a fear of bureaucratic and administrative formalities in cotrain. At the start-up phase, companies and VET centres expected an increased weight of formal documentation (i.e. convention and annexes). This fear may have represented an obstacle for companies in accepting the project.

The evaluation phase, contrary to what was expected, did not underline this item as a weakness/constraint.

2 The Belgian model of collaborative training

Writer, CEPAG with CEFA and IFAPME collaboration

In this section, Belgian COTRAIN partners relate how they transferred the essential elements of a collaborative training model in a different regulatory and institutional framework, the types of problems that came up, and how they were resolved. They attempted to find a Belgian way of making the model work in BeFr; the idea was never to strictly imitate the German or Austrian models.

2.1 The dual system in BeFr

2.1.1 A diversified system

BeFr has a differentiated system of initial vocational education and training, in which the dual system is found. The dual system is characterized by two locations:

- ▶ the work-based learning, in a company, which makes up about 60-80 % of the learning period and focuses on job-specific knowledge and skills;
- ▶ the school-based learning in a part-time vocational school/training centre, which is about 20-40 % of the learning period and focuses on basic subjects, related to theoretical knowledge and general education.

Training lasts two to four years, depending on the craft and the type of dual training; the norm is three years.

The duration of compulsory schooling in Belgium is 12 years, beginning the year in which children turn six. Minors must attend school full time until the end of the school year, in the calendar year in which they reach the age of 15, and must complete at least the first two years of secondary school. After this period, students may continue full-time or part-time.

The dual system is organised for those who choose part-time. Two paths are possible, within either the education field or the training field.

The different COTRAIN pilot partners are active in each field: the CEFA in the field of education and IFAPME in the field of training. They share common rules and practices, but each also has its specificities. The aim of this section is not to detail these issues: we will focus only on COTRAIN.

Youngsters hired in a dual training contract receive retribution. The most common apprenticeship contract defines three minimum levels of retribution, ranging from 17 % to 32 % of the gross minimum wage.

2.1.2 A dual system with multilevel governance

In the BeFr dual system governance, IFAPME and CEFA – partners in COTRAIN – have both common and different regulation frameworks.

Education field	Training field	
Community ministry of Education	Regional ministry of Employment and Training	
BeFr regulation basis for the <i>dual contract</i> , the company accreditation, the training plan		
Social partners contract Labour contract (part time)	Self-employment training convention Coordination and management (COEN) convention	
Conventions with social partners	Conventions with social partners (except for retribution)	

2.1.3 A training centre-based system

Dual training in BeFr is a training centre-based system. The training centre or institution plays a key role in the relation between the youngster and the company, including some administrative support, company prospection... It has important responsibilities, especially in verifying whether the objectives and conditions of training with the companies match the occupation and training requirements.

The following elements, in particular, form the apprenticeship system:

- company accreditation;
- rights and obligations determined in a contract/convention, including specific modalities (schedule, holidays, etc.);
- training plan;
- progressive retribution;
- pedagogical settings: training scenario, training tools, evaluation methods...

The Belgian partnership integrated the collaborative training within the current system, as far as possible. The guideline was that what has to be done within the current system would have to be done in collaborative training, while attempting to avoid needlessly multiplying administrative procedures.

The roles of the dual training actors – mentors, tutors, trainers... – remain the same as in the "one company" system.

2.2 The COTRAIN project's specific momentum

In BeFr, a ten-year reform led to a renewed and detailed apprenticeship regulatory framework. This reform came about progressively, with a major step attained in 2015 when a new dual contract came into force. During this ten-year reform, designed for a "one-company" model, collaborative training was never mentioned.

In September 2016, the context itself was a challenge for implementing COTRAIN:

- ▶ the project began only one year after the implementation of the apprenticeship reform. This brought about many changes. Some of them were opportunities, others were threats:
 - the apprenticeship contract was profoundly modified;
 - a transition period begun with "old" apprenticeship contracts had to be seen through to the end (to avoid breaking rules, especially the ones regarding retribution, if and when it was higher for youngsters);
- ► changes were made regarding financial incentives encouraging companies to hire apprentices. As a new model, cotrain requires a greater involvement, and these changes did not facilitate our work:
 - an important incentive disappeared;
 - another incentive relating to a minimum training duration raised questions. On one hand, as a
 cotrain includes splitting the training duration, the lead company might not be eligible to the
 incentive anymore. On the other hand, the incentive might never be accessible to the
 collaborating company;
- ► IFAPME had to manage an important increase of dual training candidates (because of a change in the registration rules), which was seen as an opportunity to develop COTRAIN;
- ▶ new policy reforms initiated by the ministry of Education created uncertainties regarding the development of dual training itself within the field of education;
- ▶ the training volume within companies has been reduced for training providers in the field of education (CEFA), to the benefit of in-school training. Some believe that the cotrain model is an opportunity to guarantee that youngsters will practice all of the required activities (in the building and wood, and electricity sectors for example), compensating the reduction of training hours;
- ▶ another major reform called "CPU" (certification per unit, linked to the ECVET European Credit system for Vocational Education and Training) is gaining ground in the field of education, and could make cotrain compulsory in some cases. The principle of CPU is to split the evaluation of a training year into units (2 to 4 units a year), in order to decrease dropouts. For apprenticeships, the activities within the company will not have to correspond to the school year, but rather the unit period, which is shorter. If the company's agenda does not allow it, a cotrain might become a (necessary) solution. Not everyone is in agreement concerning the current CPU experimentation; many uncertainties still remain;
- ▶ the transposition of the European directive regarding regulated professions also raised questions.

2.3 The COTRAIN project and the dual training framework

The apprenticeship regulations provide for the following requirements.



A public institution defines mandatory occupation profiles as well as training profiles (title, content and training equipment, conditions...). This institution is the SFMQ (Service francophone des Métiers et des Qualifications), in which ministry representatives, social partners, employment public services, education and training and recognition stakeholders are all represented. Outside of the scope of the SFMQ, training centres are competent to create training programmes in response to specific needs.

In BeFr, SMEs and very small companies are the ones which generally take on apprentices. This implies that their activities may not cover enough of the training profile of an occupation. Allowing for a certain margin, the company can receive accreditation under the condition that the training centre will address the missing elements. This can be achieved by organising a specific training within the training centre, by integrating a specific practice within the training centre programme, by using one of the skills centres of the education and training networks... However, if a company simply cannot cover enough of the activities required to comply with the training profile, the accreditation is refused.

In some sectors, there is a request to modify this restriction, under certain conditions. A collaborative training model could meet this request, via a *partial accreditation*. A company could receive a partial accreditation and only hire apprentices under certain conditions, which could include the cotrain model.

In the training centre, a mentor is in charge of accompanying youngsters, supervising the signature of the contract, prospecting companies, giving the accreditation... In collaborative trainings, the mentor will analyse if and how a complementarity between companies can be created, in order to complete or better fulfil the apprenticeship.

A cotrain model will require that these three people (mentor, youngster, tutor), as well as the employer (if the employer is not the tutor) share a common idea of how and why the cotrain will function, before signing anything.

2.3.1 A cotrain convention

For the COTRAIN pilots, Belgian VET partners did not change anything to the contracts employers used to sign: apprenticeship contracts (*contrat d'alternance*), specific conventions or social partner contracts.

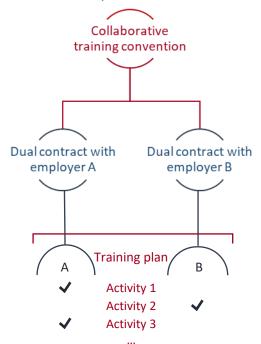
In addition, Belgian partners designed a specific cotrain convention. This convention ensures that:

- the rights and obligations of each contract applies;
- ▶ the specific issues and requirements of the collaborative training are clear to everyone.

To simplify this added layer of regulation, the cotrain convention frames the contracts respectively signed by the parties, like a "hat".

This "hat" covers both of the existing contracts between each employer and the youngster. It offers the advantage of respecting whichever contract each employer uses, as there are several different possibilities.

The cotrain convention can be adapted if the apprenticeship contract requires it, for example if the retribution level differs between an apprenticeship contract and a Social partners contract. The cotrain convention is to be signed by youngsters (and parents if minor), employers and training centre/institute, along with the contracts signed for the apprenticeship.



2.3.2 The training plan

The legislation makes it mandatory to sign a training plan, as an annex to the apprenticeship contract (regardless of the type of contract). The employer, the youngster (or parent for minors) and a training centre/institute sign this plan.

The training plan covers all periods of the training, with the aim of covering the complete occupation/training profile.

In order to lighten the cotrain framework, Belgian partners offered to keep a single version of the training plan, and to add a column to it. In this column, the mentor can specify when the skills/activities mentioned are to be achieved in the lead or the collaborative Company. Some activities may be found in both companies, but not primarily.

∞ Amara, a cotrain with two companies beginning with the collaborative company – Office functions, p.64.

[∞ Coline, a cotrain with two companies – Sales, p.79

If three companies participate in the collaborative training, two columns will be added.

In order for the CoTraiN project to succeed, partners knew from the beginning that contracts would have to be prematurily ended, with the approval of both youngsters and employers. Whichever scenario was encountered — breaking a running contract or starting a new collaboration — a cotrain convention was offered.

2.4 Difficulty: certain cotrain models imply a repetition of administrative procedures

As the dual training framework is made for a one-company model, the existing social security obligations imply repeating certain administrative procedures. This is the case, for example, if apprentices return to the first company (or a former one), during the cotrain. This does not apply for cotrain models with no return to a previous collaborating company.

Each time an apprentice enters or leaves a company's payroll, the employer must send a notification to the social security office. The contract and the notification cannot be transferred between employers, which means the administrative procedure has to be repeated.

Company A Company B Company A Employer has to: Employer has to: Employer has to: notify the entry; notify the entry; repeat the entry end the contract; end the contract; procedures; manage end of contract manage end of conrepeat the exit procedures; tract procedures; procedures... notify the exit. notify the exit. ...if the apprentice is not This may be considered too hired as a full worker at much by the employer, for the end of the dual a short training period... training

Unless regulations can be adapted, it is important to mention these obligations clearly, and support employers involved in this type of cotrain model. Otherwise, the situation will be quite confusing.

Despite this situation, several 3-step models (A-B-A) were developed in BeFr.

2.5 Difficulty (resolved): the BeFr apprenticeship law explicitly forbids youth from signing two simultaneous dual training contracts

At the beginning of the project, Belgian partners faced an unexpected problem: two employers asked to hire an apprentice with a weekly schedule (the apprentice would train in each company every week).

[∞ The cotrain simultaneous model, p.12.

This was unusual, as cotrain periods within companies generally follow each other in succession. The unexpected problem was that the new apprenticeship law explicitly forbids a youngster to sign two apprenticeship contracts at the same time. This is to protect youngsters against a potential form of abuse regarding "extra" working hours.

This was a true difficulty, until the Belgian partners found a way around it: the law allows two employers to sign one labour contract with an employee. Two employers could therefore sign one apprenticeship contract. The social security office confirmed this possibility, as well as how to implement it. This took a few months, as the Social Security office was working on the question on a larger perspective than the COTRAIN project.

In order to gather information, the Belgian partners investigated the matter through four questions. The appropriate institutions confirmed all of the following responses.

The four questions which structured the legal and administrative research on this issue were the following:

- is the principle based on which two employers can sign one labour contract a legal one?
 Yes;
- 2. does this principle apply to apprenticeships? Yes, by extension;
- 3. who/which employer is responsible for what? The Labour legislation provides that both employers are responsible, on a joint liability basis. The employers are under an *in solidum* obligation to ensure compliance with the requirements of the contract;
- 4. what has to be done in order to comply with the regulatory administrative framework? The national social security office (ONSS) confirmed the administrative requirements, referred to under the term "co-employment". The procedure includes that²:
 - employers and apprentice sign the contract;
 - each employer submits an immediate declaration of employment, using their respective registration (BCE) number;
 - each employer reports the information required in a quarterly return, using their respective registration (BCE) number.

This legal and administrative investigation took ten months. However, we now have a robust response that could inspire others.

Belgian partners agreed that it would be easier to compile all of these administrative and regulation issues in a short vademecum, specially made for training mentors.

2.6 How to facilitate cotrain in the future

On the legislative and administrative standpoints, the conclusion of the Belgian partners is that integrating the collaborative training model within the dual training framework would be the most efficient solution. This would mainly imply that:

- the apprenticeship law should be adapted:
 - to include the cotrain model within the scope of the law;
 - to integrate the cotrain modalities within the dual training contract, as a possible form of dual training;
 - to integrate the cotrain model to the accreditation requirements: it would be practical and efficient to frame flexible conditions under which the companies that cannot offer the full appropriate activities could still offer training, under the conditions of a cotrain;
- administrative requirements (social security, administrative procedures...) should be adjusted to fit the model: it would be easier to integrate a specific cotrain framework within the apprenticeship regulatory framework, in order to avoid the repetition of administrative procedures.

This would give legitimacy to the model, simplify and facilitate its achievement, which in turn would help to pursue a higher quality of training with no added cost.

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https://www.socialsecurity.be/employer/instructions/dmfa/fr/ latest/instructions/persons/rules.html#h21

III. How different the VET systems are and how the pilot countries carried out collaborative training

Certain people seem to believe that dual training mature systems, such as the German and Austrian models, are too specific to their countries to be implemented elsewhere.

Usually, they will say that implementing this system or a part of it cannot be achieved, mainly because:

- mature systems are mature because of a tradition, a training culture;
- ▶ in mature systems, the training is seen as an investment, not a cost;
- mature systems are built on a strong and sustainable policy support.

In addition, the following weaknesses are usually underlined. At the beginning of the project, partners highlighted these fears and prejudices:

- ▶ the most common Italian and Belgian employers' mind-set might be that they see costeffectiveness as the priority; they would therefore be reluctant to "share their apprentices";
- ▶ the most common youngsters' profile might be too weak. For example, in BeFr and Italy, dual training at the secondary level is fed by a relegation system ("no other choice" system); this could imply a weaker profile, while a cotrain model would be more demanding as the youngster will work with at least two companies;
- ▶ the most common youngsters' mind-set might lead the them to prefer the "one company model", which would be in their comfort zone. They also may not (yet) understand just how demanding the labour market truly is.

The COTRAIN project partly dispelled these fears. The main reason is that there is not one single profile of youngster, or one single profile of employer. Among employers and youngsters, people understood the reasoning behind cotrain, and supported the idea and its implementation.

[∞ Considerations regarding candidates, p.100; and

Considerations regarding companies, p. 105.

1 The main differences between the company-based VET systems and the training centre-based VET systems

In German and Austrian systems	In BeFr and Italian systems
► The collaborative training system is part of the dual system regulation framework. Countries have ad hoc regulation frameworks that prohibit a company from participating in apprenticeships if it cannot cover all activities of the occupation profile.	➤ The collaborative training system is unknown and the regulation framework does not include it. The legislation is based on and tailored for a one-company model.
▶ It is a company-based system.	► It is a training centre-based system.
► Company accreditation by the Chambers of commerce, based on the occupation, legal constraints.	 No restraint on the capacity to train to the complete occupation but some regulation via accreditation: Italy, accreditation of the VET centre by the Regional authority, with specific constraints for the companies with which the training centre works; BeFr, company accreditation by the VET centre, with a margin for the part of the training profile not covered by company activities.
► Companies sign a specific collaborative training agreement between them only; this agreement is a service contract.	 The VET contracts between each employer/youngster remain as they are, for each period in each company; The 4 parties can sign a convention, clarifying the commitments of each one (period, activities, retribution); This convention frames the existing legal rules.
 The leading company: finds ad hoc collaborative company(ies); hires the apprentice(s); takes over all the regulation constraints for the entire duration of the training, including paying insurances; pays apprentice(s) remuneration, including during the training period in the collaborative company. 	 The employers: the lead company is the one in which the volume of training hours is the highest; employers pay insurances, the same way as in a one company model; employers pay the retribution prorata temporis. The VET centres/institutes (mentors): find ad hoc collaborative company(ies); send/prepare apprentices to recruitment interview; ensure all the regulation constraints are correctly carried out for the entire duration of the training; provide appropriate information to all parties regarding their obligations.

2 The COTRAIN mind-set during the cotrain pilots

Beyond differences in the institutional and regulation frameworks, beyond mind-set issues, the COTRAIN partners bet on the fact that needs and objectives are the same in all countries:

- ▶ the long life learning issues are similar: leading to strong qualification is an objective of all VET systems, including achieving complete occupational profiles, particularly for initial VET;
- ▶ the socioeconomic fabrics share similarities:
 - co-existence of big and small companies, specialized companies...;
 - the limits of the one-company model are a common issue;
 - the companies need qualified workers;
 - there is a relatively similar evolution in occupations, as processes and products impact the market in a similar way.

COTRAIN partners first worked on the core elements of the model, in three steps:

- 1. what are the core elements, what do we require regardless of how it will be specifically carried out, or what is required by the country regulation system (training, labour, social security...);
- 2. considering these core elements, how can it work in each country's regulation system, with regards to actors, common practices, etc.;
- 3. when obstacles or problems occurred, partners gradually worked out how to overcome them, how to work around them, or how to change the plan.

Two examples to illustrate this:

In Italy and Belgium, the partners had to implement the pilots in accordance with their regulations. Partners checked which current legislation could allow us to implement the model, the first question being: does the existing framework allow us to "share" or "split" a dual training between two or more companies.

The Italian partner chose to develop the cotrain model in the work-based learning frame because the apprenticeship law as it is today makes it impossible to do otherwise.

In Belgium, partners faced additional administrative obligations if the youngster returns to company A ([∞ II.2The Belgian model of collaborative training, p.34). Partners did their best to inform employers in order to compensate the situation, and mainly presented a one-way model to them.

Partners discussed these problems with VET stakeholders and social partners, who helped them find solutions ([∞ Difficulty (resolved): the BeFr apprenticeship law explicitly forbids youth from signing two simultaneous dual training contracts, p.39).

People who understood the benefits of the cotrain model supported us. They will support you too.

PART III – COLLABORATIVE TRAINING EXAMPLES AND COTRAIN PILOTS

ÖBB, national railway company - A collaborative training example in Austria

Writer, öibf

In Austria, training groups can be carried out in different manners ([∞ The Austrian model of collaborative training, p.20). One of the most common models is one in which a large company, itself a training company, performs parts of the dual training for smaller companies.



In most cases, these are supplier companies or companies that are closely connected to large-scale production. One of these large companies is ÖBB.

ÖBB (Österreichische Bundesbahn) is Austria's largest mobility service provider, being the national railway company, owned by the state and responsible for the public railway structure of Austria.

As a comprehensive mobility service provider, the ÖBB Group brings 461 million passengers and 111 million tons of goods to their destination in an environmentally friendly manner each year. 92 % of the traction current comes from renewable energy sources, 90 % from hydropower.

With a punctuality of around 96 %, ÖBB was one of the most punctual railways in Europe in

40.265 railway and bus employees, and approximately 1.900 apprentices, ensure that around 1,3 million passengers reach their destination every day.

Apprenticeship with ÖBB

[40.265 employees and around 1.900 apprentices]

ÖBB is one of the large companies in Austria with a long tradition of apprenticeship. The first apprentice was trained in 1895 as a boiler smith. Currently, around 500 new apprentices are admitted in training each year, in various apprenticeships. The railway education centre (BZE) is the competence centre for railway-specific education. At their locations found throughout Austria, they offer incompany, technical and vehicle-technical education and training as well as technical facilities, training rooms and overnight accommodations.

There are 22 different types of apprenticeships at ÖBB, from commercial apprenticeships such as forwarding merchant or training in mobility service, to technical apprenticeships such as track construction, automotive technology and system electronics or metal and electrical professions.

98 % of apprentices pass their final apprenticeship exam on their first attempt – the entire job market benefits from the system, because with the support of the Ministry of Transport, ÖBB can train more young people than they themselves need. About half of the apprentices remain in the company and the others, as sought-after specialists, find good jobs in business and industry.

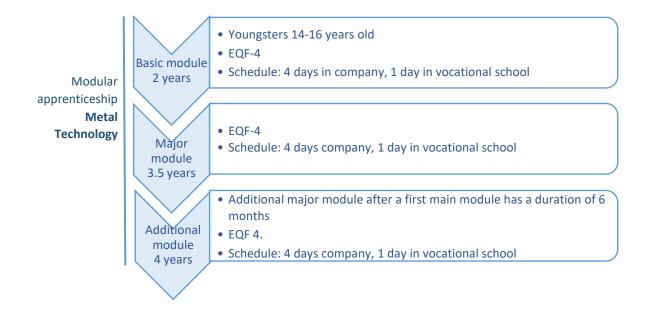
Apprenticeship in ÖBB – a few key numbers:

- 22 different types of apprenticeship;
- ▶ 98 % of apprentices pass their final apprenticeship exam on their first attempt;
- about half of the apprentices remain in the company;
- over 3.000 applicants per year, 500 of whom are admitted;

- ▶ 140 trainers;
- ▶ 16 % of ÖBB apprentices are women, and almost half of them are trained in technical occupations (targeted quota 20 % in 2020).

2 Collaborative Training Networks with ÖBB

One of the occupations for which CTNs with ÖBB take place is Metal Technology. The training in this profession is organised as a modular apprenticeship. It consists of a basic module with a total duration of two years, which all apprentices have to complete. After that, apprentices have the choice between eight major modules; at least one must be chosen. If the apprentice chooses one major module, the total apprenticeship last for 3.5 years. If, in addition, the apprentice chooses another main module or a special module that can be completed after the (first) main module, the whole duration of apprenticeship will be four years.



ÖBB offers CTNs in 12 different modules
Basis Metal working ① part of Basic Metal working
Fundamentals of Electrical Engineering 1 and 2
Electrical Engineering
Laboratory machinery
Protection measures
Installation technology
Pneumatics / Electro – Pneumatics
Programmable logic controller
Tuning
Milling

ÖBB offers to train other companies' apprentices for parts of the training regulation.

Within the structure of the training regulation, ÖBB offers a 2-month "Basis Metal Training".

All other items of the basic module and the main modules chosen by the apprentice have to be trained by the other company.

The Basis Metal Training consists of these parts of the professional profile

Welding

Knowledge of work planning and work preparation as well as participation in work planning, defining work steps, work equipment and working methods

Knowledge of the materials and auxiliaries, their properties, processing options and possible uses

Knowledge of coolants and lubricants, their applications and their properties

Handling and maintaining the equipment, tools, machines, measuring and testing equipment and work tools to be used

Reading and applying technical documentation such as sketches, drawings, wiring diagrams, operating instructions, etc.

