



REPORT

**Agenda of the 3rd international meeting:
“Continuous Vocational Training and Innovation in SMEs”
6th - 7th November 2014, Białystok (Poland)**

Wednesday, 5.11.2014

Arrival in Białystok. Hotel Aristo address: Kilińskiego 15, 15-089 Białystok

Thursday, 6.11.2014

- 08:00 – 08:30 *Pick up at the Hotel and transfer to ZDZ Head office*
- 08:30 – 08:45 Welcome and introduction (**Poland - ZDZ**)
- 08:45 – 09:30 Some facts about ZDZ, Podlasie region and Poland (**Poland - ZDZ**)
- 09:30 – 10:00 *Transfer to Białystok University of Technology*
- 10:00 – 12:00 Presentation of Białystok University of Technology - (**Poland**)
- 12:00 – 12:15 *Transfer to ZDZ Training Centre*
- 12:15 – 13:15 *Lunch*
- 13:15 – 14:30 ZDZ role in CVT and Innovation in SMEs (**Poland - ZDZ**)
- 14:30 – 14:45 *Break*
- 14:45 – 16:00 Presentation of Tomas Consulting/ Tomas International/ CPIIR. Innovation and CVT in Poland and in the Podlasie region. (**Poland**)
- 16:00 – 17:30 Białystok evening city tour
- 19:30 *Dinner*

Friday, 7.11.2014

- 08:30 – 09:00 *Pick up at the Hotel and transfer to Białystok Science & Technology Park*
- 09:00 – 11:00 Presentation of Białystok Science & Technology Park (**Poland**)
- 11:00 – 11:15 *Transfer to ZDZ Head office*
- 11:15 – 13:00 Continuous Vocational Training and Innovation in SMEs in partners countries (**Turkey, Germany, Switzerland, Hungary**) – some facts and discussion
- 13:00 – 14:15 *Lunch*
- 14:15 – 15:00 Partners' coordination meeting. Next steps, roles and tasks, project's outcomes and deliverables, project progresses and expectations. Discussion about: project coordination, administrative task. (**Turkey**)
- 15:00 – 15:15 *Break*
- 15:15 – 16:00 Question, discussion and exchange of experiences. Evaluation. (**All partners**)
- 15:45 – 16:00 Closure (**Poland - ZDZ**)

Saturday, 8.11.2014

Departure from Białystok.



INTRODUCTION OF THE MEETING TOPIC: “Continuous Vocational Training and Innovation in SMEs”

VET in Poland (IVET and CVET)

Polish VET system for which the Minister of National Education is responsible is provided at upper secondary and post-secondary non-tertiary levels. VET at higher education level is in the scope of responsibility of the Minister of Science and Higher Education.

1. At upper secondary level, students can gain vocational qualifications in a 3-year basic vocational school or in a 4-year upper secondary technical school.
2. At post-secondary non-tertiary level graduates of general and technical upper secondary schools can gain vocational qualifications in a post-secondary school where learning process does not last longer than 2,5 year.
3. Adult learning and CVET. Existing basic vocational and technical schools for adults since 1st September 2012 are being replaced by more flexible system of VET courses for adults organized mainly by IVET schools, continuing education centres and practical training centres. VET for adults is organised mainly in out-of-school forms, such as:
 - a) vocational qualification courses. Completing a vocational qualification course allows to take an external examination confirming vocational qualification, conducted under the same conditions and according to the same rules as for IVET students.
 - b) occupational skills courses – courses for separate units of learning outcomes specified in a given qualification.
 - c) other courses related to occupations included in the classification of occupations and specialisations meeting labour market needs, including courses conducted in cooperation with labour offices. Apprenticeship for Adults is in the scope of responsibility of the Minister of Labour and Social Policy. The aim of this particular active labour market programme, provided by the Local Labour Offices, is to improve employability of unemployed and job seekers, by helping them to confirm their skills and qualifications formally.

