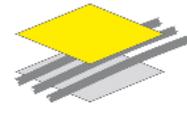




Erasmus+

REFORM E



CCCA-BTP

*Le réseau de l'apprentissage BTP*

## ConstructyVET

Middle Management Skills in the Building Sector:  
Adjustment of the Vocational Education  
and Training Offer  
to the Evolution of Company Needs

**2015-1-FR01-KA202-015054**

Production Oriented Approach

## DETAILED DESCRIPTION OF THE PROJECT

### KICK-OFF MEETING

**Start: November 17<sup>th</sup>, 2015, 2:00 PM**

**End: November 18<sup>th</sup>, 2015, 4:00 PM**

**CCCA-BTP, 19 rue du Père Coirentin, Paris 75014, France**

## SUMMARY

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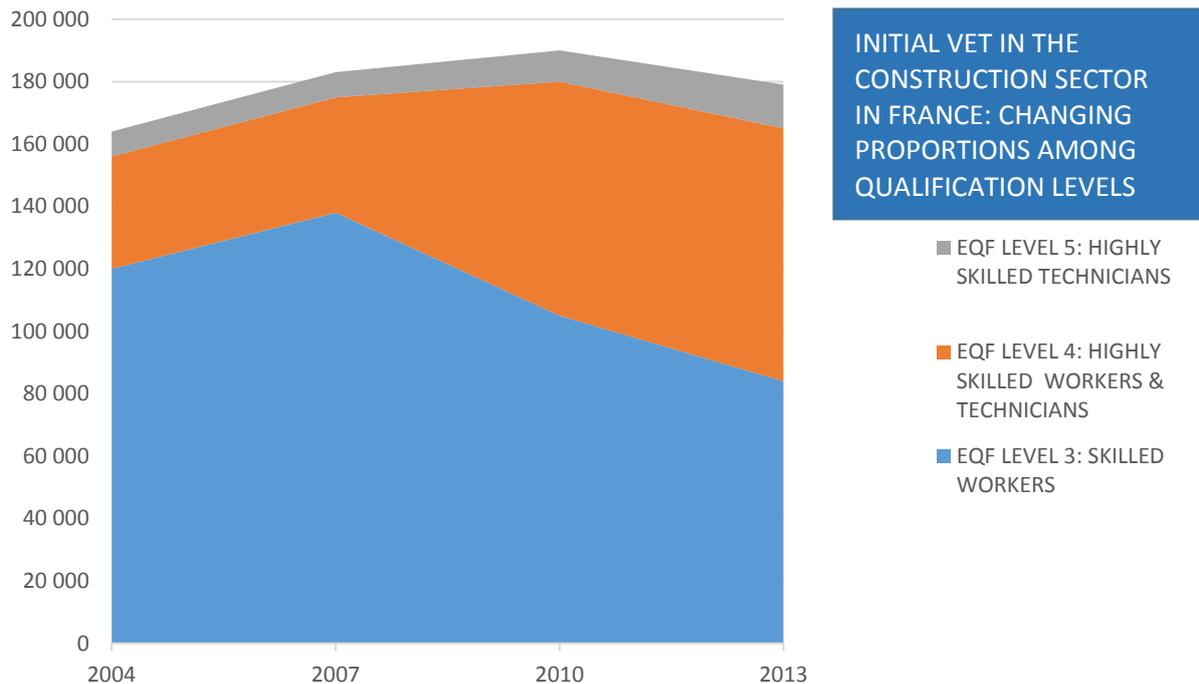
This project presents **an opportunity to conceive a common transnational plan of actions in favour of the development of skills of middle management staff in building companies** by reducing the gap between company skills expectations on the one hand and the profile of the available workforce at the labour market on the other hand.

## **BACKGROUND: A DECLARED NEED TO REINFORCE THE COMPETENCES OF THE MIDDLE MANAGEMENT STAFF IN THE CONSTRUCTION SECTOR**

Analysis of skill needs carried out by professional organisations, observatories and vocational education and training (VET) providers for the building sector in various European countries for last 5 years demonstrate, in spite of a high unemployment rate, significant difficulties of recruitment of middle management staff at worksites, at the qualification levels 4 and 5 (EQF). This statement confirms a sustainable lack already evoked several years ago in the documents like “Inception Report on Future Qualification and Skills Needs in the Construction Sector” (Danish Technological Institute, 2008), “Skill needs in Europe: Focus on 2020” (Cedefop, 2009) or “Analysis of Construction Company needs in terms of middle management staff” (French Observatory of Employment and Vocational Training in the Construction Industry, 2014).

These reports confirm that qualitative and quantitative evolution of occupations demanding higher qualifications is more dynamic than those concerning workers. In fact, the organisations represented in the REFORME network and having close relationship with building companies relate quite often a shortage of team leaders and worksite supervisors. Moreover, social partners from the countries like Belgium, France, Germany or Poland stress that this gap risks widening up in the future if the building companies together with VET providers do not adopt relevant strategies to attract more labour force able to demonstrate knowledge, skills and competences of at least EQF level 4 towards these occupational profiles.

Even if the global number of learners in the initial VET preparing to the construction crafts is decreasing in many European countries according to the data provided by FIEC (International Federation of Building Companies), the paths ending up with professional qualifications of levels 4 and 5 (EQF) globally correspond better to current recruitments and generally do not acknowledge significant decrease. In France for example, initial VET paths of EQF level 4 in the construction industry represented, in 2004, 22% of learners, whereas in 2013 this percentage increased to 45%. Parallel to this, surveys carried out by the French Observatory of Employment and Vocational Education and Training in the Construction Sector in 2014 demonstrate that graduates with a qualification corresponding to the levels 4 or 5 (EQF) find a permanent employment quicker and easier than those having a professional certificate or diploma corresponding to the level 3.



These graduates find jobs leading them frequently after a period of 3 to 7 seven years of experience in a company as “skilled worker” to the functions of team leader or worksite supervisor. But the complexity of worksites due to technological and organisational evolutions, national and transnational directives and recommendations regarding security and safety at work or sustainable development require from VET providers to be reactive and adapt their offer regularly to the evolution of different skills required by the companies: defined in certain countries as *soft*, like style and efficiency of communication, personal habits, empathy or preference for leadership, *transversal*, like entrepreneurial or organization capacities, human relations or technical topics common for all building crafts, like environmental and safety rules) and *hard*, mainly based on technological knowledge specific to each craft. Moreover, European VET providers specialised in construction crafts must take into account National roadmaps adopted in several European countries in 2013 as a part of the Build Up Skills programme, promoted by the European Commission, where the necessary renovation of the construction crafts by introducing environmental and energy saving requirements, as well as stronger safety rules at worksites has been pointed out. Regarding this, team leaders and worksite supervisors will have to possess additional skills enabling them to master and to coordinate interfaces among traditional and new tasks, as well as to conceive new organisations and procedures in company workshops and at worksites.

