



LIFELONG LEARNING PROGRAMME

ELEVET

Progress Report

Public Part

Project information

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transparency

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Executive Summary

The ELEVET project is being carried out under “Lifelong Learning Programme” upon an application form submitted to the Education, Audiovisual and Culture Executive Agency, having its seat in Brussels, in 2011 by the project coordinator, i.e. the Association of Polish Electrical Engineers (SEP). The project is supposed to contribute to policies which comply with EU strategies consisting in that profession teaching methods and outcomes are modernized by expanding the set of qualifications and predispositions of young experts who participate in initial vocational training. Competition on the labour market in Europe necessitates the acquisition of new skills and high standards of competences, innovation, and professionalism.

An additional target of the ELEVET project under “Lifelong Learning Programme” includes users listed in section: 1, “Project objectives”. This section also presents objectives of the ELEVET project. The main objective of the project is to unify education and professional qualification acquisition for the group of electricians in EU countries. Therefore, dissemination and exploitation constitute a significant aspect of the project.

In section 2, “Project Approach”, the applied approach and methodology of solving the problem of vocational training of electrical engineers, carried out within a cooperation of six EU countries being partners to the ELEVET project, are presented.

In section 3, “Project Outcomes & Results”, outcomes achieved so far, which can be exploited in order to prepare a unified framework for education of electricians the EU as well as a relevant handbook for trainers, are presented.

The duration of the project is 30 months (i.e. from 1.10.2011 to 31.03.2014) by a consortium of organizations engaged in the concept of vocational training in countries such as Belgium, Denmark, Italy, Poland, Romania, and Spain. A list of the organizations is provided in section 4, “Partnerships”.

In section 5, “Plans for Future”, tasks envisaged during the second half of the project, i.e. in 2013 and Q1 in 2014, are listed.

Contribution of the project in question to EU policies constitutes a separate aspect. This subject is discussed in section 6, “Contribution to EU policies”.

Any applied project solutions are widely reported, among others, by means of project website (www.elevet.sep.com.pl) and Facebook, and in near future by LinkedIn as well.

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1. Project Objectives

Every country which is now a member of the European Union has separate regulations and professional qualification frameworks, separate requirements set for education and confirmation of knowledge of subjects in the group of electricians.

The objective of the ELEVET project under “Lifelong Learning Programme” is to allow for recognition of achievements obtained during education and training in one’s country in other EU countries by unifying the education and qualification acquisition system for electrical engineers in such countries so as to:

- improve mobility among electricians employed in various economy sectors, that is, mainly in power sector, industry and civil engineering; it also applies to young people who are about to start their professional work, employees of short work experience,
- mutual recognition of the learning outcomes (in all EU countries), both acquired in formal and informal training paths,
- improve transparency of the initial VET titles within the ECVET framework,
- improved cooperation among companies, education and social organizations in devising education methods, also in terms of lifelong learning,
- improved links with VET to be more responsive to the labour market needs.

Specific objectives of the project include:

- improved recognition and transparency of professional titles inside the European Credit system for Vocational Education and Training (ECVET),
- improved mobility of electrical professionals,
- mutual recognition of learning outcomes obtained in vocational schools and courses,
- modernization of education paths by taking into account soft skills and knowledge of foreign languages.

The target group of uses of the ELEVET project will include:

- electricians who find themselves now in education as well as schooled electricians at various levels (fitters, technicians, engineers), who want to obtain relevant professional qualifications recognizable in EU countries,
- employees of the sector associated with widely understood electricity, who do not possess official certificates which would confirm the electrician profession, but who gained knowledge and skills in work, or by the completion of specialized courses, etc. and who need professional titles recognizable in Europe.

- teachers and trainers of electricians, both in formal and informal training,
- VET centres, for which a process of reform and harmonization of vocational training programme will be proposed.
- companies which run informal courses for their own employees.
- Ministries competent for vocational training in project partner countries; in Poland it refers to Ministries such as: the Ministry of National Education, the Ministry of Science and Higher Education, the Ministry of Labour and Social Policy, and the Ministry of Economy.