Measurement and testing of mechanical quantities using measuring instruments and slide gauges

Select, obtain and verify the required materials

Manual machining of materials such as sawing, drilling, grinding, filing, thread cutting, reaming, etc.

For each training network (cotrain), a separate bilateral agreement is concluded between the training company (A) and ÖBB, in which the number of apprentices participating, the duration (2 months), and the period are bindingly agreed upon.

In addition, the following aspects are regulated in this convention:

- ▶ the training plan must be determined with the head of the training workshop for a precise coordination, whereby the time frame agreed upon must remain unchanged. If the company requires changes in the training plan, they must be commissioned by the person in charge of company A prior to the commencement of the modified training;
- ▶ in order to check the training progress of the apprentices, information meetings are held on an ongoing basis between the training supervisors of company A and the instructors of the training workshop;

- ▶ all records within the training sections are available for inspection by company A at any time, but remain the property of the training workshop of ÖBB;
- ▶ for the duration of the training period specified in the agreement, the apprentices are under the supervision of the instructors responsible for the training workshop. In the sphere of influence of the training workshop, the apprentices have to execute the orders of the responsible trainers of the training;
- ▶ ÖBB will comply with the legal protection regulations (e.g. worker protection regulations) that apply to the agreed training;
- ▶ ÖBB is liable only for intentional or grossly negligent behaviour on the part of its own training officers;
- ▶ the company A will only assign apprentices with the required mental, physical and character fitness to the training;
- costs charged by ÖBB to company A;
- costs charged for accommodation (if offered by ÖBB);
- ▶ if the performance of an apprentice does not meet the expectations of ÖBB, the contracting parties will decide, in concert, on the end of the training. In the event of unreasonable behaviour or serious misconduct by an apprentice and after prior agreement of the other contracting party, ÖBB can terminate the contract with immediate effect. A deadline is not required in this case;
- ▶ absence of apprentices due to illness or vacation, in the form of single or consecutive working days, in the amount of up to three days, does not interrupt the training period. A longer absence requires the agreement of the contracting parties;
- ▶ the daily working hours depend on the legal regulations and the operating hours of the training workshop.

Besides Metal Technology, ÖBB also offers cotrains in basic modules for three other occupations: electronics, electrical engineering and mechatronics.

The participating training companies, in consultation with ÖBB, can determine the content and duration of the training units acquired by ÖBB within the framework of the training association, regarding the basic modules of these modular teaching occupations.

3 Each company benefits from the collaboration

The advantages of a training alliance for the sending companies lie in the fact that they do not need to have the necessary and often space-intensive training facilities. They can save considerable fixed and personnel costs. They can take on young people who have basic knowledge in the field of metalworking, are used to working in workshops and have basic social skills. Furthermore, possible weaknesses from school time are compensated. The apprentices can therefore be employed in production, directly after a short familiarisation period, or take part in in-depth courses.

The advantages for ÖBB lie in the consistently high utilisation of its equipment and training facilities, financial compensation, the possibility of maintaining close contact with well-known industrial companies and coordination in the area of vocational training.

II. Mechatronic - A collaborative training example in Germany

Writer, inab

In Germany, vocational training under the regulations of the dual system can be carried out in different ways. Usually, the apprentice will be educated in a company, which must always be recognized and registered. This implies that certain conditions are met, which are a prerequisite for training, such as the competence of the trainer, the profile of the company and issues like the size of available training rooms or industrial safety.

Not all companies can perform all modules that make up the occupation in which the apprentice will be educated. In that case, the company will have to form a partnership with another company, which is competent to educate this particular module. The reasons behind a partnership can vary:

- the main company does not offer work in a specific field, because it prefers outsourcing;
- ▶ the main training company does not have the respective competence to educate in a very specialized field;
- ▶ the trainer does not have time to educate, due to other obligations;
- the company is a supplier for a bigger company and the bigger company obliges the smaller company to reach certain standards, which can only be met in a high tech training centre of the bigger company.

Example:

Denis is 16 years old, and he agreed on an apprenticeship with a company as a mechatronic. The mechatronic is a high-level occupation within the metal branch, with a recognized vocational training occupation in that field of activity. The job title derives from the art word mechatronics, which comes from a combination of mechanics, electronics and computer science, and describes an interaction of the disciplines of mechanical engineering, electrical engineering and information technology. The job of a mechatronics engineer is very similar to the profession of an electrician mechanic. The main skills of a mechatronic include:

- pre-assembly of components;
- manual and machine cutting, cutting and forming;
- installation and assembly of machines and systems for the customer;
- programming mechatronic systems;
- installing and testing hardware and software components;
- construction and testing of electrical, pneumatic and hydraulic controls;
- laying the supply lines;
- commissioning, including functional and safety checks.

The occupation has recently been revised by the social partners, due to a general review of the occupation in order to make the metalworker fit for his job in the digital age. When Denis had his interview at his company, he found out that one part of his education could not be carried out in this company, as they do not have the competence: this new field in the revised occupation profile is not part of their main activities.

In Germany, federal law defines the education in the field of mechatronics. 20 chapters of the education plan define the content (as learning results according to the logic of the qualification framework), the duration (how long the content of each respective chapter must be taught or practised) and the fixation of the respective years during which the four-year learning activity will take place. There are also chapters that will be taught throughout the whole duration of the education. The process is as follows:

Nr.	Part of Education profession	Skills and knowledge	Time Guide values in weeks in the year of training
1	Vocational training, Labour and Tariff law (§ 3 No. 1)	 Meaning of the training contract, especially graduation, duration and completion, explain vocational training, Labour and Tariff law (§ 3 No. 1) b) mutual rights and obligations within the training contract Possibilities of professional training Essential parts of the employment contract Essential provisions of training operations in collective agreements 	During the whole Training
9	Manual and machine cutting, disconnect and reshape (§ 3 No. 9)	 Sheets, plates and profiles of metal, saw plastic after a crack Surfaces and shapes on work pieces up to dimensional accuracy of ± 0.2 mm and a surface condition between 6.3 and 40 μm, angled and parallel filing as well as deburring, manual and machine cutting, disconnect and reshape (§ 3 No. 9) Drilling up to a positional tolerance of ± 0.2 mm by full drilling, drilling and profiling holes to the dimensional accuracy according to IT 7 and surface texture between 4 and 10 μm, internal and external thread with taps and dies produce Work pieces up to the dimensional accuracy of ± 0.1 mm and surface texture between 4 and 63 microns with different turning tools Work pieces up to the dimensional accuracy of ± 0.1 mm and one surface texture between 10 and 40 microns with different milling by face, peripheral face milling to edit Thin sheets and plastic sheets with shearing hand and hand lever shears, sheets, tubes and profiles of iron and steel, cold forming non-ferrous metals and judging. 	11 weeks the first year

Describing the learning steps and explaining how the content of the occupation will be transformed into learning units is one of the training company's tasks. The company will therefore elaborate a well-defined training for the youngster for the coming 3.5 years which will define, in detail, what the youngster will have to do. Within the dual system, the youngster would do all the practical learning in the company. One day a week, he will go to the vocational school for his lectures in mathematics, political sciences, language skills etc.

In this case, however, the normal path of the dual system had to change. The educating company could not train all of modules found under the federal law of vocational occupation in this particular occupational description. Denis and his trainer identified that module 14 of the occupation of a mechatronic could not be taught in the company. They therefore decided to cooperate with another company, in which Denis could complete his practical courses.

Nr	Part of Education profession	Skills and knowledge weeks in the year training	
14	Building and testing of electrical, pneumatic and hydraulic controls (§ 3 No. 14)	 Electrical, pneumatic and hydraulic circuits, build and connect Facilities for the supply of electrical, pneumatic and hydraulic power, connections, check and adjust building and testing of electrical, pneumatic and hydraulic controls (§ 3 No. 14) Pressure in pneumatic and hydraulic systems, measure and adjust 	4 weeks the first year

At this point, a cotrain came into place. As it is possible to combine several learning places, Denis and his trainer in company A agreed with company B, which is involved in the business of producing elevators, that Denis could fulfil units a-c of chapter 14 with that company. As company B is also registered at the chamber, this also implied that Denis would benefit from the cooperation for the full duration of his apprenticeship.

There are benefits on all sides:

company A:

- enables Denis' education as a mechatronic, even though a particular skill could not be trained;
- has the benefit of potentially hiring Denis as a future employee;
- Denis could be observed in his learning progress and performances;
- fulfils a part of its social responsibility;

Denis:

- accomplishes the mechatronic occupation training he wanted within his home city;
- apprenticeship is secure for the whole duration of the training process;
- gains some knowledge about another company. Maybe at a later stage he may decide to change employers;

company B:

- benefits from another company's apprentice;
- can deepen its business relations with company A;
- can learn more about the processes of another company.

III. Collaborative training stories in Italy

Writer, Centoform

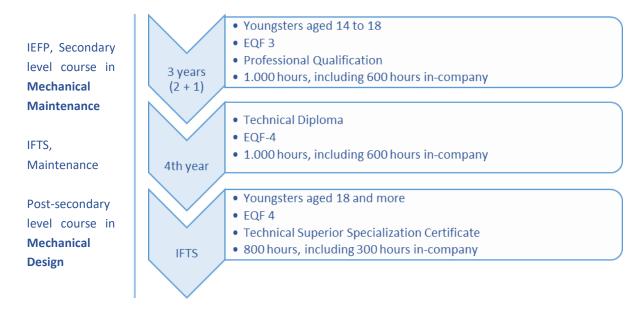
Thanks to the COTRAIN project, in Italy it was possible to test 12 cotrain pilots under different educational programmes, one for under-aged students, and the other for adult students with a diploma.

The reader will find a résumé of all the pilots carried out during the project, following the presentation of these two selected pilots.

1 The choice of the educational programmes

The first training programme in which cotrain was tested was in Mechanical Design, for a Technical Superior Specialization Certificate.

The second training programme belongs to the so-called IEFP [∞ The Italian model of collaborative training, p.30. It is a technical training path reserved for youngsters aged 14 to 18.



The pilot training course was entitled "Technician for the management and maintenance of automated systems". After 3 years, 2 plus 1, attending students can obtain a professional qualification, and after 4 years they can obtain a technical diploma. Both the training programmes are in the mechanical sector.

As experimentations, these training courses were selected according to the Emilia Romagna Region's Education System and framework.

Fourth year IEFP students can access the IFTS course; this is why it was interesting to implement pilot actions in both of these connected learning contexts, according to a supply chain approach.

The Emilia Romagna region is an international leader in mechanical industries, from concept design to manufacturing.

The Vet centre Centoform suggested testing cotrain in the mechanical sector, because it is one of the prior economic sectors of the Emilia Romagna Region, the backbone of the regional economy, considered as a point of excellence under the framework of the regional Smart Specialization Strategy (IS3).

In general, the Italian pilots had a positive impact both on the student's competence profiles, and on the lead companies and collaborative companies involved.

2 Mechanical design, IFTS Course, EQF IV

The cotrain experience was applied to the IFTS course, a secondary level course in Mechanical Design run by Centoform VET centre. The training title is "technical superior specialization certificate". It is one of the most important courses managed by Centoform, financed by the regional ESF Fund, and there is a permanent increase in demand for this professional profile. Finally, and very importantly, there is an excellent employment percentage for participants having completed the training (78 %).

Occupation: mechanical designer
Training: technical superior specialization certificate, EQF-4

Read and understand mechanical drawings (symbols, dimensional models, measurements, etc.)

Knowledge of technology of materials

Ability to conceive mechanical designs

Ability to carry out a project (from the idea to the final product), using ad hoc software

Respect Quality and Safety Standards for processes and products

Create prototypes, applying novel techniques such as reverse engineering, 3D printing, additive and subtractive manufacturing

The comprehensive duration of the IFTS course is 800 hours. 70 % attendance rate is required for admittance to the final exam.

	480 theory and lab
	20 project work
800 hours	300 work based learning
	8-9 months
	40 hours per week

3 Salvatore, a cotrain with two companies and a return to the lead company

Company A: X MEM srl

Company B: Elettrostamperie Poppi srl

Cotrain model: A-B-A



This cotrain involved one student, Salvatore, and two companies.

Salvatore started in X MEM, where he stayed for 104 training hours between 23-04-18 and 11-05-18. After that, he continued his training with Elettrostamperie Poppi for 120 training hours, from 15-05-18 to 01-06-18. Salvatore then returned to X MEM for the last 76 training hours, finishing his practical courses according to his individual training plan.



The Lead company (A) • X MEM SRL is a very innovative company specialized in technical drawings and in innovative mechanical production technologies and plants. Established in 1997, it follows the complete mechanical design process: analysis, 2D and 3D project for automotive, automatic machinery, carpentry, mechanical plant engineering, conveyor belts, as well as 2D and 3D assistance of CAD hardware and software.

The first step of the practical courses in X MEM allowed to Salvatore to increase his awareness regarding the whole mechanical drawing process and technologies in use. He also had the opportunity to gain specific skills and expertise, concerning both mechanical design and concept and physical design of mechanical elements, increasing and applying in the field the knowledge and capabilities learnt during the theoretical part of the course.

Salvatore also had the possibility to use an advanced design software, even more advanced than the one available in the VET centre's labs, making his own competence profile more attractive and versatile for future employment.

The Collaborative company (B) • Elettrostamperie Poppi SrI is a production company created in 1962. Thanks to continuous investments in high tech equipment, it is highly specialized in the electric upsetting and forging of any kind of parts based on drawings, using all types of steel: inox, bearing, carbon, stainless, etc. Salvatore joined the production department. There, he could deepen his knowledge and skills concerning technology of materials, peculiarities of the production process, production techniques and systems for the realization of any kind of mould.

Returning to Company A • Salvatore brought with him all the acquired baggage of new knowledge and capabilities concerning product design and realization processes. Salvatore could carry out technical drawings with a better awareness of the entire production process, from idea to implementation. He also had the possibility of evaluating how design could take into account certain

particularities of the production phase and specific needs in order to reduce production time and, most of all, to reduce non-compliance of the final product.

3.1 A very positive experience and a tangible benefit for all: intern, companies, training centre

The combination of trainings with different companies made the practical courses a much more powerful and rich experience for the interns as well as employers, establishing and strengthening a win-win-relation.

A work experience in two different contexts	Regarding the intern, the work experience carried out in two different professional contexts was extremely useful in reinforcing organizational and relational competences, and not only technical skills.
A knowledge now covering the whole supply chain	Regarding the core of the mechanical process, thanks to the rotation in two companies – the one specialized in design and technical drawings, the other in production – the intern acquired knowledge relating to the whole supply chain, not only the concept phase of the process itself.
Entrepreneurs consider that the cotrain model can reinforce competitiveness in the medium to long term	The evaluation, through questionnaires and interviews carried out at the end of the cotrain experience, involving both the students and the companies, shows very positive results. Both companies considered cotrain to be a powerful tool for reinforcing their competitiveness in the medium to long term, thanks to the new competences brought by the intern as well as the new relation (potential commercial partnership) built with the other company. According to the employers, through cotrain, they can get in touch with a new industrial partner, strengthening their industrial mark-up.

3.2 After the cotrain

Elettrostamperie Poppi Srl considered forms of stabilization with Salvatore.

Salvatore, however, preferred to continue his training, attending a technical course offered by the firm Lamborghini SPA, international leader in the automotive sector.

After that, another mechanical company of the local area (Bologna Province) hired him, with specific engagement in the production department.

We believe the cotrain experience increased his employability.

Salvatore [more skilled]

"Thanks to cotrain, I had the possibility of improving IFTS course learnings and gaining new competences. Cotrain allowed me to meet different companies, different realities.

In the end, you have a complete overview of the work and you feel more comfortable and strong."

The lead company (A) [emulation]
X MEM SRL

"Our company had the opportunity to analyse the training methods adopted for apprentices and new workers by comparing our practices with the ones of other companies, exploiting the feedback of apprentices in relation with the other training experiences. This also allowed us to revise our training methods for new employees."

The collaborative company (B)

[youngsters better understand companies and job market]

Elettrostamperie Poppi Srl

"Thanks to cotrain interns/apprentices have the opportunity to know and evaluate the job market, because they can see and compare different jobs and different work places. Young people can better understand what work to choose for their future."

The VET centre [higher expertise]

"Centoform reinforced:

- ▶ its network of companies;
- its consultancy role and
- ▶ its reputation concerning design, development and implementation of innovative training programmes connected to the needs of the labour market."

4 Luca, a cotrain with three companies, starting with the collaborative company with a return to the leading company

This pilot involved one student, Luca, and three companies.

Cotrain model: B-A-C-A

Company A: Sagom Tubi SpA

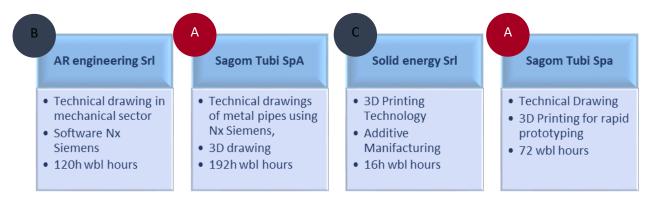
Company B: AR Engineering Srl

Company C: Solid Energy Srl 🚅



Sagom Tubi is considered as the lead company (company A), seeing as it was responsible for the largest number of training hours.

The duration of the internship, respecting the training programme of the IFTS course in the mechanical sector (EQF 4), was 300 training hours. Luca carried out parts of his practical courses in these three companies, according to his individual training plan:



The Lead company (A) • Sagom Tubi SPA, was established in 1973 and is specialized in the production of piping made of iron, copper and aluminium, and rubber flexible pipe fittings for hydraulics, fuel injection and air conditioning systems.

The Collaborative company (B) • **AR Engineering Srl** was established in 2014 and is specialized in engineering project design. The firm provides feasibility studies, kinematic analysis studies, structural models and fluid dynamics studies using FEM (Finite Element Methodology).

The Collaborative company (C) • Solid Energy SrI is a member of THE3DGROUP, the most important Italian partner in 3D digital innovation. They are highly specialized in 3D printing, reverse engineering, dimensional model certification, digital measuring, ergonomics analysis, functional design techniques,

ease of assembly analysis, visual design for the sectors of automotive Industry, energy, aerospace and industrial automation.

The intern • Luca, started his training in company B, AR Engineering, increasing his knowledge and capabilities in technical drawing in the mechanical sector. In particular, he had the opportunity of increasing his technical competences using NX Siemens 3D mechanical software especially used in the automotive industry.

Luca then went to Company A, Sagom Tubi, a production company using NX Siemens for the design of metal pipes and components. Centofom conceived this second step as a direct follow up of the first one, allowing the youngster to apply his acquired ICT competences directly in a working environment.

The third step was carried out in company C, Solid Energy, a very novel company specialized in additive manufacturing, in particular novel 3D printing technologies. With this company, Luca could learn these particular mechanical techniques, using 3D printers and different materials (metal, plastic, resin, etc.)

As a fourth and final step, Luca returned to Company A, Sagom Tubi, with stronger competences, both technical and organizational.

Luca became the ambassador of a new technology used by Solid Energy, company C, in company A.

Thanks to the cotrain, Luca was able to promote the innovativeness of the 3D printing, facilitating the internal reflection in company A, Sagom Tubi Spa. He could focus on the possibility of introducing this production technology, extremely effective and costless, in the future.

4.1 A positive experience and a tangible benefit for all: intern, companies, training centre

The combination of training with different companies made the work-based learning a much more powerful and rich experience both for intern and for employers, establishing and strengthening a win-win-relation.

A work experience in different contexts	The combined work experience of this cotrain allowed the intern to develop a 360° vision of the companies, considering both organizational aspects and the whole of the work processes. Cotrain gave him the opportunity to reinforce his profile, in order to become more confident and attractive for future work placement.
A knowledge now covering to the whole supply chain	Regarding the core of the mechanical process, thanks to the rotation in two companies — the one specialized in design and technical drawings, the other in production — the intern acquired knowledge relating to the whole supply chain, and not just the concept phase of the process itself.
Entrepreneurs consider that the cotrain model can reinforce competitiveness in the medium-long term	2 out of the 3 companies recognized a strong return in the medium to long term, regarding competitiveness and reinforcement of internal skills. All employers recognized cotrain as a powerful tool that reinforces employability and facilitates innovation in regional work policies. All entrepreneurs agreed to promote cotrain to other companies, even if in some cases the fear of an increase in administrative procedures is still present.

4.2 Focus on the cotrain benefits within the VET centre and between companies

During their training, students attended activities, both in the classroom and in the ICT laboratory. These internships were extremely important in order to complete the training. In the training centre, students "only" learn how to use a specific software (i.e. CAD) for designing and projecting. With a company, students also acquire a particular awareness regarding the organizational aspects of the company and its core work processes, based on their direct insertion in the company itself, as well as a better performance in designing thanks to their direct knowledge of the production processes.

Luca also received a specific request from Sagom Tubi. The company asked him to obtain certain new competences during his stay with Solid Energy. These new competences related to the use of 3D printing in realizing the so-called DIMA, a mould for the production of a tube. This new production process has allowed the design of the DIMA to overlap some production steps, consequently reducing production time and costs. The generated benefit for Sagom Tubi has been extremely relevant.

Another relevant impact was the beginning of a commercial partnership between these companies, for the introduction in the production processes implemented by company A of the new 3D printing technologies provided by company C.

4.3 After the cotrain

Luca found a job coherent with his profile, even though AR Engineering did not hire him, as initially expected. The cotrain generated tangible value and benefits for all:

The intern [more skilled]

"I improved my work profile, I increased my competences and now my curriculum is more competitive than before and I finally found the job I wanted."

The lead company

[good planning of training is crucial]

Sagom Tubi SPA

"If the activity is planned in the required way and time, it will not lead to any additional commitment from a bureaucratic point of view, or administrative effort"

The collaborative companies

[sharing knowledge]

AR Engineering SRL

"Our company had the possibility to meet more apprentices and the possibility to begin new collaborations with other companies, sharing knowhow."

Solid Energy SRL

[students are ambassadors of our technology]

"I believe it is essential to transfer knowledge about our technologies to students. We hope that in the future the students may need our technology in their work and be able to use it to solve problems or improve productivity. This could also bring about new relationships between us and the companies for which the students will go to work"

The VET centre [higher expertise]

"Centoform reinforced:

- its network of companies;
- its consultancy role and
- ▶ its reputation concerning design, 3D printing, development and implementation of innovative training programmes connected to the labour market needs."

