

# STRUCTURAL METHODS AND RELEVANT TRAINING FOR COMPETENCE MANAGEMENT IN METAL SECTOR (SMART COMET)

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## SMART COMET

### EXECUTIVE SUMMARY

Qualified workforce is one of the key elements currently for the industry to ensure sustainable competition both in global and local scale. The emphasize and importance placed by the providers of vocational training and education, the policy makers and private sector enterprises on the vocational education and training and cooperations established in this regard are decisive to a greater extent for ensuring qualified workforce. SMART COMET Project, accomplished accordingly and supported by Turkish National Agency within the scope of European Union Erasmus + Program, aims to reinforce the cooperation between the vocational high schools and enterprises through the life-long learning perspective and therefore contributes to the sustainable development of qualified workforce. Providing the vocational training and education system with the capability to respond to the requirements of sector-specific employment market on a high-level and contributing to enterprises on an ever-increasing competition environment within the sector is among the main objectives of the project. In addition to this, enterprises provide support and assistance to vocational education and training through various activities and opportunity to reinforce and consolidate the theoretical knowledge with practical practices and applications is offered to the students. The main objective of the project is to reinforce and consolidate the reciprocative benefits, namely win-win practice between the schools and enterprises.

The Project is realized by means of a partnership established between the providers of vocational training and education of Turkey, Germany and Spain and the national and international enterprises towards enhancing the international cooperations. The Project is realized under the partnership of Ministry of National Education Directorate General for Vocational and Technical Education (Turkey), MESS Training Foundation (Turkey), DEKRA Akademie (Germany), FLM Fundacion Laboral del Metal (Spain) and the strategic partnership with the Turkish Employers Association of Metal Industries. 6 quality reports were drawn up during the Project, in accordance with the principles of quality by Hanna Schrankel, senior consultant for European Union Education Projects and the feedbacks received as a result of the report were evaluated and benefited as a tool for the accomplishment of the final objective of the project.

SMART COMET is consisting of two main components; first one is the competence management model and the competence development platform (IT Tool) as the output of this component and the second one is to develop the school-enterprise cooperation and proposal of the school-enterprise cooperation model. Within the process of establishment of the project outputs of these two components, five study visits were performed covering three countries for the purpose of making observations and exchanging views and opinions. The study visits were performed by delegations consisting of directors from various vocational and technical training and education institutions, relevant technical specialists of metal sector enterprises, representatives of human resources, public sector

representatives and representatives of project partners. Opinions and views were received from the instructors of vocational high school in the focus group meeting held in Sakarya. In the assessments performed, in addition to the reports on the site visits of the working visit participants, a working report was drawn up by the literature reviews, enterprise visits, focus group meetings and the data obtained from the analysis studies. The report was further revised and finalized by the evaluations of the Ministry of National Education, observations of the project partners, current European Union regulations and practices, endeavors of technical specialists and substantial contributions of the human resources specialists. As a result of this, an innovative competence management model supporting the sustainable vocational development and addressing to the entire sector and the industries of 3 participant countries is established and a competence development platform (IT Tool) is accomplished to support this model.

### **During the establishment of the competence management model, supporting the learning and development of the individuals was aimed to be ensured on each step of Continuous Vocational Education and Training (CVET).**

In the context of the Project, as a part of the life-long learning, the stages of CVET journey are defined as the Vocational Education and Training (VET), Job Orientation, Onboarding, Specialization and enterprises own needs. ECVET (European Credit System for Vocational Education and Training) tools are benefited to the greatest extent for the establishment of the model predicated the specialization journey of an individual starting from the school education and as of the first day in the enterprise. By means of the competence development platform established (IT Tool), the enterprises are ensured to have the opportunity and chance to measure the competency levels of the employees, monitoring the development and training thereof and development planning accordingly.

The Machine Maintenance Operator National Competency (Level 3), prepared by the project coordinator MESS within the scope of the European Qualifications Framework and Turkey Qualifications Framework in 2015 within the scope of the Vocational Qualifications Authority, revised in 2018 within the framework of the requirements of current requirements and Smart-Comet projections made by Project, recognized and accepted by the entire sector and the relevant stakeholders (vocational education and training institutions, enterprises, Non-Governmental Organizations and Trade Associations) is selected as the focal aspect of the pilot application by the project team and the enterprises due to its importance in terms of Industry 4.0 transforma-