The users will be engaged in the ELEVET project due to the dissemination by means of:

1. ELEVET website and social media such as Facebook, and in the future LinkedIn as well,
2. information on the ELEVET project in various media, in particular technical magazines, connected with the training of electricians,
3. detailed guidelines on training electricians (handbook for trainers) to be prepared in February 2013, i.e. during the next stage of the ELEVET project,
4. information on the ELEVET project during various conferences, seminars and other meetings with manufacturers, training and social organizations;
5. reporting results of works and including the conclusions to be implemented (ministries and subordinate units).
6. reporting conclusions from completed works during meetings associated with the implementation of the National Qualifications Frameworks.

It has to be noted that during task 4 we widely informed about the project in Poland during the following events:

- a) speech for members of parliament, government members and representatives of various organizations in the Sejm of the Republic of Poland on 21 February 2012 on "Experience and good practices in SEP concerning the certification of professional competence",
- b) during a seminar at the main office of the Polish Federation of Engineering Associations (NOT) – a federation of 39 science and technical association gathering abt. 110 000 individual members, on 15 March 2012, a seminar for qualification committees, presentation titled "Ordinance of the Minister of Economy on safe organization of work at electrical equipment" – a leading subject during vocational trainings of electricians in Poland,
- c) during the seminar at the main seat of NOT in May 2012 on the implementation of Leonardo da Vinci in Poland by presenting a paper titled "ELEVET – the most significant tasks taken by SEP as to the education of

electrical engineers”, with participation of Ms. Ute Haller Block as a special guest.

- d) during the seminar at the Warsaw Fairs of Renewable Energy Sources in September 2012, presentation titled: “Education system of electrical professionals in Poland – ELEVET assumptions”,
- e) during the Energy Fairs in Lublin between 13 and 15 November 2012, paper titled “ELEVET and NOBE – significant tasks taken by SEP as to the education of electrical engineers and prevention against accidents due to defective electrical systems in buildings”.

The mentioned above papers were presented by the ELEVET project manager, i.e. Andrzej Boroń.

Similar events were organized in other countries; a detailed list of meetings and papers, conferences, and seminars will be provided in the final report.

Qualifications Framework in Europe

The European Qualifications Framework serves as common European reference framework

which links qualification systems in individual countries. The frameworks function as a transfer instrument due to which qualifications are more transparent and easier to be understood in various countries and systems in Europe. They have two main objectives such as promoting mobility of citizens among countries and making easier for them

to learn in a lifelong manner.

The project participants in the partner countries take active part in works concerning the implementation of the concept of the European Higher Education Area. A wider discussion of this subject, including a report on introducing project conclusions into all countries, will be provided in the final report. The following section includes a few notes on the activities in Poland.

Qualifications Framework in Poland

The National Qualifications Framework constitutes a description of mutual relations between qualifications where such a description integrates various national qualification subsystems. It serves mainly for improved transparency, availability and quality of qualification to be acquired. The framework has been created, among others, for the needs of the labour market and civil society. It is important to notice that the NQF includes a description of a hierarchical system of qualification levels (eight levels); every qualification item is assigned to one of such levels.

Generally speaking, the National Qualifications Framework for higher education consists of a detailed method of describing education as offered by Polish universities to students. This method has two distinctive features. Firstly, descriptions

are provided in the form of learning outcomes, i.e. they present requirements to be met by the student once graduated within a given education cycle. Secondly, the descriptions, by means of a common European system, will allow for comparing certificates obtained at various universities in the entire Europe; various persons participating in the same process may acquire completely different outcomes. Consultation meetings held in Poland with regard to the NQF were attended by employees of the Association of Polish Electrical Engineers: Anna Wójcikowska – head of the Scientific and Technical Dept, Anna Dzieciół – SEP foreign relations, and Lech Dziewierz, head of the Training Dept in the Training and Publishing Centre of SEP.

2. Project Approach

Implementation of the ELEVET project is based on cooperation among the partners taking part in the project. The cooperation is ensured by the following means:

- e-mail (this is the primary way of daily communication) between the office of the ELEVET project coordinator in SEP and experts employed by other partners),
- reporting work results during national and common meetings with all partners
- ELEVET website: www.elevet.sep.com.pl,
- social media, e.g. Facebook.

