

Increase Vocational Skills to Face Earthquake Risk Inside of Buildings

517560-LLP-1-2011-1-TR-LEONARDO-LMP

<http://www.adam-europe.eu/adam/project/view.htm?prj=8265>

Project Information

- Title: Increase Vocational Skills to Face Earthquake Risk Inside of Buildings
- Project Number: 517560-LLP-1-2011-1-TR-LEONARDO-LMP
- Year: 2011
- Project Type: Development of Innovation
- Status: completed
- Country: EU-Centralised Projects
- Marketing Text: The project aims to bring new approach to furniture industry via creating an education programme about nonstructural elements inside buildings against the earthquake risks which is a virgin area for furniture workers and manufacturers. The main result of the project will be an e-learning system which will include design techniques of nonstructural elements such as chairs, windows, doors, sofas, tables, wardrobes, kitchens, mattresses for many different uses (e.g. households, schools, offices).
- Summary: The furniture industry is one of the largest manufacturing industries of Europe. The sector needs to have an innovative point in design approach to compete with continuously growing Asian market. The VET programmes have to be improved in parallel with the sector. Currently, VET providers have education programs which are absolutely not covering the sectorial innovation needs and focus on technical issues, not design. Design is considered at university level and as the sector is mainly based on SME's which couldn't employ designers, the design approach is partly disregarded in current situation. Within this project, we would like to create a new job opportunity to the sector representatives which is directly related to human life! The project focuses on prevention of loss of life, property and function of the buildings during earthquakes by producing non-structural elements considering the risks. Neither in on the point of the VET, nor on the point of the seismology science, the non-structural elements have been taken into account in European level. More than 300 thousand people died and 260 million inhabitants are under the risk of the earthquake now in EU. The SISMILE project would like to create an eLearning package about design techniques on prevention of the risks caused by nonstructural elements inside buildings during earthquakes for furniture workers and manufacturers. This eLearning will train the target group members via creating a real-world simulation and showing the effects of the correct or false designed non-structural elements on inhabitants during the disasters. The training content will be multilingual (EN, TR, IT, SP, GR, BU, RO) and national – cultural differences of the partner countries will be involved. The training programme could be used as a part of current informal, non-formal and formal training systems, but at the same time it could be used individually. It will be created by the cooperations of 8 organizations from 7 countries.
- Description: Facing with the contemporary problems of the furniture industry, the education programs also must be contemporary, easily update-able, cost-benefit designed and specified. For covering the weakness of the sector called “personalizing products” also must be considered in education programs. Unfortunately current education programs are mainly based on the technical part of the production. In recent years the design approach in furniture production is continuously being developed but the statistics show that it is not enough to compete with Asia which is the highest growth of furniture apparent consumption. The globalization is changing the structure of labor intensive industries such as the furniture industry. Besides, there is an important subject which has not been considered as a design subject for furniture production until now such as “designing of the nonstructural elements inside the buildings against the risks caused by the earthquakes” which is the most dangerous disaster of the Europe.
- Understanding of size of the possible return of the project result, it is necessary to be perceived the figures in Europe related with earthquake disaster. The history of Europe is full of the earthquake disasters which cost hundred thousands of life and millions Euro of properties. The earthquake risk still continues and it will never end and the population in earthquake area is more than 260 million people now. The

Project Information

project's subject is a cross-border and transnational issue which has not been focused via education programmes until now. Via reaching the aim of the project, the loss' degrees of life, property and sustainability caused by earthquakes will be decreased.

This project will bend over on this subject and via this will kill two birds with one stone. Firstly the furniture industry will have new subject to work on and increase the area of employment and secondly the risks caused by non-structural elements during the earthquakes will be decreased.

Orderly the project results will have cascade objectives;

- 1) The workers and manufacturers in furniture industry will be trained about the application techniques about non-structural elements inside the buildings against earthquake risks
- 2) Trained workers and manufacturers will apply these techniques to the buildings in European earthquake risk area and will get profit from it
- 3) This profit will increase the employability in the furniture industry
- 4) Application of these techniques will decrease the risks and the losses' of life, properties and sustainability.