tion and the pioneer and leading role in the metal industry. Application of the model on site and development of the model by the feedbacks of the relevant specialists in the enterprises are ensured through the pilot application. Within the scope of this application, the machine Maintenance Operator National Competence (Level 3) competencies were evaluated as theoretically and practically with 8 fieldworkers performing this job within various MESS member enterprises such as Türk Traktör and Farming Machines, Arçelik Çayirova Washing Machine Enterprise, Ford Automotive Industry, İçdaş Steel Energy Shipyard and Transport Industry pilot machine was designed for the realization of practical applications and thus, performance of assessment was ensured without interrupting the manufacturing flow and the duration of the application was substantially curtailed. Technical expert opinions were received and the prototype machine developed was made compact and played a significant role for the assessment of the practical competencies during the application. Thus, the evaluation of the development areas of the employees was attained without the time pressure. The prototype machine designed was observed on site and the final technical developments were performed accordingly. The machine with the technical drawings drawn was rendered to be reproducible for a similar application in case of any requirement. Although the profession of Machine Maintenance Operator was taken as basis within the Project, similar endeavors can be performed for different professions and the practical applications can be realized in training workshops just like in this project.

The second output of the project is the contribution for the reinforcement of the cooperation between school and the enterprise. For the purpose of ensuring qualified workforce for the metal sector; protocols for sector-school-enterprise cooperation were concluded as a result of the endeavors realized by MESS and Ministry of Education Directorate General for Vocational and Technical Education (MTEGM) and executed by MESS Training Foundation (MEV). The representatives of schools and enterprises participating in the protocol have participated in the working visits by the assistance and endeavors of the Ministry of Education Directorate General for Vocational and Technical Education and seized the opportunity to review and analyze the school-enterprise cooperation practices in different countries and compare the current practices with the practices in the European Union member states. The participants had also the opportunity and chance to review and examine the regulations and legislation of the vocational and technical training and education in such countries on the scale of regional, national and European Union. The participants of the visits had substantial knowledge and information regarding the school-enterprise cooperation practices in the project partner countries Turkey, Germany and Spain as a result of the endeavors performed. In these countries, school-enterprise questionnaires and surveys were conducted and completed upon the assessments of 75 instructors and students from 17 vocational and technical training and educational institutions in 9 provinces in Turkey. In consideration of the questionnaires and surveys conducted by the project partner countries, an exhaustive report was drawn up regarding the different country examples and the applications of ECVET tools. In the report drawn up, the cooperation practices in Spain reveal similarities with the practices in Turkey and it was identified and determined that the dual education model practiced in Germany is widely recognized, internalized and absorbed by the stakeholders to a greater extent. The long-term influence of this output

of the Project within the metal sector that can constitute a good practice for other sectors shall be ensured by increasing and enhancing the employability of the qualified workforce. The Project shall constitute a reference point for the future endeavors to be performed with respect to the development of qualified workforce on that sense.

**In conclusion, a substantial step was taken with the SMART COMET Project for the establishment of qualified workforce for the current requirements of the metal industry and development of the vocational training and education training by the entire stakeholders.**

The competence development model that is the initial output of the project is consisting of steps that can contribute to the progress and advancement of the individual from the moment of the first step into the vocational training and education towards the specialization in the relevant area. The endeavors performed within the scope of the school-enterprise cooperation protocols were assessed together with the examples of the European Union member states and reported to reveal a model convenient for the requirements of the sector.

Sustainability of the Project should be feasible and attainable by the continuation of the cooperation between the schools and the enterprises by the relevant regulations and encouragement of the policy makers and performance of monitoring and developing of the competencies and qualifications of the employees in professional life on a regular basis. Accordingly, the investments to be made on the students and the employees should contribute to the industry and therefore to the countries. By means of the Project, contribution is ensured with the steps taken with regard to the school-enterprise cooperation for the metal industry to have access to qualified workforce and a standard approach is revealed by the model established with respect to the competence development for the entire metal industry.

This project that lasted for 30 months and completed in April 2019 upon accomplishment of successful outputs that may be extended on sectoral basis and adopted to various sectors was supported and funded by the Turkish National Agency within the scope of the chapter of European Union Erasmus + Program Key Action 2 (KA2) Strategic Partnerships and realized by the valuable and noteworthy supports and contributions of the institutions such as European Commission, Turkish Employer's Association of Metal Industries, Ministry of National Education Directorate General for Vocational and Technical Education, MESS Training Foundation and DEKRA Akademie, Fundacion Laboral del Metal.





# STRUCTURAL METHOD (SMART COMET) PROJECT FOR COMPETENCE MANAGEMENT IN METAL INDUSTRY



## ABOUT SMART COMET

SMART COMET project ensuring the establishment of a cooperation model between the schools and enterprises including the competence management (COMET) approach for the metal industry and widening thereof on pilot basis and the establishment of a bridge between the vocational education and training institutions and the industry. The project is accomplished by aiming to establish the framework allowing the employees of the metal industry enterprises to achieve better results towards the business strategies by managing their competencies more effectively as a model by addressing the experiences of the member States of the European Union.