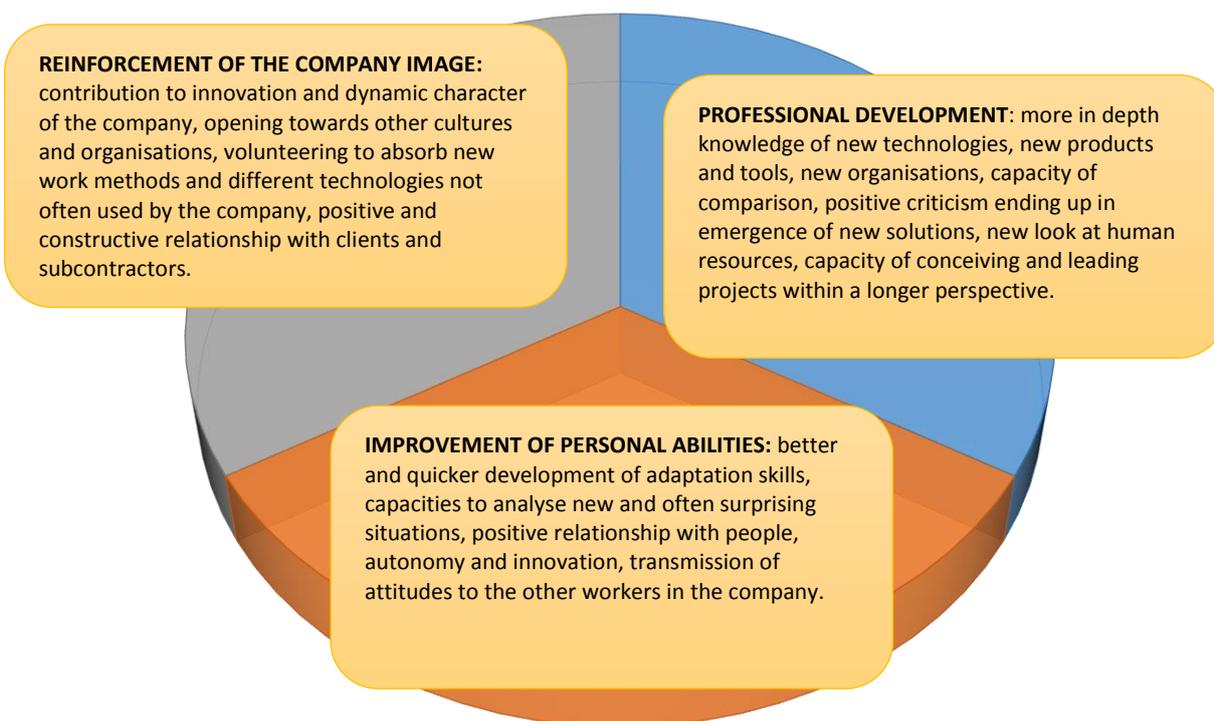
**TEAM LEADER:** highly skilled, he organises the execution of activities by his staff (small group of workers), such as constructing a part of a building or repairing defective installations.

**WORKSITE SUPERVISOR:** manages the whole staff working at the worksite, determines with team leaders the tasks to attribute to each worker. The human aspect is essential in this function: this very good technician attached to the quality and to the details has to be at ease as staff manager.

Source: FFB, 2015, France

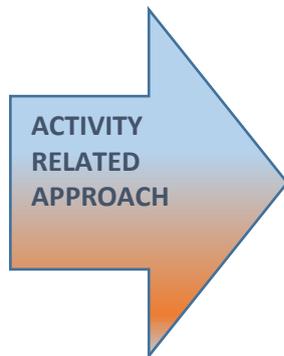
## KNOWLEDGE, SKILLS AND COMPETENCES OF THE MIDDLE MANAGEMENT STAFF: NECESSITY TO IDENTIFY MORE SPECIFIC COMPANY NEEDS

Team leaders and worksite supervisors constitute sensitive professional groups that are vital for company running. In many REFORME countries, educative authorities and training providers have put in place or renewed for 10 last years the educational and training offer leading to the certificates or diplomas certifying professional qualification at EQF levels 4 or 5 and likely to lead, directly or after some amount of years of experience, to the middle management duties. But analysis of their matching to the company needs and to the profile of trainees, measured with objective indicators concerning not only training contents and pedagogical methods, like time necessary to find sustainable or temporary job after certificate or diploma, characteristics of the post obtained or time and degree of adaptation to the company specific contexts, are not carried out systematically. Nevertheless, some partners have achieved preliminary surveys to find out what kind of new knowledge, skills and competences the building companies expect from team leaders and worksite supervisors. The compilation of results highlights that the company needs can be regrouped in three distinctive pools, each of them being considered as equally important:



This first and rough evaluation, based on the opinions collected directly by the REFORME partner organisations among building companies in France (30 interviews carried out in 2013 and 2014 with company owners or tutors accompanying learners), in Belgium, Germany and Spain (10 to 15 interviews in each country), must be completed by a more scientific approach of company needs. This new survey will be based on the investigation of a representative sample of intermediate and functional interfaces in each REFORME partner country, situated between VET providers and aimed team leaders or worksite supervisors. It will be a matter about including executive and quality managers, architects or even professional fellows, representatives of social partners of both orientations: employers (able to express company collective needs) and trade unions (able to defend individual development and carriers of workers). Thus, advisory groups will be created in each

interested country under the responsibility of the REFORME partners, in charge of capitalising results. As “the employers are frequently in the best position to provide qualitative information about changing

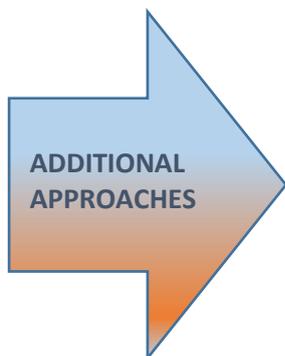


needs for particular skills, in contrast to quantitative data” (Piloting a European employer survey on skill needs, Cedefop Research Paper no 36, 2013, p.12), the advisory groups will principally work on qualitative identification of skill needed, starting from their own knowledge of the evolution of the functions concerned. Doing this, each advisory group will take into consideration the fact that the employers generally find it difficult to think in terms of skills and it is often simpler for them to think in terms of production processes, tasks to be executed and objectives to be achieved. For these reasons, it seems reasonable to assume that interrogations in terms of tasks and expected results might result in more reliable and relevant data, given that skills can be identified when analysing work

activities.

The national advisory groups will also take this opportunity to examine the opinion of the company owners and tutors on the existing educational and training offer (initial vocational education and further training) in terms of contents and pedagogical approaches proper to different ways of access to professional skills. The accent will be put on the forms of education and training where the partners are particularly competent and have legitimacy recognised by national and regional authorities: initial VET shared with companies, like apprenticeship or dual system, continuing updating and development of skills, as well as professional reorienting of groups with difficulty of finding jobs and, therefore, social and economic inclusion. The methods used for this examination will be rather informal, given that the evaluation of the educational and training offer could constitute an independent project and it will be done within the proposed framework only as an additional mean clarifying skill needs.

