

WP 3 “ET-INVENTORY”

CATALOGUE OF TRANS-NATIONAL INVENTORY CRITERIA

1ST DRAFT

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INTRODUCTION

The project "ET-struct" aims at an area that is "critical to growth and employment potential". It aims to address essential issues surrounding a general lack of coherence between "the connection of the educational system to the leading edge of technology and business practices", here there is often a lack of an effective "matching process" across the interfaces of: (1) policy-making (2) economy/labour market (3) education/training. The partnership will concentrate on this triple helical link and set up permanent territorial management organisational structures ("ET-Management"), which will organisationally link the relevant policy, economic and educational partners/stakeholders to match and optimise work force qualifications with the needs of regional economies in an innovative, ongoing, dynamic, flexible, systemic process. These permanent triple helical territorial structures will be linked at transnational level in a meta-structure ("ET-Joint-Management"). This means: the many players involved in policy-making, economic development and education will work together regionally and at the same time at a transnational level with counterparts in other CE regions. In the context of Cohesion policy this will:

- (a) promote a "stronger integration of the territory" by supporting "the balanced and sustainable development of the territory";
- (b) reduce "barrier effects through cross-border cooperation and exchange of best practices". The project idea, developed, tested and implemented during the project lifetime, will be transferable to any other CE region.

WP 3 ("ET-Inventory") is the "reference framework" for the main objectives, types of actions and core outputs of the project and provides the content-related basis for the following WorkPackages. Based on existing methodologies and studies on the relationship between labour markets and the regional economies, an extensive transnational inventory will be compiled. On the one hand, it will focus on the kinds of personal, vocational, linguistic, social skills and competences that are needed for a *successful vocational life* ("new-skills-for-new-jobs"). On the other hand, it will take into account the concrete current and predicable future economic situations of the involved partner regions. These two aspects will be matched in the "ET-Inventory". As already mentioned, it will serve as the reference framework for WP4 - the development of two transnational tools.

In particular this **catalogue of comparison criteria for the ET-Inventory** will represent the proper background for the implementation of the regional surveys and therefore for the definition and implementation of the final version of the ET Trans-national Inventory as result of Task 3.2 (*servicing as reference framework for all the following project tasks*).



RATIONALE OF THE CATALOGUE

As already cleared, the “*Et-struct Catalogue of Trans-national Inventory Criteria*” has been first of all conceived as a reference knowledge tool supporting the project following Work-Packages (starting from the WP4) and as a basic opportunity for all the 10 NUTS III level regions involved in the project to better know each other not only in the strict related education / training field.¹

In this sense, this paper has no intention at all to replace or even improve all the other existing knowledge management tools at national or European level (such as for instance *EuroStat*² and *Euridice*³). On the contrary the analysis we propose moves its steps from the data and information contained on the said tools trying to add a more specific and detailed view over the 10 NUTS III level regions.

Anyway the real “knowledge value” of the ET-struct Trans-national Inventory, in comparison to the already existing EU knowledge tools and data, is represented by the type, size and quality of its target, meaning *NUTS III level regions* coming from the central Europe area (*six countries out of the eight involved in the CE Programme*). All the mentioned information sources are on the contrary providing a detailed picture on national or NUTS II region level target, with no concrete opportunity for the definition of a “comparable picture” for the ET-struct partner regions.

¹ Chapter 2 is meant to provide an almost exhaustive picture of the socio-economic situation (and also trends) in each of the 10 regions.

² See <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>

³ The **Eurydice Network** provides information on and analyses of European education systems and policies. It consists of 35 national units based in all 31 countries participating in the EU's Lifelong Learning programme (EU Member States, EEA countries and Turkey) and is coordinated and managed by the EU Education, Audiovisual and Culture Executive Agency in Brussels, which drafts its publications and databases.

The mission of the Eurydice Network is to provide those responsible for education systems and policies in Europe with European-level analyses and information which will assist them in their decision making.

The Eurydice network primarily focuses on the way education in Europe is structured and organised at all levels. It provides a vast source of information, including: detailed descriptions and overviews of national education systems (*Eurybase*); comparative thematic studies devoted to specific topics of Community interest (*Thematic Studies*); indicators and statistics (*Key Data Series*); a series of reference material and tools related to education, such as the European glossary, school calendars and a thesaurus on education systems (*Reference Material*).

See http://eacea.ec.europa.eu/education/eurydice/index_en.php



METHODOLOGY

The proposed analysis are based on a *weighted mix* of the following methodologies:

- research / elaboration of existing regional / local survey and analysis (where the data and information processed are updated, scientific and reliable - starting from the national / regional basic statistic indicators);
- questionnaires / direct investigation proposed to a significant local / regional sample (as precisely defined in each section of the this survey) and using specific investigation tools provided by the WP 3 leader.

Anyway the data and information collected and processed should follow the basic indication provided within this Catalogue (as a direct result of the joint discussion between all the PP WP 3 experts) in order to obtain the proper “*uniformity*” necessary for the creation of a significant and reliable ET Trans-national Inventory.

In order to simplify and harmonise the analysis coming from all the 10 different regions the following education / training categories will be considered according to the basic explanation provided (taking into account the wide and different scenario in each country):

- **Secondary education** is the stage of education following primary school. Secondary education is generally the final stage of compulsory education. However, secondary education in some countries includes a period of compulsory and a period of non-compulsory education. The next stage of education is usually college or university. Secondary education is characterized by transition from the typically compulsory, comprehensive primary education for minors to the optional, selective tertiary, “post-secondary”, or “higher” education (e.g., university, vocational school) for adults;
- **Post-secondary education**⁴ refers to a level of education that is provided at academies, universities, colleges, vocational universities, community colleges, liberal arts colleges, institutes of technology and certain other collegiate-level institutions, such as vocational schools, trade schools, and career colleges, that award *academic degrees*;
- **Vocational training** (or vocational education and training - VET), also called career and technical education (CTE), prepares trainees for jobs that are based on manual or practical activities, traditionally non-academic, and totally related to a specific trade, occupation, or vocation.⁵

⁴ This category is widely known also as “*tertiary education*”, including the educational level following the completion of a school providing a secondary education, such as a high school, secondary school, university-preparatory school, or gymnasium.