**PROJECT TIME PERIOD:**  
12.12.2016 – 5.04.2019

**PROJECT BUDGET**  
225.640 Euro

**TOTAL WORK DAYS:**  
700 working days



## THE ENTERPRISES NEED TO HAVE COMPETENT LABOR FORCES TO BE GLOBALLY COMPETITIVE AND SUCCESSFUL.

The enterprises need to have competent labor forces to be globally competitive and successful. Increase in quality of vocational and technical education and therefore development of the competence of the employees play an important role in leadership of enterprises in global competition. The competencies of the hourly employees underlie an efficient production setting.

There are tools both at international and national levels that are designed to develop competencies and qualifications. However, most small and medium scale enterprises lack the necessary capabilities to implement those tools in a strategic approach towards managing the competencies of their workforce. In this context, this project aimed at developing new tools to develop, pilot and implement an innovative competence model for metal (COMET) sector enterprises and schools and provide its sustainability by addressing European best practices.

**The aim of this project is to address European best practices in the frame of school and enterprise cooperation model and in this context, to develop, pilot and implement an innovative competence management system. The overall results obtained by this project are:**

A pilot basis for school and enterprise cooperation system for the metal sector companies using a competence management (COMET) approach is developed and piloted,

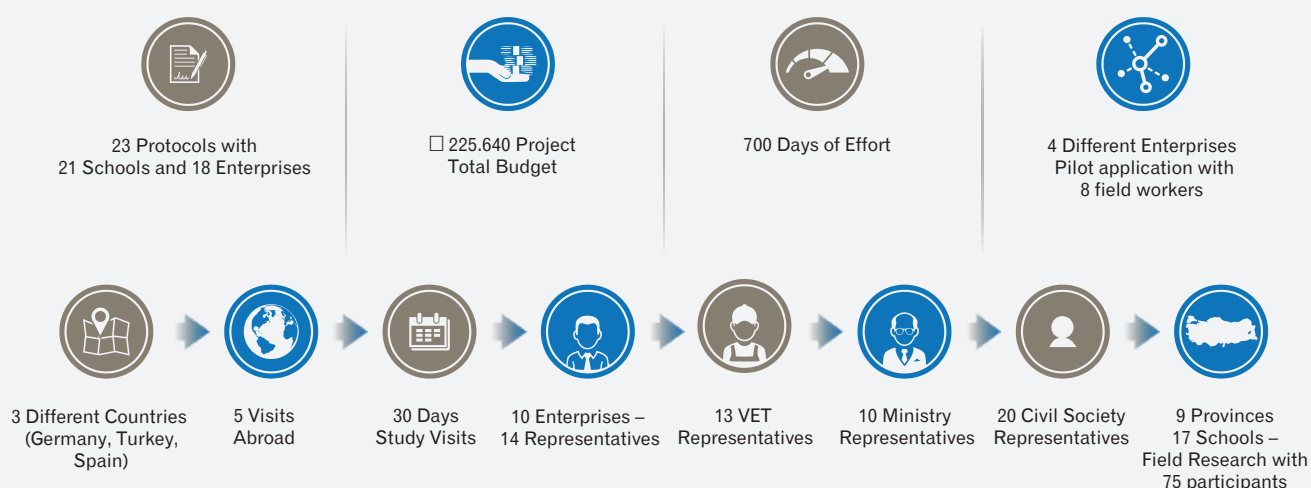
A model is created for metal enterprises to better manage their workforce through learning outcome-based competence management,

Enterprise and school capacity models are reviewed to analyze and manage and predict human resource challenges in order to be able to manage the need for competence better with a strategic approach,

A new competence model is created and school enterprise cooperation is addressed by analyzing school enterprise models of three countries that are project partners. Schools' participation in the cooperation model to better adapt themselves to evolving labor market needs by working closer to metal enterprises is piloted.

## As a result of transnational study visits and exchange of knowledge, an international competence management model is created.

Many enterprises in metal sector have competence management models which they created in line with the needs use efficiently. Within the scope of this project, the national and efficient competence management models and best practices of the member countries of European Union were reviewed. A new competence management model was created by looking at it from different perspectives and utilizing different specialities.