Besides, the research on skill needs will be completed by the analysis of relevant job advertisements, diffused in all the participant countries, to identify the frequency of elements highlighted as essential



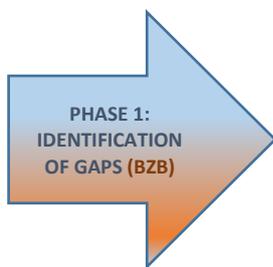
for the positions of team leader and worksite supervisor. In addition, vacancy statistics published in the countries concerned, as well as collected by Eurostat within the European Vacancy Monitor (EVM) and the European Vacancy and Recruitment Report (EVR) providing a comprehensive overview of recent developments on the European job market will be analysed. Moreover, existing training surveys focussed on initial education and on employees working in the enterprise (experienced and newly recruited) will be exploited, even if it is often difficult to distinguish between the need for companies and employees to acquire new skills and upgrading existing ones. Therefore, the degree of training intensity will not be considered as sufficient indication of the need to acquire new skills and can only complete

and highlight the data mentioned before, especially in case either of legal obligation to update skills regularly in the domains like security and safety at work or when the training constitutes a form of benefit for employers and employees that does not directly reflect skill needs.

## PHASES OF THE PROJECT

Before proposing change, updating or new educational and training offer including the results of the previous research phase, it is proposed to screen and evaluate a sample of relevant existing ones, selected in each REFORME partner country, related to each of three fields of investigation as follows. These fields also may cross:

- Initial VET shared with companies, like apprenticeship or dual system,
- Continuing updating and development of skills,
- Professional reorienting of groups with difficulty of finding jobs.



Under each category listed above, the partners will select the educational and training paths they consider the most suitable to be confronted to the company needs regarding skills of team leaders and worksite supervisors. After this selection, each partner will proceed to screening contents and pedagogical methods related to each VET path identified by confronting them to the results of the research phase as described above. At this stage, the difference will be made among “*soft, transversal and hard skills*” (FLC internal documents, 2015) and a common definition of these concepts will be proposed, starting from singular understandings of these concepts by the partners. Common grids of analysis will be conceived, produced, discussed, experimented and finally adopted by all the other partners. This phase will be crucial for the identification of the existing gaps in terms of skills provided within already existing and representative VET offer. The results of this phase will determine what VET paths are to be modified, what are the reasons of the modifications and how to modify them or create new ones in terms of both: contents and pedagogical methods.

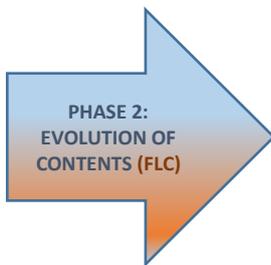
Thanks to their experience and after the analysis of the previous investigations among building companies already mentioned, the partners make the hypothesis that a relatively large opportunity to improve the initial and continuing training offer is situated in the field of **transversal skills**, still not sufficiently considered in the current vocational educational and training offer related to the construction crafts as decisive for the global competence (i.e. “*combination of autonomy and responsibility in specific work situations*”, cf. EQF explanation brochure, 2013) of team leader or worksite supervisor, in addition to soft and hard skills.

The decision to work principally on the transversal skills is motivated by two initial hypothesis:

- *Soft skills* are rather to be analysed in relation with *aptitudes*, either natural or acquired, linked above all to the interior and personal characteristics of the individuals and, therefore, the partners consider that working on them would be relatively risky in the framework of the proposed project, given that it would be necessary to face more socio-psychological dimension of the relation that individuals establish between their own preferences and work situations then capacity building process based mainly on acquired knowledge and skills.
- *Hard skills*, proper to each professional *craft* like bricklayer, carpenter or painter and not to the functions like team leader or worksite supervisor, would not be specifically considered within this project, taking into account that they are rather related to the transmission and application of purely technical knowledge and many VET providers specialised in this field, as

well as a number of fabricants already offer technical courses corresponding to this specific skill need.

Thus, the partner organisations are convinced that the most significant added value the project could produce should be focussed on the analysis of adequacy between training offer and building company needs in terms of transversal skills concerning both middle management functions aimed.



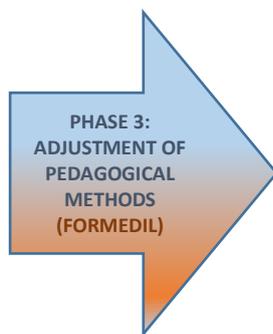
At this phase, the partners will work on the definition of contents enabling beneficiaries to acquire or improve **transversal skills in terms of learning outcomes** for team leaders and worksite supervisors, **likely to be certifiable at EQF levels 4 and 5**. When doing so, the partners will exploit their respective and complementary expertise in conception and putting forward vocational education and training pathways. They also will base their conceptual work on the results of the transnational projects in which they have participated within the framework of previous programmes. In particular, they will introduce to this new project the methodology of elaboration of contents already developed when they have worked on the improvement of key competences of the workers with lower level of qualifications in the building sector, on a better implementation of trainings related to security and safety prescriptions in small and medium sized companies, as well as on specific training modules in line with environmental change and economy saving. Parallel to this, some other European projects achieved by other partners, not only from the building sector, have been identified as useful for the work on improvement of team leader and workworksite supervisor skills. In fact, results of certain projects can be exploited and developed, for example: dealing with developing of transversal and key skills through technical jobs (2011-1-FR1-LEO05-24454), creating space for developing entrepreneurial skills in cultural assets and heritage (2013-1-IT1-LEO05-03977) or tackling competences of entrepreneurship (2012-1-ES1-LEO05-48274).

The partners will follow a specific and clearly identified methodology for design and putting forward of training paths that will be set up together starting from the experience of each partner. The definition of learning objectives (in terms of learning outcomes) will take place in relation with the evolution of activities and tasks of the publics concerned situated in their environment and contexts. Thus, the planned methodology will take into consideration three key dimensions:

- Existing *legal, political and strategic constraints* existing in the countries concerned likely to limit the design and contents of the VET paths aimed due to established national, regional and local rules to be respected (like reference standards related to professional activities, competences and related training approved by law).
- *Professional situations* and analysis of work systems in the building companies in the countries concerned, given that the professional situation will be taken into account with its double dimension: as an objective ensemble of tasks and duties to be accomplished on the one hand and as an evolving relationship of the worker with his workplace.
- *Positioning of transversal skills* within the planned training paths regarding a larger professional environment affecting VET designed for the aimed beneficiary groups in each country, also by taking into account an increasing complex co-activity at worksites, which must be taken into consideration in a stronger manner when conceiving or modifying training paths.