Themes: *** Open and distance learning
 *** Continuous training
 ** Labor market
 ** Lifelong learning
 * Enterprise, SME

Sectors: *** Education
 ** Manufacturing
 * Other Service Activities

Product Types: open and distance learning
 website

Product information: The output of the project is a tool which could be adapted to the current vocational training programmes in furniture design/production training systems and be used without any special arrangement. Also it could be used out of the formal and informal current education training programmes by the supports of employers, employer associations, trade unions, municipalities, local authorities and other similar organizations. Nature of the product avoids disseminating itself in a wide range crew. Therefore the partnership plans to reach to the stakeholders to provide the involvement of them beyond the life time of the project. This aim will be reached with several approaches;

- Providing the deep involvement of the target group and sector representatives during the project life time
- Setting up good relations with vocational training providers to provide their usage after the project life
- Creating a system which covers the standard training and qualification approaches such as European Qualification Framework
- Creating a system which also covers the expectations caused by the national and cultural differences
- Presentation of the systems to the final benefits and provide them to understand that how could they get benefit, if they use the system
- Reminding the importance of the nonstructural elements risks prevention against earthquakes to the local authorities, politicians and key organizations
- Creation of a certification system which will help to improve the employability and interests of the furniture workers and which will also help the distribution of the product within the current training systems via accrediting by National Ministries or other authorized organizations
- Searching for the silent partners and by taking silent partner to provide a feeling more responsibility to volarize the project result.

Thanks to new information and communication techniques which provides training by eliminating the distance, economic, language and time problems. The eLearning system will be free and open to usage of the target group and it will be disseminated

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on internet thanks to the search engines and links and by other dissemination activities. Within project lots of activities are planned to reach the target group in long term, after the end of the project such as dissemination conferences, web site, published materials, accreditation works, press releases and meetings...

Besides the multilingual side of the project (English, Turkish, Italian, Spanish, Romanian, Greek, and Bulgarian) will help to reach the target group in long term. The targeted countries' languages which are under risk of earthquake will be presented in the project and so the target users could use the system without foreign language knowledge.

Therefore the applicant guarantees to update the content and technique side of the eLearning at minimum 3 years after the project ends according to the temporary developments in the sector.

Projecthomepage: <http://sismileproject.com/>

Project Contractor

Name: Kandilli Observatory and Earthquake Research Institute
City: IST - Istanbul
Country/Region: Istanbul
Country: TR-Turkey
Organization Type: university/Fachhochschule/academy
Homepage: <http://www.boun.edu.tr>

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Partner

Partner 1

Name: PALAZZO SPINELLI PER L'ARTE E IL RESTAURO ASSOCIAZIONE NO PROF
City: Florence
Country/Region: Toscana
Country: IT-Italy
Organization Type: association/non-governmental organisation
Homepage: <http://www.palazzospinelli.org>

Partner 2

Name: European Furniture Manufacturers Federation
City: Brussels
Country/Region: Bruxelles Cap, Brussel Hof
Country: BE-Belgium
Organization Type: association/non-governmental organisation
Homepage: <http://www.ueanet.com>

Partner 3

Name: A.E.P.M.R
City: Sat Varsatura, com. Chiscani, Braila county
Country/Region: Sud Est
Country: RO-Romania
Organization Type: association/non-governmental organisation
Homepage: <http://www.aepmr.ro>

Partner 4

Name: Yamaguchi University Faculty of Engineering
City: Yamaguchi Prefecture
Country/Region: Other region
Country: Other country
Organization Type: university/Fachhochschule/academy
Homepage: <http://www.yamaguchi-u.ac.jp>

Partner

Partner 5

Name: The Institute of Training & Career Guidance (IEKEP)
City: Athens
Country/Region: Attiki
Country: EL-Greece
Organization Type: continuing training institution
Homepage: <http://www.iekep.gr>