## PROJECT PARTNERS

### PROJECT COORDINATOR

MESS: İSTANBUL / TURKEY

MESS TRAINING FOUNDATION : İSTANBUL / TURKEY

MINISTRY OF NATIONAL EDUCATION DIRECTORATE  
GENERAL FOR VET / TURKEY

DEKRA AKADEMIE GMBH: STUTTGART / GERMANY

FUNDACIÓN LABORAL DEL METAL: SANTANDER / SPAIN





## TURKISH EMPLOYERS' ASSOCIATION OF METAL INDUSTRIES

Project Coordinator:



**Turkish Employers' Association of Metal Industries (MESS) which is the representative of the organizations and the first employers' association in Turkish metal sector was founded in Istanbul in October 14, 1959.**

MESS covers more than 200-member enterprises and is active in the metal sector such as; automotive, electronics, metal products, electrical machinery, iron and steel etc.

The main objectives of MESS which directs the work life and industrial relationships are to perpetuate and generalize work peace and tranquility according to the common benefits of the member employers and employees who work at the member enterprises, support economy and industry of our country, serve with a trust- and dialog-based approach. MESS has more than 200 members including leader enterprises that operate in Automotive key industry, automotive sub industry, iron and steel, white goods and other metal sectors. MESS contributes business world with its 38 shareholders and it represents the industry in 7 organizations (CEEMET, ILO, BUSINESSEUROPE, B20, OIE, OECD, ILERA) abroad.



## MESS TRAINING FOUNDATION

Project Partner:



**MESS Training Foundation has been founded under the leadership of MESS (Turkish Employers' Association of Metal Industries) to carry out educational studies in order to cover the well-educated and qualified employees in our country.**

Through the years, the Foundation has expanded its organizational goals to not only technical training, but also contributed to the education of a number of employees, managers, and teachers from different field of specializations.



## MINISTRY OF NATIONAL EDUCATION DIRECTORATE GENERAL FOR VET (MONE DG VET):

Project Partner:



**The education and training system in Turkey includes two main dimensions: theoretical (school training) and practical (in-company training). Vocational education policies and activities are mostly carried out by the MoNE DG VET.**

There are more than 3700 vocational and technical high schools affiliated to DG VET. Its mission is to meet the labor demands of economic and social sectors through vocational education, to train labor force who hold vocational qualifications in accordance with international standards, to develop and implement policies, strategies that will make the vocation valuable and provide everyone a profession.

Its vision is to be a leading institution established its quality values, raising creative, innovative, entrepreneurial and productive skilled labor force in its schools who add value to the economic growth, recognized by national and international vocational qualifications in cooperation with the economic and social sectors.



## DEKRA AKADEMIE GMBH

Project Partner:



**DEKRA Akademie, together with its affiliate, DEKRA Qualification, is one of the leading educational providers in Germany and boasts more than 30 years of experience in vocational and further education.**

In more than 100 permanent locations, DEKRA Akademie offers a wide range of products and services, including day seminars as well as tailor-made long-term training concepts. Eight decentralized competence centers are in charge of developing and maintaining various product lines: logistics, craft and industry, commerce, IT and media. The DEKRA Akademie was involved in the development of the German system of advanced IT-training system (APO-IT) from the very beginning and is a member of the CEN ICT Skills Workshop. There are strong connections to the affiliate DEKRA Certification, one of the leading certification companies in Germany.



## FUNDACIÓN LABORAL DEL METAL

Project Partner:



### **The Fundación Laboral del Metal is a non-profit organization oriented to provide services for the Metal Industry in Cantabria region, Spain.**

It was created in March 2004 by the most important regional Labor and Trade Unions – Federación Minerometalúrgica De Cc.Oo., Mca-Ugt Cantabria and Pymetal Cantabria, which together offer continuous training and employment solutions to 20,000 workers and 3,000 companies in the region. Annually the Foundation delivers professional training and updates technical skills to more than 1,200 workers.

The Foundation designs and implements integrated projects with private and public institutions on new technologies and methodologies related to qualifications, training and competencies development as well as in social realms as social & labor integration of vulnerable groups. The organization has implemented a variety of EU projects in the last 10 years in all these areas. Currently Fundación Laboral del Metal is comprised by a team of 10 employees, 30 teachers and 1,200 students/year.







## PROJECT CONTENT

SMART COMET project includes two components. C1 is to establish a competence management model and its competence development platform, C2 is to prepare a school and enterprise cooperation report that compares different practices from different countries. Participants' observations in Germany, Spain and Turkey were reported. In addition to the report of the participants of working visit literature search, project partners' feedbacks, current EU practices were taken into account. Directors of different vocational and technical education schools, technical specialists of the enterprises and human resource specialists, public representatives and representative of project partners were included in these working visits.