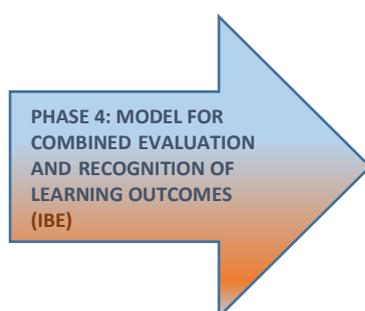
The common elaboration of the methodology for design and implementation of the planned learning outcomes and for their evaluation is considered by the partner organisations as one of the main opportunities to share experience and good practice at the European level, and, therefore, to bring

new components to the ways in which each country conceives its own training paths and models for the evaluation of learning outcomes. The partners are convinced that this collaboration can have a positive impact on the evolution of the vocational education and training design in the countries concerned thanks to a better mutual understanding of the arguments and constraints that each partner takes into account when conceiving VET pathways (long and leading to a professional diploma or recognised certificate, identified within EQF or short).



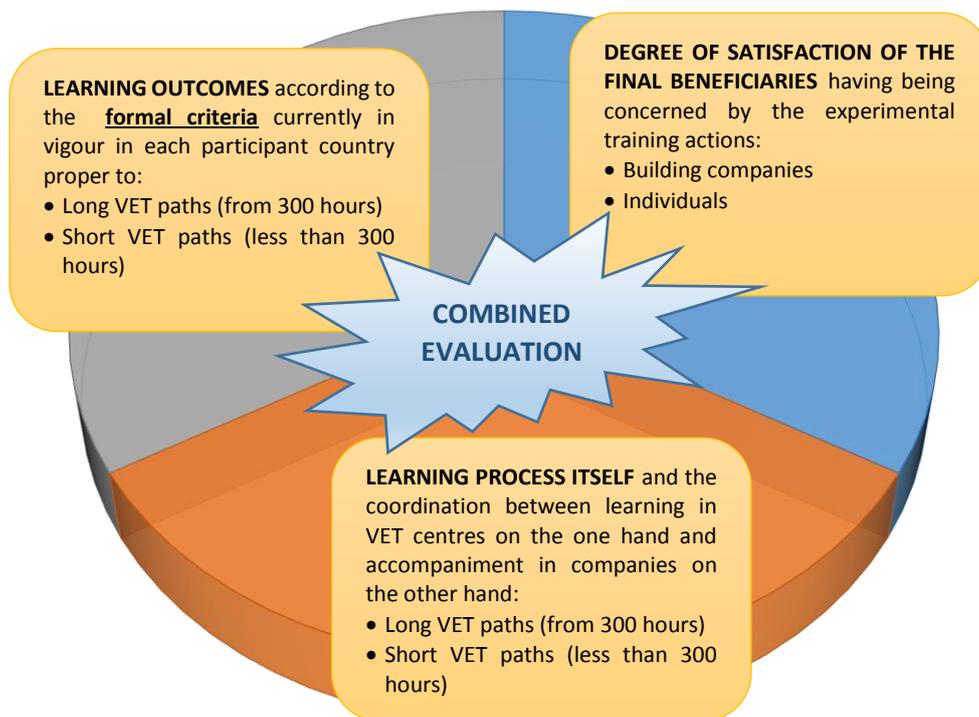
In addition to the adjustment of contents, the partners will also benefit from their complementary experience of conceiving pedagogical methods and tools for appropriate VET paths, thanks to both their respective national experience and several transnational projects already achieved. Thus, the partners will particularly reflect and produce guidelines on how to switch from the logic of separate thematic training blocks aiming at a better knowledge of separate topic (for example: communication with teams or energy saving rules) to the logic of *learning modules* aiming at a better capacity to master activities that need combination of different kinds of knowledge (for example: preparing the worksite for the worksite supervisor, leading a team of bricklayers at worksite for team leaders). The partners will put together their understanding of modular systems of learning to propose a common transnational **methodology of conceiving training modules** specifically adapted to two professional groups identified. This methodology will take into account the potential degree of autonomy of learners to determine to what extent they can become actors of their own training (especially if it is long and leading to the recognition at EQF levels 4 or 5), how to accompany them by educational and training organisations on the one hand and by company owners or tutors on the other hand. When working on this issue, the partners will also inspire from some European projects already achieved, like “*Train-Com: Developing Training Competence in IVET by Using Units of Learning Outcomes*” (DE/13/LLP-LdV/TOI/147605).

Thus, the **manner in which the learners concerned can be accompanied**, formalised by a guide for the VET trainers and company tutors involved, will constitute the second intellectual outcome of this phase. The added European value of the project at this stage will consist in the fact that the partners decide to produce transnationally, by putting together their respective experience, a coherent common methodology for **conceiving training modules and accompaniment schemes at the same time**, considering that the separation of these complementary topics could be one of the factors contributing to the potential gaps between VET paths and skill needs expressed by both companies and learners themselves. In fact, during the preparatory phase, the partners stressed that accompaniment of learners beyond the scheduled pedagogical face-to-face, as well in training centre as in company, where accompanying personnel (teachers or trainers in VET centres and company tutors) meet and communicate, could constitute a powerful lever contributing to a better adaptation of the VET path contents to skill needs.



Even if the evaluation should constitute an integral part of each educational and training action, the experience piled up by the partner organisations demonstrates that it is often limited to its formal or legal aspect. Therefore, the partners propose a **more exhaustive and combined evaluation** focussed, on the one hand, on the companies and on the individuals, related to the field of motivation, usefulness, recognition and certification of qualification and, on the other hand, on the related VET system, which adds to the first factor a more global dimension. In fact, as the project partners testify, formal evaluation of learning outcomes focussed on the individual beneficiary of the VET path is often regulated and supervised, whereas all the other forms

of evaluation are often blurred and rarely systematic. For this reason, the partners intend to set up, at the end of the conceptual phase, an experimentation of the training actions that will be renewed or created, which would not be an autonomous goal, but a field to elaborate a pragmatic and complex model for the evaluation of the VET actions, by confronting concepts with real final end users of the schemes conceived (individuals and building companies). As an initial hypothesis, the partners intend to adopt the following model:



This initial model will be progressively questioned and refined thanks to each national experience of the partners involved. The objective is to blend these experiences and to end up with a coherent transnational proposal for the evaluation of the transversal skills specific to the middle management staff in the building companies, starting from the VET experience made with team leaders and worksite supervisors. As the evaluation is both objective and subjective process, the planned work should demand a clear work framework organised particularly well. It will include national and transnational capitalisation of rules and situational experiences to prepare a more collective research of common solutions to be proposed as a new model. Results of several transnational projects having already tackled this issue will also be examined and related, for example, to the evaluation of new competences for VET professionals to shift to using learning outcome contracts and on-Line Learning Management Systems (2012-1-IE1-LEO05-04713) or to peer learning assessment system for evaluation of trainers and quality VET professional programmes (2012-1-NO1-LEO05-04776).

At this stage, the partners will associate appropriate national certification bodies, as well as ministries of education and of labour, in charge of national diplomas and professional certification, to make sure that the conclusions forwarded are in coherence with the current legislation and legal procedures. Moreover, will proceed to a systematic check-up and adjustment of both training paths and evaluation procedures regarding their conformity to the logic of the European Qualifications Framework (EQF). Thus, thanks of the pragmatic approach of learning by doing, the partners intend to contribute to the more efficient implementation of the National Qualifications Frameworks (EQF) in the countries where they are still not operational in practice (like in Poland) and to their reinforcement in all the others.