Partner 6

Name: AIDIMA Furniture, Wood and Packaging Technology Institute
City: Paterna (Valencia)
Country/Region: Comunidad Valenciana
Country: ES-Spain
Organization Type: association/non-governmental organisation
Homepage: <http://www.aidima.es>

Partner 7

Name: Technical University of Varna
City: Varna
Country/Region: Severoiztochen
Country: BG-Bulgaria
Organization Type: university/Fachhochschule/academy
Homepage: <http://www.tu-varna.bg>

Products

- 1 e-Learning for prevention-earthquake in the house
- 2 Web site
- 3 SISMILE Midterm Report Public Part
- 4 TG, TS and current education systems report
- 5 Analysis of the seismic differences in target countries
- 6 SISMILE Guidebook
- 7 STUDY REPORT "JAPANESE EXPERIENCE"
- 8 Houses and Interiors Report
- 9 SISMILE short film
- 10 Final Report Public Part

Product 'e-Learning for prevention-earthquake in the house'

Title: e-Learning for prevention-earthquake in the house

Product Type: open and distance learning

Marketing Text: The eLearning package is the main output of the project. It is aimed to theoretical informatics mainly based on visual elements. The elearning includes general knowledge about the non-structural elements concerning furniture, the design techniques which are used currently in this subject and necessary changes which must be done in design to prevent the inhabitants from the risks of earthquakes... The eLearning content is supported by some tools such as forum, mailing, glossary, online tutoring, etc. The eLearning package is in 7 languages (Turkish, English, Bulgarian, Romanian, Italian, Greek, Spanish) which help to be widespread itself to the target group as wide as possible.

Description: Within this project, we would like to create a new job opportunity to the sector representatives via developing an eLearning system about design application which is directly related with human life! The project focused on non-structural elements inside the buildings which are designed and realized by the furniture manufacturers. The non-structural elements were considered in risk level. There are three types of risk associated with the earthquake damage of non-structural elements: loss of life or injury to building occupants, loss of property especially in commercial buildings where the cost of non-structural elements may be as high as 75 percent of the total cost of the building, and impairment or loss of function of an important building or lifeline structure, for example, telecom center, which should be functional just after an earthquake. In spite of all these consequences, over the years, design of non-structural elements was overlooked as compared to the design of structural elements because the focus of engineers had been the prevention of structural failure first, and also because the non-structural elements are not permanently attached to the buildings and often added after the construction is complete.

The nonstructural elements subject has not been taken into account as the necessity of the subject either on the point of the furniture industry and furniture training or on the point of the seismology researches until SISMILE project. Since 1900s more than 2 million people has died in earthquakes all around the world; more than 300 thousand of them are from Europe area. It is hard to say how many of them died because of non-structural materials however in some cases, the percentage increased to 50 %. Lots of EU member countries are under the risk of earthquakes now and the population in this risk area is nearly 260 million. Seismic disasters have been proved the deadliest of all European disasters over the past decade, and cost the continent 27 billion € in damage alone. The importance of citizen protection from the risks within EU policies is a high priority. The enlargement of the European Union enhances the importance of earthquake risk mitigation, since the acceding and candidate states are in many cases seismic sensitive countries.

Target group: The workers and manufacturers of the furnishing industry is the target group of the product.

Result: The product helps to increase the knowledge and skills of the workers and manufacturers in furnishing industry about furniture design and applications to avoid the earthquake risks.

Area of application: The product could be used as a part of current formal, non-formal and informal training systems. Besides, it could be used individually by the target group members.

Homepage: <http://www.sismileproject.eu/>

Product Languages: Bulgarian
Turkish
Spanish
Greek
English
Romanian
Italian

Product 'Web site'

Title: Web site

Product Type: website

Marketing Text: The project web site was be created as multilingual (EN, TR, IT, SP, RO, GR, BG) and the links to the partners' web-sites was established. The project have been disseminated in internet environment by search engines. The partnership guarantees three year maintenance of it after the end of project.