## PROJECT METHODOLOGY

The first phase of the project was concluded by the selection of the partners to be involved in the field researches and with the literature reviews. In this phase, EU practices were reviewed, these reviews were reflected on the analysis reports with the feedbacks received from the project partners.

Within the scope of the field visits; a total of 5 transnational trips in Germany, Spain and Turkey were realized and a working visit of 30 days was performed accordingly. The emphasize of the visits in Germany was the German model of dual vocational training system, while the competencies required by the employees regarding adaptation to Industry 4.0 practices and certain innovations initiated to be implemented in the enterprises were observed. As for the visits to Spain; the competency management models of the enterprises and certain innovative practices were reviewed, especially the participants visiting the Basque Region (Pais Vasco) reported the models and practices that started to be implemented there. The most different model was Tknika Center for Research and Applied Innovation that was established by Spain Basque Region Government Undersecretariat of Vocational and Technical Education. Participants could find an opportunity to review a public institution Tknika, an organization which coordinates all public and private vocational and technical schools in innovation projects and is in contact with universities, enterprises and technology centers. In Turkey, participants visited manufacturing area of the innovative companies such as Arçelik Çayirova Washing Machine Enterprise, Bosch Industry and Ford Automotive Industry. They could see the works that were done to provide school-enterprise cooperation. The participants reported all the models and applications they saw.

## STUDY VISITS



**14**

REPRESENTATIVES FROM

**10**

ENTERPRISES

**13**

DIRECTORS OF VOCATIONAL AND  
TECHNICAL ANATOLIAN HIGH SCHOOLS,

**20**

REPRESENTATIVES OF CIVIL SOCIETY  
WERE PARTICIPATED IN THE VISITS.

Literature Reviews

Analyses Reports

EU Practices

Field Researches

Member Enterprise Visits

Feedbacks of the Project Partners

Focus Group Meetings

## EVALUATION OF WORKING VISIT PARTICIPANTS ACCORDING TO THE PROJECT QUALITY REPORTING:

### Project Partner

- Participation of the shareholders such as public sector, private sector, civil society provided different perspectives.
- Dual education application of different enterprises was reviewed.
- Vocational and technical education practices starter to be generalized.
- Enterprises specialized in different fields shared their experiences.
- Cultural exchange of participants during activities was highly impressive.



Bosch Factory, Bursa, Turkey



Fraunhofer Future Laboratory, Stuttgart, Germany



Tknika Research and Inovation Center, Basque Region, Spain





Lapp Cable Corporation apprentice training center



Focus Group Meeting, Sakarya, Turkey

## PROJECT OUTPUTS

### COMPETENCE MANAGEMENT METHODOLOGY AND SOFTWARE (COMPETENCE DEVELOPMENT PLATFORM)

**In the scope of competence management model appealing to the metal industry as a whole, a pilot application is introduced to be implemented in an operational and occupational basis.**

As a result of this application, feasibility of the model and development areas related to the implementation of the model in the field have been determined. 10UY0002-3 National Qualification of Mechanical Maintenance Operator (Level 3) developed by MESS with the participation of all related stakeholders (vocational education and training institutions, enterprises, NGOs and occupational chambers, etc.) has been chosen for the pilot implementation by project team and enterprises due to its significant role in Industry 4.0 transformation and for metal industry. The model application was developed by the project team, Human Resource experts of the enterprises and machine maintenance operators and it contains two parts; theoretical and practical. Prototype machine and manual that was prepared by the technicians in the project team applied to two Mechanical Maintenance Operators in four enterprises in their own premises Türk Traktör ve Farming Machines, Arçelik Çayirova Washing Machine Enterprise, Ford Automotive Industry, İçdaş Steel Energy Shipyard Transport Industry.



Pilot Application, Ford Automotive Industry



Pilot Application, Türk Traktör and Farming Machines



Pilot Application, İçdaş Steel Energy Shipyard Transport Industry



Pilot Application, Arçelik Çayırova Washing Machine Enterprise

## PROTOTYPE MACHINE WAS DESIGNED TO PERFORM PRACTICAL APPLICATION BY TECHNICAL SPECIALISTS.

Thus, during application production line was not used and time was saved. Technical competencies was measured rapidly and accurately with compact structure of the prototype machine. Technical drawings that will be used in new and similar application were completed and prototype machine became easily producible.