Even if the main objective of the project is to reduce the existing gap between the skill needs of certain categories of the middle management staff in the building companies and the existing VET offer, its concept and transnational cooperation foreseen will also contribute to building up strategic partnerships in the field of education, training and youth, as expressed within the *“Erasmus+ Programme Guide”* (European Commission, 2015). The analysis of the global and specific objectives of this programme has highlighted that the proposed new initiative of the REFORME partner organisations, in association with some other competent bodies, would contribute to several horizontal and VET specific priorities of the Erasmus+ Programme, within the Key Action 2:

#### **Horizontal priorities**

- Developing transversal skills, especially entrepreneurship, new organisations, environmental priorities, security rules, technologies and materials to be used and widespread at worksite, as well as likely linguistic skills proper to work situations and contacts with clients.
- Developing new approaches to make training paths conceived with companies more individualised and taking into account previous formal, informal and non-formal learning outcomes, combining educative exploitation of work situations and external injunction of knowledge throughout a reinforced cooperation between companies and VET providers.
- Supporting teachers, trainers and other educational staff to conceive training paths where both training centres and companies participate and which could include, among others, Open Educational Resources (OER) and ICT to increase the quality of learning and of the evaluation of the learning outcomes.
- Contributing to the development of a European Area of Skills and Qualifications through a transnational and common approach of the competence and skills related to the functions of team head and of worksite supervisor.
- Stimulating the development and use of innovative approaches and tools to increase the efficiency of investment in vocational education and training by making them closer to company and end user needs.

#### **VET-specific priorities**

- Reducing skills mismatches and shortages in the building sector concerning middle management staff.
- Supporting the development of high quality VET specific to the building sector thanks to stronger work-based components to be experienced for the professional qualifications of higher level (EQF levels 4 and 5).
- Increasing transparency between several national VET systems through streamlined implementation of EQF.

Once achieved, the project outcomes will be transferable to other professional sectors and to other countries, especially in terms of methods. Moreover the project could be prolonged by additional ones, concerning the capacity building of teachers, trainers and company tutors working with current of future middle management staff in the construction industry, transnational mobility of the educational staff and learners or a better implementation of new communication habits and tools to the educational and training actions.

## DETAILED DESCRIPTION OF THE CONTRACTUAL INTELLECTUAL OUTCOMES

The partners will apply a methodology based on empirical and situation analysis principles relating to work situations, as the main sources of information, interpretation and analysis of skills to be identified in face-to-face situations with the representative audiences (operational interfaces between the companies and training organisations). The trends in activities led by the team leaders and worksite supervisors in actual work situations will be taken as the main basis for investigations. Once the skills sought after have been identified, the partners will assess a sample of current training judged to be representative and selected from each country forming the partnership, with a view to determining whether they are adequate to meet the skills requirements identified beforehand. Hence, in all, the partners will identify a transnational sample of 32 certified courses to undergo auditing, adjustment and testing:

- 2 courses for the team leaders (preferably leading to knowledge, ability and skills corresponding to level 4 EQF criteria, in order then to facilitate the transnational comparison step),
- 2 courses for the worksite supervisors (preferably corresponding to level 5 EQF criteria).

The partners will adopt a methodological approach for which there will be diagrams and maintenance and analysis grids, as well as a wider area for research into innovative ideas or new solutions, combining scientific discipline and creativity, while observing the contractual framework and the obligation to obtain results. The partners will work by applying their own methodological approaches to their activities for each of the aimed productions, which will be explained in detail by a description of these productions.

The productive activities of the project, to which we should add the activities of management, administrative and financial management and above all, communication, valuation and the distribution of results (interim and final), will be as follows:

- identification of discrepancies between the courses concerned and company expectations, by proceeding with an examination of the contents and educational methods and comparing them with the results of the research phase covering the skills requirements,
- adjustment of the content, which will allow the beneficiaries to acquire or improve their transverse skills in terms of learning outcomes for the team leaders and worksite supervisors, leading to certification which is comparable to level 4 or 5 EQF,
- adaptation of the teaching methods to the contents and adjusted training aims, whilst taking account of the degree of potential independence of the learners, in order to determine to what extent they could become the players of their training,
- creation of a common assessment model for the training in question, which will not only combine formal validation of learning outcomes but also the degree of satisfaction of the beneficiaries (individual and companies) and the process of learning itself,
- full-scale testing of each of the audited and adjusted training courses in order to assess the training processes, the quality of learner support and the methods of assessing learning outcomes together with the degree of learner and company satisfaction.

The partners will speed up their national co-operation networks and will bring into the project, the competent and specialist national organisations as part of the pertinent investigations, namely universities and specialist institutions in designing professional training, specialist organisations in assessing learning outcomes or even national certifying bodies, as well as the Ministries of Work and Education. They will ensure that the European regulations governing teaching and professional training are taken into account wherever they may facilitate transparency, recognition and validation of the learning outcomes. This relates in particular to the EQF and ECVET.

Regarding the latter, the CCCA-BTP has already established a practice of consultation with the national team of ECVET France, as part of an apprentice mobilisation project, that has been in operation since 2014 and in which certain partners of this new project are involved in their capacity as host organisations. The partners secured the presence of the Educational Research Institute of Warsaw, which will allow them to proceed with strict methodological and scientific monitoring. See Annex 2 regarding the execution of activities with the various phases and timetable (communication document with the partners).

### Intellectual Output 01

Report on the **adequacy between skills needed by building companies concerning team leaders and available training offer.**

Work Package Leader: BZB (DE)

Before suggesting adjustments to the courses identified, the partners will organise in each country involved, an analysis of company expectations by way of questioning and interpretation in working groups, by following a joint method of investigations. Those involved will be company managers, quality managers, architects, partners, employers' representatives and trade unions, trainers and business mentors. Given that the companies reason more in terms of activities, the tasks to be executed and objectives to be achieved together with the skills, the investigations will be more targeted to an analysis of the working activities and it would then be up to the experts analyzing the qualitative data, to interpret these in terms of knowledge, ability and skills.

This investigation will be completed by an analysis of job applications, in order to determine the frequency of elements identified as essential in each country for the positions of team leaders and worksite supervisors. Besides which, also to undergo analysis will be the statistics on the job vacancies collated by Eurostat as part of the European observatory of vacant jobs and the European report on vacant jobs and recruitment, which will provide a complete appraisal of recent trends in the European labour market. The national analyses relating to initial training and related job functions will also be used, even if it is often difficult to distinguish between the need to acquire new skills and the need to upgrade existing skills. The degree of training intensity will therefore not be considered as a sufficient indication of the need to acquire new skills and can only complement and highlight the data indicated above, especially with regard to the legal obligation regularly to update skills in the areas of occupational safety and security or where the training comprises some form of advantage for the employers and employees that does not directly reflect the skills requirements.

