THE ASSOCIATION OF POLISH ELECTRICAL ENGINEERS (SEP)

GLOBAL WP3 REPORT

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Warsaw, December 2012

INTRODUCTION

This document is the summary of whole Questionnaire actions among companies, realized in the ELEVET Partners countries.

The main task of this Work Package was receiving of the survey on the base of questionnaires replies. The outcomes of survey which are summarized in this document are results of till now received replies, but still to SEP and to other Partners are transferring the new replies, which will be taking into account later in calculation of the medium results.

The exact outcomes of survey has been done in the document SEP: „***Report on consultation***" (November 2012). Because of this here is description only the most important problems concerning questionnaires replies.

The whole document has been divided into 3 parts:

Part I – General informations about the Questionnaire,
Part II – Summary of replies concerning the business skills for VET path,
Part III – Summary of replies concerning managerial, social and personal soft competences,

Part I - General informations about the Questionnaire

The survey was carried out in Work Package 3. In some ELEVET partners countries the whole process of assembling the replies has been realized as following:

1) SEP (P1) sent Questionnaires to the 137 energy power companies and received replies from 37 companies,
2) PIGE (P2) sent the Questionnaires to the 200 industry production companies and received replies from 40 companies,
3) SIER (P3) sent on line/off line invitations addressed to companies to fulfill the Questionnaire as following:
   a) by e-mail (recipients – more than 1400 are BCC),
   b) more than 300 letters (sent by post mail) for the same purpose and received 101 replies,
4) ELIS Consortium (P4) sent sent the Questionnaires to the 25 companies and received 10 replies,
5) SDE College (P6) sent the Questionnaires to the 161 companies (60 Questionnaires in electronic form) and received 21 replies.

The whole sum of the distributed Questionnaires was 1923 and sum of replies was 209, it means that it was about 11 % of whole sum distributed Questionnaires.

From the questionnaires replies some basic results are as following:

a) the most of companies were the industry production companies,
b) the Questionnaire has been distributed mainly (55 %) to companies where employment is over 200 workers,
c) the main part of the companies were companies cooperating only with the domestic companies and national or EU companies,

The most often problems which the workers met in the past few years are as following:

a) risk of electrical installations up to 1 kV,
b) damages of the internal power systems,
c) power outages,
d) damages of equipment by surges atmospheric,

Another very important results are as following:

a) the greatest possibility increasing the efficiency of electrical energy concern electrical drives,
b) the use of renewable energy sources mostly concern the solar and photovoltaic equipments,
c) the dominant works under tension are works at a voltage of 1 kV,
d) the dominant works are low-voltage electrical installations (construction, maintenance and operation).

Part II – Summary of replies concerning the business skills for VET path

In the Questionnaire has been introduced 7 Tables concerning the business skills, where the respondents answered on the questions for the next basic subjects:

1) The expectation for the competence of employees related to occupational safety and health (Tables 1 – 2),
2) The expectations for the knowledge and competence of employees associated with business activity (Tables 3 – 4),
3) The methods of the new professionals acquisition (additional Table 3d),
4) Expectations about the subject matter of courses related to human safety and equipment, energy security and the management and organization of work (Tables 5 – 7).

From the enclosed in the Questionnaires and mentioned above the Tables arise the following problems:

1) the greatest meaning in the expected range of knowledge (Table 1) concern:
   - basic knowledge related to health and safety,
   - knowledge of rights and obligations of employers concerning the health and safety,
   - knowledge of the rules concerning the maintenance of the electrical equipment in the workplace,
2) the greatest meaning in expected range of skills (Table 2) concern the ability to anticipate threats to health are:
   - ability to anticipate threats to health and associated with the performance of professional tasks,
   - ability to anticipate threats to property and environment associated with the performance of the professional tasks,
   - ability to use of individual and collective protection when performing professional tasks,
3) the greatest meaning in expected range of knowledge (Table 3) associated with business activity are:
   - knowledge of business activity regulations
   - basic knowledge of the labor laws,
   - knowledge of management and quality management as well as national and foreign standarization,
4) the greatest meaning in expected range of skills (Table 4) associated with buisness activity are:
   - ability to develop and implement the panel's work schedule, subject to certain priorities,
   - ability to negotiate and make decisions,
   - ability to independently plan and self-education process to inspire and organize the learning process of others,
   - ability to use office equipment, business corespondence and the application programs that support economic activity,

5) the greatest meaning in the method of acquisition of the new professionals (Table 3d) is as following:
   - additional training of own companies staff on external courses,
6) the greatest expectation about the subject matter of courses relating to safety of people and equipment, energy security and the management and organization of work (Table 5) are:
   - protection against electric shock, fire protection measurements up to 1 kV,
   - safe operation of electrical equipment and installations,
   - the works under voltage up to 1 kV,
7) the greatest expectation about the subject matter of courses relating to energy security (Table 6) are:
   - optimization of energy consumption in areas of priority for the company,
   - optimization of energy, techno-economic indicators,
   - optimization of operating systems, structures, industrial power equipment,
   - automation of of the medium and high voltage grid,
8) the greatest expectation about the subject matter of courses relating to the management and organization of work (Table 7) are:
   - the team building and communication within the group,
   - managing and motivating the team,
   - the efectiveness of the management team.

Part III – Summary of replies concerning managerial, social and personal soft competences

From the Tables 8 – 10 of the Questionnaire the results of the replies according managerial, social and personal soft competences are following:

1) in the case of **managerial** soft competences the graetest meaning are (Table 8):
   - assigning tasks,
   - strategic thinking,
   - planning,
2) in the case of **social** soft competences the greatest meaning are (Table 9):
   - teamwork,
   - sharing knowledge and experiance,
   - communicativeness,
3) in the case of **personal** soft competences the greatest meaning are (Table 10):
   - conscientiousness,
   - aiming of results,
   - readiness to learn.

Above outcomes of the questionnaires survey should be taken into account by preparation of the special Handbook for trainers, but in practice, depend on country some requirements concerning the business and soft competences may be something modified.