5 The cotrain pilots developed in Italy

Mechanic and mechatronics is one of the prior economic sectors in the Emilia Romagna Region, for excellence in production and for the number of active companies. It is also a sector with continuous development and innovation due to the globalization of the markets and digitalization of work processes. Key professional profiles have to improve soft skills and technical competences regarding design and production phases.

Collaborative training networks allow the trainees:

- ▶ to acquire both the soft and hard competences necessary to autonomous interventions;
- ▶ to gain a complete knowledge and awareness regarding the entire work process, from design to production and maintenance;

These types of opportunities are often impossible to find within a one-company training model.

What follows is a summary of the different cotrain pilots developed in Italy, including collaborating companies and skills acquired.

 ♠ C.M.P. srl ▶ Company specialized in the production of mechanical automatic machines ▶ Maintenance techniques 		 AR ENGINEERING Company specialized in engineering project design and consultancy Mechanical drawings 		C.M.P. srlMaintenance techniques	
Technician for the manage	ment and	d maintenance of a	automated systems		
 V2 Engineering srl Production of packaging machines 		 AR ENGINEERING Company specialized in engineering project design and consultancy Mechanical drawings maintenance of automated systems 		 V2 Engineering srl Production of packaging machines 	
 NOVA srI Company specialized in the construction of mechanical plants and machines Maintenance techniques 	® BALT Compar the prod heating systems ▶ PLC softv ▶ Use	UR SPA ny specialized in duction of and cooling	 AR ENGINEERI Company specin engineering project design consultancy Mechanical directions 	NG cialized g	NOVA srlMaintenance techniques

Technician for the management and maintenance of automated systems

(A) OTM srl

- Company specialized in the construction of mechanical plants and machines
- Maintenance techniques

® BALTUR SPA

- Company specialized in the production of heating and cooling systems
- PLC programming software
- Use of mechanical machines

© AR ENGINEERING

- Company specialized in engineering project design and consultancy
- Mechanical drawings

O OTM srl

Maintenance techniques

Technician for the management and maintenance of automated systems

(A) Carpigiani Srl

- Company specialized in the production of food machines
- Maintenance techniques

® SM srl

- Company specialized in the construction of mechanical machines
- PLC programming software
- Use of mechanical machines

© AR ENGINEERING

- Company specialized in engineering project design and consultancy
- Mechanical drawings

SM srl

Use of mechanical machines

Technician for the management and maintenance of automated systems

(A) Easy snap copacking srl

- Company specialized in the construction of mechanical packaging plants and machines
- Use of mechanical machines and tools

® AR ENGINEERING

- Company specialized in engineering project design and consultancy
- Mechanical drawings

© Easy snap copacking srl

Use of mechanical machines and tools

Technician for the management and maintenance of automated systems

A BALTUR SPA

- Company specialized in the production of heating and cooling systems
- ► PLC programming software
- Use of mechanical machines

® AR ENGINEERING

- Company specialized in engineering project design and consultancy
- Mechanical drawings

© BALTUR SPA

- ► PLC programming software
- Use of mechanical machines

Technician for the management and maintenance of automated systems

Nuova S.P.Z. srl

- Company specialized in the construction of mechanical plants
- Maintenance of plants and machines

® AR ENGINEERING

- Company specialized in engineering project design and consultancy
- Mechanical drawings

© Easy snap copacking

- Company specialized in the construction of mechanical packaging plants and machines
- Use of mechanical machines and tools

Nuova S.P.Z. srl

 Maintenance of plants and machines

Mechanical design

A X.MEM Srl

- Company specialized in technical drawings and in innovative mechanical production technologies
- Mechanical design and drawing

® Elettrostamperie Poppi Srl

- Company specialized in the electric upsetting and forging of any kind of parts based on drawings, in all types of steel
- Mechanical production process

© X.MEM Srl

 Mechanical design and drawing

Mechanical design

AR ENGINEERING

- Company specialized in engineering project design and consultancy
- Mechanical drawings

® Sagom Tubi Srl

- Company specialized in the production of piping
- Production of mechanical components

© Solid Energy Srl

- Company specialized in 3D printing, reverse Engineering, innovative mechanical design
- ► 3D printing

Sagom Tubi Srl

Production of mechanical components

Mechanical design

(A) Bonfiglioli Engineering Srl

- Company specialized in technical drawings and in innovative mechanical production technologies
- Solid modelling, design concept of packaging machinery

® Solid Energy Srl

- Company specialized in 3D printing, reverse Engineering, innovative mechanical design
- ▶ 3D printing

© Bonfiglioli Engineering Srl

 Solid modelling, design concept of packaging machinery

Mechanical design

ATG Srl

- Company specialized in technical elastomer vulcanisation articles, especially for Automotive sector
- ► 3D mechanical modelling

® Solid Energy Srl

- Company specialized in 3D printing, reverse Engineering, innovative mechanical design
- ▶ 3D printing

© ATG srl

► 3D mechanical modelling

IV. Collaborative training stories in Belgium - CEFA

Writer, CEFA CST

1 The choice of the training sections

CEFAs organize apprenticeships within the field of education. They relate to full time schools. Their school years correspond to the secondary school structure, which goes from years 1 to 6. The dual training is organised from year 3 to year 6, and youngsters are at work during those years. Some of the occupations the CEFAs organize also lead to a 7th year.

Among the sections the CEFA Court St Etienne organizes, management and staff identified sections offering a good potential for success, the office function and restauration sections in particular.

Each year counts 1.200 hours including at least 600 hours in a company.

1.200 hours including at least 600 hours in a company

 1.200 hours including at least 600 in a company
 Vocation qualification of year 6:
 administrative assistant and front office worker
 restaurant manager
 Study certificate (CE6P) that gives access to a 7th year

1.200 hours including at least 600 in a company
 Vocational qualification of year 7:
 management of very small companies
 event caterer
 Management certificate + certificate that gives access to high school level (CESS)

The CEFA organised COTRAIN information sessions for apprentices, in order to explain the collaborative training principles, its rationale and the voluntary basis of the project for youngsters. CEFA mentors gave the information to employers in direct meetings.

Considering the duration of an apprenticeship (3 years) and the duration of the COTRAIN project, mentors had to end certain apprenticeships already begun in a "one-company" model. Beginning a cotrain required a voluntary basis, which means youngsters and employers had to agree. This was one of the difficulties identified by the mentors at the beginning of the project.

The objectives of the cotrain model 2

Regarding the office section, the CEFA considers that a model of collaborative training can generate a real benefit for the apprentices, for the following reasons:

- ▶ the training profile covers a variety of administrative and office support tasks that are usually common to several companies: tasks performed under supervisors, or front of house management tasks aiming to make sure interaction with the customers or visitors goes smoothly and professionally. These tasks include answering telephone calls, greeting and directing visitors, ordering office supplies, maintaining the office facilities running smoothly, ensuring that equipments and appliances work properly as well as performing a number of clerical duties in connection with money-handling operations, travel arrangements, appointments...;
- ▶ however, the specific business of the companies can make these tasks specific, in a number of ways. Office functions can be performed in different types of companies (or departments) : different in size, big, small; in status, public, private, not-for-profit; and covering different kinds of activities, legal, real estate, human resources, medical, sales (with many different goods and services to sell), hospital, entrepreneur in specific areas, IT, building, mobility, web design, training...

The CEFA's objective at the beginning of the project, in diversifying the companies, was to correspond more efficiently to the training profile as well as to practice similar activities in different professional contexts and with different tools, which often changes the way tasks are accomplished.

Regarding the catering section. The catering and restaurant professions include tasks of various nature and scope. They are constantly evolving, which requires the development of a diversity of skills, regarding the variety of products, flavour associations, textures, spices, aromatics, food and wine matches... The CEFA mentors consider that the sector is a good fit for the COTRAIN model, due to the variety of cooking techniques, work environments, as well as the difficulty to place apprentices in all of the company positions and the personalities of the head trainers within the companies.

Amara, a cotrain with two companies beginning with the collaborative company - Office functions

Company B: Immo souverain Company A: Optic Wauters

Cotrain model: B-A



Amara began her training in 5th secondary school, in the Office functions option. Full-time school was not appropriate for her anymore. She chose apprenticeship to discover a real job, the labour world and as a way to earn some money. Her training going forward, she chose a path allowing her to enter a 7th secondary year.

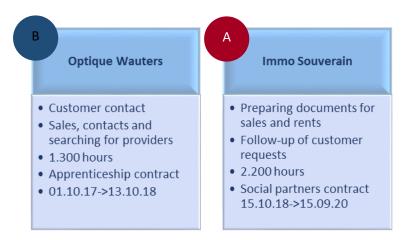
The CEFA has been collaborating with a joint board (CP323) since 2010, to encourage apprentices in real estate companies and owners associations to be trained as administrative assistants (office work section) or commercial assistants (sales section). The goal is to encourage youngsters to complete a 7th year in business management as multi-functional employees in administration and sales.

Amara was motivated and had a very good profile. At the beginning of the school year, her mentor gave her the opportunity to apply for two jobs. Both interviews were positive. The employers identified a very ripe profile and wished to hire her. Amara choose to work with an optician, Optique Wauters, under an apprenticeship contract.

The tasks there were varied, but as it is a small structure, there was a risk that the activities might not cover enough of the training profile.

Under the advice of her mentor, Amara began working as an administrative assistant in a real estate agency.

The objective of the course is to enter a 7th year in the Business Management option (in French, GTPE) as a multi-functional administrative and commercial employee.



As the volume of training hours with the second company is higher than in the first one, Immo souverain was considered as the lead company (company A).

The collaborative company (B) • Optique Wauters is a small optical shop, with 25 years of experience. In store and online, the company offers the usual range of glasses: eyewear, sunglasses, sports eyewear, children's glasses, corrective lenses, contact lenses, and have the technological equipment to produce their products.

The lead company (A) • Immo Souverain is a real estate agency. It employs eight people. The company is a partner of the CEFA, ready to train and support young people from the beginning of the project. Two other young people in 6th and one in 7th year are already training in this company, under a social partner contract (CAI).

A dual training with these types of companies offers the possibility of learning the basic elements of the training plan as well as company specific context, very specific tools and customer relations. Here is an example of a training plan in Belgium:





Administrative assistant and front office worker General overview of the training plan



Optical shop	Administrative assistant and front office worker General overview of the training plan	Real estate company
•	Answering telephone calls	•
•	Receiving and directing customers	
•	Making telephone calls	•
	Managing incoming mails and parcels	•
•	Using sources of information (catalogues, prices), searching for information regarding suppliers	
	Managing electronic agenda and sending e-mails	•
•	Identifying customer needs	
•	Developing communication skills	•
•	Helping customers	
•	Updating different tools	•
•	Recording, organizing, storing, using the computer and retrieving information: invoices, orders, sales and rent-files	•
•	Managing copier, scanning and sending fax	•
	Using word-processing, spreadsheet; typing texts, mails to type leases and compromises to update Excel listings to establish records of gas, water and electricity	•
	Using professional real estate software, updating database, input real estate goods write property descriptions update database: property coordinates, cadastral parcels	•
	Ordering office supplies and maintaining the office facilities running smoothly: material, showcase (shop window), orders, documents, realizing showcase with new real estate goods	•
•	To become able to work autonomously	•
•	To manage stress	•
•	To self-evaluate	•

A positive and constructive experience

Employer and apprentice had good professional and training relations	After one year of professional experience, Amara had developed good relations with her employer and gained in confidence and maturity. These are important skills for a good professional relationship with employers, which will be more inclined to give tasks with a higher level of responsibility, as well as with customers, especially for eyewear services.
The employer understood and supported the	Benefits for Amara The Optical Wauters entrepreneur understood Amara's training project. She agreed to let Amara spent a few trial days in the real estate agency.
youngster's professional project	Benefits for the training centre The relationship with the training centre and the optical shop is still in place, the cotrain increased trust between the employer and the training centre.

Amara achieved her objectives, and her training continues.

Amara

[more skilled and eager to go forward]

"Thanks to cotrain, I learned a lot. The employers showed me many tasks. I can do more things, different things. I see myself moving forward and I feel more and more confident in myself and in my skills."

4 Inès, a cotrain with three companies - Office functions

Company A: Bouvy motor Nissan

Company B: Yakimmo

Company C: Centre automobile Charleroi

Cotrain model: A-B-C



This pilot description mainly shows cotrain as seen from the youngster's perspective.

Inès manages the customers' administrative tasks and visits with customers (sales and rent). She began her courses in the Office functions section at 18 years old. Inès wanted to learn and work at the same time, so she choose apprenticeship, and obtained a dual training contract in an automobile dealership.

The lead company (A) • Bouvy Motor Nissan is an automobile dealership. The employer saw that Inès quickly found her marks, and he assigned her to an internal division of pre-owned vehicles. Inès learned to manage all of the administrative tasks and duties customers require when they buy a pre-owned vehicle.

The collaborative company (B) • Yakimmo is a real estate agency, offering services in sales, expertise, rent, survey and audit. This context and these services were brand new for Inès.

The collaborative company (C) • Centre Car Charleroi is an automobile dealership. Returning to a context she knows, Inès would learn and manage administrative tasks and duties, this time for new cars. This implied different administrative proceedings, different documents and a different software to work with.

A positive and constructive experience

Inès progressively built her skills in a different context, then in a familiar one	Inès arrived in the third company with two different professional experiences, among which an experience in a similar company. She was therefore familiar with the technical terms as well as with some administrative technical language. She also felt more confident in her ability to learn.
Inès is work ready. Her professional experiences brings confidence	Inès is work ready when she begins a second dual training contract with Yakimmo. Even in a company with very different services, she knows from her former experience that there are procedures to respect and administrative duties to achieve.
Inès is aware of her progress and evolution	When she arrived in a new company, Inès realized she had a former experience and quickly understood how useful it is. She saw herself evolve. It reinforced her confidence in her capacity to learn.

5 Nathan, a cotrain with two companies and a return to the first company – horeca

Company A: Le Gros Vélo (restaurant)

Company B: La Maison Nicolas Lefevere (event catering)

Cotrain model: A-B-A



Despite the administrative workload for a cotrain A-B-A model, partners implemented this type of model. [∞ Difficulty: certain cotrain models imply a repetition of administrative procedures, p.39.

This story is Nathan's, an apprentice in 7th year, who wished to work in event catering.

As is the case for the apprentices in the Office functions section, CEFA mentors of the HORECA section organized information sessions to present the COTRAIN project.

Like the youngsters in the video (Flavius and Julien), Nathan is one of the pupils who showed interest in cotrain. He was an apprentice in a restaurant, and wanted to develop and practice more activities directly linked to catering. Nathan wished to discover another professional atmosphere and work rhythm.

Both employers and Nathan signed a collaborative training convention. Specific activities relating to catering were defined in this convention.

The lead company (A) • Le Gros Vélo is a bistro and restaurant, which offers pub-fare menu, French cuisine and Belgian cuisine. It has 50 seats.

The collaborative company (B) • La Maison Nicolas Lefevere is a catering company which organizes private and professional events, on their own premises or at the customer's home. They work with exceptional culinary products, organic products, and are attentive to presentation. They can also offer complementary services: "art de la table", floral arrangements, atmospheric design, sound and light.

The Lefevere house has had passion for catering since 1969, received 3 awards given to the best Belgian chefs, the Prosper Montagné prize.



Social partners contract

• 31.08.2016-> 18.04.2018

• 2.800 hours

Gros Vélo Maison Nicolas Lefevere Event caterer

В

- Catering specific techniques of cooking, conditioning, finger-foods
- Catering event for hundred people
- 240 hours
- Social partners contract 19.04.2018->30.06.2018

Le Gros Vélo restaurant

- Kitchen and room service activities
- Social partners contract
- 01.07.2018 ->31.08.2018



	· · · · · · · · · · · · · · · · · · ·
Specific catering	participating in the production and service for corporate events: walking dinners,
activities the	cocktail dinners, seminars, gala dinners
restaurant	preparing finger-foods and tasting-dishes (hot and cold)
accomplishes	participating in the presentation, decoration of counter, buffet, guest room
	practicing catering specific techniques of conditioning, with the customer receiving
	information on how to use prepared meals
	participating in the creation of a menu for an event while respecting a budget,
	including the determination of costs and selling price

The objective of the collaborative training in the event catering company was to cover the specific catering activities in only two months. However, this duration and the period in which the collaborative training took place in the catering company did not allow the training to cover all of the activities. Nathan did not get the opportunity to practice catering for customers, as the caterer only carries out this type of activity during the end of the year festive season. As the caterer calls on a subcontractor for the decoration of the rooms, Nathan could not participate in this activity either.

A positive and constructive experience

Nathan's expectations are met	Nathan wanted to discover another work environment, a new team. He wanted to participate in banquets with more than 300 people, to learn the "catering" pace of work. He wanted to learn new serving and cutting techniques, other cooking and conditioning techniques.
and more Nathan learned unexpected skills	Nathan clearly understood that the activities of the restaurant are very different from catering. Nathan understood that it is more demanding to manage the cold chain when preparing finger-food or entry plates for more than 200 people.
Nathan clarified which job he prefers	This is specific to apprenticeship: people learn through real experience. Thanks to his cotrain, Nathan could practice catering. He needed this practice to realize he actually prefers restauration.

Nathan [more skilled]

"I am happy to get a qualification in event catering, and I learned skills which are also useful for restauration in a catering event company."

6 The cotrain pilots developed by the CEFA

6.1 The COTRAIN pilot projects for the administrative and reception assistant and SMB manager sections

The CEFA mentors consider the section favourable to collaborative training, as the corresponding tasks in different companies will vary according to the company's field of activity, size, legal status, ... If the activities found in the training profiles are relatively similar from one company to another, each business has its specificities. Collaborative training programmes will often allow apprentices to learn more about the administrative tasks in one company, and reception in the other.

Steeve - Sales - Small and micro-company manager

(A) Century 21 Immo Dewaele

Face-to-face and telephone client reception, appointment booking for commercial representatives, schedule management, client information, stock encoding, drafting descriptions, ...

® Presshop

Opening and closing the store, receiving packages, managing the post office spot, reassortment, register, store layout, direct contact with clients and bills of sale

Amara - Administrative and reception assistant

® Optique Wauters

Client reception, receiving and making calls, finding suppliers, ordering, billing, archiving

® Century 21 Immo Souverain

Updating database (supplies, property owners and their coordinates, cadastral parcels, ...), drafting lease agreements and sales agreements, processing of emails, Excel listings, gas, water and electricity readings, ...

Emilie – Administrative and reception assistant

® Sambre Logements, Social Real estate Agency

Sorting and inputting bills, registrations, situation inventory; indexation, debts, credit notes, financial situation, re-billing, phone calls, visits, scanning and sending invoices

(A) Century 21

Emilie will be able to utilize her experience and the whole palette of skills already acquired in Sambre Logement, in a real estate agency specialized in brokerage and/or building management

Tundy – Administrative and reception assistant

(A) EXKI

Client reception and information, reassortment, product knowledge, printing labels, register, sales...

® Sambre Logements, Social Real estate agency

Administrative tasks: encoding, payment reminders, activity reports...

Inès - Administrative and reception assistant - Small and micro-company manager

(A) Bouvy Motor Nissan/Procahr

Management of administrative procedures for clients acquiring a used vehicle: from client reception to the administrative and physical delivery of the vehicle

® Yakimmo real Estate agency

Phone and client reception, client information, agenda management, appointment booking, property input, follow-up and monitoring of client files, phone prospecting, sales and lease visits...

© Charleroi automobile center

Administrative procedures for the sale of new vehicles, specific software for the sale of new vehicles.

Malik – Administrative and reception assistant – Small and micro-company manager			
② Yakimmo Real Estate agency Telephone and face-to-face reception, client information, agenda management, booking appointments, inputting properties, follow-up and monitoring of client files, phone prospecting	Sodexo Client service: processing e-mails, invoicing, monitoring and follow-up of client files, client demands, phone		
Redouane – Administrative and reception assistant			
Promimo-syndic Filing, archiving, accounting data input (invoices), calls for technical interventions, building visits (to make sure everything is fine in the buildings, or to plan future interventions)	© Century 21 Immo BW Evolved client contact, enhancing commercial sense, learning to present the characteristics of a property, phone and in the field prospection, mandate meetings with supervisor		
Juliette – Small and micro-company manager			
Real estate agency ML Schmidt Privilège Phone and in the field prospection	© CNE Bonus management division (input), personnel division (follow-up on information requests), accounting (input), visitor reception		
Dominiko – Administrative and reception assistant			
Sodexo Processing e-mails, sending and receiving e-mails and regular mail	Real estate Schmidt Lease visits, agenda management, inputting in a database and follow up of client files, setting up panels (sales)		
Benjamin – Administrative and reception assistant – S	mall and micro-company manager		
Débit et Crédit (fiduciary) Filing, archiving, inputting work-hours, scanning, manipulation of different sources of information, and preparing accounting documents for the managers	® Yakimmo real Estate agency Phone and face-to-face reception, client information agenda, meetings, property encoding, lease and sale visits, phone prospection, stewardship, stock management, scanning, rewriting documents in Word, inputting work travel km in Excel		
Malhaurie – Administrative and reception assistant			
® Prestimmo real estate agency Receiving calls, processing e-mails, client information, input in a database, filing and archiving	© Gré à Gré real estate Receiving calls, processing emails, client information input in a database, filing, archiving all of the agency administrative work is managed by Malhaurie, who has made incredible progress!		

Manon – Administrative and reception assistant

(A) Be home real estate agency

Reception, client contact through follow-up of mails received and to propose properties, making copies, filing, scanning, input in a database, greeting cards...

B Le petit zoo, grooming salon

Marketing management of the store's brand: managing social media (photos, publications ...), client reception, booking appointments, desktop tools (Word), filing contracts...