At the same time, the partners will select the qualifying training courses they judge best adapted to check the requirements of companies with respect to the knowledge, abilities and skills of the team leaders and worksite supervisors. On completion of this selection, each partner will proceed on the basis of a common methodology agreed upon transnationally, to examine the contents and teaching methods of each selected training course, by checking these against the expectations of the companies in their own country. At this stage, a distinction will be made between the *soft, transverse and hard*

*skills*, as already indicated. A common definition of these concepts will be proposed. Common analysis grids will be designed, produced, examined, tried out and finally adopted by all the other partners.

The partners' decision to work mainly on the transverse skills is motivated by two initial observations:

- *The soft skills* are more of a behavioural nature and should rather be analysed in relation to the natural or acquired abilities and above all, associated with the internal and personal characteristics of such individuals. The partners thus believe that it would be fairly difficult to work on these as part of the ConstructyVET project, which does not give itself the aim of working in an in-depth manner on socio-psychological aspects of the relationships the individuals establish between their own preferences and professional situations. In fact, the partners would rather work on processes reinforcing knowledge and skills, essentially based on professional behaviour and expertise.
- The *technical skills* moreover, relate to each *job*, such as masonry, carpentry or painting and generally speaking, are not associated with functions as carried out by team leaders or worksite supervisors. This explains why the partners do not make everything about their project, which they would rather be focused on the professional factors of the target groups identified. Moreover, the partner countries already offer a generally well identified technical training course (mainly in the form of on-going training) which is accessible to both current and future team leaders and worksite supervisors.

The partner organisations therefore confirm their conviction that the most significant added value produced by the project, lies in the analysis of the adequacy between the training offer and construction company requirements with regard to transverse skills for the jobs of the middle management referred to.

## Intellectual Output 02

**Renewed or new contents for initial and continuing VET addressing team leaders and worksite supervisors** (minimum two in each category per country involved in the project).

Work Package Leader: FLC (ES)

In this production the partners will, based on a joint methodology, define the training contents which will enable the beneficiaries to acquire or improve their transverse skills in terms of learning for the team leaders and worksite supervisors, and which are likely to lead to level 4 or 5 EQF certification. In this context, the partners will exploit their crossed expertise in the fields of educational engineering and training engineering and will be mentored by external experts from the university and academic world and specialist research institutions with respect to any specific and pertinent issues.

In order to achieve the results aimed for, the partners shall proceed in stages:

- *Design, choice and implementation of a joint and transferrable methodology (to other jobs, other sectors and other countries)* to adjust the training content, getting inspiration from the experiences and practices of each partner, before calling in the expertise from universities or specialist educational engineering institutions for the already established or new partnerships,
- *Adjusting the targets and contents of training courses* (two per country and per job), which will retain the methodology in relation to the trend in professional jobs, activities and jobs in the company, involving both the research practitioners, company mentors or tutors, who train the trainees as well as the professional trainers at the training centres,

- *Capitalisation of the adjusted targets and contents at partnership level*, in order to compare the functioning of a jointly worked out methodology, the conclusions and changes arrived at by each of the partners, validations of the revised courses, in association with the national qualification frameworks and the EQF, which would make it possible to inject the experience of every person into the final adjustment of each training course (to be tried out before the changes become final).

The training targets are defined in terms of learning outcomes and the methodology provided to adjust the course and this takes account of three aspects:

- *Legal, political and strategic constraints* prevailing in the countries in question and likely to limit the form and content of the anticipated training courses, owing to national, regional and local regulations that have to be observed,
- *Professional statuses* and the analysis of professional systems in construction companies in the countries concerned, given the fact that the professional circumstances will be considered from two aspects: as an overall aim of tasks and remits to be accomplished on the one hand and as the constantly changing relationship between the worker and his place of work;
- *The position of transverse skills* for the anticipated training courses in as broad a professional environment as possible, which will impact on the courses designed for the beneficiary groups in each country, also taking account of a growing and complex joint activity on the sites.

The joint creation of the course design method based on the learning outcomes will be considered by the partner organisations as one of the main opportunities to share experience and good practices at European level and thus introduce new elements in a way where each country conceives its own learning outcomes, assessment courses and models. The partners are convinced that this co-operation may have a positive effect on the trend governing teaching design and professional training in the countries concerned, thanks to a better mutual understanding of the arguments and constraints, which each would take into account when designing courses resulting in a professional diploma or acknowledged certificate.

### Intellectual Output 03

Guidelines for **pedagogical methods and tools for (re)designed VET paths addressing both VET centres and company tutors** and also including instructions and recommendations for accompaniment of the learning process.

Work Package Leader: FORMEDIL (IT)

Besides adapting the contents, the partners will work on the design of pedagogic methods and tools for the courses in question, where they will put to good use their national experience with regard to the construction of pedagogic activities adapted to professional training courses, including alternating training sessions with the companies. Besides which, they will benefit from the results of several transnational projects, which they implemented themselves, such as:

- Copilote (2008) on the involvement of company building tutors during training,
- CeSaTra (2012) on the design of pedagogic tools to incorporate the “Site Safety” aspect when training middle management staff,
- Trasfobuilding (2012) on acknowledging informal and formal apprenticeships.

The partners will establish, in particular, a transverse and transferrable method which, during professional training leading to acknowledged qualifications at levels 4 and 5 EQF would pass from the logics of disciplinary topic blocks to the logics of *apprenticeship modules*, the aim of which is to master

activities (preparation, execution and assessment) requiring a combination of different types of knowledge and which places the learner and skills indicated at the core of the package.

The partners will pool their concepts of the modular learning systems and suggest a design method of the common transnational training modules, which are expressly adapted to the two professional groups identified. This methodology will take account of the degree of independence of the learners in question, in order to determine how they could become players in their long-term training ultimately leading to a qualification/certification of levels 4 and 5 EQF, and how the training organisations on the one hand and the instructors on the other, can assist them. Moreover, assistance would be the subject of a completely separate job and be considered as one of the fundamental, methodological components of the training courses in question.

This is why the partners will produce supportive guidance at several levels, under the methodological supervision of the Institute of Pedagogical Research of Warsaw (project partner) and the *Conservatoire National des Arts et des Métiers de Paris* – the training Jobs team (associate organisation already contacted by the CCCA-BTP and interested in this production):

- National identifications and transnational capitalisation of guidance experience as part of the modular courses adapted to professional training at “technician” and “senior technician” level;
- Proposal of a joint guidance model adapted to the individual training courses for team leaders and worksite supervisors;
- Definition of the conditions for deploying this common model in the partnership countries, formalized by a guide for the trainers of the training centres and the company mentors concerned (this will form part of the Guide mentioned, as production 03).

This production will, above all, be a practical and pragmatic communication tool between all the parties involved in the training processes concerned. In addition, its aim will be to allow the players in question to create their training strategies whilst complying with the different institutional and organisational requirements.