Description: The web site of the project had been published just after starting the project. The web site is the most important dissemination element of the project and at the same time a door for entrance to the eLearning system. It is multilingual and it has several different sections. The general information about the project and outputs, information about the partner organization, information about the funding organization, the reports of the analysis and dissemination activities are in the web site.

Target group: Workers and manufacturers of the furnishing industry, teachers, trainers, researchers, general internet users

Result: The web site helped to increase the awareness of the project in the community.

Area of application: Internet

Homepage: <http://sismileproject.com/>

Product Languages: Bulgarian
English
Greek
Italian
Romanian
Spanish
Turkish

Product 'SISMILE Midterm Report Public Part'

Title: SISMILE Midterm Report Public Part

Product Type: others

Marketing Text: The midterm report of the SISMILE project gives general information about the project's objectives, aims, progress, results and activities which were taken within the project.

Description: The Midterm report public part is in English and generally describes the project from all points.

Target group: Furniture Workers and Manufacturers

Result: e-learning tool

Area of application: in the Furniture Sector

Homepage: www.sismileproject.eu

Product Languages: English

product files

2011_5175_PR_ SISMILE_pub.pdf

http://www.adam-europe.eu/prj/8265/prd/4/1/2011_5175_PR_%20SISMILE_pub.pdf
SISMILE Midterm Report Public Part

Product 'TG, TS and current education systems report'

Title: TG, TS and current education systems report

Product Type: procedure for the analysis and prognosis of the vocational training requirement

Marketing Text: This report is aiming to give a general panorama of the furniture sector and the craftsmen of this sector points out the similarities as well as dissimilarities between countries basing on the information provided by the reports of each partner institution in Italy, Turkey, Belgium, Spain, Greek, Bulgaria, Romania.

Description: As a part of the project; two surveys were realized to understand the condition of the vocational training and target group (workers and manufacturer in the furniture sector) and target sector (restoration) in partner countries.

One of them is called "Analysis of target group preferences" which aimed to understand furniture workers/manufacturers social-economic, educational and occupational status and at the same time their preferences about training clearly. This knowledge helped to develop the training content suitable to all aspects of the target group and sector. It is important to know what the general average of the TG in educational, occupational and personal level is and what are the national or cultural differences to create the e-learning suitable their understanding and usage.

The other one which is called "analysis of cultural national differences" aimed to understand the cultural – national differences in current furniture design and production training and sector in partner countries, especially what kind of materials are used in these countries, what kind of application techniques they have, what their traditions in usage of the furniture are etc. Understanding these differences provide to cover all aspects of the countries or nations in the final product.

Additionally the partners decided to do a research about the design habits of the householders in each partner country to understand weak points in designing houses according to the nonstructural elements risks against the earthquake. Each partner prepared a report about it.

The analysis results were reported by each responsible partner and were presented in the second meeting to the partnership. All reports was unified and published on the web site to provide a source to the researches.

Target group: researchers, trainers, teachers, employers, employees in furniture sector

Result:

Area of application: Turkey, Italy, Spain, Belgium, Greece, Bulgaria, Romania

Homepage: <http://sismileproject.com/>

Product Languages: English

product files

ANALYSIS OF THE CULTURAL-NATIONAL DIFFERENCES_LAST.pdf

http://www.adam-europe.eu/prj/8265/prd/5/1/ANALYSIS%20OF%20THE%20CULTURAL-NATIONAL%20DIFFERENCES_LAST.pdf
ANALYSIS OF THE CULTURAL-NATIONAL DIFFERENCES

Product 'Analysis of the seismic differences in target countries'

Title: Analysis of the seismic differences in target countries

Product Type: procedure for the analysis and prognosis of the vocational training requirement

Marketing Text: Analysis of the seismic differences in target countries was realized by P1. This analysis aims to understand seismologic differences of each partner country. What kind of shakes they have, where are their locations, the possible effects of the seismic shakes, what are their densities... To learn the responses of these questions, it is important to provide that the product suits to all kinds of seismic events in partner countries.