Laïla – Administrative and reception assistant			
© L'Audace intemporelle (decoration store) Management of phone calls, e-mails, regular mail, client reception, information and follow-up on client files (orders, estimations), filing, a little bit of accounting	Sodexo Laïla works in the client and consumer division: processing e-mails, invoices, follow-up on client files and requests. In May: internal training – telephone communication		
Marine – Sales – Small and micro-company manager			
Naf-Naf (ready to wear) Client reception, merchandise reception, package processing, package returns, sales, register, e-mails with daily numbers, analysing sales numbers indicators	© Century 21 Immo BW Processing e-mails, visit reports, telephone, filing, archiving, client reception, encoding client files		
Simon – Small and micro-company manager			
© Carrefour Express Register, reassortment, stock management, truck reception, all store sections	Hosslet Inputting delivery slips, reassortment, inputting orders, telephone, administrative documents relating to lease of machinery		
Mohamed – Administrative and reception assistant – Small and micro-company manager			
② Urban Concept real estate agency Client reception, receiving phone calls, confirmation of appointments, agenda management, inputting estimates	Real estate agency (Still to come)		
Lesly – Administrative and reception assistant			
® Century 21 Iris real estate agency Telephone, visitor reception, agenda management, follow-up of case files	② Sodexo Sales department: processing termination e-mails, filing, archiving, management of different e-mail inboxes and dispatching to the relevant persons, marketing surveys, VAT files		

6.2 The COTRAIN pilot projects for the restaurant and catering section

The catering and restaurant professions include tasks of various nature and scope. They are constantly evolving, which requires the development of a diversity of skills, regarding the variety of products, flavour associations, textures, spices, aromatics, food and wine matches... The CEFA mentors consider that the field is a good fit for the COTRAIN model, due to the variety of cooking techniques, work environments, as well as the difficulty to place apprentices in all of the company positions and the personalities of the head trainers within the companies.

Mariyam – 5th and 6th restaurant business

(A) Catering counter specialized in rotisserie

Basic skills, preparing hot and cold entrées, participating the conservation of raw products, sauces, vinaigrettes, preliminary vegetable and meat preparation techniques, cooking of vegetables, Moroccan meals for the counter, AFSCA (sanitary) norms...

® Banquet, seminars and receptions organiser

Appetizers, entrées, desserts, plating; production for various events; other cutting and conditioning techniques; bar and dining room service; client reception during seminars, receptions, ...

Alejandro – 5th and 6th restaurant business, 7th catering – Banquet organisation

Take-away catering with counter and banquet organiser

Menu containing fish, shellfish and crustaceans...

® Restaurant specialised in grilled meat

Homemade sauce, drink preparation and service, different work rhythm, American style service...

Flavius – 5th and 6th restaurant business

Take-away catering specialised in fish

Menu containing fish, shellfish and crustaceans...

® Gastronomic restaurant

American style service and plating, dining room service and sommelier support

Julien - 7th specialized restaurant techniques - Pastry chef

Pastry/bakery

Cakes, pies, tartlets, pie crust... in large quantities, presented individually

® Gastronomic restaurant

Making desserts and plating of ice cream, sorbets, flocking...

Lucas – 6th restaurant business, 7th banquet organisation

A Brewery

Preparation and conservation of raw material, bar and dining room setup, cocktail preparation...

® Restaurant - caterer

Stock management, hot and cold entrées, desserts, plating, sauces, dining room service...

Mevlan – 4th and 5th restaurant business

@ Greek restaurant

Stock management, bar and dining room orders, meat skewer cooking, shrimp, sauces, vegetable cutting, preparing salads, plating of entrées and desserts, ...

® Restaurant with scaling bench (still to come, with trial period)

Preparation and plating of entrées, desserts, sauces, fish techniques, shellfish and crustaceans, ...

Nathan – 7th catering – Banquet organisation

® Restaurant

Brewery, conservation of raw material, making sauces/stocks, preparing vegetables, meat, fish, making desserts, service and orders...

® Caterer and banquet organiser

Making appetizers, zakouskis, entrées, plating for over 1,000 guests, conception of menus based on client requests...

Ugolin – 5th and 6th restaurant business, 7th catering – Banquet organisation

® Restaurant and scaling

Conservation, making cold and hot entrées, preparing seafood and shellfish platters, sauces, preparing fish and meats, preparing and plating desserts, drink service at the bar...

® Caterer specialised in fish with counter

Conservation, ordering at the counter and advising clients on large platters and trays, preparing sauces, preparing entrées, making and plating fish dishes, food cost...

V. Collaborative training stories in Belgium - IFAPME

Writer, IFAPME

1 The choice of the training sections

As a Regional Institute and central administration, the IFAPME coordinates 16 decentralized units organising training at the local level all over the Walloon Region. In the vocational training field, training years are counted differently than in the education field. As the duration of the training is usually 3 years, people refer to years 1, 2 and 3.

For internal reasons mainly regarding the accreditation the Institute grants, it took more time to initiate the pilots. The Institute needed to clarify the procedures that would apply in the training centres of the network [∞ Collaborative training is a novel, tailor-made service, p.110.

The accreditation of a company includes the verification of the actual tasks carried out in the company through a mentor's visit.

The breakdown of activities is based on an occupation profile framework. It was not easy to match the COTRAIN project with the methods currently in use, which include accreditation of companies for a full occupation. This type of accreditation makes it possible to directly conclude a three-year contract. Many companies and youths do not want to break from their habits. In this context, the IFAPME initiated a general reflexion regarding the learning outcomes in companies and company accreditation. A process of partial accreditation has been created. It offers a clear and practical view of how the activities of the training profiles and the tasks within the company are met in each company. This allows mentors to determine clear collaborative training pathways.

The IFAPME organised COTRAIN information sessions for apprentices, to explain the principles of collaborative training, its rationale and the voluntary basis of the project for youngsters. The Institute invested time to explain the project to the mentors and the training staffs involved in accreditation and in-company coaching. Mentors gave the information to the employers in person.

The IFAPME developed pilots in different sections: hairdressing, bakery-pastry, and sales and restauration, in two types of training:

- apprenticeship, for which the entry age is 15 to 18 years old;
- ▶ self-employment training, for which the entry age is 18 and over.

The collaborative trainings presented below concern hairdressing and sales, on the apprenticeship level.

Apprenticeship 1e Year

- For all apprenticeships, training takes a minimum of 600 hours. A year of internship is compulsory
- This year's success is based on daily work and a final examination

Apprenticeship 2e Year

- For all apprenticeships, training takes a minimum of 600 hours. A year of internship is compulsory
- This year's success is based on daily work and a final examination

Apprenticeship 3e Year

- For all apprenticeships, training takes a minimum of 600 hours. A year of internship is compulsory
- Apprenticeship training that allows attending self-employment training

Selfemployement training 1e Year

- When compulsory, a minimum of 250 hours of training is generally required
- This year's success is based on daily work and a final examination

Selfemployement training 2e Year

- When compulsory, a minimum of 250 hours of training is generally required
- This year's success is based on daily work and a final examination

Selfemployement 3e Year

- When compulsory, a minimum of 250 hours of training is generally required
- The certificate obtained makes it possible to work in the chosen trade and to set up as a selfemployed business owner

Considering the duration of the apprenticeship (3 years) and the duration of the COTRAIN project, mentors had to end certain apprenticeships already begun in a "one-company" model. Beginning a COTRAIN required a voluntary basis, which means youngsters and employers had to agree. This was one of the difficulties identified for implementing the pilots.

2 The objectives of the cotrain model

Hairdressing – the IFAPME considers that a model of collaborative training can generate a real benefit for the apprentices, for the following reasons:

- ▶ hairdressing is a complex training considering the steady evolution of products, techniques and fashion, which has an important impact on the economic growth of this kind of company;
- ▶ in this sector, the IFAPME has noticed that some very small companies prefer not to impart the latest "comb stunt" and cutting techniques. The reason is employers might be afraid of losing their customer base. The market is very competitive, and small businesses especially are afraid of giving away their knowledge. In addition, for the companies, learning with wig heads is very expensive, as the quality of the wigs has to be high to make learning efficient, and wigs can only be cut once;
- ▶ however, company chains train their staff in their own training systems on a regular basis. Bigger hairdressing salons have their own products, own software and offer their own new cuts, for example via shows;
- ▶ another issue is that in hairdressing salons, it is difficult to learn shaving skills, which are almost exclusively practiced in salons specialized for men. Shaving is a part of the occupational profile. In Belgium, hairdresser is a regulated profession, including hairdressing for men and women.

Sales – the retailer-merchant training covers a variety of tasks, common to companies in this professional sector, which constitute a basic skills foundation. The occupation profile is divided into 3 school years, each corresponding to a competence threshold. As the training progresses, the apprentice:

- ▶ learns the different steps of the sales action, and gains a good knowledge of products and of the shop;
- organises the presentation of the products;
- creates decorations, showcases, sales spaces and exhibition areas in which to put the products, present services in keeping with the marketing criteria of the company in order to enhance the brand image and raise customer interest, and learns the trade regulations and the security standard.

Retail sales can take-on different forms (counter sales, ambulatory, distance selling...), and covers fields of activity which are as diversified as the variety of products and services, in different contexts and destined for customers with varying profiles and expectations. The sales sector is complex, as it can range from small local shops to online companies, including businesses with specific technical knowledge. For example computer sales, cosmetic products...

It is important for the learner to acquire as many techniques as possible, in order to pass certification, complete the training and successfully integrate the labour market. The cotrain model's flexibility makes acquiring a variety of professional experiences possible: different products and services, different sales techniques, different sales outlets... This is a major asset for complex training programmes.

3 Charlène, a cotrain with two companies – Hairdresser

Company A: small hairdressing salon Company B: chain hairdressing

Cotrain model: A-B



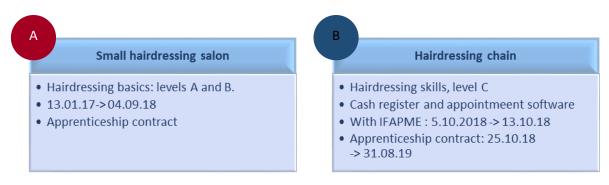
This story is about Charlène who began a 2nd year of apprenticeship in September 2017.

Apprenticeship		
1	2	3
	•	•

Thanks to her prior schooling and in conformity with the individual training plan of the Institute, Charlene began an apprenticeship directly in her second year. After the apprenticeship, she wanted to attend two years of self-employment training and launch her own hairdressing salon.

In hairdressing, the training profile covers almost all of the activities of the occupation, with a progressive increase in complexity and enhancement of the skills, year after year. For example, coloration: the *first step* is to know the basic colours and to make semi-permanent or tone-to-tone coloration. The *second step* is to achieve mixes that are more complex. The *third step* is to apply hair highlights, with a covering level that fits the customer's expectations and hair type.

These steps, 1, 2 and 3 correspond to three levels of the training plan, to which a progressive minimum retribution is linked, A, B and C.



The lead company (A) ● Small hairdressing salon.

The collaborative company (B) ● a franchised hairdresser, with its own products, training, shows, magazine and software for the cash register and management of appointments.

A positive and constructive experience

Charlène has a higher chance of successfully completing her training Charlène was aware that her progress slowed down because of the size of the first salon, which implied that she was unable to practice all of the necessary complex skills there. Without a cotrain, she would have probably failed this part of her assessment.

4 Coline, a cotrain with two companies - Sales

Company A: sandwich shop
Company B: food supermarket

Cotrain model: A-B



This story is about Coline, who began a 2nd year of apprenticeship in September 2017.

Apprenticeship		
1	2	3
	•	•

This cotrain involved one apprentice and two companies. The broken arrow means that the first cotrain failed.

As explained above, the three-year duration of the COTRAIN project implied that certain contracts had to be terminated in order to implement the pilot projects. For this pilot, the training centre received the agreement from Coline and her employers. Based on the training outline, the mentor was able to make employer A understand and accept that he could not keep the girl during the three years of apprenticeship, because the activities in his sandwich shop could not cover the training objectives within a 3 year apprenticeship contract. Coline could not acquire the skills necessary to succeed in her training by only accomplishing the tasks carried out within that company.

Another employer (B) was ready to hire Coline in the middle of the training year. Coline agreed to step out of her comfort zone with employer A, after taking the time to think it over. She faced difficulties in understanding that the activities of the sandwich shop would not allow her to cover all of the required training profile. The mentor, according to the new internal accreditation procedure for the sales sector, terminated the first contract. Based on his visit, the mentor modified the company's accreditation to the first year level. Everyone then signed the cotrain convention [∞ Belgian cotrain convention, p.134.

However, as soon as her contract with employer A ended, and before signing the contract with employer B, Coline changed her mind and did not wish to sign the second contract anymore. Employer A had already signed with another youngster suggested by IFAPME, to facilitate the change, which meant Coline no longer had an employer, and felt demotivated. This period of demotivation resulted in the non-fulfilment of the contract initially planned with company B. Thanks to a coaching organized by IFAPME, Coline signed a contract with another company B, with the same profile as the previous one, which implied a certain delay between the two contracts and the conclusion of the collaborative agreement. This new contract would allow her to learn the skills required at the two other levels of the training.

The lead company (A) • is a sandwich shop, a small neighbourhood store. In this type of business, the salesperson must be attentive, flexible, fast, and creative. Punctuality, politeness, simple technical gestures and the management of a simple cash register are part of the daily tasks. Managing stress during rush hours is also a necessary skill. In food sales, stock management will have a significant financial impact. The sales will vary according to the seasons and variations in eating habits.

The collaborative company (B) • is a medium-sized company in general sales, like a supermarket. In this type of business, employees must be available on request. Inventory management, labelling, restocking, and the use of a complex cash register are the daily tasks of this type of salesperson. Stress

management is also a necessary skill, especially during rush hours. This company accepts adapting the tasks to be carried out based on the youngster's previous knowledge. This requires learning to manage tasks that are more complex, in a professional environment with at least 20 people. Interpersonal adaptation attitudes have to be developed in parallel to technical skills.

A Sandwich shop

- Customer reception, management of a simple cash register, basic soft skills
- 25/11/2017 au 30/09/2018
- Apprenticeship contract

Food supermarket

- Management of a more complex cash register, stock management, restocking management, return of merchandise
- 7/11/2018 au 31/08/2020
- Apprenticeship contract

In the youngster's training progression, the internship in the lead company offered a first step to learn the basic soft skills required in a professional setting. The collaborative company defined the tasks of the internship based on the skills acquired in the previous company, and brought them to the next level of complexity, in a bigger work environment with a different labour organisation. This was also an opportunity for Coline to start a new type of professional relation with new and more numerous colleagues (20 employees).

Company A	Training plan "sales-retail" skills	Company B
•	Client reception : reception and orientation	
•	Product knowledge, logistics: differentiating products, knowledge of the establishment, the layout of the store	
•	Storing and restocking	
•	Use of proper packaging	
•	Labelling	
•	Client relations: welcoming the client, guiding the client in his product choice, suggesting products based on the customer's needs	•
	Presenting sales arguments	•
	Carrying out the sale, additional sales and conclusion of the sale	•
	After-sales treatment	•
	Preventing and reacting to theft in the store	•
	Product knowledge, logistics: conceiving and creation a display according to the calendar	•
	Product knowledge, logistics: manipulating products, insure correct handling of merchandise, receiving and controlling deliveries, preparing merchandise for sales, managing a correct display of the articles	•
	Preparing storefront and displays, lettering	•
	Reading a plan and carrying it out	•
	Using an adequate support to display the merchandise	•
	Identifying the internal organisation and decoration of the store	•

Company A	Training plan "sales-retail" skills	
	Applying promotional techniques to store sales	•
	Financial aspects: recording purchases, scanning/punching in, carrying out payment operations	•
	Handling commercial documents	•
•	Respecting rules of safety and hygiene (including cleaning) concerning specific levels and tasks	•
•	Respecting confidentiality rules	•

The employer understood and supported the professional project of the youngster	The employer of the sandwich shop understood the objective of collaborative training and accepted cutting off the contract as the IFAPME asked. The second company agreed to complete Coline's training according to the training plan.
Coline understood the benefit of the cotrain	Coline felt doubt, because she believed that finishing her training within company A was a successful choice. Thanks to the cotrain, she became aware of her progress and the chance she had to be able to sign with another company in a cotrain model. She gained self-confidence and felt more comfortable with tasks she faced difficulties with before.
A cotrain cornerstone for the training institute	A general reflexion was initiated within the IFAPME regarding the learning outcomes in companies and company accreditation. A process of partial accreditation has since been created. It offers a clear view of how the activities of the training profiles and the tasks within the company are met in each company, and helps mentors define clear collaborative training pathways.

5 The cotrain pilots developed by IFAPME

5.1 The COTRAIN pilot project for the bakery-pastry section

The reason for collaborative training: the baker-pastry chef profession is in a situation of labour shortage. Few youths these days wish to work at night, as it implies isolation from their social life. Many different possibilities to buy bread exist. It is just one purchase among others in a supermarket. The food supermarkets bake their own bread in-house, along with a number of other pastry works.

Thomas – 2nd year of apprenticeship

A Family company

Ensure the maintenance of material and premises. Ensure stock management. Apply rules of hygiene and safety. Carry out the baking of: breads, crunchy products, soft products, pastries and pies

® Medium-sized company

Making chocolate products and decorations, different shapes of marzipan and decorations. Making ice cream and frozen products (base and decoration). Serving clients and recording sales

5.2 Hairdressing section

The reason for collaborative training: the profession is constantly evolving. Methods change following fashion, the evolution of products, and technologies. Each company has its own knowledge base. Brands train their staff in their own training centres on a regular basis. Large companies have their own products and recurring offers for new types of cuts (fashion shows). They also have their own software.

Charlène - 3rd year of apprenticeship

Medium company

Preparing and cleaning the workstation. Welcoming customers, settling them in. Meeting their expectations based on hair-types. Applying rules of hygiene. Apprehending time-management. Doing shampoos, hair care, selected blow-drying. Carrying out hair colouration.

® Large company

Performing haircuts. Making different types of buns. Ensuring commercial aspects – billing and cashing in. Ensuring commercial aspects – presentation of products, ensuring stocks, ensure cleanliness and encourage the sale of complementary products.

Stacy – 3rd year of apprenticeship

(A) Very small company

Welcoming customers and settling them in. Studying and understanding different haircut schematics. Shampoos, colourations. Performing straight "children" cuts.

® Large family-type company

Complete haircut training. Performing different cuts. Learning about products and complementary sales. Management of the cash register.

Pamela – 2nd year of apprenticeship

® Very small company

Preparing and cleaning the workstation. Welcoming the customer, detecting expectations and setting up. Applying rules of hygiene. Learning time management. Performing shampoos, hair care, and selected blow-drying.

A Large company belonging to a chain

Learning about products, new colouration techniques, and complementary sales. Performing shampoos, colourations, rinses and perms.

Océane – 1 st year of apprenticeship		
 Very small company Welcoming and settling in customers. Shampoos, colourations, styling. Use of ancient hairstyling techniques. Pamela – 2nd year of apprenticeship 	Medium company Learning new techniques and colouration methods, shampoos.	
Very small company Preparing and cleaning the workstation. Welcoming the client, detecting his expectations, settling him in. Applying rules of hygiene. Learning time management. Carrying out shampoos, hair care, and selected blow-drying.	B Large company Learning about products, new colouration technologies and complementary sales. Performing shampoos, colourations, rinses and perms. Different use of equipment. For example, towels are not used in this type of salon.	
Clémentine – 1 st year of apprenticeship		
® Very small company Welcoming and settling in clients. Shampoos. Discovery of the trade and the work world.	Large company belonging to a chain Learning techniques of care/shampoos, the colourations of the company. Blow-drying. Haircut techniques training is ongoing.	
Laura – 3 rd year of apprenticeship		
A Large company belonging to a chain Preparing and cleaning the workstation. Welcoming the client, detecting his expectations, settling him in. Applying rules of hygiene. Learning time management. Carrying out shampoos, hair care,	® Large company belonging to a chain Training regarding company specific products and techniques. Ladies haircuts.	

5.3 Sales - Retail section

men.

selected blow-drying, and performing haircuts for

The reason for collaborative training: retail sales come in many shapes and size (in-shop, street sales, distance selling and e-commerce...), and covers fields which are as diversified as the variety of products and services, in different contexts and intended for publics with various profiles and expectations. In small companies, it is difficult to offer a sufficient variety of activities in order to cover the whole of the training profile.

Coline – 2 nd year of apprenticeship		
Sandwich shop Basic « client contact » training, for relatively simple orders, handling of a small cash register.	® Food supermarket and department store Client contact and service, technical knowledge of products, display management. Stock management training. Complex tasks with the cash register (discounts, sales, pre-encoding).	
Angélina – 3 rd year of apprenticeship		
② Franchised in shoe sales Tasks relating to receipts and displays. Client contact and service.	® Large clothing company Stock management training, complex cash register tasks (discounts, sales, pre-encoding); display management.	

Thalina - 2nd year of apprenticeship

Client relations and sales (offer, argue, close the sale). Logistics: handling, reception, arrival control, preparing for sales, in-store presentation. Registering purchases, scanning/pointing, performing payment operations.

® Large clothing company

Client relations and sales. Preventing and reacting to theft. Being able to make a complementary sale.

Conception and creation of displays according to the calendar. Applying promotional techniques.

Processing commercial documents. For example, administrative management of returns.

Alizée – 1st year of apprenticeship

Food supermarket and department store

Client relations: offer, argue, close the sale; post-sale support; technical knowledge of products. Preventing and reacting to theft. Display management. Complex cash register tasks (discounts, sales, pre-encoding...).

® Large company – sandwich shop

Reception and control of merchandise. Preparation for sales, reassortment. Stock management training. Preparing orders. Handling the cash register.

5.4 Restaurateur section

The reason for collaborative training: the restaurant industry includes different types of kitchens, and many different culinary and presentation techniques. According to the type of company and the menu it offers, the training will be different.

Thimotei – 3rd year of apprenticeship

Brewery – caterer. Belgian, French and Italian cooking, regional specialities and specialities of the chef (gastronomy)

Discovering the professional life. Set-up and execution of basic meals, sweet and savoury courses. Table service. Reservations. Management of merchandise.

® French, Moroccan, Tunisian restaurant

Preparation of hot and cold meals. Set up of jellies, terrines and foams. Maintaining plates at the right temperature. Management of the bar. Handling the cash register.

Noémie – 2nd year of apprenticeship

Discovering professional life. Participating in handling merchandise. Set-up and preparation. Making a vegetable and starch-based meal. Ensuring basic maintenance and management of the premises, equipment and cooking products. Ensuring table service. Client contact.

® Classic restaurant business (family-owned).

Executing meals based on meats and giblets, poultry, game, fish, crustaceans, shellfish (slow-cooked meals). Executing basic meals, sweet and savoury. Plating. Ensuring the management of the bar. Client contact (reservation, advice, taking and announcing orders, cashing in).

PART IV – BUILDING COLLABORATIVE TRAINING

Introduction

Writer, CEPAG

In countries where the model is "one youngster—one company", suggesting a new model such as cotrain raises significant challenges. COTRAIN partners experienced them throughout the whole development of the project. It is important to keep these issues in mind. No matters how good a methodology is, it will only work if people trust it, know why they apply it and share an interest in developing it.