#### **Intellectual Output 04**

**Model for evaluation and recognition of learning outcomes**, combining certification with reference to EQFs and EQF, degree of satisfaction of final beneficiaries (individuals and companies) and learning process itself.

Work Package Leader: IBE (PL)

Even if the assessment has to form an integral part of each teaching and training activity, the experience of the partners demonstrates that it is often limited to its formal or legal aspect. The partners therefore propose creating a joint model leading to a fuller and combined assessment, which will include:

- Assessment and formal validation of learning outcomes in each country, based on national criteria and with reference to the European recommendations in this sphere (essentially EQF and ECVET, which can be adapted to checking the knowledge outcomes during training);
- Assessment of the degree of satisfaction of the direct recipients (individuals) and indirect beneficiaries (companies), based on the results of the experimental training campaigns

indicated above, using assessment grids that are designed, used and operated according to the rules of design, use and joint exploitation;

- Assessment of the training processes by facilitators and users, by emphasizing the support processes, according to the rules which are the same for all partners of the consortium.

The project partners emphasize the fact that the formal assessment of learning outcomes, geared towards the individual recipient, is frequently regulated and supervised, whilst all the other forms of assessment are often vague and rarely systematic. This is why the life-size tests are used not only to test the training courses and their methods, educational tools and assistance, but also to test the assessment processes with its three components already indicated. This experimentation would make it possible to develop an initial theoretical model. The final aim is to combine the national experiences so as to arrive at a cohesive and transferrable transnational proposal to assess the transverse skills relating to the training courses themselves leading to the job descriptions of the team leader and worksite supervisor.

Given the fact that the assessment is both an objective and subjective procedure, the work would require a clear and particularly well organised working framework. The results of several transnational projects where the subject of assessment and validation have been approached, will also be examined, i.e.:

- CERT.ENT project concerning the application of ECVET credits to certify the learning outcomes of the construction company managers,
- ECVET project concerning non formal and informal site safety training
- Project relating to the assessment of learning outcomes and online learning management (2012-1-IE1-LEO05-04713),
- Project relating to the assessment principles of apprenticeships in the work situation (2012-1-NO1-LEO05-04776).

It should be pointed out here that the partners will spend a lot of time and attach a great importance to testing the contents and training outlines proposed, which largely justifies the anticipated project duration of 36 months, so that they will obtain a reliable and well analysed experimentation so as possibly to adapt the design work conclusions. Nonetheless, the experimentation is neither an aim nor product in itself for the partners, but rather a means of improving and validating the quality of productions anticipated, including the multi-dimensional assessment-validation model. This is why the partners will conduct this in a systematic and strict manner: each of the 32 renovated courses will be tested on the recipients who will be recruited from the training centres according to current criteria in each of the countries forming the partnership, under the scientific co-ordination of the partner responsible for this production, which will follow an experimentation and validation protocol of the common detailed and accurate models.

## COMMUNICATION AND DISSEMINATION EVENTS

This section is particularly important. The communication activities relating to the project and distribution of its results must take place throughout the period of the project and in all countries of the partnership. This is why a communication website for the outside world will have to be designed quickly, with links to the national websites of each partner.

### **E1: Information meetings on the project launch with the boards of directors and management of partner organisations.**

The first events will be organised from September/October 2015 in order to make the decision-makers and directors of the partner organisations aware of the project launch, the stakes and means of mobilisation. Hence it will be a matter of sharing the project with the board directors and management and to ensure that its objectives are known and that its results are anticipated.

The institutional project launch meetings will comprise the first stage of the communication and exploitation strategies, which the directors of the partner structures must uphold in order to ensure their efficiency and impact on the other public areas aimed at. In fact, creating awareness amongst board directors (most frequently representatives of corporate partners and supervisory institutions) and also the internal managers also allows them to be involved in the creation of such strategies, all the more so since their involvement is essential to implement the envisaged strategies, especially with respect to facilitating contacts with the business community and institutional partners of the building sector.

The partners anticipate a global communication strategy which is resolutely geared both to their own networks and professional sector and to the outside, given that the productions designed are to be transferred to other training courses, other sectors and other countries. Hence, before even thinking of the events, it is necessary for the partners to organise and build this joint strategy, **under the project promoter's responsibility, with the latter also being responsible for co-ordination**, with the idea of continuity that ensures permanent visibility of the project amongst its direct recipients (trainees and companies), indirect recipients (trainers of training centres, company mentors and organisations designing and co-ordinating professional training in the countries in question and beyond).

At the time of these initial meetings/communication events concerning the project, it would also be necessary to present the decision-makers with a basic outline of the communication proposed and to gather their ideas on this point, so as to construct a communication and dissemination plan on three levels:

- Organisation of their own actions and events in favour of the project and its results, using the jointly created methods and tools, that can be offered in relation to the contexts and national priorities of each partner;
- Identification of the communication strategies already deployed by other *Erasmus+ Strategic Partnership* project backers in ConstructyVET partnership countries, in order to propose joint dissemination with the aim of sharing and transfer;
- Identifying national structures and organisations responsible for spreading and promoting the European recommendations allowing for greater transparency of qualifications and certificates, as well acknowledging learning outcomes as national EQF and ECVET contact points (which also benefit from European finance), so as to consider networking and joint

communication campaigns by presenting ConstructyVET as one of the contributors implementing these recommendations.

Intellectual productions disseminated:

- Information brochure on the aims, content, anticipated results, partnerships and project organisation.
- Document presenting the proposed communication and evaluation strategies (to be developed subsequently).

Organisation responsible for this activity: every partner, co-ordinated by CCCA-BTP.

## **E2: Communication and workshop for the professionals on the trends in training courses offered by the partners and likely to involve all middle management in construction companies.**

The partners perceive their strategy of communicating, upgrading and disseminating results as a participating and integrating step, where the participants are not the passive recipients of messages sent, but rather contributors who, as a result of their observations, criticisms and proposals contribute to the quality of the final productions. The entire series of events fit into this logic.

Moreover, the partners have no intention systematically to create isolated events, which are purely dedicated to the ConstructyVET project, as their limitations have been shown in the past. They only allowed for a reduced distribution of results and as a rule, there were only a reduced number of participants. On the contrary, in order to create dynamic events to promote their project, the partners will have to find more widespread events, which have the stamp of approval of institutions and corporate partners, where ConstructyVET will be shown as a constituent of a far greater movement.

Therefore, it is by becoming involved in such events, which initially are professional and sector-specific in each of the partnership countries, that the partners can propose their ConstructyVET workshop as part of the trends in training courses likely to involve the entire middle management in the building sector companies. To achieve this, the members of the board of directors and management of partnership organisations will be requested, to help the project teams responsible for communication, to identify those national and regional professional events where they can set up ConstructyVET workshops. The nature of such events will lead to change in bringing together the professionals of the sector, in relation to the customs inherent in each country. The deciding criterion will be the involvement of professional training players in the building, such as academic bodies, pilot organisations, company representatives, managers and trainers of training centres.