Distinctive features of VET in Poland (both IVET and CVET)

In order to improve the quality and the attractiveness of vocational education and training, specific tools were introduced:

- The classification of occupations in VET - a kind of register in which occupations possible to acquire within IVET and CVET have been defined. Each occupation is made of 1, 2 or 3 qualifications. There are 200 occupations and 252 qualifications in the classification.
- One VET core curriculum for all occupations (since 2012). Separate vocational qualifications within specific occupations are described in the core curriculum for vocational education as a set of expected learning outcomes: knowledge, occupational skills, as well as personal and social competences.
- Two optional curricula for VET – subject centered curricula or modular curricula – modular curricula are based on vocational tasks, called “modular units”. Such curricula combine theory with practice. The modular curricula can be easily modified, depending on the needs of the labour market.
- Vocational qualification courses (since 2012),- a short and flexible way to acquire separate vocational qualification in CVET and take external exams confirming qualifications. After acquiring all qualifications (1, 2 or 3) required in a given occupation students receive the diploma confirming vocational qualifications.
- Extramural examinations in VET as a validation tool – the possibility to confirm knowledge, skills and competences acquired in different learning contexts, including professional experience (non-formal and informal learning). Extramural examinations are designed for persons who want to confirm their education level or vocational qualifications without going to school/attending courses.

About Podlaskie Region

Podlaskie Voivodeship is situated in the north east of Poland. Its capital is Białystok. It is an agricultural region with well-developed agro-food industries. The production of machinery and equipment, textiles, wood and furniture plays an important role. Particularly, the manufacturing potential is concentrated in the largest cities – Białystok, Suwałki, and Lomza.

Most important data about Podlaskie:



- Territory– **20 187 km²** (6.5% of the country).
- Population– **1,2 mln** (3.1% of the country –14th place in Poland).
- The rural area inhabited by **471.000** inhabitants (39.6% of the voivodeship population).
- Average population density–**59** persons per km² (in Poland 122).
- Businesses and institutions that are listed in the REGON register (National Official Business Register)-**98,2 thous.**
- Employed in the national economy– **409 thous** (3.0% of the Poland's employed).
- The average employment in the enterprise sector - **98.4 thous.**
- Agriculture employs -**138.8 thous** (33.9% of all employed).
- The average gross wages in the business sector – **3353,38 PLN** about 800 Euro.
- Unemployment rate – **12,8% (X2014)**.

Podlaskie has the lowest population density of the sixteen Polish voivodeships, and its largely unspoilt nature is one of its chief assets. Around 30% of the area of the voivodeship is under legal protection. The Polish part of the Białowieża Forest biosphere reserve (also a World Heritage Site) is in Podlaskie. The voivodeship constitutes a part of the ecologically clean area known as "the Green Lungs of Poland". Podlaskie is the most diverse of all Polish voivodships. The area has been inhabited for centuries by members of different nations and religions. The Podlaskie is ranked on the 14th position in terms of gross value-added (GVA), estimated at 2.2% of national GVA. Central Statistical Office (2014) (GUS 2014). The share of industry in the generation of GVA is estimated at 19.9% which is below the national average (25.6%). Entities engaged in services generate 27.5% of regional GVA. (GUS 2013).

Continuous Vocational Training in SME's

Poland is differentiated among other EU countries by the lowest involvement of enterprises in continuous learning of their employees. In 2010, it concerned only 22.5% of all enterprises taking part in the research, whereas the EU average was 66%. It means that the level of involvement of Polish enterprises in staff development is three times lower than the average level for EU-28. Poland is also behind Greece and Romania, which have lower educational activity of adults than Poland. Because employers give the strongest impulse for occupational development, the level of engaged enterprises is not only unfavourable, but it is a barrier for this process. It is visible that in Poland, unlike in other EU member states, the number of enterprises providing their employees with training decreased (from 35% in 2005 to 22% in 2010), irrespective of their size. It means that Polish enterprises are categorized into the group in which enterprises in this period significantly limited their investment in the staff.

The participation of entities providing continuous vocational education increased along with the size of an enterprise. Among large enterprises, 74.8% of all entities provided training; among medium enterprises - 41.4% and small - 15.9%. In general, engagement of Polish companies in staff development is low and activity of small companies in this scope is inconsiderable. (EUROSTAT 2015)

CVT does not include micro enterprises which are even less active in scope of staff development and which constitute 94.8% of all enterprises in Poland and hire 37.2% of employees. If we included this group of enterprises in the total involvement of entrepreneurs in staff development in Poland, it would be even lower, which would make employees' chances for professional development even smaller. (GUS 2012)