People need time to change. Different people will agree with a new idea at a different pace. The main things partners did to tackle this issue were:

- ▶ to give people time to consider the idea when presenting it for the first time;
- ▶ to raise the idea again, during a subsequent meeting, and give a more in-depth explanation;
- ▶ to show the benefits of the system in the coaching countries, then later based on the pilot projects themselves, in order to create emulation;
- ▶ to prepare the cotrain offers as completely as possible, for all parties involved: VET centre staff, youngsters, employers, sectoral funds, chambers, Unions...;
- to show that the system works;
- ▶ to show the benefits of the model for all parties, including how it can help tackle certain weaknesses of the dual system and reinforce HR expectations...

Beyond the main differences between the systems, company-based or training centre-based, stakeholders faced the same core challenges. Looking beyond each project and the particularities of each country to find similarities made this tool possible.

In the following sections, the reader will find:

- ▶ how COTRAIN partners implemented cotrain, following a specific path with common step stones;
- ▶ the elements that made the difference in making cotrain a reality (partners faced similar difficulties, but also specific barriers);
- ▶ the reasons why partners made their choices: depending on the system and the context, a similar reasoning will sometimes lead to different choices.

As a collaborative training model is an innovation for many VET systems, and as the cotrain pilots raised many questions, this section of the guide reflects:

- ▶ the results of the action-research, in order to give a better understanding of what the COTRAIN partners achieved how many apprentices, how many companies, how VET partners managed the implementation of the model within the framework of the processes in place, what the project changed...;
- ▶ the lessons learned throughout the action-research, based on which this methodological guide is built.

The method used to make these lessons explicit follows a progressive "building block" approach. This Guide is a tool, which explains what the pilot partners did as well as what the coaching partners

shared. It approaches, step by step, the main issues we invite the reader to keep in mind when considering, designing and setting up a collaborative training. Most of these steps are connected to each other, and should be considered together, not independently.

There is no "universal recipe". Partners identified the core of their cotrain achievements corresponding to their situation, as well as the questions and expectations they encountered, in order to help others implement the model. In a very practical way, this tool reflects the COTRAIN lessons we learned and the issues we invite the reader to pay attention to through questions and advice.

At the time of this edition of the Guide, cotrain and cotrain learnings are still going on.

I. WHY - Motivation, purpose, positioning

Writer, Centoform and CEPAG

1 Know the reasons to commit to collaborative training

It is important for stakeholders to identify, as clearly as possible, the reasons why they want and choose to create collaborative trainings, what they hope to achieve and in which setting they currently are. During the COTRAIN project, we found that there could be different reasons, motivations and expectations. Bringing these to light is very useful, and will be an asset when explaining and promoting the model.

In Germany and in Austria, the training law forbids organizing an apprenticeship without completely covering the activities of an occupation. So when we ask "why" in these countries, people tend to respond: to be allowed to train, because it is the law. However, the real question should be "why" they train the way they do, independently of the law... The answer is that German and Austrian employers train for the same reason they invest in dual training: to invest in the quality of training for the future labour force.

In collaborative training networks, companies join together to facilitate the training investment, and to respond more efficiently to technological changes. In Germany, this type of training is one of the levers that can be activated to face demographic changes.

In Belgium and in Italy, partners wanted to increase the quality of apprenticeships by organising the complementarity of the activities determined for an occupational profile, and by offering at least two different professional settings. COTRAIN training centres also wanted to improve their portfolio of companies. Besides the issue of quality, sectoral funds were mindful of opening the apprenticeships to companies offering a high quality framework, but simply without enough activities to receive the accreditation required to train apprentices. For the automotive sector for example, the issue of a high quality skilled workforce is an existential one: the automotive industry will remain in the country if the skilled workforce reaches the standards of the car manufacturers. The training funds see, in COTRAIN, an opportunity to create a path towards increasing the qualification level and connecting different small companies with incomplete but complementary activities regarding the occupational profile.

1.1 Quality as a key motivation for companies, youths and VET centres

The reasons for implementing collaborative training mainly concern the quality of the training, recruitment expectations, the socio-economic fabric and requirements, the needs and expectations of the youngsters and the development of the training centres.

The stakeholders that COTRAIN partners met believe that the cotrain model should be developed for many reasons:

- ▶ to increase the quality of apprenticeships by organising the complementarity of the activities defined for occupational profiles, and by offering at least two different professional setting ::
- ► to increase the motivation of youngsters and to decrease the risk of dropout .

 Some youths are aware that, at the beginning of the internship, the activities of the company will not cover the full occupational profile they wish to learn. In this case, the risk of demotivation is

high. This can also be the case when the market/activities of the company lead to a repetition of certain tasks, especially considering the (long) duration of the internship;

- to improve the training centre's portfolio of companies;
- to increase the number of potential companies allowed to organise dual training s;
- ▶ to help a company reposition itself through vocational training.

 A company may decide to broaden its activities, which may require training employees at a higher level through activities not yet developed within the company. The idea could be to begin the first level of apprenticeship in the company that wishes to change its market position, followed by a second period of training in another company to learn the relevant skills. The apprentice could then return to complete his training in the first company, with a good chance of being hired;
- ▶ to contribute to improving the image of the company by training youngsters; and to attract youngsters to work for them;
- ▶ to anticipate the retirement of skilled and experienced employees, and to organize an efficient skill transfer;
- ▶ to ensure youngsters are skilled for an occupation in a specific field (ex. railway) while avoiding a training which would be too specific to one company ::
- ▶ to activate the expertise of better-performing companies, by convincing them it is to the benefit of all to train tomorrow's employees and tomorrow's entrepreneurs;
- ▶ to ensure direct or future recruitment:
 - youngsters will have a real experience in the company;
 - employers will have a real knowledge of the youngsters, which will enable them to either recruit directly at the end of the training, or to create a recruitment pool;
- ▶ to limit the costs and risks inherent to recruitment, making dual training and collaborative training an investment in human resources;
- ► to train new profiles that are difficult to find on the market.

 COTRAIN brought this benefit to an Italian company, ATG SrI (company A), specialized in the production of rubber automotive components. The majority of mechanical companies located in Emilia Romagna produce metal components for automotive industries. ATG is the only one that is specialized in rubber components. The company faced difficulties in identifying potential new technical profiles to hire. A cotrain with Solid Energy SrI (company B) specialized in 3D printing made it possible to train a youth with specific skills to incorporate in their production department, with a training as requested by ATG itself. ATG then hired the cotrain apprentice.
- ▶ to activate the cotrain model as a lever to accomplish the company's HR recruitment and training strategy.

Other benefits found in cotrain can also become a motivation to set up collaborative training:

- ▶ when a cotrain is organised with a company that is a part of the leading company's production chain, it offers the youngsters the opportunity to gain a better understanding of the product ::
- ▶ if youngsters return to the leading company, they can apply what they learned with the second company to the benefit of the first. Thanks to COTRAIN, an Italian youngster developed an innovative product , [∞ Luca, a cotrain with three companies, starting with the collaborative company with a return to the leading company, p.57
- ▶ a cotrain model encourages employers to network on a different basis: training 🚅;
- ▶ some cotrain pilots reinforced the relationship between employers and training centres, as the employers clearly understood that the training centres give priority to the youngster's training, which in turn means a higher quality of training for the employers. [∞ Amara, a cotrain with two companies beginning with the collaborative company Office functions, p.64;
- etc.

1.2 Knowing your motivations will help you explain things clearly

The different examples and stories show that collaborative training brings concrete benefits for all of the parties involved.

In order to identify the reasons why you wish to create collaborative training networks, the following questions will help to initiate a reflection:

- ► For what reasons do you want to implement cotrain?
- ▶ What are the needs to which a cotrain would respond? The needs of :
 - company;
 - youngster;
 - training centre...
- ▶ What is the connection between the occupation and the local socioeconomic fabric?
- ▶ What is the professional setting in which the cotrain will take place, and:
 - is there a specific social issue?
 - is there a specific technical issue?
 - is there a specific economic fabric issue?
 - is there a specific "training" issue? For example shortening the duration of the training, or filling a gap in the training course...
- ▶ What do you hope to achieve through the cotrain model? In other words, to which HR strategy does cotrain relate?
- Etc.

2 Promotion of the cotrain model

Writer, Centoform

2.1 Coaching countries and pilot countries both need cotrain ambassadors

Promotion of the cotrain model is key to making collaborative training networks a potential tool that is well-known, not only by companies, but also among students, apprentices, as well as VET providers, schools and, last but not least, public stakeholders. Note that youngsters also appreciate the COTRAIN video "a winning model", and have shared it online.

Even after years of implementation, in Austria and Germany communication and promotion still play a relevant role in increasing awareness of companies, especially SMEs, regarding the opportunity of being part of a collaborative training network, to be directly involved in the education processes and in order to test new professional profiles. The cotrain model may also offer unexpected opportunities to companies facing recruitment difficulties.

Thanks to its participation in COTRAIN, an Italian company (ATG SRL) had the opportunity to train a new apprentice, hiring him at the end of the training. At the time of the pilot, the company was looking for a new apprentice, without success. Thanks to the promotion of cotrain realized by Centoform at the local level, during an event attended by ATG, its management decided to seize the opportunity and accepted the internship of a student in cooperation with other companies.

2.2 Why promoting cotrain is a key factor

Promotion and communication are strategic because they allow spreading knowledge among public and private stakeholders regarding the educational power and innovation potential of collaborative training.

In countries where collaborative training is not a part of the national dual training system, promotion could play a key role:

- ▶ in increasing the awareness of relevant actors;
- ▶ to stimulate stakeholders in their commitment to guarantee qualified training opportunities to youngsters, according to the labour market's evolution.

What's more, increasing stakeholders' awareness of cotrain's innovative potential could be strategic regarding policy innovation and new recommendations in the field of education.

Thanks to the COTRAIN project, the Emilia Romagna Region is considering changing the legal framework, viewing collaborative training networks as a powerful tool to implement in the regional educational system. As the training authority, the Region may give the priority to projects including a cotrain model -when appropriate considering the activities of the company- in the yearly call for proposal VET providers have to fill in.

Regarding SMEs, cotrain could represent an interesting opportunity to enter networks with other companies. For a SME to train alone requires a very important effort because of:

- the workload the internship might generate;
- ▶ the involvement of in-company trainers;
- the impact of training on daily production activities;

- the lack of resources and suitable equipment;
- etc.

Thanks to cotrains, all companies, not only the small and medium sized, could improve their training and education capacity by sharing it with other companies. They could also reinforce their brand and image as socially responsible companies, because of their commitment in educating new generations of workers.

Communication could, finally, boost emulation between companies if, for example, a company decides to enter a cotrain network because other known companies did so.

When they began their communication activities, cotrain partners were attentive to:

- ▶ prefer direct, face-to-face contacts via meetings: explaining a new concept is easier this way;
- ▶ integrate the cotrain promotion/communication within the current promotion/communication of the organisations (open house day, VET fair...);
- ▶ identify the different stakeholders' networks to involve them in the communication and promotion actions, including:
 - the VET centre staff;
 - the companies with which the VET centre/institute already work (employers and tutors);
 - the youngsters and their parents;
 - professionals in charge of apprenticeship in sectoral funds;
 - employer representatives in charge of dual training and/or willing to work on improving dual training, such as Chambers of commerce;
 - union representatives aiming to increase the vocational training within companies
 - other VET centres...
- ▶ prepare a communication support, with a message which takes into account the primary interests of the stakeholders.

These interests may vary depending on the socioeconomic area of the activity, the activity itself, and the reasons stakeholders already invest in dual training or work based learning:

- innovation could be a major asset (e.g., computer aided design);
- training quality could prevail: by broadening their training activities (e.g., restauration), by offering different work environments (e.g., private and social real estate);
- HR investment with or without direct hiring can raise interest: following the training period in certain COTRAIN pilots, some employers offered to hire their cotrain apprentices;
- changing the image or initiating a new area of negotiation raises the interest of the unions, as does the possibility of anticipating HR changes;
- ▶ anticipate concerns stakeholders might have regarding the cotrain model. Some entrepreneurs showed resistance to innovation and/or scepticism during the first stage of promotion:
 - identify the major concerns stakeholders might have and include messages to reassure them in your communication supports;
 - in Belgium, one of the COTRAIN partner tried to understand the interests and concerns of the employers by submitting a questionnaire to employers of its dual training company portfolio (a specific initiative by the CEFA CST, hereafter);

- adopt clear concepts and simple language, in order to reach the highest number of stakeholders and companies;
- use different and integrated communication channels (digital, non-digital) in order to maximize the dissemination effect;
- ▶ promote existing communication platforms in order to increase the awareness of companies and other training providers.

Unions can offer support to the creation of cotrain networks. They usually wish to increase the training quality level of dual training. They have a good knowledge of the local socioeconomic fabric, of industrial or services estates, or of the vertical organisation of the companies in a certain field of activity (companies involved in the same production chain). For example, the weakness of an industrial or services estates could be that they have weak public traffic connections, or no connection at all in the case of shift work.

2.3 A specific initiative by the CEFA CST

In Belgium, the CEFA partner submitted a questionnaire in order to get the opinion of employers who did not know the cotrain model yet. At the beginning of the project, the CEFA launched the cotrain model in two sections, office work and restauration. The model then raised interest in other sections, and mentors of these other sections began to think about what kind of interest employers could have regarding the model. The questionnaire is available at the end of the guide.

The objective was:

- to make the model known;
- ▶ to raise the interest of employers;
- ▶ to see if employers were open to the idea or not, and why;
- depending on the answers and the interest or lack of it, to prepare follow-up arguments.

The questionnaire was submitted to 42 employers in the following sectors: carpentry, building, electricity, iron, people's assistance, and sales. Those employers heard about the cotrain principle for the very first time.

The results are developed in [∞ Considerations concerning companies, p.105.

This questionnaire was also an opportunity to spread the idea of the cotrain model within the VET Centre staff. Mentors who spoke with employers were ambassadors for the new idea. [∞ Issues for the stakeholders in training-centre based systems, p.109

II. HOW - What to think about when building a cotrain

In this section of the guide, the reader will find the lessons learned throughout the COTRAIN project and the different elements to keep in mind when launching a COTRAIN project, taking into consideration:

- whether you are working in a training-centre based or company-based model;
- ▶ the fact that this may be a new model, a novel idea, and the potential resistance to change you will encounter;
- ▶ the rich results of the action-research:
 - COTRAIN partners wish to give feedback on as many learnings as possible, coming from the
 pilots and the meetings Belgian and Italian partners had with different stakeholders during the
 project: Chambers, Social partners training funds, VET organisations, Unions, companies
 interested by COTRAIN but could not enter the project...;
 - sometimes, the reader will find a lot of information and learnings, not necessarily because every
 item should be taken into full consideration but to give ideas, to help draw the perimeter of a
 COTRAIN project, to increase the chance of addressing as many of the specific concerns which
 could be encountered as possible...;
- ▶ a constant concern for explicit explanations and practical illustrations:
 - COTRAIN partners chose to make this difficult exercise to give the reader a concrete vision of the experimentation;
 - this is because simply saying that a cotrain increases quality is only an assertion if the reason is not given, but also to make the reading consistent thanks to the explanations and the reasons why it makes sense for COTRAIN partners, following their experimentation;
- ▶ a similar 3 step presentation for each of the issues COTRAIN partners define when thinking about "how" to create collaborative trainings. These issues are the subsections of this part of the Guide, and follow these 3 steps:
 - step 1 explains why COTRAIN partners address the issue for example, why defining companies complementarities is important and is the very first issue (1.1);
 - step 2 reflects the lessons learned through the action-research. It is sometimes a very rich subsection as COTRAIN partners learned a lot and as their learnings are sometimes multiplied by the differences between the partners. This manner of sharing learnings aims to increase the efficiency of the Guide;
 - step 3 offers a list of questions COTRAIN partners invite the reader to use and/or a list of concerns to pay attention to. It is a very practical step, which aims to make the Guide a very useful tool.

As exceptions prove the rule, the reader will find:

- one section with a fourth step giving an exhaustive overview of cotrain conventions and
- one section without a third step as the assessment section has no specific cotrain practical to do list to suggest.

1 Defining complementarities and the distribution of activities between the companies

Writer, CEPAG and IFAPME

Matching the skills of the training profile with the skills of the companies is the cornerstone of cotrain

1.1 The founding step and the cornerstone

Sometimes the issue of the cotrain complementarity raises itself: if it is obvious that the company's activities do not cover the whole of the training plan for example. Other times, the question can follow a HR or training reflection, which intends to increase the quality/expertise level of the training. It can also follow a reflection regarding the training opportunities to offer within the economic fabric.

Whatever the case, the issue of complementarity is a founding step and the cornerstone of any collaborative training project.

1.2 Elaborating the complementarities: the basics

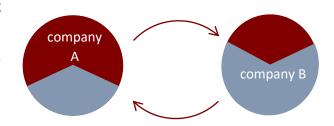
1.2.1 Refer to the training standard

Regardless of how the training regulation defines the occupations, there is a description of the profession and/or of the training, usually in a profile found in most of the VET systems. Depending on the country, access to certain occupations can also be regulated. These profiles determine a content (activities, labour setting, etc.) a skilled worker is supposed to be trained in, whatever company he will work for. The question is how to ensure, or better ensure, that the work-based learning will allow covering this profile, this standard as completely as possible. In other words, what is needed to reach a certain level of quality, which can mean:

- ▶ the minimum level required to be qualified;
- an opportunity to receive better training;
- ▶ to train at an expert level.

The first part of this exercise consists in defining the reason a complementarity is necessary:

- on one hand, what is missing within the company in terms of equipment, processes, products, context...
- on the other, what could another company bring to reach the training standard, or to improve upon it.



Reflecting on the possible complementarities may also imply covering the following:

- ▶ what are the tasks that some other companies accomplish better, because they are more specialized?
- how does working in different environments contribute to acquiring the basic skills of the profession;

etc.

COTRAIN partners consider this to be a step-by-step and tailor made exercise, which can vary according to many parameters. These steps will depend on the specific situation, and include minimal duration, division by module, simultaneous contracts, meetings with mentors, determining a specific schedule, etc. The exercise requires gathering together stakeholders with a good knowledge of the local companies (or the regional socioeconomic fabric if relevant) and a good knowledge of the job and/or training profiles.

In company-based training systems (such as in Austria and Germany), the companies themselves accomplish this. They can also receive support from the Chambers of commerce, collaborative training networks of companies such as AUBI-plus (www.aubi-plus.de) or public bodies (such as the city of Berlin).

In training-centre based systems (such as in Italy and Belgium), the mentors must do it. It is part of their job, although cotrain implies a novel way of doing it.

During the COTRAIN project, partners received support from:

- sector-specific training funds, in order to respond to current or short-term challenges regarding labour qualification;
- public authorities, with the objective of structuring vocational training in order to meet the needs of SMBs active in innovative fields.

Many contacts were also initiated with different stakeholders, including Unions and potential employers, in order to prospect for the future of collaborative training.

Whatever the system in place (based around the company or the training centre), certain practices are common to the implementation of any cotrain. The leading company can make the offer to a collaborating company. They know each other, complete each other's activities, and collaborate on a regular basis. The mentor can also suggest the collaborating company, if it is already in his company portfolio. He will then determine the most appropriate collaboration based on:

- ▶ the different skills which must be acquired;
- the mobility of potential apprentices;
- ▶ the possibilities in terms of timing management:
 - between the companies;
 - with the training centre (schedules, ...);
 - with the training programme.

1.2.2 Create intelligent links based on the companies' activities and skills needs

Collaborative training is at the crossroads between the company's activities and the training profile. Many companies already collaborate for commercial and economic reasons (to share resources). For example, some car garages rent pneumatic equipment in other garages. Note that no cotrain pilots were initiated with a garage, but the Belgian training fund has shown interest.

Companies gave different reasons as to why they chose to enter the different COTRAIN pilots:

- ▶ the companies complete themselves as their activities are part of the conception-production chain.
 E.g., CAO-3D printing ::
 ;
- ▶ the activities of the training plan are transversal and a same basic occupation can be found in different areas. For example, in the sales sector, a company offering basic skills in sales will collaborate with another company in which sales activities are slightly more complex;
- ▶ the companies complete themselves for the training, as some of them are small or very small, which has an impact on the activities and the level of autonomy the employer is ready to offer. A limited level of autonomy implies that the training profile may require a collaboration to complete it. This is often the case in hair dressing, for example;
- ▶ the occupation covers a wide range and type of activities, the size of the companies is small or very small and their market is specific, for example in restauration ::
- ▶ some country legislations establish regulations for professions with a "double occupation" such as, in Belgium, bakery-pastry, butchery-charcuterie...;
- the principles of collaborative training can also apply to bigger companies: a big maintenance company has a main and a secondary maintenance bay. A cotrain could begin within the secondary maintenance bay, targeting the basics of maintenance. Then, moving on to the main bay, the cotrain youngsters could learn more specific activities, on a broader scale. This could be the case for a railway company. In Belgium, such a collaboration could be set up between a maintenance bay, a repairing bay and a high-speed train bay, all the while keeping the specificities of the railway into consideration .

1.2.3 In Italy, Centoform created a "cotrain" fabric

Centoform applied the cotrain logic on two levels, taking into account the different levels of training as well as the needs of the trainees, the companies, and the training opportunities.

In the case of mechanical design training, the training in the leading company mainly focused on design, and secondarily on the production process. Centoform balanced the number of sector-specific companies specialised in technical drawing and conception, with companies specialised in the production of mechanical pieces (in 3D). The students were able to increase their knowledge of the production process, all the while increasing their knowledge and skills regarding the whole of the mechanical process, from the conception all the way to the technical realisation of the final product.

For the management and maintenance of automated systems technician training, Centoform integrated the possibility of acquiring designing skills to the apprentices' training plan.

In the first case, the collaborative training began in a conception company, with an ulterior training period with a production company. In the second case, the collaborative training began in a production company, with an ulterior training period in a conception office.

1.2.4 In Belgium, an example of cotrain reflexion in the automotive sector

In Belgium, the social partners training fund of the mobility sector, Educam (garage), showed interest in the cotrain model. For many years, the social partners of this sector have been well aware that the automotive industry will remain in Belgium only if the workforce offers the training quality at the level

required by the automobile manufacturers. Social partners invest in the training quality and attempt to anticipate as best they can the changes in the car industry and the car market.