Description: This analysis aims to understand seismologic differences of each partner country. What kind of shakes they have, where are their locations, the possible effects of the seismic shakes, what are their densities... To learn the responses of these questions, it is important to provide that the product suits to all kinds of seismic events in partner countries.

Target group: researchers, trainers, teachers, employers, employees in furniture sector

Result:

Area of application: Italy, Turkey, Spain, Belgium, Bulgaria, Romania, Greece

Homepage: <http://sismileproject.com/reports.html>

Product Languages: English

product files

seismic_risk_report_sismile.pdf

http://www.adam-europe.eu/prj/8265/prd/7/1/seismic_risk_report_sismile.pdf
Seismic Risk Report

Product 'SISMILE Guidebook'

Title: SISMILE Guidebook

Product Type: others

Marketing Text: The purpose of the Guidebook is to help us make our house and workplaces safer in case of earthquakes. A huge number of avoidable injuries and deaths, during earthquakes, is caused from nonstructural components. There are three general categories of nonstructural components Architectural Elements (i.e. ceilings, windows, doors etc.), Building Utility Systems (i.e. water, gas, electric, sewerage piping etc.) and Furniture and Contents. If you follow the simple tips of the Guide Book you can minimize the damage from the furniture and the contents of your house or workplace in case of an earthquake.

Description: The purpose of the Guidebook is to help us make our house and workplaces safer in case of earthquakes. A huge number of avoidable injuries and deaths, during earthquakes, is caused from nonstructural components. There are three general categories of nonstructural components Architectural Elements (i.e. ceilings, windows, doors etc.), Building Utility Systems (i.e. water, gas, electric, sewerage piping etc.) and Furniture and Contents. If you follow the simple tips of the Guide Book you can minimize the damage from the furniture and the contents of your house or workplace in case of an earthquake.

Target group: The users of SISMILE eLearning system, the craftsmen in furniture sector, researchers, teachers, tutors, all related groups.

Result:

Area of application: It is in the web site of sismile and it is ready for usage as a hard copy

Homepage: <http://sismileproject.com/>

Product Languages: Greek
Italian
Bulgarian
English
Turkish
Romanian
Spanish

product files

handbooks.rar

<http://www.adam-europe.eu/prj/8265/prd/8/1/handbooks.rar>

Product 'STUDY REPORT “JAPANESE EXPERIENCE”'

Title: STUDY REPORT “JAPANESE EXPERIENCE”

Product Type: procedure for the analysis and prognosis of the vocational training requirement

Marketing Text: The study report aims to clarify how Japan responded against the shaking and also non structural damage in the houses during an earthquake. As a committed in the project; a survey to Japan were carried out to understand the conditions of the the most earthquake prone country in the world in terms of non structural hazard mitigation. We aimed to understand the similar conditions to EU countries, educational needs, background, skills, work and the training expectations of the craftsmen regarding the indoor safety and level of the Japanese partner potential supports. The report aims to give a general view of the Japanese experience and their way of non-structural mitigation in the buildings and also points out the similarities as well as dissimilarities between EU countries and Japan based on the information provided by the reports. The report provides a comprehensive overview of the possible know-how transfer to SISMILE project from Japan experience.

Description: One of the goals of the SISMILE project is to perform an analysis of the training preferences and national differences on applications and seismological resistances of different countries. An e-learning program covering the indoor non-structural mitigation was also developed in the project in the framework of European Quality Standards which the furniture workers and public could easily understand. The study report aims to clarify how Japan responded against the shaking and also non structural damage in the houses during an earthquake. As a committed in the project; a survey to Japan were carried out to understand the conditions of the the most earthquake prone country in the world in terms of non structural hazard mitigation. We aimed to understand the similar conditions to EU countries, educational needs, background, skills, work and the training expectations of the craftsmen regarding the indoor safety and level of the Japanese partner potential supports. The report aims to give a general view of the Japanese experience and their way of non-structural mitigation in the buildings and also points out the similarities as well as dissimilarities between EU countries and Japan based on the information provided by the reports. The report provides a comprehensive overview of the possible know-how transfer to SISMILE project from Japan experience.