The methodology of creating a unified vocational education framework and a unified system for conferring professional qualifications under the ELEVET project consist–of the following work stages:

- 1) collecting data and describing systems of education and acquisition of professional qualifications in individual countries,
- 2) preparing a questionnaire aiming mainly at analysis which business and soft competences are the most required by employers to be met by their own and newly hired employees,
- 3) distributing the questionnaire among enterprises among various trades employing electricians, and collecting answers,
- 4) publishing the questionnaire on generally accessible websites,
- 5) direct studies during meeting organized in participation of various groups of employers and HR experts, as well as telephone conversations,
- 6) analysing the questionnaires,
- 7) analysing results of direct conversations,
- 8) organizing national and local focus groups in order to discuss the issue of unifying the education system and acquisition of professional qualifications
- 9) organization of the international focus group in order to discuss common criteria for the VET framework.
- 10) testing an agreed framework of education and acquisition of professional qualifications with the example of selected training courses,
- 11) signing a memorandum of understanding between social, training organizations and state authorities in the matter of practical application of the agreed methodology of education and acquisition of professional qualifications.

The implementation of the project is controlled on a current basis by means of quarterly Quality Assurance Reports submitted to: the Monitoring and the Steering

Committee as necessary documents for the discussion during periodic meetings of the committees.

A method of disseminating project results was described in the introduction to this report.

3. Project Outcomes & Results

There are the following main results of works carried so far under the ELEVET project between 1.10.2011 to 31.12.2012:

- 1) SDE College and SEP prepared brochures informing about the ELEVET project,
- 2) Individual Partners of the ELEVET project described national systems for education and acquisition of professional qualifications. It was a basis for SEP to prepare the following documents:
 - a) “Compendium of best practices” including a description of education and professional qualification acquisition systems in individual countries,
 - b) “Report on existing qualifications and professional titles” being a supplement to the above-mentioned document (item a) with regard to the existing qualifications and professional titles in partner countries,
 - c) “Mapping of national legislation in Poland” concerning VET in which a set of current legal acts and a list of professions for electricians in vocational education were presented along with a set of civil engineering qualifications for electricians,
 - d) “Short report of the accreditation system in Poland” in which objectives, scope and procedures of the Polish Centre for Accreditation (PCA), which accredits other organizations which grant professional qualifications, were presented,
 - e) “Work package 2 Report” with an emphasis put on business requirements to be improved in which the most necessary business skills with reference to various factors associated with work performance, e.g. professional activity, human and equipment safety, health as well as work organization, were presented,
 - f) “Report summarizing the implementation of WP2 in the view of national-level conclusions” in which a suggestion as to the unified minimum requirements for trainings leading to the acquisition of professional qualifications was presented,
 - g) Preparation of three documents:
 - “Report on consultation”
 - “Report of the survey in international companies”,
 - “Global report on completed Work Package WP3”;

The documents presented questionnaire results on the basis of submitted studies carried out by individual partners in their countries .

- h) Preparation of a support document including a concept of a unified vocational education and professional qualification acquisition system in EU countries titled “Preliminary suggestion as to the unification of education systems and acquisition

of professional qualifications by electrical engineers in EU countries under the ELEVET project”.

3) Polish partners carried out the following tasks:

a) questionnaire template for enterprises (the questionnaire was supposed to be prepared by DEHN that withdraw from the ELEVET project, it was taken over by PIGE and SEP); the questionnaire is attached hereto,

b) distribution of the questionnaire among enterprises in Poland and by the partners in other countries, and then collecting and analysing the answers in terms of the most necessary needs as to business and soft skills (responsible: SEP and PIGE),

c) document en entitled “Identification of best practises in Poland as to VET for electrical engineers according to the current academic year 2012/2013), in which, according to the Higher Education Law and the Ordinance of the Minister of National Education on core curriculum, a list of qualifications and professions was discussed with regard to the electrical and electronics sector,

d) “Short report on existing modules and courses” in which, similarly to the above in the document in item c, a list of qualifications and professional titles for the electrical sector were provided, and in addition, a division of the professions into 7 professional groups was presented.

4) Organization of national focus groups with experts along with preparation of relevant reports on such meetings which took place within the period between October and December 2012.