In BeFr, the accreditation rules make it almost impossible to consider companies that only cover a small part of the occupational profile in their training. The latest reform in apprenticeship provides for consultation of the sectoral funds that organize it. When the sectoral coaches organized this consultation for the accreditation, they created a database including all their visits within companies asking for a new accreditation. The database identifies different kinds of major activities in the garage sector, related to the occupation profile. This kind of record makes it easy to identify non-accredited companies that could train within the frame of a cotrain. Unfortunately, at that time, the database was very young (less than 12 months and not many companies included) and the potential cotrain identified concerned companies too far from each other for apprentices.

Nevertheless, the sector still shows a high interest in initiating CTNs between big companies and smaller ones, notably to train in electric vehicles, as youngsters still need to be educated to conventional motors and electric ones.

1.3 Defining cotrain complementarities, a step-by-step and tailor-made exercise

Regarding the reason why cotrain is a solution, you should be mindful of the following:

- ▶ the occupation for which you want to build a cotrain is clear;
- ▶ the reasons you wish to implement a cotrain are relevant to the training plan;
- ▶ the companies, the youngster and the training centre know why they want to enter into a cotrain;
- ▶ the activities to be carried out in each company for which the collaboration is set up are clear.

Concerning the expertise regarding the activities and that of the employers:

- ▶ What kind of expertise do stakeholders need?
- ▶ What kind of expertise do stakeholders share?
- ▶ Do stakeholders know how/where to find the expertise they do not yet have?
- ▶ Who else could contribute to this issue, if necessary?
- ► In a training centre based system:
 - the mentor verifies that the cotrain employers know each other;
 - the mentor organizes a meeting with the employers beforehand as well as a time for feedback during and after the cotrain.

Regarding the practical arrangements:

- ▶ the cotrain training plan is clear on the following issues:
 - the duration of the training in each company;
 - the period of training in the training centre and in each company;
 - the relevance of beginning and completing the cotrain in the company A or B (or C...);
 - each stakeholder agrees on the cotrain schedule.

• the number of companies participating in a cotrain is limited, in order to ensure a coherent and stable work setting.

Regarding uncertainties:

- ► cotrain builders should identify potential risks, and communicate transparently in order to attempt to remove them, or to work around them:
 - confidentiality: if the regulation applying to the training does not mention it, and if the cotrain makes it necessary, a confidentiality clause should be included in the cotrain convention;
 [∞ Collaborative training convention, p.116.
 - recruitment:
 - in the German and Austrian systems, the lead company is responsible for paying the retribution and the insurance for the whole duration of the training, including the periods during which the apprentices are in another company. This raises the question of recruitment. A lead company employer might be afraid that the collaborative company could hire the apprentice. In this case, German and Austrian employers conclude a gentlemen's agreement;
 - a possibility, in order to reinforce the relation between the apprentices and the leading company, is to plan for the apprentices to return to the leading company for a certain period, whatever the system (company-based or training centre-based) and whichever cotrain model is preferred.

2 Considerations regarding candidates

Writer, CEFA and CEPAG

There is no single ideal profile, but certain attitudes are necessary: proactivity, empowerment...

51 youths participated in the COTRAIN project:

- ▶ 8 in management and maintenance of automated systems
- ▶ 4 in mechanical design
- ▶ 10 in restauration

- ▶ 17 in office work
- ▶ 1 in bakery-pastry
- ▶ 7 in hairdressing
- ▶ 4 in sales

For the levels in which each partners developed the cotrain pilot, please refer to their respective introduction of [∞ Collaborative training in « pilot » countries, p.30.

2.1 Is there a cotrain youngster profile?

Whether raising this question is appropriate or not does not find a unanimous answer. It is a very sensitive issue. Over the course of COTRAIN, there was some doubt as to whether or not the cotrain model was possible in an apprenticeship system fed by relegation, which is the case for several VET systems at the secondary level in Europe, including in Belgium and in Italy.

The concerns relate to the capacity of the youths, considering the relegation process. Their profiles could be too weak for a collaborative model, which could be more demanding.

The primary expectations of youths in dual training could also be to complete their training within a "one training — one company" model; they would therefore be reluctant to step out of their comfortzone. Youths in dual training may also not truly understand the requirements of the labour market. All of these concerns were addressed during the project.

2.2 The particularities of cotrain regarding the youngsters

The COTRAIN youngsters

In Italy, Centoform developed cotrain for students that already had a first vocational qualification (see the testimony of Francesco . Centoform also developed a partnership with Futura, a VET centre organising initial vocational training, for apprentices aiming for a first qualification (see Ayoub's testimony .)

In Belgium, the CEFA CST developed cotrain with youngsters learning in order to obtain a first qualification (at the end of the six years of the secondary level) and youngsters continuing to obtain a complementary qualification linked to the previous one (a seventh year). The IFAPME mainly developed cotrain for apprentices aiming for a first qualification, although not exclusively (12 apprentices in 13 cotrains).

The COTRAIN pilots were set up on a voluntary basis. The results of the projects show that:

- youngsters who were initially not fully convinced by the model but attempted it were very satisfied, after only a few days in the other company;
- ▶ some youngsters immediately understood the benefits of the cotrain model for their qualification;

- some youngsters continued their training instead of stopping it as they intended, thanks to the possibility they had to change companies;
- some youngsters training in very specific sectors (ironworks for example), did prefer staying in the same company.

The conclusion of the project is that:

- there is no single ideal youngster profile for cotrain;
- ▶ the fear that certain profiles may be too weak for collaborative training due to the relegation process was unfounded; the different profiles encountered never made the project unachievable;
- ▶ the pilots show that considering the cotrain specificities, the training centres' usual guidance and follow-up actions can be adapted to the model.

How COTRAIN VET centres introduced the model to the youngsters

The COTRAIN VET centres/institutes integrated and offered the cotrain model as a tool in their current support and guidance actions, when meeting the youngsters face to face and/or in the training classes.

VET mentors would usually have a meeting with the youngsters and begin by quickly going over their situation based on their previous training paths, motivations, mobility, family situation and financial position.

Then, as the mentors also have a good knowledge of local companies active in their training fields, they could begin to match youngsters and companies.

Some fundamental issues regularly came up before launching a cotrain. These issues were expressed by the youngsters, mentors, as well as the employers suddenly confronted with a new model, even if it was on a voluntary basis.

The youngsters' most common worries were:

- ▶ the distance between their residence and the two chosen companies;
- leaving a familiar working environment for an unfamiliar environment;
- the fear of receiving lower wages;
- ▶ the fear of having to find a new job, consent to unplanned efforts in the beginning of the training, or even having their application turned down.

As there is a company change, companies would (probably) have specific requirements. The VET mentors paid attention the following attitudes of youngsters, who should:

- be ready to change, to move to a different workplace;
- be ready to change and work with a different employer, tutor, and team;
- demonstrate a capacity to adapt to change, an attitude which companies appreciate...

The COTRAIN mentors believe it is important to pay attention to the following concerns, which are not specific to cotrain itself, but should be kept in mind in order to achieve successful collaborative training:

▶ the regular presence of apprentices in the training centre;

- ▶ the youth's reliability and rigor towards the employer, and the respect of his contractual obligations;
- ▶ appropriate conduct of the youth in his job and in the training centre:
 - punctuality/respect of schedules;
 - presence/regularity;
 - courtesy/appropriate vocabulary;
 - respect of the ethical code;
 - respect of workplace regulations;
 - respect of rules of hygiene, dress code, equipment and the workplace in general;
 - respect of colleagues and of the hierarchy;
 - team spirit;
 - interest for the job and the field;
 - capacity to adapt to job requirements (schedule, flexibility, ...);
 - constructive reaction to criticism;
 - proactivity and motivation;
 - ...
- ▶ the youth's situation regarding mobility and, if necessary, finding a compromise with the employer based on public transportation if the youth doesn't have a car or driver's licence;
- ▶ the youth's open-mindedness and flexibility should also be taken into consideration. Youths must take an active part in their training. Partners believe a youngster will be more active if he knows he may learn more thanks to different companies. The more active they are, the more the cotrain model will give them the possibility to learn...

Although COTRAIN VET centres/institutes had concerns regarding the youngster's profiles at the beginning of the project, they were pleasantly surprised:

- some youngsters understood, from the very beginning of their dual training, that:
 - their current company alone would not allow them to practice all of the activities their future occupation requires :
 - they will reach a point, long before the end of the training, where they will get tired of repeating tasks they already know how to perform;

This was the case for Amara, as explained in the video .

- some youngsters quickly understood the benefit of the cotrain model, as it allows them to acquire more professional experience, working in several different professional settings;
- ➤ some youngsters showed great interest in the cotrain model, because it could offer them the opportunity to specialize in a very specific area of their occupation.

Emulation between youngsters?

After two years into the COTRAIN project the CEFA partner noticed an important change with apprentices participating in the project in the Office work section. The CEFA is used to following the statistics of the apprentices in grades 5, 6 (which ends the secondary level school) and 7 (which gives access to the superior education level).

Based on the CEFA's experience, most of the apprentices will usually stay with the same company, especially the ones in grade 5 and 6 of the secondary school level.

The main reasons for this are that: they are reassured that they will not have to begin searching for a job once again, they will not have to adapt to a new environment, they can continue the trade apprenticeship they have begun without interruption and focus on being successful in their school year, with no added pressure.

The school year following the beginning of the cotrains, two thirds of apprentices asked to change companies.

In grade 7, for the training section "very small company management", before COTRAIN the situation was that youths did not wish to change companies because they had reached a comfort zone in their work. They are confident, feel competent and have a working knowledge of the different ways in which numerous tasks are executed. They have a higher degree of autonomy following years of experience, and they wish to focus, during the whole of the year, on a relatively demanding end-of-year project and take on the more important educational workload with no added pressure.

Two thirds of the apprentices in this grade also asked to change companies.

The CEFA mentors believe there might be an emulation effect between youngsters.

The youngsters who wished to change companies gave the following reasons:

"I do not have enough work" — "I am no longer learning anything" — "I've explored all aspects of the job here" — "I would like to change to a different field of activity" — "I would like to develop the commercial rather than the administrative side of things" — "I want to try something else" — "I need to move more" — "I need more client contact".

Youngsters who participated in a cotrain gave the following feedback:

"I had to learn to adapt to a different employer, and different ways of doing things, which increased my self-confidence. I took the positive elements of each job, and also learned from my mistakes." – "A collaborative training gives us a unique opportunity to learn with more than one employer. Once we have our degree, this situation will only be found if our work contract ends..."

Some of the unexpected benefits of cotrain for the youngsters are that the cotrain model:

- ensures a higher involvement of the youngsters;
- helps to prevent dropouts;
- ▶ helps them to begin their career.

2.3 How to tackle the issue of youngster profiles

Regarding the issue youngster profiles, the main elements raised by the COTRAIN pilots are that, in order to implement a cotrain successfully, you should:

- define whether you want to establish specific requirements;
- explain the model face-to-face to youngsters, especially if it is quite new;

- ▶ identify their concerns and allay their worries, especially regarding the shift between companies and the new relationship with the tutor;
- ▶ identify the requirements youngsters should meet, and if partner companies have to satisfy specific requirements in order to meet the youngsters target profiles:
 - among these requirements, identify the most important ones;
 - make sure the apprentices know these requirements;
- analyse the training plan with youngsters who will decide whether or not to begin a cotrain with a new company:
 - find out if the youngsters might prefer a trial period;
- ▶ define the most appropriate ways to recruit cotrain apprentices, and to find companies:
 - selection of youngsters by the training centre
 - selection of companies by the mentors
 - direct recruitment by the companies
- ▶ if the cotrain changes the usual training contract or convention, clearly explain what may change and what will not change;
- ▶ keep in mind the legislation that applies if the youths are minor.

The following sections complement this section: [∞ Collaborative training convention, p.116; [∞ Quality issues, p.126.

3 Considerations regarding companies

Writer, CEFA, CEPAG, inab

At the beginning, employers told us we are crazy *Centoform*

In Italy, 15 companies participated in a cotrain.

In Belgium, they were:

- ▶ 20 in the restauration sector
- 28 in office work, SME management
- ▶ 2 in bakery-pastry

- ▶ 11 in hairdressing
- ▶ 7 in sales

One company prematurely terminated a collaborative training in Belgium, as the employer B decided the level of soft skills was not appropriate in the company.

Please see the recapitulative tables [∞ The cotrain pilots developed in Italy, p.60; [∞ The cotrain pilots developed by IFAPME, p.82.

3.1 Do the cotrain companies have specificities other companies involved in dual training would not have?

The project shows that:

- ► some companies seem more open to change and quickly pick up emerging ideas. This guide also deals with this issue in the first section, [WHY Motivation, purpose, positioning, p.88.
- ▶ it also seems that some companies are not "cotrain" minded, even though they may be involved in vocational training. For some of these companies:
 - the cotrain model requirements are considered as an administrative burden and/or, according to them, decrease the cost effectiveness of dual training;
 - the objective behind an investment in apprenticeship is to hire the apprentices. Therefore, the employers prefer to keep a privileged link with their apprentices;
- some of these elements should be considered as fears or preconceptions, and not real blocking points.

The scope of the project did not allow drawing a company profile based on their size, area of activity... because the initiative mainly came from the VET centres and their current portfolios. However, thanks to a trade union initiative, a big public company will try the model.

During the COTRAIN pilots, partners worked mostly with very small companies, with few medium sized companies (around 200 employees) and one big company (around 15.000 employees).

In Germany, the cotrain model is mainly developed in SMEs, while 80 % of the companies who organize dual training are big companies representing 20 % of the economy. The Federal ministry of vocational training develops projects to support SMEs' investment in dual training, including the cotrain model, as these type companies often do not seem to have enough activities to cover the full occupational profiles.

3.2 Is there an ideal cotrain company profile?

Reflecting on the issue related to the existence of a "cotrain company profile" is crucial in order to define joint strategies of promotion, communication and management of relationships among actors involved in building cotrain networks (stakeholders, VET providers, companies, BSOs, Chambers, etc.).

The COTRAIN partners, based on their experience, consider that the primary motivation of employers investing in dual training should be the same as the motivation to invest in collaborative training. Considering the issue in this manner, there is no "ideal" profile for a company to enter collaborative training. However, the important elements regarding any company's profile should be identified, as we know there are fears and sometimes barriers, all of which will often be based on preconceptions and possible to work on, when identified.

The COTRAIN partners of the pilot countries nevertheless believe that employers have to become aware, by themselves or with the help of a VET centre or a social partner fund, if the activities of their companies do not cover the full training profile.

They also noticed that some employers who participated in the COTRAIN project strongly believe in the benefits of the model and were convinced of the interest, for youngsters, to learn in another company mind-set and environment [testimonies of Belgian and Italian employers in the COTRAIN video].

A contrario, Belgian COTRAIN partners met employers who had no wish to attempt cotrain, because they wanted to hire "their" apprentice at the end of the training.

A company's negative mind-set can change, based on the factors described above. External stakeholders such as training sectoral funds, Chambers, VET centres, policy makers... can help companies to think about their HR strategy and their skills needs. They can invite employers to adopt the perspective of a dual training/cotrain model not only based on their personal benefits, but also from the perspective of the youngster's career, as well as the general impact of having a better trained workforce.

A specific initiative by CEFA CST (Belgium)

As mentioned above, the CEFA partner submitted a questionnaire to receive the opinion of employers. The CEFA mentors submitted it face-to-face to 42 employers who were already involved in dual training, but were not familiar with the cotrain model.

50 % of the them replied that they were in favour of the system, as it should allow to:

- acquire all competences required to practice a profession;
- ▶ acquire competences and techniques elsewhere, when it is not possible to develop them within only one company:
 - some believe it is necessary to offer a wider range of activities to let the youngsters better understand the sector in which they want to be qualified;
- gain expertise and knowledge thanks to another company;
- discover various work environments, different or similar realities: a different company culture, working instructions, responsibilities...

Less than 50 % of the employers disagreed with the principles of cotrain. They gave the following reasons:

- ► fear of losing good trainees and fear of not having the possibility to hire them at the end of the training, especially if there is a shortage in the sector;
- administrative and legal uncertainties regarding the project;
- worries regarding confidentiality;
- ▶ the training would not be efficient in a certain sectors, especially if it is planned for a short duration: the youngsters would face difficulties to feel like a part of the team in a short training period.

These issues, as said before, are mostly based on preconceptions. The COTRAIN experimentation allows us to at least partially respond and offer a solution for each one:

- ▶ a gentlemen's agreement between employers and/or a cotrain model in which the trainee returns to the leading company;
- ▶ in Belgium, almost all of the administrative issues have been clarified, although the simultaneous cotrain model does still require additional administrative procedures. This model, however, is the one least requested;
- ▶ a confidentiality clause can be added to the cotrain convention, if it is not already part of the apprenticeship contract;
- ▶ the efficiency of training in another company, regarding duration, can be addressed while setting up the training plan and company activities.

3.3 Identify the company mind-set regarding the cotrain model

The sections why and how to build complementarities offer many arguments to support emulation and promote the benefits of the cotrain model. The elements below will help to frame and structure how employers consider training in their company, and if they are ready to attempt a cotrain.

- verify if the employer is:
 - aware that the company activities do not cover the training outline and discuss alternatives;
 - willing to develop cotrain in order to improve the training and/or help the youngsters get specialised in a specific area of activity;
- identify to which extent the company:
 - has a concern with skills needs for the future (short and medium terms);
 - is able to identify it's skills needs;
 - has integrated training in the company workforce policy;
 - might target excellence in youngster training;
 - seeks to increase the training standards/quality (also applicable for their suppliers);
 - wishes to improve and differentiate their HR image;
- support elements of a good training relation between the companies:

- verify if the employers know each other; if not, suggest that they meet in order to discuss the issue of cotrain;
- if there is an issue regarding hiring the apprentice, suggest a gentlemen's agreement to the employers;
- sharing a common training goal and having a clear vision of the division of the training plan contributes to building a positive training relationship between employers, tutors and mentors;
- ▶ anticipate the usual practical questions employers have regarding a cotrain [∞ Very practically, what to think about, p.121.

4 Issues for the stakeholders in training-centre based systems

Preparing the change

Writer, IFAPME and CEPAG

4.1 Make the staff supportive

Any change within an organisation requires preparation. However, most of the time, some of the issues will only appear when the changes are applied. That is why COTRAIN partners of the pilot countries want to deliver specific messages regarding how to deal with this change within the organisation implementing the new model.

This core part of the guide deals with the "why" and the "how". Preparing for changes also means paying attention to the "when". Thinking about launching a cotrain should begin at least one year before a new school year. It is obvious when reading this Guide that there are many things to think about, and some may seem obvious now for COTRAIN VET partners...- however COTRAIN partners believe the internal staff will have specific additional questions regarding:

- ▶ the way they used to work so far, without cotrain, and what will change;
- b the cotrain benefits for the organisation itself [∞ Collaborative training stories in Italy, p.53; and [∞ Collaborative training stories in Belgium CEFA, p.63.
- ▶ issues regarding the training schedule and how cotrain has to match with it. The training centres prepare youngsters to learn and work in companies. It might happen that the company schedule might not fit with the training centre programme, meaning youngsters are not prepared to accomplish specific tasks within the companies. In this regard, the expertise of the tutors and the mentors is very important to anticipate this kind of situation and to devise appropriate solutions.

This issue reveals how different the COTRAIN VET partners are. Indeed, the COTRAIN VET partners who implemented the pilots work in different institutional and pedagogical settings:

- ▶ the IFAPME is an institute with a regional foothold that coordinates a network of training centres. The Institute frames the training programmes and the process through which the company receives the accreditation allowing them to train, using a CRM system. The training covers a wide field: depending on the VET centre, the IFAPME can offer up to 200 training programmes;
- ▶ the CEFA CST is a VET centre with a local anchoring. The adjustments required by the model (accreditation issues, ending a training programme...) could only be discussed at the level of the centre. The training covers different sectors but the number of training programmes is not very high;
- ► Centoform is a VET centre with a local anchoring in very specific sectors, with a high flexibility margin regarding the way the centre organises itself in order to achieve objectives strictly based on the regional regulation.

Regarding the issue of pedagogical liberty: in Belgium, as one of the COTRAIN VET partners is in the educational field and the other one in the training field, partners set a limit beyond which the COTRAIN guidelines could not go. For example, they agreed that it is important to mention the pedagogical monitoring in the cotrain convention, but also that the cotrain has to remain within the scope of the training centre's usual practices.

In a training centre-based system, it was deemed important for project partners to schedule an indepth information session for all of the centre's staff, to explain the development of the new model, the reasoning behind it and the benefits that are expected for the employers, the centre and the trainees.

In particular, this implied informing and involving the teachers and vocational trainers who would meet the youngsters, as well as people who would not be directly involved in the development of cotrain: other teachers and vocational trainers, as well as the administrative team...

It is only possible to implement a new model successfully if the whole staff and the hierarchical line are behind it. This is an issue common to any type of change. Belgian partners experimented with a slow pace at the beginning of the project, especially because they first needed to set up a solid central basis for the change, upon which they created internal emulation. The support of the youngsters and the employers giving positive feedback on the project is very valuable as leverage in order to support change.

4.2 Collaborative training is a novel, tailor-made service

Considering the variety of working environments and the possibilities a training profile can offer, each cotrain has to be tailor-made. Mentors have to verify that the employers/tutors have the correct information, and agree on the complementarities. An adapted training plan can be used for this purpose. [∞ Amara, a cotrain with two companies beginning with the collaborative company – Office functions, p.64; and [∞ Coline, a cotrain with two companies – Sale, p.79.

The Belgian pilots have shown that sometimes, the mentor has to convince a tutor to accept sending a youngster to another company to learn more skills. An employer might agree more easily than a tutor might, but in the end, it is up to the mentor to determine the best path for the youngster.

The VET centre staff needs to have:

- room for debate, to discuss the cotrain changes;
- ▶ the different tools and documents which explain the different aspects of cotrain:
 - impact on the accreditation;
 - impact on the training profile;
 - administrative impacts and modified documents;
- ▶ a helpdesk where the information is centralized, and where the staff can find support if needed.

How the COTRAIN partners responded to the concerns of the VET centre staff

There were concerns at the beginning of the pilots in the VET centres, to which partners gave the following responses.

The main concern was that the project could imply a greater workload:

- a different and closer type of monitoring;
- a multiplication of the follow-up with companies;
- ▶ a new way of considering the activities during the training in companies, as there are two or more companies; this also applies to the activities of companies in relation to the VET centres;

▶ new administrative issues to consider, with new documents and uncertainties, as well as a risk of having to do the work twice (or more... once per company).