Target group: Researchers, teachers, trainers, employers of furniture sector

Result:

Area of application: Japan

Homepage: <http://sismileproject.com/pdf/analysis%20of%20know-how%20of%20the%20third%20country.pdf>

Product Languages: English

product files

analysis of know-how of the third country.pdf

<http://www.adam-europe.eu/prj/8265/prd/9/1/analysis%20of%20know-how%20of%20the%20third%20country.pdf>

Product 'Houses and Interiors Report'

Title: Houses and Interiors Report

Product Type: procedure for the analysis and prognosis of the vocational training requirement

Marketing Text: This study pretends to be an starting point to look for solutions that helps to decrease the damages produced during and earthquake.

Description: All the countries there are lots of different kind of furniture that are used inside homes. This study pretends to be an starting point to look for solutions that helps to decrease the damages produced during and earthquake. Common solutions to apply in the interior furniture of houses, because the general typology and disposal of the furniture inside homes is similar trough the different countries studied.
As indicated at the beginning of this study, the interior of the houses of the different countries participating in the project has evolved in such a way that all the images that show us to have a certain similarity from the point of view of the interior decoration and the furniture and accessories that are used.
We note that depending on the economic status of families there can be a certain difference from the point of view of the level of design in the nonstructural elements, however in all cases we find a wide variety of non-structural elements that can be hazardous at the time of produce an earthquake, and the security systems are lacking in all the cases.
Certainly there has been an evolution of the houses, as well as the evolution of the models of families or styles of interior, however all of them.

Target group: researchers, teachers, trainers, furniture sector

Result:

Area of application: Italy, Spain, Belgium, Bulgaria, Romania, Turkey, Greece

Homepage: <http://sismileproject.com/pdf/DESCRIPTION%20OF%20HOUSES%20AND%20THEIR%20INTERIORS.pdf>

Product Languages: English

product files

DESCRIPTION OF HOUSES AND THEIR INTERIORS.pdf

<http://www.adam-europe.eu/prj/8265/prd/10/1/DESCRIPTION%20OF%20HOUSES%20AND%20THEIR%20INTERIORS.pdf>
DESCRIPTION OF HOUSES AND THEIR INTERIORS

Product 'SISMILE short film'

Title: SISMILE short film

Product Type: Film

Marketing Text: The films aims to give a short introduction about the project besides aims to give an overview about non-structural elements arrangements.

Description: The films aims to give a short introduction about the project besides aims to give an overview about non-structural elements arrangements.

Target group: Employers - employees of furniture sector, teachers, trainers and researchers

Result:

Area of application: Furniture sector

Homepage: <http://sismileproject.eu/>

Product Languages: Turkish

product files

sismile_film_SON.mp4

http://www.adam-europe.eu/prj/8265/prd/11/1/sismile_film_SON.mp4

Product 'Final Report Public Part'

Title: Final Report Public Part

Product Type: others

Marketing Text: This is the final report of the project which gives general information about the project's objectives, aims, progress, results and activities which were taken within the project.

Description: The final report public part is in English and generally describes the project from all points.

Target group: project owners, the people who would like to prepare a project, sector representatives, craftsmen, teachers, trainers, employers

Result:

Area of application:

Homepage:

Product Languages: English

product files

2011_5175_PR_SISMILE_pub.pdf

http://www.adam-europe.eu/prj/8265/prd/12/1/2011_5175_PR_%20SISMILE_pub.pdf
finalreport

Events

Final Seminar

Date 02.10.2013

Description International conference about Seismic Risk in Europe and Non-Structural Risk Mitigation

Target audience Researchers, teachers, trainers, students, furniture designers, interior designers, craftsmen, decoration specialists, furniture sector employers and employees

Public Event is open to the public

Contact Information infor@palazzospinelli.org

Time and place 2.30 pm, Le Murate Piazza delle Murate, Firenze Italy