

Standardization of school subjects for Ventilation Engineers

LLP-LdV/TOI/2007/SE/1586

<http://www.adam-europe.eu/adam/project/view.htm?prj=4255>

Project Information

Title: Standardization of school subjects for Ventilation Engineers
Project Number: LLP-LdV/TOI/2007/SE/1586
Year: 2007
Project Type: Transfer of Innovation
Status: running
Country: SE-Sweden
Marketing Text: Training must be one of the foundation stones in EU's harmonizing work. Through training a common set of rules and regulations and standards can be implemented, thereby creating a common market.
Harmonized training provides the possibility of increased movement for training and work. Ventilation is a large labour market in the whole of Europe and we see great possibilities to create a better functioning common market within this field.

Summary: Background

The ventilation market has grown substantially and the technical development is rapid. Within the whole of Europe, especially within the participating countries and several of the candidate countries, there is significant new building under construction. Partly due to a lot of housing construction but above all due to a lot of construction of commercial and public premises; shopping centres, hospitals, schools, etc. In certain countries there is also extensive renovation and reconstruction going on, especially in the new EU countries. In Sweden alone approx. 35 000 flats are planned during 2007, to a value of approx. 80 billion SEK and commercial premises to a value of approx. 90 billion SEK. Construction has changed substantially. The distribution of costs between the different parts of construction (ground and foundation work cost, construction costs, installation costs etc) is now very different from 20 - 25 years ago. In commercial premises the costs for installations (building services installations, ventilation etc) account for more, sometimes a lot more than, 50 % of the total cost of construction as opposed to 25 % previously. Ventilation accounts for a considerable part of the installation costs, mainly in commercial premises but also in modern flats. The lack of labour is significant. According to statistics from the trade organization "Svensk Ventilati-on", a few hundred trained ventilation technicians are needed in Sweden alone. The average age within the profession is over 50. During the sixties and seventies the large ventilation companies were usually responsible for training in Sweden. The large restructuring of the trade has led to this training being altogether terminated. The only current vocational training is a "KY" training course at IUC (The training centre for installation engineers) in Katrineholm. In Latvia there is an elementary training course for ventilation technicians. In Poland and Lithuania there is a certain amount of internal ventilation training in large companies. This training can also be described as elementary. In Poland work is ongoing preparing the education administration for a new training in ventilation technology. We would like to claim that many, perhaps the majority of the workers within the ventilation trade, have a great need for further training. Some have no training whatsoever. There is no training at upper secondary level for the ventilation trade's manufacturing industry and fitters as well as coherent training material. Among other things this means that the coming generation of skilled workers is limited. The training material must of course be used for this purpose as well. The situation is similar in all of Europe. The EU has, among other things through TC 156 "Ventilation for buildings" drawn up guidelines for a European ventilation standard. The EU also has drawn up a number of energy directives which are of importance to the ventilation technology, among other things "Energy efficiency status and indoor climate status", "Energy-

Project Information

declarations, methods, design and registers". As far as we can tell there are no incentives to implement these directives more than that they have been published in English or in some cases, translated into languages within "the old EU".

A condition for these directives having an effect in the EU and thereby creating a common ventilation market is that they become part of the ventilation training.

Description: The structure of the training material

To be able to use the material for further education and to raise levels of competence working ventilation technicians, it has to be flexible. It has to be easily adapted to different requirements, different environments and different conditions.

Therefore, the structure of the material must be such that the section in question can be omitted in order to shape the course he/she is to give more easily.

Content wise this means that, on the whole, different sections should be able to be gone through on their own and not presuppose that all previous sections have been read.

If a teacher is to give a lesson in fundamental ventilation knowledge he/she should easily be able to use this subject. If the reading of drawings that is needed then only that section is used, etc.

Certificates will be handed out for each specific subject after the training has been passed and completed.

Approximately 30 % of the training material will consist of demonstration and laboratory lessons. Other parts are largely based on illustrations.

The technical form of the teaching media has to be adapted in a similar fashion. We consider printed teaching media with appendices impossible to use. New technology, equipment and materials are developed very quickly within the ventilation trade and to be able to offer updated teaching material we are of the opinion that the teaching media has to be digital, e.g. on CD DVD. This will, to a considerable extent, facilitate the spreading of revised teaching material as well as reducing the costs for production and distribution.

Digital study material also facilitates distance tuition.

As mentioned earlier the technological development within ventilation is very fast. This is mainly applicable to the computerized process engineering technology.

It is easy to continually update a digital teaching media and we see it as a prerequisite for the teaching media to survive for any length of time.

It should be emphasized that the training material can of course be used in ordinary school forms, for professional training, for training unemployed, etc.

Responsibility for the study material

After the project the responsibility for the study material, distribution, updating, etc. should rest on the trade organizations within ventilation and the ordinary education system in each country respectively.

The project management is responsible for the material during a transitional period of 3 years.

Themes: *** Labor market
*** Lifelong learning
*** Vocational guidance

Sectors: *** Professional, Scientific and Technical Activities
** Education

Product Types: transparency and certification
website
material for open learning
teaching material
CD-ROM
description of new occupation profiles

Product information: The project will provide training material for training within the field of ventilation technology such as:

- Implementing the common set of rules and regulations which have been created within the EU.
- Can be used for supplementary training and raising levels of competence within special areas of technology.

Project Information

- Can be used for further training for workers.
- Can be used to cover the significant demand for trained labour.
- Provide a common level of knowledge and thereby a common labour market for ventilation in all of Europe.

Projecthomepage: <http://www.edu-venttech.eu/>

Project Contractor

Name: VentilationsCentrum
City: Enköping
Country/Region: Stockholm
Country: SE-Sweden
Organization Type: association/non-governmental organisation
Homepage: <http://www.ventilationscentrum.se>

Contact Person

Name: Martin Ancons
Address: Ågatan 15
City: Enköping
Country: SE-Sweden
Telephone: +46-(0)171-30706
Fax:
E-mail: martin@envengi.com
Homepage: <http://www.edu-venttech.eu>

Coordinator

Name: VentilationsCentrum
City: Enköping
Country/Region: Stockholm
Country: SE-Sweden
Organization Type: association/non-governmental organisation
Homepage: <http://www.ventilationscentrum.se>

Contact Person

Name: Martin Ancons
Address: Ågatan 15
City: Enköping
Country: SE-Sweden
Telephone: +46-(0)171-30706
Fax:
E-mail: martin@envengi.com
Homepage: <http://www.edu-venttech.eu>

Partner

Partner 1

Name: Zespol Szkol Budowlanych Nr.1

City: Krakow

Country/Region: Malopolskie

Country: PL-Poland

Organization Type: university/Fachhochschule/academy

Homepage: <http://www.zsbnr1.republika.pl>