There were other concerns as well:

- ▶ it might not be possible to include the new process in the CRM;
- ▶ potential differences in opinion concerning the best way to set up new procedures to include the cotrain model, especially if the current procedures are very rigid.

Any change will imply a greater workload, at first. The COTRAIN partners took the time to speak with the staff, and found different ways respond to their concerns:

- all concerns were considered legitimate;
- ▶ the main reason why cotrain is legitimate is based on the mentors work and the centre's reason to be: ensuring and increasing the quality of the training, and guaranteeing an efficient training environment and a positive experience for the trainees...

 ::
- ▶ partners built a cotrain framework in order to integrate it in the very first step of the accreditation of a company, or its recognition as a company allowed to train for a certain occupation;
- ▶ they identified, within the current administrative and regulatory framework, what would be required for a cotrain, to integrate it as lightly as possible when explaining the principles;
- ▶ they spread their knowledge of cotrain and offered support to colleagues who might face difficulties in designing a collaborative training because they were new in the VET centre...

Just like the other cotrain stakeholders, the VET centre staff have to see that a cotrain is useful or necessary. In Italy, the key was to understand why the youths in mechanical maintenance training could find it useful to learn more on mechanical design in company B (only mechanical design). Core competences are maintenance and production, but in the occupational profile it is important to understand mechanical design (which is only taught at school), and therefore to reinforce those skills in a company (most companies do not do design). To make the staff understand this idea is fundamental.

The accreditation issue in the IFAPME procedures

The IFAPME is an administration, which determines internal rules within the regulatory framework regarding company accreditation for dual training. The institute led an internal reflexion concerning adjustments that the principles of a cotrain could bring to their accreditation process. Basically, the IFAPME's accreditation rule is that a company is accredited if its activities allow it to cover a large majority of a training profile.

The apprenticeship law defines 3 levels of retribution (commonly known as levels A, B, and C). The IFAPME connects the levels of retribution to the three-year duration of apprenticeship, following a progressive learning logic:

Level A – Year 1

Level B – Year 2

Level C – Year 3

A *full accreditation* means that the company covers the training profile for the 3 levels. In case the company is unable to do so, the IFAPME currently defines three types of incomplete accreditations:

The first one is based on the training plan. The activities match with the level A, and only the level A. Seeing as the training plan is already divided into in three levels, this segmentation can fit with a cotrain very easily.

The other two are defined by the fact that a company:

- ▶ has limited resources (regarding equipment, tutors, ...);
- chooses not to impart certain activities of the training profile;
- ▶ has a specific labour organisation...

As illustrated in the next table:

- **1-A** partial accreditation corresponds to a division by year. Beginning an apprenticeship in a sandwich bar could offer a good beginning to the training, although the company's activities are not wide and specific enough to respond to the full training outline required for the profession.
- **2-A** *limited accreditation* corresponds to activities that can cross over the yearly division. Some hair salons offer activities that only cover a part of the training profiles. For example, some hairdressing entrepreneurs prefer that the apprentices do not cut hair themselves, but other activities of the training profile can be learned.
- **3-A** *specific accreditation* corresponds to activities within a same year/level: to create chocolate products and decorations is a part of the bakery-pastry training profile that can be trained with a chocolate confectioner, as bakeries-pastries have a tendency, more and more often, to work with ready to use chocolate decorations.

This breakdown is directly based on the activities of the company. It offers more flexibility but requires a redefinition of the usual steps of the training plan (levels A, B, C).

Apprenticeship	Level A – Year 1	Level B – Year 2	Level C – Year 3						
Complete accreditation:	the company meets the cond 3 levels, the 3 years	litions to train to the activities of	the training profile for the						
Three kinds of incomplete accreditations:									
1- Partial	the company covers the first level (A) of the training profile								
accreditation	Level A – Year 1	Level B – Year 2	Level C – Year 3						
Retail trade	sales activities in a sandwich bar								
2- Limited accreditation	the company is accredited fo for level A only).	r the majority of the training pro	file (but not for level A, or						
accreditation	Level A – Year 1	Level B – Year 2	Level C – Year 3						
	without hair cut								
Hairdressing		simple hair cuts							
		simple and co	mplex cuts						
Sales (shop)	basic tasks, no cash ı	register showcase, cash re	egister, billing						
3- Specific	the company covers a very specific activity of the training profile – because of limited								

accreditation	resources or as a training choice – that the main training company does not offer					
•	Level A – Year 1	Level B – Year 2	Level C – Year 3			
Car mechanic	Car pneumatics					
Hairdressing	-		Barber			
Hairdressing			Hairdressing for men			
			Chocolate			
Bakery-pastry			products and			
			decorations			

4.3 We invite cotrain conceptors to pay attention to...

The following elements should be kept in mind in order to ensure that the idea of cotrain can successfully make its way within any organisation:

- ▶ think about how to implement the changes, in order to lead everyone to agree that the practical objective of the VET centre will be to offer a "finished product":
 - this implies offering solutions regarding the cotrain plan and administrative issues, coordinating schedules between the companies, with the training centre...
- ▶ identify the most appropriate way to make the cotrain idea grow inside the organisation;
- ▶ analyse the type of expertise that could be required in order to reinforce the staff with regards to:
 - the administrative and legal issues, as the mentors should be able to make sure that everyone understands the cotrain convention;
 - the pedagogical issues on how to divide a training plan;
 - the knowledge of the economic fabric and the companies' characteristics...;
- ▶ identify the most appropriate way to make the cotrain idea grow outside of the organisation, and find support with the Chambers, training sectoral funds, unions... as well as the best ways to increase the VET centre's company portfolio;
- ▶ clarify whether the cotrain model might change the procedures currently in place in the VET centres, and the mentors' day-to-day work as well as that of the rest of the staff, as educational consultants. Do they require a new reference framework? If so, they should be involved in defining it;
- does the cotrain model generate concerns? If so, identify them and elaborate responses by involving those of the staff who have concerns. Organise sharing of practices between staff members;
- whether the cotrain model modifies procedures or not, verify if it is necessary to confirm who is responsible for what, including the responsibility of the cotrain training profile;
- make sure that the mentors and the tutors share the same information...

5 How to prospect cotrain companies

Writer, inab

Cotrain prospection is the result of a strategy

5.1 Invite companies to think about their skills needs

Prospecting cotrain companies is a strategic activity for companies, stakeholders and training providers, in order to enlarge the reference "platform" of collaborative companies. VET providers, chambers and business support organizations are interested in the reinforcement of business-education partnerships in order to strengthen the dual system and boost its implementation to bring innovation to the education system. It is important to be aware of the fact that the question of prospecting companies is an issue very close to the question of complementarity, between the company profiles and the job outlines.

When thinking about prospecting to create a cotrain, it is important to keep in mind:

- ▶ the core business of the companies and the potential activities to share through a cotrain with regards to the targeted professional profile and future employability of apprentices;
- ► the fact that the prospection process could be different in a company-based system (i.e. Austria, Germany) than in a VET centre-based system (i.e. Italy, Belgium).

5.2 How to find the right partners

In Germany for example, a company wishing to evaluate the opportunity of entering in a collaborative training network, with a direct interest in educating the next generations as well as identifying new apprentices to take on, could go to the Chambers to receive the contact information of other companies interested in cotrains. Chambers always have a long list of business candidates to host dual trainings and cotrains.

Companies can request a meeting with another either independently, or through a VET centre, in order to receive all of the possible support for being involved in collaborative training networks. They can also analyse the situation of the other company, in order to determine complementarities regarding the training needs and learning objectives of groups of apprentices or interns.

In VET centre-based system, the VET centres are the key actors in building collaborative training networks. VET providers have direct contact with companies, other VET centres and schools, as well as with relevant private and public stakeholders at the local level. VET providers will be the primary resource to gather the required information, to find opportunities to become a part of networks involved in dual training and to evaluate the opportunity of implementing cotrains.

The COTRAIN project has shown that certain sectoral funds have a high interest in the model, as it could respond more adequately to issues of emerging skills, regarding technological changes and/or market evolutions. In Italy, Centoform found a strong support from the local and regional authorities, as they developed a broader vision of the training needs in which cotrain could find a valuable place.

5.3 Preparing an efficient collaboration: key issues

To build collaborative training networks, both in-company trainers and VET providers should keep the following issues in mind, and prepare to address them:

- ▶ profiling the company: did your organization develop a profile of possible partner organizations, which refer to the following criteria: sector, core processes, production, services, organization, customer portfolio, corporate culture, market, location, accessibility, etc.?
- collecting information: did you check information regarding technical equipment, in-company training referents and available technical and technological resources? in relation to the training needs of the youngsters, what resources does your company have or which may you expect from the cooperating company?
- ▶ did you verify the cooperating companies' motivation to enter cotrain with you? What would your interest in a cooperation with them be?
- did you define and evaluate the training capacity of the company in relation to the job outline reference?

Whoever is responsible for the following issues, the cotrain tasks which must be taken on by the different stakeholders are:

- ▶ to select the cotrain apprentices;
- ▶ to manage the training: rotation system, assessment reports...
- ▶ to give advices to companies regarding the legal, technical and pedagogical aspects;
- ▶ to support apprentices in case of problems (in companies, at school, in vocational courses...);
- ▶ to foster sharing of experience, to create emulation between companies, tutors, vocational trainers...
- to search for cotrain workplaces;
- ► to enter into cotrain contracts;
- to plan and organise the cotrain;
- to ensure the apprentices receive the ad hoc vocational training;
- ▶ to offer to apprentices, vocational trainers and tutors training sessions to prepare the shift in the training workplace,
- ▶ to ensure and control the quality of the training...

6 Collaborative training convention

Writer, CEPAG

A written convention brings security and trust to the collaboration

6.1 The benefit of a written convention

A written convention usefully informs the youngster (and the parents), the employers and the VET centre or the Chamber of the specific elements regarding a cotrain. It integrates issues the training authority and the social partners consider important.

The collaborative training convention parties may differ, depending on the system:

- ▶ in Germany and in Austria, as they have company-based system, a collaborative training implies two types of agreement:
 - the contract between the youngster and the employer. The regulation provides for the minimum content of a collaborative training, in a company-to-company model;
 - the service contract between the employers;
- ▶ Belgian and Italian partners decided to use a written convention framing the collaborative training between the parties, as it differs from the one company model. As Belgian and Italian VET systems are training-centre based, the parties of the convention are the employers, the youngster and the training centre/institute.

This section of the guide is closely connected to [∞ PART II - The national collaborative training frameworks, p.20 ->; and [∞ Quality issues, p.126.

6.2 Establish the purpose of the convention and it's place within the legislative framework

Here are the first things to keep in mind when the time to speak about the regulation framework comes, from a legal point of view. For an administrative point of view, please refer to [∞ Very practically, what to think about, p.121.

From a legal point of view:

- ▶ have/build a clear exhaustive idea of the regulation that a collaborative training implies, and take the time to do it step-by-step because you will be liable for this, and you will have to explain it to the different parties: employers, youngsters, training staff, social partners...
- clearly explain the purpose of the convention and its implications for all the signing parties;
 - a written convention brings security and trust to the collaboration;
- clarify, in the convention, the elements that do not change from a one-company model, and the specific elements of a collaborative training, if appropriate:
 - if the convention is embedded in another dual training contract, as in BeFr, it should be mentioned clearly. [∞ The COTRAIN project and the dual training framework, p.37;

- ▶ be aware that the convention might be seen as an additional administrative layer, and try to make it as light as possible, by mentioning only what is necessary:
 - Belgian partners created a framing, "hat" type of convention, that only includes what the
 collaboration is, what changes and what does not, without repeating the content of the
 contracts already used in the dual training;
 - Belgian training centre/institute COTRAIN partners have partly different regulations, but Belgian partners created a model that could fit different situations with enough room to adapt.
- choose who the signing parties will be and why, taking into account the law regarding minors.

What's more, you should also:

- ▶ be aware that there might be specificities for a particular sector, for example status in the public sector;
- ▶ ask for support from the vocational ministry/authority, from social partners, from Chambers;
- ▶ ask questions, discuss problems with experts and relevant authorities:
 - this is what Belgian partnership did to circumvent the prohibition for an apprentice to sign two
 simultaneous apprenticeship contracts [∞ Difficulty (resolved): the BeFr apprenticeship law
 explicitly forbids youth from signing two simultaneous dual training contracts, p.39;
- ▶ support employers and youngsters who wish to attempt collaborative training:
 - make sure the staff and/or the mentor receive the information they need in order to convince them of cotrain, and set it up more easily;
 - anticipate their questions in order to prepare the responses, making them more effective.

6.3 What to think about...

- ▶ Is there a regulation that applies to dual training, and therefore to collaborative training?

 If not, COTRAIN partners believe it would be preferable to include the minimum commitments of parties within the cotrain convention.
- ► Does the collaborative training model fit the regulations?

 In order to determine the regulatory framework applying to a collaborative training, take into account:
 - labour law, which could remain the reference by itself, or through specific references to it;
 - training regulations;
 - apprenticeship regulations;
 - work-based learning regulations;
 - ...

These regulations are often connected to each other or with others, for example regarding accreditation.

- ▶ Some issues should also be clarified in the convention:
 - safety liability: every company is responsible for its employees with regards to safety in the
 workplace. This responsibility has to be met by the partner companies during the training
 period within their company. This implies that the partner company has to make sure that the
 apprentice faces no risk of health damage during the training;
 - the principle of co-responsibility between employers, if relevant.

6.4 COTRAIN examples

The content of a collaborative training contract between youngster and companies, in a company-based model

Germany – Parties: youngster, lead company

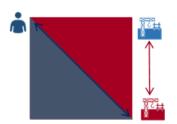
- ► Title of the training occupation;
- ▶ Duration of training planned dates of the beginning and end of the action;
- ▶ Places of employment, date of exchange;
- ▶ Obligation for the youngsters to go to the training centre;
- ▶ Name of the tutor(s) in each company, responsible instructors;
- ▶ Information regarding the 2 companies : type, size, products and services of both;
- ► Training profile:
 - as a whole;
 - distinguishing which parts are trained with which company (3 parts in case of a return to company A;
- ► Compulsory aspects of training, and interesting aspects of the project;
- ► Framework of the curricula;
- Examination standards;
- ► Co-responsibility;
- Safety;
- Signing parties.

Additional organisational clarifications:

- Means of transportation of the apprentice;
- ► Time of arrival;
- Accommodations, if any;
- Catering, if any;
- ► Internal cost agreements, if any;
- ► Employers' obligations:
 - objectives of the training;
 - initial training regulation;
 - training aids, if relevant;
- ► Attendance of part time vocational school and participation in training measures outside the training premises, if relevant.

In brief, in a company-based model

The contract between the youngster • and the company contains specific cotrain elements.



Cotrain companies **a** sign another specific service contract.

Austria - Parties - Offficers in charge of training within the companies

The Austrian model of collaborative training, p.20

Content of the collaborative training conventions between youths and companies based on the BeFr and Italian models

For the complete versions [∞ Belgian cotrain convention, p.134 and [∞ Italian cotrain convention, p.137.

The Belgian national context part of this Guide introduces the convention the Belgian partners created for the project.

This convention provides the framework for collaborative training, built on the following elements:

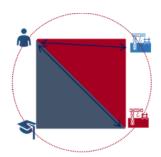
- ▶ the signing parties of each dual contract (signed by the employer and the youngster as established by the law), as well as a representative of the VET institution involved sign the convention. In order to avoid confusion due to differences in the description of the parties, the Belgian partners based this field of the document on the apprenticeship regulations which define it for the apprenticeship contract;
- the aim and object of the collaborative training;
- the occupation targeted by the training;
- ▶ the principle that the rights and obligations sections of the regulations and of the contracts already signed between each employer and the youngster still apply;
- ▶ the principle that the retribution will evolve in conformity with the regulations:
 - for the apprenticeship contract, the BeFr regulation defines three levels of retribution (A, B, C) which correspond to the skill level. These 3 levels refer to a minimum percentage of the minimum average salary allowed. Belgian partners consider that when entering the second period of cotrain in the collaborative company, retribution should at least reach the level B;
 - for the social partner contract, the regulation also refers to the minimum average salaries to respect based on the age of the apprentice, which makes it easier to apply to a cotrain;
 - the Italian model of internship does not include retribution;
- ▶ the main activities of each company;
- ▶ the main activities the youngster will perform in each company;
- the date of beginning and end of the convention;
- ▶ if possible, the periods of the respective collaborative trainings;

▶ the principle following which the pedagogical tools remain the ones already used by the VET provider.

In brief, in the BeFr training centre-based model

For the COTRAIN project, the youngster • signs an apprenticeship contract with each company, and and ...

The training centre/institute signs the training plan, which is a compulsory annex to the apprenticeship contract with the other parties.



All parties sign the cotrain convention, which frames the collaboration and its conditions for all the parties in a single document.

7 Very practically, what to think about

Writer, CEPAG, IFAPME

Opening the doors is easier if you are clear on practical issues

7.1 Anticipating practical issues

Anticipating the practical and administrative issues of a new model will help in opening certain doors. It will alleviate some fears, and limit potential concerns. All of the very practical issues can be integrated in a vade-mecum, a practical document to keep at hand when meeting with potential cotrain stakeholders. Identifying who will take over which tasks as soon as possible is very important; it may seem like a subsidiary issue but it is not. When mentors meet employers and/or tutors, it will be one of their very first questions. Preparing clear responses should be a part of the "cotrain package" that mentors, Chambers or the administration (depending on the institutional setting) offer companies.

What follows is a list of things to keep in mind, according to the COTRAIN partners, on a transversal level. A more in-depth analysis would become too specific and irrelevant for readers of different countries.

7.2 Defining duties and responsibilities

When the law and/or an administrative regulation already defines the collaborative training model, the main issue is to clearly and practically inform as to what has to be done, by whom and when. In company-based training systems, the leading company is in charge and pays for "everything": retribution, social security contributions, insurances... [∞ Collaborative training in coaching countries, p. 20.

As the model was quite new, COTRAIN partners of the pilot countries established a list of duties and responsibilities for a usual dual training. Most of the duties for a one-company training model apply for the companies involved in a cotrain.

In training-centre based systems, especially in BeFr, the COTRAIN partners had to determine what should be done and by whom, taking into account the differences between a successive model and a simultaneous model.

Beyond the fact that the administrative obligations have to be fulfilled, one should be aware that some employers or mentors might be reluctant to enter a cotrain if they are uncertain about the way to proceed.

In Italy, considering the development of cotrain in internship, the framework for a cotrain is "light" and regulated within the accreditation of the VET centre. [∞ The Italian model of collaborative training, p.30.

In BeFr, partners had to clarify duties regarding the simultaneous cotrain model, if for example an apprentice is in company A on Mondays and Tuesdays and in company B on Wednesdays. They did this with the help of the Labour and social security administrations. [∞ Difficulty (resolved): the BeFr apprenticeship law explicitly forbids youth from signing two simultaneous dual training contracts, p.39.

Therefore, when setting up a cotrain, it is important to make a list of everything that has to be done by each party to meet the required obligations.

7.3 Practically, employer obligations in a cotrain

In order to decide who will take on which tasks, you should determine:

- ▶ who is usually in charge of fulfilling the procedures in the current training model. If appropriate, discuss or verify how to proceed with them;
- ▶ the changes the cotrain might imply, depending on the model;
- who will be responsible for the administrative formalities and requirements, and what will those responsibilities entail:
 - social security procedures before the collaborative training can begin, and at its end;
 - any other requirement due to accreditation regulations;
- ▶ who will be responsible for the contract, medical assistance, social insurance, civil responsibility... and what will those responsibilities entail;
- who will be responsible for the travelling expenses;
- ▶ what are the regulations regarding compulsory schooling, or other legislations regarding age;
- ▶ what type of financial incentives are available, and who will apply for them.

More specifically, here is what BeFr employers involved in collaborative training must do:

- ▶ insure the learner against occupational accidents (covering training hours in the company, in the training centre, as well as travels between residence, company and training centre) and supply this information;
- contract a liability insurance;
- ▶ register the learner to Prevention and Protection at Labour Services;
- ▶ be affiliated to the National Office of Social Security (ONSS) and register the apprentice;
- be listed in the Crossroads Bank for Enterprises (CBE);
- ▶ have the regulated access to the profession for which dual learning will be implemented, if relevant;
- be in order regarding social and tax contributions;
- ▶ appoint one or several tutors (with a maximum of 2 apprentices per tutor) which satisfy tutorship regulations, who will follow and train the apprentices throughout the dual training;
- comply with the training capacity rule (number of apprentices by number of employees within the company);
- deliver knowledge and skills relating to the occupation;
- ▶ plan for a medical visit, which should apply for the duration of the training.

Writer, CEFA

8.1 Does a cotrain imply changing the rule of assessment?

COTRAIN partners noted that a cotrain does not change the assessment rules in Germany and in Austria, and introduced no change in this regard for cotrain in Italy and BeFr. Rules usually applying for the current models were applied for the cotrains.

In practical terms, this implies that:

- ▶ if the youngsters would have to fill out a school diary in a one-company model, in a cotrain model they must do so for each company;
- ▶ if the employer usually signs the progression of skills in the training plan, each cotrain employer signs the cotrain training plan;
 - depending on the COTRAIN VET partners, there is one assessment grid to co-sign or two grids to sign in order to verify that the employers fully respect their commitments;
- ▶ if the employer/tutor can participate as an observer in the final examination in front of a jury, each cotrain employer/tutor can be invited to do so;
- ▶ if the training employer/tutor cannot participate as an observer, no cotrain employer/tutor at all will be invited to participate;
- ▶ if part of the assessment is made within the training company, this assessment will be organised in the cotrain leading company...

8.2 Does the cotrain model have consequences on final assessment?

It is difficult to estimate the impact of cotrain on assessment, as there is no objective control group. However, throughout the course of the project, COTRAIN VET partners observed the following trends:

- ▶ in Italy, youngsters from Futura VET centre in maintenance found it easier to answer questions regarding design, as their cotrain was organised with companies in computer aided design;
- ▶ in BeFr, the CEFA partner observed a similar trend; youngsters tend to better pass their final exam. The CEFA mentors share these additional hypothesis:
 - a cotrain implies accomplishing specific work regarding the training plan with the youngsters, which could lead them to have a better understanding of the training objectives;
 - with a cotrain, youngsters have company follow-ups with at least two employers/tutors instead of one, which could increase their quality;
 - a cotrain means youngsters will/might apply similar tasks and use similar skills in different company settings, which could reinforce their learnings;

- as they change companies, youngsters have a better understanding of what they can already do. This improvement, connected with their work on the training plan, could help youngsters formulate what they can do more efficiently. This is also valuable when using European tools (Europass) as these tools use the specific phraseology "I am able to do...";
- youths themselves testify to a gain in confidence, and mentors observed a virtuous circle: youths are confident, employers/tutors assign new tasks to them, with higher responsibilities; youth become more proactive and autonomous, employers/tutors continue to give them new tasks...