The partners not only expect these workshops to distribute the information and project results but also to provide a pragmatic contribution from the participants in terms of suggestions to modify the contents and form of the finished products. The participants will be involved in the production process of the results, which will not be an area exclusively reserved to the project teams. The contribution of these workshops will also be formalised by analysis grids to be designed together and to be common for all partners, so as to capitalize the results more easily and incorporate these in the productions.

These workshops will, basically, be put in place between the 6th and 24th months of the project, depending on the organisational opportunities to be taken and the state of execution of the productions. Each partner undertakes to organise and participate in at least two professional and sector-specific events in his country.

Intellectual productions disseminated:

- O1. Necessary training adaptations concerning the duties of the team leader and site manager and identification of transverse skills to be reinforced at European level – final document.
- O2. Reviewed and adapted contents of qualifying training courses geared to team leaders (level 4 EQF) and worksite supervisors (level 5 EQF) – version being produced.

**E3: Design and implementation of transverse events, piloted by those structures responsible for disseminating and promoting the European recommendations and instruments to encourage the transparency of certifications and the acknowledgement of skills.**

In addition to the sector-specific events in their countries, the partners are planning to create networks in co-operation with the authorities, such as the EQF or ECVET national co-ordination points (operating under a financial and activities agreement with the European Commission as part of Erasmus+ - the potential initiatives and programme co-ordination sector), national agencies co-ordinating this programme as well as with any other institution or national or transnational body which contributes to a better understanding of the recommendations and European instruments for professional teaching and training.

Such networks will allow the partners to participate in the more widescale dissemination events, such as seminars, institutional meetings or thematic workshops, during the course of which the partners will present the products of the ConstructyVET project together with the transfer opportunities to other jobs and duties, towards other training levels, towards other professional sectors and towards other countries.

The proposed networking by the partners, some of whom have already made contact with the nation co-ordination centres indicated above (even if these do not exist in all countries of the partnership), is aimed at spreading awareness of the ConstructyVET products to the national and transnational public services at large, so as to contribute towards a better understanding of the concerns, methods and working tools of others, with a view of exchanging practical information and providing mutual inspiration of achievement. ConstructyVET will therefore be considered as a contributor towards a greater movement in favour of company performance, the employability of apprentices within a framework that is not only national but also European.

The nature and exact dates of such events will be specified with the partners involved before the end of the year 2015 and each partner undertakes to participate in the organisation and implementation of at least the transverse events, between the 12th and 30th month of the project. They will aim at:

- Presenting the project as pragmatic implementation of European recommendations in order to demonstrate their usefulness for a professional sector, for jobs or duties and for specific qualification levels,
- Making the project visible to the public authorities on a large scale and also to the public bodies aimed at, in order to arouse the interests of the former regarding the transfer of its productions to their own context and objectives,
- The growing interest of the parties involved in the events regarding the European approach and instruments of transparency and acknowledgement of the learning outcomes and qualifications, thanks to the concrete and pragmatic example of ConstructyVET.

ConstructyVET is therefore also designed as a means to testify, in favour of the national certification framework coupled with the European framework, as well as in favour of ECVET as a step to facilitate the modularisation and individualisation of professional training for levels 4 and 5 EQF, whilst also contributing to a change in the assessment methods and to the validation of the learning outputs.

Intellectual productions disseminated:

- O1. Necessary training adjustments leading to the roles of team leader and site manager, and identification of the transverse skills to be reinforced at European level – final document.
- O2. Contents that have been reviewed and adapted for qualifying training sessions for team leaders (level 4 EQF) and worksite supervisors (level 5 EQF) – final document.
- O3. Guide relating to the methods, teaching tools and guidance to be implemented as part of an adapted training course and intended for team leaders and worksite supervisors in the partnership countries – version undergoing completion.
- O4. Transferable model for assessing training and for the formal validation of learning outcomes that are appropriate to the duties of team leaders and worksite supervisors – version undergoing completion.

**E4: Transnational seminar to develop the ConstructyVET project in the context of strategic partnerships and other European projects executed between 2015 and 2018, which are aimed at improved adaptation of the professional training offered to meet company expectations.**

The partners will organise a 2-day transnational seminar in Paris between the 33rd and 36th month of the project, which will essentially be dedicated to validating the ConstructyVET results, and also combine this with other projects carried out under Erasmus+, possibly by other partnerships, with similar problems; this must not be excluded if this means increasing the global impact of the project for the direct and indirect beneficiaries on as many people as possible.

This seminar therefore envisages the participation of at least 150 people coming from all countries of the partnership. It will group together:

- Representatives of the building sector (companies and social partners),
- Representatives of other professional sectors potentially undergoing the same changes as the building sector,
- Apprentice representatives (who beforehand participated in the experimental training and validation of learning outcomes or who potentially wish to undertake the proposed training),
- Representatives of training organisations (teachers and trainers) and company mentors,
- Institutional representatives and representatives of professional training research organisations
- Associated institutions (national and European), structures and organisations having participated in the non-budget project.

In order to remain consistent with the events described above, this transnational seminar will be essentially organised in the form of reflection sessions and workshops, geared towards the knowledge and use of products and also to the sustainability of the project beyond its contractual useful life.

Besides which, some of the workshops of this seminar will be particularly geared to the transfer of results to other beneficiary profiles, to other professional sectors and other countries. This is why the presence of European players, such as the national agencies managing the Erasmus+, programme, representatives of the European Commission, national training designers and certification agencies will be of particular importance to place the ConstructyVET project productions in this expanded context.

Co-ordinating the preparatory work for this event will be carried out directly by the project promoter's communication division in co-operation with the heads of communication of the partner organisations, which will work closely together with the teams producing the results for the contents and forms of the anticipated event.

The communication division, whilst focussing on ConstructyVET, will place this event from the point of view of highlighting all the productions executed by the partners, possibly with other partnerships, as part of the Erasmus+ programme, so as further to promote most global movements contributing to building the performance of companies and of individual skills, than purely single productions. The partners are therefore convinced that the best way of developing ConstructyVET productions would be to demonstrate how they could contribute to this transverse movement, which exceeds a single job, a single sector and a single country.

Intellectual disseminated productions:

- O1. Necessary training adjustments leading to the jobs of team leader and site manager and identification of the transverse skills to be reinforced at European level – final document.
- O2. Contents reviewed and adapted to qualifying training for team leaders ( level 4 EQF) and worksite supervisors (level 5 EQF) – final document.
- O3. Guide of methods, teaching tools and guidance to be put into place as part of the adapted training courses and earmarked for team leaders and worksite supervisors in the partnership countries – final document.
- O4. Transferrable model to assess training and for the formal validation of learning outcomes appropriate to the jobs of team leaders and worksite supervisors – final document.

*Marek Lawinski, PhD, CCCA-BTP  
With the participation of Paola Bolognini, CCCA-BTP  
and of Sébastien Roux, Préface (FR)*