Podlaskie belongs to the regions with very low percentage of companies training their employees - 19.8%. In the sector of small enterprises, only 11.8% educate their employees (average for Poland -22.5%) The prevailing form of training is a course form - conducted by 91.1% of all enterprises providing training. This regularity was visible irrespective of the type of business, size of an enterprise and voivodship. Most enterprises used external courses - 88.6%, whereas internal courses were conducted by 58.6% of all enterprises. Some enterprises conducted both internal and external courses. Predominance of enterprises providing external courses over enterprises conducting internal courses was visible in each size class. 84.9% of small enterprises conducted external courses, medium - 91.9% and large - 96.3%. Other forms of training occurred in 63.1% of enterprises providing training. In this group, five training forms have been differentiated. The most popular types included: conferences, seminars, workshops, fairs and lectures – 75% of all enterprises providing other types of training. Another popular form was training at a workplace – 58.5%. The least popular form (irrespective of the size of an enterprise, voivodship) was learning by participation in scientific circles or quality circles – only in 4.2% of enterprises providing different forms of training. (GUS 2012)



Innovation in SME's

In Podlaskie the business R&D expenditure accounts only 0.06% of GDP (2010), which is both lower than the country and EU average estimated at 0.16% and 1.31% respectively. The underlying characteristic of the Podlaskie is that large companies recorded the highest innovation sales (7.84%), followed by medium-size companies and small enterprises, respectively 4.2% and 2.81%. (GUS 2014). In 2013, there were 670 foreign firms in the Podlaskie region out of 78,926 foreign companies located in Poland.

The main scientific institutions in the region are: the University of Bialystok, Bialystok University of Technology, Higher School of Economics in Bialystok, and Higher School of Finance and Management in Bialystok. The University of Bialystok offers courses in 27 fields of study and over 70 specialisations for approximately 18,000 students within full-time and part-time programmes. The University of Technology has the following faculties: architecture, computer science, civil and environmental engineering, management, electrical engineering, mechanical engineering, and forestry. Altogether there are 14,000 students and 600 academic lecturers.

The region's strengths are: trans-boarder location, scientific institutions, foundations and associations promoting the regional development, growth of business activities, active and dynamic development of the private sector, resources for the development of agro-food-, wood, and construction sector, clean environmental and tourism attractiveness. To the largest companies having their headquarters in the Podlaskie Region belongs among others GK Pfeleiderer Grajewo (furniture), SM Mlekoop and Grupa Mlekovita (food industry).

According to the Regional Innovation Scoreboard 2014, the Voivodeship of Podlaskie is ranked (since 2006 RIS survey) as a modest innovator with an innovation performance below 50% of the EU average. In addition, in the recent years in case of key regional innovation characteristics one can observe downward trend. The catalogue of these changes include for example the decline in technological innovations from 0.24 in 2007 to 0.09 in 2012 or in non-technological innovations from 0.27 to 0.03 respectively (normalised data of RIS surveys). However, in the analysed period the significant growth in the population with tertiary education is characteristic for the Podlaskie region.

In consequence, main weakness relates to low business R&D expenditures (0.06% of GDP in 2010 according to the national statistical data), and the relative strength is the population with tertiary education (growth from 21.5% in 2009 to 26.1% in 2013), which level is close to the EU average.

Institutions support technology and Innovation:

- ✓ Science and Technology Parks in Suwalki and Bialystok
- ✓ Institute of Innovation and Technology of Technical University, Eastern Centre for Transfer of Technology- Bialystok
- ✓ Suwalki Special Economic Zone
- ✓ Center of Experimental Medicine, Research Center of Renewable Sources of Energy - Bialystok
- ✓ 17 universities providing education to 54000 of students and a high potential of academic staff.
- ✓ Clusters

VISIT AND PRESENTATION

Visit in Bialystok University of Technology

Presentation of Bialystok University of Technology Faculty of Mechanical Engineering made by Vice-Dean for Promotion and Co-operation Kazimierz Dzierżek, PhD, Eng.

Bialystok University of Technology is the largest technical university in the northeastern region of Poland. It is a modern, dynamically developing institution with 64-year-old experience in educating scientists and technologists. At present there are nearly 14 thousand students studying at Bialystok University of Technology in its 7 faculties: the Faculty of Architecture; Civil Engineering and Environmental Protection; Electrical Engineering; Computer Science; Mechanical Engineering; Management and Faculty of Forestry in Hajnówka.