Besides the final assessment, there is another indicator to evaluate training quality: what do the youths do after their training...?

- ► In Italy, where the duration of the cotrain is shorter than in Belgium, all the cotrain youngsters found work immediately after their training, or could have been hired by the training company. Centoform observed that the companies were unexpectedly satisfied. Considering this was a pilot experience and a qualitative experience, this is very positive.
- ▶ In Belgium, some cotrains are still going on or have only begun, as the usual duration of apprenticeships is 3 years. The mentors noticed that thanks to cotrain some youngsters now want to continue their training, even though they would have probably stopped after finishing their current school level.

PART V – QUALITY ISSUES AND CONCLUSION

I. Quality issues

Writer, oïbf, CEPAG

1 The issues of quality and quality monitoring

As the COTRAIN project is a qualitative project, the purpose of this section is to encourage reflexion, not to offer a quality framework as such. COTRAIN partners believe it would be necessary and useful to gather all of the relevant stakeholders around a table in order to define quality monitoring for a cotrain system.

Improving the level of security and quality is an objective for any system. COTRAIN partners were mindful of how to achieve it with respect to the specific framework of the stakeholders and their legitimate areas: labour needs, pedagogy, assessment...

COTRAIN partners consider that there already is a framework in the VET field, which contributes to a certain extent to the quality of the vocational training system. With differences, this framework defines:

- ▶ the content of the occupations VET providers and companies have to educate to;
- ▶ the accreditation rules, even if in Germany and Austria these rules are far more detailed then in Belgium and Italy; or even if in Italy, the companies are not accredited but the VET centres have to prove they pay attention to regulated criteria;
- ► the legal framework;
- ▶ the content and required level to achieve certification...

Quality and comparability – In Germany and in Austria, the company accreditation is part of the legal framework, the control of which is entrusted to the Chambers. This choice contributes to set up a standard that is applicable in the whole country. It is the basis for a comparability. A qualification in the North of the country is comparable in the South. Wherever a company is implanted in the country, employers know quite well how people are trained. This helps to secure comparability, beyond the usual black box on how to achieve the level of training established at the federal level. The Chambers also secure this standard of quality through examinations, playing a direct role in ensuring youths have the minimum competences to be hired.

The success of a cotrain depends on many factors. In order to achieve the most successful course of training and optimal effects, it is necessary to clarify in advance all of the elements that will ensure a good quality of collaborative training.

2 The COTRAIN methodology contributes to training quality

The progressive building elements of a cotrain -from the reasons why to the how- already contain parts of the following requirements:

- A- The focus of the training is on the job profile. Therefore, the questions to answer are:
- ▶ what skills and competences need to be taught to meet the demands of professionals in the relevant field?
- does the training company need support to teach relevant skills and competences?
- ▶ if so, which partners can support the training? Moreover, how is the cotrain coherent with the youth's training path, and the training within the company?
- **B-** If a company concludes that a collaborative training offers the opportunity to ensure optimal training, it is important to keep an eye on a number of quality-influencing factors throughout the process. The checklists in the sections below (3 -> 6) can be used for the ongoing monitoring of existing collaborative training, a final evaluation of completed collaborations, or the anticipated structuring of planned training associations.

3 Regulation brings quality and trust to the system

- **A-** The aspects that are important for the success of a training network geared towards quality education include:
- ▶ the securing of legal and contractual conditions;
- ▶ the definition of the training areas to be transferred within the framework of the training association;
- the optimal choice of partner facilities;
- the organizational framework of the training network;
- ▶ the financial implications.
- **B-** A company or a VET centre that plans to carry out collaborative training needs to learn enough about the different opportunities of such trainings. These may depend on whether and in what form collaborative trainings and training networks are integrated into the national (or regional) system of vocational training. In Austria and Germany, training networks are an integral part of legally regulated apprenticeship training. In other countries, where in-company training is not regulated to this extent, it is important to clarify the legal, institutional and organizational framework conditions for a collaborative training before starting it. Promoting the cotrain system helps not only to make it known but also to spread a good quality frame for those who want to try it.
- **C-** The training content and which competences are to be taught in which profession must be clarified, as well as whether the cooperation will concern one or more other companies, and when and for how many apprentices it will be set up. The extent and variety of training tasks to be transferred to other companies, as well as the number of apprentices to be sent to other companies, will depend on whether it is a training association with a single partner company (A B model) or with several partner companies (A-B-C... model).

4 A cotrain complementarity implies a company compatibility

A- Once these questions have been clarified, it is important to find suitable partner companies. Social partner institutions, business associations, public institutions, unions or consulting service providers can provide support in this regard.

When selecting potential partner companies, it must be ensured:

- ▶ that they are compatible in terms of:
 - their range of products or services;
 - their corporate culture and training activities;
- ► that they are suitable for the training tasks that would be transferred, including that their agenda allows for it;
- that their motivations are clear regarding:
 - the benefits they expect from cotrain;
- ▶ more specifically for VET centre-based system, that the employers know each other before the beginning of the cotrain.

In countries where training companies require accreditation before starting a training activity, it can be assumed that these companies can guarantee a sufficiently high quality of training.

In Austria and Germany, all training companies undergo an accreditation process through the representative bodies and are subject to the control of authorized institutions. In BeFr, all training companies are accredited by the relevant VET centres/institution, but the criteria are less demanding than in Germany and in Austria. In Italy, VET centres are accredited by the relevant authority and the quality of the companies the VET centres work with are a part of a regular audit by the authority.

If potential partner companies are found, it is important to clarify whether they are willing to undertake training tasks for apprentices in the desired occupational field as part of a training network, and whether they are capable of doing so in terms of their training experience, availability of trainers and infrastructural equipment.

When assessing these quality criteria, it is useful to review the following questions using a checklist:

- what is the business purpose of the potential partner company;
- which products and services are offered by the partner company;
- ▶ has the partner company already dealt with practical training in the past and, if so, with what success (number of internships or apprentices, number of successful degrees, occupations and contents of these training courses);
- ▶ has the partner company already carried out training and/or cotrain in the past and, if so, with whom;
- ▶ what is the level of hiring within the company at the end of the training/cotrain;
- what is the level of tutoring in each company;
- ▶ is there data and feedback from other companies, graduates, social partners or public bodies;
- ▶ how does the partner company present its own activities (on a website, in brochures or magazines).

B- In order to ensure an efficient and successful training by the partner company, the following aspects of the collaborative training must be clarified and determined:

- the number of trainees;
- the content of the training and competences to be taught;
- the beginning, end and duration of the training modules;
- ▶ a detailed training plan covering each cotrain company;
- who are the training managers or tutors in the partner company;
- ▶ the form of training documentation, performance assessment and certification;
- the cost of training;
- ▶ the insurance coverage of the apprentices.

5 Available data contributes to a quality monitoring

It is worthwhile to develop an indicator system in order to monitor and evaluate the training networks, based on which the partners can assess the quality of the association in the ongoing process as well as after completion of the training. This will allow companies to determine possible weak points as well as consider potential improvements.

These indicators can be based on documentation, which can be collected progressively, then evaluated and interpreted in view of a final evaluation. These documents can include:

- ▶ the central data of the training association (partners, persons responsible for training, apprentices, period and duration of the association, apprenticeships, agreed training contents, cost agreements, conditions such as working hours, place of work, possible remuneration conditions, etc.);
- training documentation completed on a daily or weekly basis (start and end of training, breaks, content and form of training, progress of training, next training objectives);
- ▶ a comparison of the agreed training plan and the training progress and, in case of deviations, the adaptations planned;
- ▶ documentation regarding performance assessment.

6 A concrete quality monitoring based on values

Regarding the quality criteria, some elements seem obvious, other less so. COTRAIN partners believe it is useful to integrate the final objectives in the reflexion, in order to explicit the reasons why certain quality criteria are important, and to what they contribute. Many of the indicators above are suitable for a one-company training model. COTRAIN partners insist that it is important that during a collaborative training, appropriate items be verified in each training company and not only the leading company, in order to increase the success of the cotrain for all parties.

II. Conclusion

The COTRAIN project and the results this Guide reflect show that creating collaborative training is possible. The project and the guide also show that collaborative training offers a means to increase the quality of training with many benefits, at a low cost. All a cotrain needs is to create the appropriate network between future cotrain partners and to have a regulation frame that makes it achievable. There is no need for new infrastructures, equipment...

The first conclusions, at the end of the National contexts (Part II) show that:

- ▶ VET stakeholders can implement a model from another country;
- ▶ it is possible to pull the substance from a model even if it comes from a very different system;
- this substance relies on:
 - first knowing the reason why stakeholders have made their choices,
 - acting in accordance with the specificities of each stakeholder, within the current context;
- ▶ it is possible to implement an adapted model regardless of historical, institutional, national, regional... differences.

Nevertheless, ad hoc authorities and social partners also play a part in setting up the system, which means actors in the field will need their support. Appropriate changes must be made in order to make the model *workable*.

In Germany and in Austria, policy makers find it is so important to train for a complete occupation that the law provides for it.

Training authorities in these countries conceive training policy as a whole and coherent ensemble, which they adapt depending on their current and future concerns, as explained by the German BMBF representative in the video concerning the German dual training system.

Making the model workable also implies acting in accord with stakeholder specificities. During the project, each pilot partner developed cotrain pilots based on their available means.

- ▶ Centoform developed collaborative training, but also a collaborative training network: the VET centre offered companies to network within a specific cotrain fabric. Centoform built this network by integrating practice on a production line for computer-aided design students. Then they simply but intelligently did the opposite for maintenance training: they offered cotrain in computer-aided design for apprentices in maintenance training. Another path Centoform followed was to offer cotrain for highly specialised training modules, which meant a short period in companies with high benefit in the innovative sector in which they evolve. As their regional training authority is very interested in supporting innovation in the Region, Centorform received their support in order to develop the pilots and make the model sustainable.
- ▶ As IFAPME is an Institute coordinating a network of training centres, one of the COTRAIN issues they dealt with was to find a way to make the model workable in their internal process (CRM) and accreditation rules, to establish a similar way of proceeding. This also allowed preparing the sustainability of the model within the institution and its network. The process might not seem to go fast, but it is a prerequisite to go far.

- ► The CEFA responded to plural objectives. They sought to use the highest potential offered by the cotrain model:
 - to meet the training objectives;
 - to meet employers' expectations (for example, in the restauration sector, some employers have applied the cotrain model as it is the model applied in big gastronomy restaurants in France, where it is even more important);
 - to meet youths expectations... youths discovered themselves, which the mentors actively worked for.

CEFA mentors notably used cotrain to offer the possibility of confirming, refining or even developing youth's vocational choices. This was possible, as some CEFA sections have a partially closed program. For one of the COTRAIN apprentices (Marine, [∞ The cotrain pilots developed by the CEFA, p.70), cotrain was the opportunity to develop commercial skills complementarily to her administrative training in Office functions section. Mentors saw this opportunity as adding more strings to her bow. Marine moved forwards; she wants to go on with her training, and become a shop manager in the area she prefers.

COTRAIN partners are very proud of what youths accomplished thanks to cotrain. For many of them, cotrain opened unexpected doors. They can open these doors themselves... with just a little help!

ANNEXES

1 Belgian cotrain convention

Collaborative training convention

Contact details of the dual training provider

Denomination : Address :

Contact detail of the training provider's designated mentor

First name and LAST NAME:

Mobile phone n° :

E-mail:

Between	And		
- the first collaborating company Denomination of the company:	 the second collaborating company Denomination of the company: 		
Commercial sign:	Commercial sign:		
Legal form:	Legal form:		
Company registration n° (=VAT n°):	Company registration n° (=VAT n°):		
Company accredited for dual training for the profession that is the object of the dual training contract concluded with the dual trainee. Represented by (first name/LAST	Company accredited for dual training for the profession that is the object of the dual training contract [or CAI*] concluded with the dual trainee [*social partner contract]. Represented by (first name/LAST		
NAME/function):	NAME/function):		
Mobile phone:	Mobile phone:		
E-mail:	E-mail:		
Tutor (as mentioned in the dual training contract):	Tutor (as mentioned in the dual training contract or CAI):		
Mobile phone:	Mobile phone:		
E-mail:	E-mail:		
And	And		
the training provider (denomination):	- the dual trainee: M / F		
the mentor:	National number:		
	Mobile phone:		
Mobile phone:	E-mail:		
E-mail:	If the trainee is a minor, legal representative, (first name/LAST NAME): M / F		

Each party commits to carrying out the object of this convention, and is duly informed of the following:

- 1. Within the framework of an apprenticeship, the object of collaborative training is to divide the skills to acquire between two (or more) companies whose activities are complementary, in order to meet the training programme requirements.
- 2. The training this convention applies to is (see also the training plan hereafter).
- 4. Within the framework of this convention, the rights and obligations of all signing parties of the dual training contracts fully apply, for the full duration of the periods mentioned in said contracts.
- 5. The training plan specified in this convention encompasses the training plans respectively annexed to the dual training contracts.

The training plan is established by the mentor, taking into consideration the activities of the collaborating companies as well as the ties between them, if any.

Specify the fields of activity of

5.1.1.the first collaborating company:	[commercial sign]
5.1.2.the second collaborating company:	[commercial sign]
If applicable, specify the nature of the ties between	the companies (supplier, client)

6. Duration of the collaborative training convention (d/m/y): Start date/....- end date/....

7. Regarding the evolution of the retribution:

The principle following which the retribution evolves according to the skills acquired remains (see training plan annexed to the dual training contract);

When changing companies according to the periods specified hereafter, the principle is as follows:

- The level of retribution at the end of period 1 is acquired for the beginning of period 2;
- The level of retribution at the end of period 2 is acquired for the beginning of period 3.

[Variation in the case of and industrial apprenticeship contract (CAI) – social partner contract: Regarding the evolution of the apprenticeship compensation:

The principle following which the apprenticeship compensation evolves according to the age of the apprentice remains.]

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	copies made in	
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traiı		·
	// Location: Retribution: level Fields of activity (enumeration):	
8.3.		third training phase) (d/m/y): from// to
	Location: Retribution: level Fields of activity (enumeration):	
8.2.	<u>Training phase 2</u> (d/m/y): from//	to//
	Retribution: level Fields of activity (enumeration):	
	<u>Training phase 1</u> (d/m/y): from/ Location:	to/
8.1.		

8. Within the framework of this convention, the collaborating companies commit to training the dual training intern for the following periods (training phase) and for the activities mentioned

2 Italian cotrain convention





CoTraiN Creating collaborative Training Networks

Project n. 2016-1-BE01-KA202-016293





Collaborative training convention – Annex to "Convenzione Stage"

Contact details of the training provider in	Contact details of the dual training
charge of the internship	provider
Denomination: Futura	Denomination: Centoform s.r.l. Address: Via
Address: via Bologna 96/e	Nino Bixio 11, 44042 Cento, Italy
Name : Elena Vignocchi	Name : Linda Rigattieri
phone: 0039 051/6811411	phone: 0039 0516830470
e-mail: e.vignocchi@cfp-futura.it	E-mail: linda.rigattieri@centoform.it

Between

- The first collaborating company (denomination):	- The second collaborating company (denomination):
•	,
National registration number:	National registration number:
VAT number:	VAT number:
Dual training company selected by Futura and Centoform for the profession regarding the dual training internship has signed a dual training convention	Dual training company selected by Futura and Centoform for the profession regarding the dual training internship has signed a dual training convention
Represented by (name/function):	Represented by (name/function):
phone:	phone:
E-mail:	E-mail:
Tutor (if different from the person above):	Tutor (if different from the person above):
Mobile phone:	Mobile phone:
E-mail:	E-mail:

1. FRAMEWORK OF THE COLLABORATIVE TRAINING:

Each party commits to carrying out the object of this convention, and is duly aware of the following:

- 1.1. Within the framework of an internship, the object of collaborative training is to divide the skills to acquire between two (or more) companies whose activities are complementary, in order to meet the training programme requirements.
- 1.2. The training this convention applies to is Tecnico per la conduzione e la manutenzione di impianti automatizzati ("Technician for the management and maintenance of automated systems").
- 1.3. This convention is complementary to the dual training conventions also signed between the aforementioned parties regarding the training (*reference of the training course*), and in no way modifies these conventions.
- 1.4. Within the framework of this convention, the rights and obligations of all parties signatory to the dual training conventions fully apply, for the full duration of said conventions.
- 1.5. The training plan is established by the mentor, taking into consideration the activities of the collaborating companies as well as the ties between said companies, if applicable:
 - 1.5.1. Specify the fields of activity of the first collaborating company

Design and construction of packaging automatic plants and machines

1.5.2. Specify the fields of activity of the second collaborating company

Advice to mechanical companies for the development of drawings and projects in the mechanical field

1.5.3. Specify the fields of activity of the third collaborating company

Realization of customized specialized mechanical processing

1.5.4. If applicable, specify the nature of the ties between the companies (supplier, client, ...)

There are no ties between the two companies outside of the project

- 2. **Duration of the convention:** from November 2017- to April 2018
- 3. Within the framework of this convention, the collaborating companies commit to training the dual training intern for the following periods (training phase) of time and for the activities mentioned hereafter:

3.1. Training phase 1:

from 07/02/2018 to 03703/2018 from 19/03/2018 to 20/04/2018

Location: c/o

Fields of activity (enumeration):

- 1) Construction of 3D models of particulars and mechanical products
- 2) Usage of integrated ICT tools and programmes
- 3) Usage of technical instruments (mechanical, electric, electro technical)
- 4) Usage of professional tools

Learning outcomes

To be able to

- 1) Build a 3 dimensional model of the products and of the mechanical particulars
- 2) Use of ICT tools and PLC programming and their integration
- 3) Use of many technical instruments (mechanical, electronic and electro technical instruments)

3.2. **Training phase 2**:

from 05/03/2018 to 16/03/2018

Location: c/o

Fields of activity (enumeration):

- 1) Reading and comprehension of mechanical drawings (total products and components)
- 2) Identification and recognition of main steps of design process in mechanical sector
- 3) Identification of ICT tools and software for mechanical technical drawings

Learning outcomes

To be able to:

- 1) Understand and explain drawings and projects of mechanical products
- 2) Recognize and understand technical language, symbols and representations concerning mechanical drawings and projects
- 3) Recognize the specific technical tools supporting mechanical drawing and projects' design
- 4. The internship is documented monthly in writing, within a document available to the mentor. The mentor monitors activities within the company. The intern fills out a document labelling his activities.

5. Final considerations:

5.1. The conditions of the dual training contract, the daily and weekly schedules, the location of the training with a company as established within the framework of the dual training conventions signed by each collaborating company and the dual training internship apply within the framework of this convention.

Four (4) copies made in the city of Cento	Date:	
Each signing party acknowledging receipt of a copy.		
Front Colonia	Te	
For the first company	For the second company	
Represented by (name and function)	Represented by (name and function)	
The intern	For the training provider Futura	
The intern	To the training provider ratara	
	For the training provider Centoform	
	, e. a.e a.a	

5.2. The training plan found in this convention encompasses the training plans respectively

appended to the dual training conventions.

Collaborative training – employer questionnaire

Do you wish to hire youngsters in dual training, to teach them and allow them to learn a trade? Do you wish to contribute to their professional integration, but are wondering how you should do so?

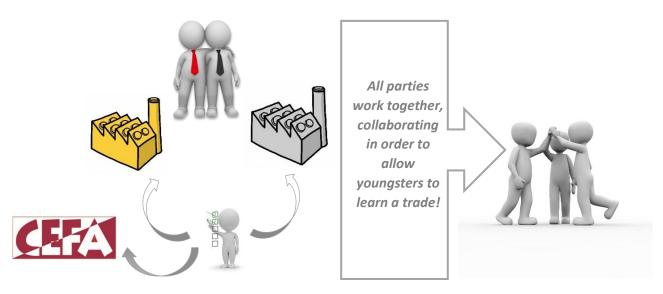


→ First, you will meet the youngster, arrange a job interview, and offer him a trial period of a few days...



→ After this trial period, you will agree to sign a contract, and offer him/her the possibility of training within your company for a determined period.

→ A new model is being set up: **collaborative training**, a close collaboration between two or more employers who accept to take on and train the same youngster. The objective of the model is to allow the trainee to acquire all of the skills required in a specific trade, as well as to discover different techniques and gain another type of work experience. The youngster receives training in each collaborating company, as well as in the CEFA.



Questions Answers		Comments		
	Yes	No	In part	
1. As an employer and/or a tutor, do you feel that				
it is possible for you to cover the whole of the				
training programme? (Can all of the skills and facets of the trade be acquired within your				
company?)				
→ If the answer is "no" or "in part", could				
you list the skills you will be able to				
provide training for (based on the CEFA training programme)?				
2. Do you own the necessary equipment				
(machines, infrastructure, merchandise and				
software) to train the youngster for the complete				
training programme?				
→ If the answer is "no" or "in part", would				
you accept collaborating with another				
company, which could fill the gaps? Could				
you give a specific example?				
3. Are you susceptible to attempt a collaborative				
training approach? (Sending the youngster to				
another company for a predetermined period, so that he may acquire an additional skill).				
that he may acquire an additional sking.				
→ If so, why? If not, why not?				
4. Do you already know companies that could be				
potential partners?				
→ If not, could you specify what your				
expectations would be regarding a				
partner company?				
5. Would you accept an exchange between two				
trainees? 6. Would you accept taking on an extra trainee for				
a specific period?				
7. Would you prefer that the youngster return to				
your company after his training with a				
collaborating company? Or that he pursue his				
training elsewhere?				
8. Does this system improve the youngsters' qualifications?				
9. Does this system benefit the company?				
, , ,				
→ Do you believe that, for example, when				
returning after training with a				
collaborating company, the youngster could bring a "new" expertise to your				
company?				
10. Can this new model of professional integration				
offer a solution to your company's needs?				
11. Based on the previous elements, does putting				
this collaborative system in place seem possible to				
you?				
→ If "yes", how and why?				
→ If not, what are your primary concerns?				

12. Do you require further information in order to		
enter into this new model?		
If so, which information?		
13. Other questions :		
14. Comments :		

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