### THEORETICAL APPLICATION:

- A1 Occupational Health and Safety, Environment and Quality Qualification Unit: 20 applications
- B1 Preventive Maintenance Qualification Unit: 25 applications
- B2 Corrective Maintenance Qualification Unit: 20 applications

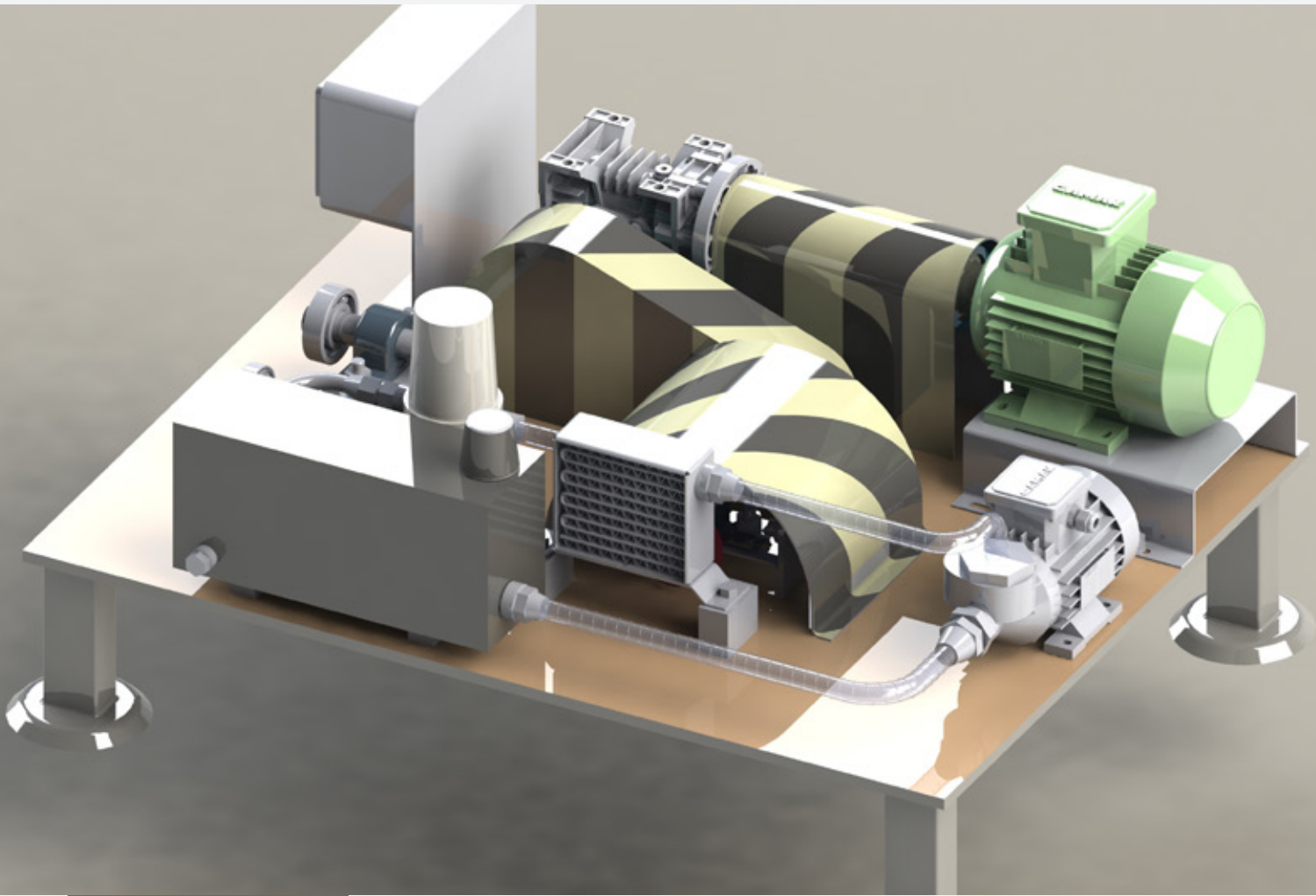
### PRACTICAL APPLICATION:

#### **The performance-based application involved B1 and B2 units.**

Observations and findings from the focus group study after the application are summarized as follows:

- Participants had difficulties in recognition of the existing visual and directory signs in their work field.
- Statements regarding the purpose and types of machine maintenance; preventive, corrective and improvement maintenance were not clearly understood by the participants.
- The lack of environmental awareness in terms of the use and disposition of consumable materials has been observed.
- Participants began to implement work orders without understanding the parts and principles of the pilot machine and examining the technical drawings in the Machine Catalog that are designed to guide them through the process.
- There is a lack of knowledge on the oils used in the machines and the intended use of oil.
- Participants had troubles with the use of measuring tools and did not follow proper procedures according to control steps when removing and installing parts.
- Even though participants were quite successful to implement work orders, they had difficulties to document the work on a previously prepared template and they needed support.