The results of the questionnaire as well as resorts from the meetings of the focus groups were used by CECE (Spain) to prepare the first draft of professional educational framework. Therefore, there is a connection of current results of the ELEVET project with the project objectives.

4. Partnerships

As has been mentioned, now in every country of the European Union there are separate regulations and requirements for employees whose work deals with power and electrical systems. Also in the country, due to the specificity of electrical engineering, including various specializations and specialities (power – generation, power – industry, power – distribution, electricity in industrial plants in civil engineering, electricity in production of electro-technical products, etc.), there are various requirements as to expected qualifications to be possessed by employees.

When selecting partners, criteria such as high quality, various specialities, and organization specialization were applied. Such an approach allowed for complementing one another as well as exchanging experience and views. Due to the participation of experts having the highest qualifications it is possible to use experience and best practices.

Under the ELEVET project, the Project Coordinator, i.e. the Association of Polish Electrical Engineers (SEP), the biggest scientific and technical organization in Poland, has cooperated with the following partners:

- Polish Economic Chamber of Electrotechnics (PIGE, Poland), a self-government organization representing sectors of Polish industry and trade within the scope of the production of cables, electrical equipment, and electrical apparatus – Partner P2,
- Societatea Inginerilor Energeticieni din Romania – a national organization which represents electrical engineers in Romania – SIER (Romania) – Partner P3,
- Consorzio ELIS – a consortium representing secondary vocational schools CONSEL ELIS (Italy) – Partner P4,
- SDE College (Denmark) is one of the largest technical colleges in Denmark; the collage is composed of a vocational school, a secondary school and a university – Partner P6.
- Confederación Española de Centros de Enseñanza (CECE) – a non-profit professional organization of employers and experts – Partner P7 from Spain.
- European Forum of Technical and Vocational Education and Training – EFVET (Belgium) is a European association which acts for promoting VET in Europe – Partner P8.

In addition, there was some cooperation with DEHN (P5) during the first months of the ELEVET project. However, the company withdraw from further cooperation in the project.

Every Partner provided the project with an added value due to their separate and rich experience in terms of training electricians so that they can acquire professional qualifications.

Such experience was used within the cooperation in the following manner:

- 1) PIGE (P2) during consulting and organizing of a local focus group with manufacturers of various electrical equipment and apparatus; the cooperation paid off in that the final version of ELEVET questionnaire was prepared and agreed upon with SEP,
- 2) SIER (P3) for detailed presentation of VET for electrical engineers in Romania, as well as consultation during the final approval of the questionnaire and templates for project quality evaluation (Quality Assurance Plan/Report),
- 3) CONSEL ELIS (P4) for contacts among VET organization and business with regard to the labour market, and additionally, during the organization of one of committee meetings, i.e. Steering Committee and Monitoring Committee on 18 April 2012 in Rome,
- 4) SDE College (P6) for preparing summary materials (based on reports submitted by the partners) for the Steering Committee and the Monitoring Committee. In addition, at a meeting of SEP and SDE College on 24 September 2012 in Warsaw an improved version of Quality Assurance Plan Form was prepared (within 3-month intervals). It is to be noted that SDE College prepared the first version of the form.
- 5) CECE (P7) for preparing the first draft of vocational training framework and guidelines on creating focus groups in individual countries,
- 6) EFVET (P8) for disseminating results of the ELEVET project by means of websites so as to ensure access for wide audience in Europe.

5. Plans for the Future

By the end of the ELEVET project, i.e. from January 2013 to March 2014, the following tasks will be completed:

1. International Focus Group in Warszawa done in January 17-18. 2013
2. Handbook for trainers – February 2013 (responsible: SEP and CECE),
3. Operational testing report – August 2013 (responsible: SDE College),
4. Quality assurance reports (every 3 months) to be submitted in: April, July, and September 2013 as well as in January and April 2014 (it applies to all partners),
5. Half-yearly reports to cover 1.10.2012 – 31.03.2013, 1.04.2013 – 30.09.2013, 1.10.2013 – 31.03.2014 (it applies to all partners),
6. Quarterly reports for Q4 2013 and Q1 2014 (it applies to all partners),
7. Self-assessment questionnaire for the target group – May 2013 (responsible: SEP),
8. Final Quality Report – December 2013 (it applies to all partners),
9. Quality Assurance Plan – February 2013 (originally in October 2012),
10. Creation of user groups on-line, i.e. by means of LinkedIn and Facebook – in accordance to the Road Map – January 2013 (responsible: SDE College),
11. National meetings of focus groups – 80 participants per country – August 2013 (responsible: all partners, SEP and PIGE in Poland),
12. Preparation and arrangement on a memorandum of understanding between authorities of secondary and higher education as well as training centres and social organizations – January 2014 (responsible: SEP),
13. Preparation of a plan concerning proprietary rights of the ELEVET project participants – January 2014 (responsible: SEP),
14. Submitting information for e-newsletter every two months (responsible: SDE College),
15. Final conference – March 2014 (responsible: SEP, in Warsaw).

6. Contribution to EU policies

The presence of barriers in connection with an explicit procedure of mutual recognition of learning outcomes as well as the acquisition of professional qualifications in a widely understood electrical field makes it difficult for employees from this sector to go abroad. This situation applies not only to young mobile employees, but also to qualified experts. Taking into account competition in other parts of Europe and outside its borders, the Union needs high standards of professional qualification, innovation and professionalism.

The ELEVET project is part of such an EU strategy. The strategy “Europe 2020”, and in particular **“Education and Training 2020”** (cfr. COM(2010) 296), highlights a series of priorities that our project addresses:

- 1) The creation of the new transfer framework (WP4) intended to create a joint university-VET learning path (convergence between ECVET points and ECTS serves here as the basis),
- 2) Improved consultation of stakeholders in the design of the system: transfer system with an approach “bottom-up”, that is involving the stakeholders, companies and professionals of the sector, in the identification of the learning outcomes (package 3).
- 3) Validation of informal education.

In addition, the ELEVET project relates to **the Youth on the Move** (COM (2010) 477) where the main target group includes young experts from the electrical sector whose work experience is not longer than 10 years. The project ELEVET has addressed the main objectives of the initiative through the creation of a VET credit transfer in which the competence and experience are acquired in formal and informal environments validated and mutually recognized by the Member States.

Another programme related to by the ELEVET project is **“A new impetus for European cooperation in Vocational Education and Training to support the Europe 2020 strategy”** – Com (2010) 296. It applies to the following objectives of the said programme:

- IVET as an attractive learning option with high relevance to labour market needs,
- Cross-border mobility as an integral part of VET practices,
- Innovation, creativity and entrepreneurship; credits will be granted by the new framework for VET courses, together with business and soft skills,

Europe without borders comes back within the scope of higher education to the best traditions, going back to the time of Copernicus; the value of gaining knowledge in several academic centres has been valued again. Benefits from mobility among students and Ph.D. students have been recognized and analysed in Europe. It has

lead to the creation of **European Qualification Framework (EQF)** in which jointly prepared principles of higher education system organization, accepted with respect to variability of programmes, institutions and education traditions in individual countries, will apply. The European Qualifications Framework **was introduced by the Recommendation of the European Parliament and of the Council of 23 April 2008** for member states to apply the European Qualifications Framework, where a temporary time frame for 2012 is established, according to which all diplomas and certificates should relate to the National Qualifications Framework being compatible with the European framework.

As travelling becomes easier and easier, it practically enables mobile studies for a vast number of students. However, there is a problem for the university which wants to accept a student in assessing in which stage of education the person is. Just a description of the education process is not sufficient for such an assessment. The ELEVET project partners joint discussions during meetings devoted to National Qualifications Frameworks, reporting conclusions resulting from the questionnaires and documents prepared with the intention for the Qualifications Frameworks being created.

It is expected that the Qualifications Framework concerning EQF will allow for:

- comparing learning outcomes at a national as well as international level, and therefore, comparing diplomas
- comprehensive knowledge of competences acquired by the graduates which is available to the public
- easier access to continuation of education under the LLL
- definitions of education standards by comparing graduate competences
- “opening the system” – enabling the acquisition of informal competences, i.e. acquired outside the university, e.g. work experience