The education process involves three cycles or degrees in full-time and part-time modes according to the Bologna Declaration directive. BUT offers over 20 study courses and a rich variety of postgraduate courses. Bialystok University of Technology has full rights to confer doctoral (PhD) degrees in seven scientific disciplines, i.e. civil engineering, computer science, electronics, electrical engineering, environmental engineering, machine design and maintenance, mechanics. Furthermore, BUT has been granted permission to confer DSc degrees in four scientific disciplines, such as civil engineering, electrical engineering, machine design and maintenance,



mechanics.

Students and staff works in 8 student research clubs. Research clubs involve student enthusiasts who are eager to engage in research projects implemented at the Faculty or work on their own student projects. The students active in research clubs build automobiles, mobile robots, unmanned flying objects, wheelchairs, prostheses and many others under the supervision of experienced tutors. They take part in conferences, exhibitions and fairs. In addition, they present their works in competitions, both in Poland and abroad, often winning high positions and awards. Faculty of Mechanical Engineering of Bialystok University of Technology had won the University Rover Challenge 2014 competition in the United States. Bialystok University of Technology received one of the Polish Innovation Awards granted to the best companies and institutions in Poland.

Thru the visit partners could see the laboratories of electronics, electrical engineering, machine design and maintenance, mechanics.

BUT have innovation and entrepreneurship centers and co-owned institutions:

- The Centre for Modern Education – modern building includes: Main Library, Foreign Language Centre, Distance Education Centre, 2 Interdisciplinary R & D Laboratories.
- INNO-ECO-TECH Bialystok University of Technology Innovative Teaching and Research Centre for Alternative Energy Sources, Energy-efficient Construction and Environmental Protection. The main purpose of the project is the construction and installation of high tech equipment for the teaching and research centre for alternative energy sources, energy - efficient construction and environmental protection in the Faculty of Civil and Environmental Engineering, as well as improving the quality of education through the use of modern ICT solutions in academic teaching.
- Academic Incubator of Entrepreneurship and Selected New Technologies as an instrument to create conditions for the development of innovativeness in the economy and the region. The incubator allow enterprising students, academic workers, university graduates and unemployed people to get places and the necessary support to create their own businesses. The resultant business firms are able to make use of BUT's scientific and laboratory facilities, conference rooms and multimedia equipment. Businesses are able to function either as residents by renting the premises or in a non-resident mode.
- The company Institute for Innovation and Technology Bialystok University of Technology. Implementation of inventions and new technologies in production is the purpose of the company Institute for Innovation and Technology, established by Bialystok University of Technology. The Institute will commercialise research.

The Institute, which has the status of a limited liability company and 100% subsidiary of the university, begun to operate at 2011. The Institute manage orders received by researchers from toward industry, and, conversely, intends to implement ideas of the scientists. It also wants to provide consulting services in implementation: from preparing a patent application, through the production of prototype to searching for investors. The production of prototypes is conducted based on the Department of Experimental Production, which operates production.

www.wm.pb.edu.pl/en

Visit in ZDZ Local Training Centre in Białystok.

Presentation about ZDZ schools, courses and projects made by Monika Stypułkowska and Kamila Janicka. ZDZ as a leader in non-public education system in North-East Poland, provide continuous vocational training.

- ZDZ Schools
 - Secondary schools (hairdresser, information technology, safety, economics, mechanical, the uniformed services)
 - Post-secondary schools (cosmetics, economics)
 - Secondary schools for adult
- ZDZ courses
 - Vocational training (operator road and construction machinery, welding, driving, administrative offices, economic and financial etc.) for adult, workers.
 - Entrepreneurship, computer, management, language courses for workers or unemployed



- qualification courses for teachers, counselling for unemployed
- 8958 courses participants in 2014
- 15247 courses participants in 2013
- Practice and work placement
 - Practice, placements in enterprises for youth, unemployed
 - Study visits for entrepreneurs
 - Conference for entrepreneurs
 - placements in enterprises for unemployed 250 pers., for youth 100 pers.
- Exams
 - qualification exams for workers (welding, energetic permission).
 - 200 welder certificates, 1356 Energetic exams

Innovation projects runs by ZDZ in Podlaskie region for SMEs:

- Intermentoring
 - An innovative method of teaching within the company. Employees learn each other. Age management strategy.
 - Training program has been developed.
- Vocational training and management training for SMEs
 - Consulting and training projects focused on the specific needs of companies. Development of employees competencies leading to the growth of innovative companies.
 - Supporting the growth of human capital through training of managerial competence.
 - 3 projects for 52 SMEs companies and about 1500 workers
- Outplacement
 - Supporting the restructuring process in enterprises. Retraining dismissed workers, find them new jobs.
 - 6 projects for start-ups. ZDZ gave grants and financial support for up to 55 people starting a business. Emerging start-ups also received advisory support - training in entrepreneurship, marketing, business plan and sales strategy. Was created 55 micro-enterprises from various industries, in the high-potential innovation.

www.zdz.bialystok.pl

Presentation of Tomas Consulting/ Tomas International/ CPIiR.

Presentation made by Małgorzata Paszko. CPIiP - Innovation and Development Promotion Centre (abbr. IDPC) and Tomas Consulting were established in 2005. The mission of the organization is: „To promote sustainable social and environmental development and the creation and promotion of innovation as a part of the condition for the regional economy of the North-Eastern Poland and border areas.”

The Association accomplishes its mission by implementing projects with the support of international, national and local public funds, particularly in the area of improving the quality of vocational training, social economy, professional activation, development of entrepreneurship and knowledge transfer.

Innovation and Development Promotion Centre has a branch in Suwałki, called Office of International Cooperation. It was established due to the implementation of transnational projects.

On this field Association participated in implementation projects such as:

-“E-cooperation - an innovative clusters”

Project carried out in collaboration with the Alytus Business Advisory Centre (Lithuania). The aim of the project was to establish cooperation between Polish and Lithuanian business sector. As a project result was create e-Platform. The Platform is a system unifying groups of interest for the development of cluster initiatives in the Polish - Lithuanian borderland, is a tool for the development of competitiveness in the sector of metalworking and woodworking, services and technologies.

- „Polish-Ukrainian Internet Platform of Cross-Border Cooperation„

Project launched web portal with offers of companies interested in international cooperation. Users can also place there free ads, which automatically will be translated into English, Russian and Ukrainian.



- "Improving the competitiveness of the region through cross-border use of its experience in attracting foreign investment"

Project was implemented in cooperation with the Office of the Marshal of the Podlaskie Province and partners of Ukraine. The project was aimed to representatives of the local government units of Podlaskie and the representatives of the government and the NGO sector in Ukraine. The aim was to use common experiences partners to improve the competitiveness of the region by multiplying the inflow of foreign investment and create new jobs.

During more than 9 years of existence, the IDPC implemented 36 projects co-financed by the European Union funds, addressed to different types of beneficiaries:

- teachers of vocational subjects
- students of primary schools, middle schools and high schools
- uniformed services - police, firefighters
- employees of small, medium and large enterprises
- unemployed
- people aged 50 +

www.cpir.org.pl

Visit in Białystok Science & Technology Park

Presentation made by Anna Daszuta – Zalewska Director of BPN-T. The Białystok Science & Technology Park (BPN-T) has been founded in order to extend innovation and technological advancement in the north-east region of Poland. BPN-T goal is to support creative people to turn their idea into an technology advanced business by providing them board range of facilities and services. Park assist not only newly established undertakings (so called 'start-ups'), but also existing companies.

Park is a project of the City of Białystok, co-financed by the European Regional Development Fund. The total budget of the project is 167 240 561, 93 PLN.

Within the Project was build two facilities:

- Technology Incubator and BPN-T Administration,
- Technology Centre.

BPN-T also take advantage of its favourable location directly next to Special Economic Zone and nearby the University of Białystok Campus to develop science and industrial centre which will create background to strengthen cooperation between world of science and business.

The primary tasks of the BPN-T include:

- incubating start-ups and ensuring support services to innovative undertakings,
- activating co-operation between business and science & research environments,
- leasing offices, manufacture, service and laboratory space to fast growing companies and research & development organizations,
- managing investment areas,
- attract investors.

Through such measures BPN-T contribute to build strong and innovative image of Białystok city and its region. This attitude also help not only to stimulate the economy, develop of high-tech and increase competitiveness of region, but also to promote entrepreneurship among young people who are the biggest potential of the region.

www.bpnt.bialystok.pl/en