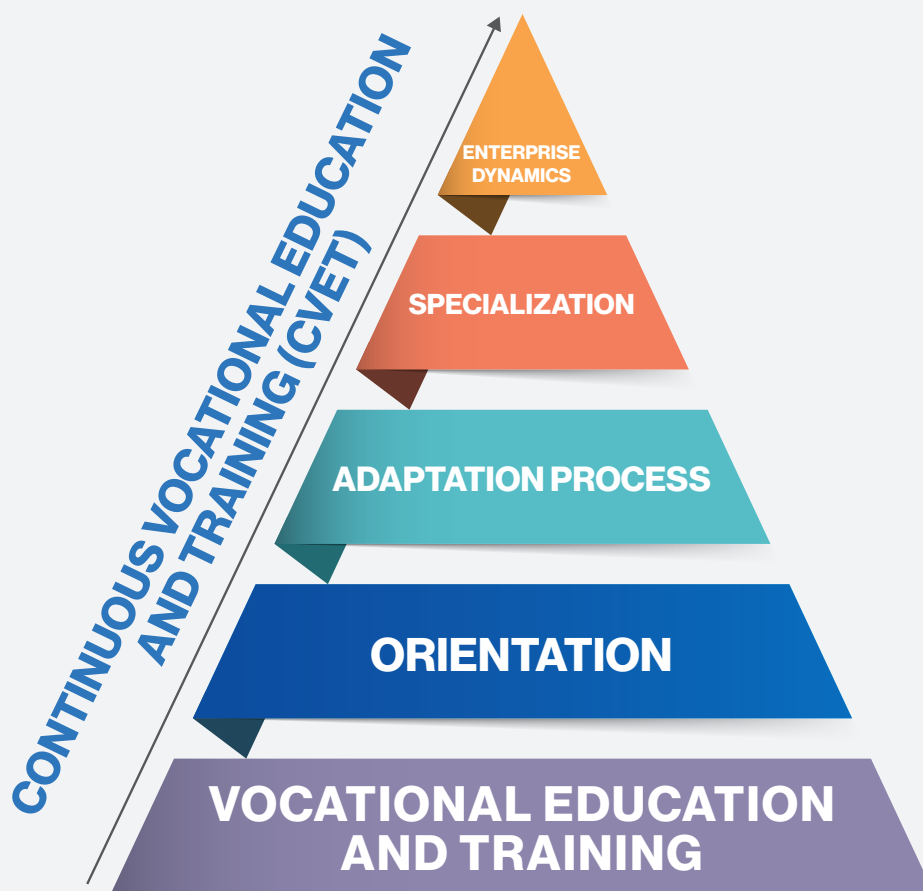




Pilot Machine used in application

## COMPETENCE MANAGEMENT MODEL:

As a result of all these observations and studies, a new model was created, and the model can be considered as the basis of a model applicable in metal industry in Turkey and European Union. Continuing vocational education and training (CVET), aims at helping individuals to improve or update their knowledge and/or skills; acquire new skills for a career move or retraining; continue their personal or professional development' In that sense, continuing vocational education and training (CVET) is basically a part of life-long learning oriented towards professional development.



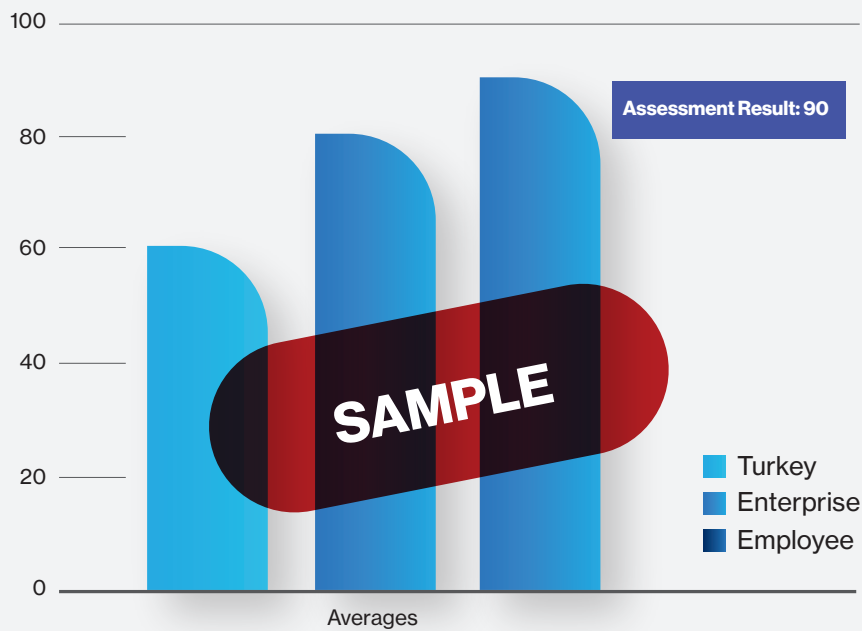
## COMPETENCE DEVELOPMENT MODEL

Another project output is competence development platform. Enterprises will be able to identify and record the developmental areas of the workers whose technical competencies are measured within the framework of the competency model so that they will have the chance to compare the theoretical and practical competencies of the newly recruited workers by measuring their competencies. The competence development platform will be used to standardize the competence management processes implemented among different enterprises operating in the metal industry. Enterprises will use the system to track the development of their workers' competencies and competency-based training. In this way, the organizations operating in the metal industry will have the opportunity to support the worker's competencies and support them through the necessary trainings on the areas of



development. With this tool, businesses will have the opportunity to support the development areas of their employees with relevant trainings. The enterprises will have the chance to compare theoretical and practical competencies of the newly recruited workers by measuring their competencies.

### Evaluation of Competencies



#### Create Employee Card

<b>Name</b> Name	<b>Surname</b> Surname	<b>Gender</b> Select...
<b>Email</b> Email	<b>BirthDate</b> BirthDate	<b>Start Date</b> Start Date
<b>Education State</b> Education State	<b>Position</b> Position	<b>Position Experience(Year)</b> Position Experience(Year)
<b>Job</b> Select...	<b>Total Experience(Year)</b> Total Experience(Year)	
<b>Manager Comment</b> Manager Comment		

**Save**





Competence Development Journey

 **MIES**  
TURKISH EMPLOYERS  
ASSOCIATION OF  
METAL INDUSTRIES

## SCHOOL-ENTERPRISE COOPERATION MODEL REPORT

Vocational education and training is vital for a country's sustainable development. A cooperation model is a must for different stakeholders of VET; students, schools, school administrators, teachers and enterprises in the sector. A sustainable system is also a must for the further assessment of competencies of the employees. The project aims at composing a comprehensive solution model for these problems by bringing together different partners from Turkey and two other country examples of EU member states; thus, an applicable model that includes experiences of different enterprises was established. The purpose of the school-enterprise cooperation model is to assist the establishment of sustainable and structured collaborations between schools, enterprises and the sector. In addition, it was stated that vocational and technical education strengthens the efficiency, performance, competitiveness, research and innovation capacity of enterprises and thus, it is of great benefit for all the stakeholders to internalize a full-fledged competence management system starting from high school level and continuing through continuing vocational education and training (CVET) practices.

Representatives of the enterprises from Turkey reported some important points which they observed in Spain and Germany:

In Spain, the number of VET students is relatively low in the region. Accordingly the number of students per teacher is much less. Short- and medium-term employment targets of the enterprises which are included in dual vocational education system are stable. They are included in the system with as many students as they are able to employ and guarantee the employment of students when the program is over. Financial support from national government for vocational education in Spain is high. Enterprises in Spain are benefitting from VET students in Research

and Development since they are more capable of thinking out of profit-oriented production which make them capable of having more innovative ideas.

In Germany, the most important difference is the comprehensive support of the non-governmental organizations for school-enterprise cooperation. The Chamber of Commerce and Industry, as an authority that signs the agreement between students and enterprises has a significant role. The cooperation with school - enterprise has the advantages of monthly payments for apprentices (wages, social insurance). Occupational chambers are included in a team that perform assessment tests and in a thesis jury. The trainers should participate in courses performed by state universities every 5 years in order to be able to update their qualifications. These are the most important factors that show the success of Germany model.



## PROJECT EFFECT AND SUSTAINABILITY

For the metal sector industry: widening use of competence management systems based on learning outcomes of ECVET, good quality of methods, provision of suitable skills and competence of their staff – enhancing employability of the workforce in these sectors will be the long-term effect of this project and will provide its sustainability.

Workers' employability will be ensured by access to training programs, recognition of life-long learning and mobility through continuing vocational education and training (CVET). The national VET and qualifications systems in the countries involved will benefit from the project

as it supports their ongoing preparation for the implementation of ECVET.

The project contributes to providing more flexibility and better adaptation of qualifications to the needs of the metal sector and links between the two learning places – schools and companies – will be improved; initial vocational education and training will be more effective this way. Reforms towards more flexibility of initial vocational education and training will further be accelerated.



## NOTES



# SMART COMET

EDUCATION | COMPETENCIES | INDUSTRY



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Erasmus+ Programme  
of the European Union