⁵ The research considers only the type of Vocational training providing a specific and “recognised” qualification for those attending the courses (and not only a simple “participation certificate”).



CAP 1 LEGAL FRAMEWORK

Analytical picture of the national / regional / local legal framework in the field of secondary education, post-secondary and vocational training. Explanation of the current norms, rules and *main actors* in the learning settings and brief introduction of reforms in progress and future trends.

National legal framework in the field of secondary education, post secondary education and vocational training (current norms and rules and brief introduction of reforms in progress and future trends) <max 2/3 pages>

In Ukraine, there is legislation which is compulsory for all levels of education and special legislation which regulates activities of a specific level of education. Here follows the list of the main normative acts:

General legislation:

- Constitution of Ukraine.
- Law of Ukraine *On Education* №1060 of 23 May, 1991.
- National doctrine on the development of education.

Special legislation, Secondary education:

- Law of Ukraine *On General Secondary Education* №651 of 13 May, 1999.
- State standard of basic and senior secondary education approved by the Decree of the Cabinet of Ukraine №24 of 14 January, 2004.

Post-secondary education:

- Law of Ukraine *On Higher Education* № 2984 of 17 January, 2002.
- Branch standards in higher education.
- Law of Ukraine № 2150 of 4 November, 2004 *On Providing Young People who have Received Higher Education or Vocational Training with the First Job, a Grant being Given to an Employer*

Vocational training

- Law of Ukraine *On Vocational Training* №103 of 10 February, 1998
- Decree of the Cabinet of Ukraine №1135 of 17 August, 2002 *On Approving the State Standard of Vocational Training*
- Decree of the Cabinet of Ukraine № 784 of 27 August, 2010 *On Approving Procedures for Obtaining Employment by Graduates of Vocational Schools who have Received Training in accordance with the Government Order*

In Ukraine depending on the necessity for changes great significance is attached to the development of education of all the levels. Thus, to improve the quality of educational services a system of life-long education has been created.



1.1 Regional / local application of the national legal framework (*in the related field*)

Analytical picture of regional / local competencies and norms resulting from the application of the national legal framework or resulting from regional / local “autonomy” in the field of secondary education, post-secondary education and vocational training *<max 2/3 pages>*

In Ukraine the national legislation consists of normative legal acts i.e. it is a written document produced by the competent authority of the state or the people in which formally obligatory rules about physical behaviour of subjects of social life established and provided for by the state are laid down; a normative legal act is the expression of the state’s will or the will of the whole people i.e. they are approved only by state agencies or other agencies which have the corresponding governmental lawmaking powers and are their unilateral expression of will. On the basis of normative legal acts and in accordance with them as well as in order to satisfy normative legal acts competent authorities issue subordinate normative legal acts.

Therefore, authorities (ministry/administrations/departments of education) make regulations in the sphere of secondary education, higher and vocational education which only specify the national legislation.

At the same time, Ukraine’s legislation makes it possible in all the educational spheres - depending on the needs of each educational institution - to specify their needs and norms. For example, in the educational sphere there are State Standards which specify the content of the corresponding education. There are invariant and variant components. The invariant component is formed at the national level and is obligatory for all educational institutions irrespective of their subordination and form of ownership. The content of the invariant component is provided through educational branches the system of which is necessary and sufficient for training pupils/students. The invariant part specifies the minimum obligatory number of academic hours for studying each educational branch. An educational institution forms the variant part by itself taking into account the region’s characteristics and individual educational needs.

The variant component includes hours which can be used additionally for studying educational branches, individual consultations and group sessions.

Pupils’ academic load consists of hours of the invariant and variant components and cannot exceed the maximum allowable week load of pupils/students established on grounds of sanitary and hygienic norms of learning process organization.



1.2 Framework of regional / local Knowledge Management tools

Analytical picture of regional / local Knowledge Management tools in the field of secondary education, post-secondary education and vocational training and of the relevant economic & statistic indicators such as “Bulletin of Economic Information and Labour”, periodic statistic surveys, official Gazettes, periodic publications of the Chamber of Commerce, etc. [<detailed list>](#)

The publications with statistic data are presented in following list:

- Statistical yearbook of *Zakarpattya*,
- statistical bulletin *Social and Economic Situation in Zakarpattya Region*,
- statistical bulletin *Economic and Social Situation in Districts, Towns and Cities in Zakarpattya Region*,
- statistics digest *Development of Enterprises - Business Entities in Zakarpattya Region*,
- statistics digest *Gross Regional Product of Zakarpattya Region*,
- statistical bulletin *Small Enterprises in Zakarpattya Region*,
- statistics digest *Zakarpattya Industry*,
- statistics digest *Financial Performance of Enterprises and Organizations in Zakarpattya Region*,
- statistics digest *Work in Zakarpattya Region*,
- statistics digest *Economic Activity of Zakarpattya Population (based on survey data)*,
- statistics digest *Zakarpattya in a Demographic Dimension*,
- statistics digest *Population of the Region*,
- statistics digest *Activity of Educational Institutions in Zakarpattya Region*,
- statistics digest *Gender Identity of Zakarpattya Region*,
- scientific-methodological journal *Education in Zakarpattya*,
- regional educational newspaper *Teacher's Word*,
- Informational-methodological digests on vocational education in Zakarpattya region *Newsletter*.



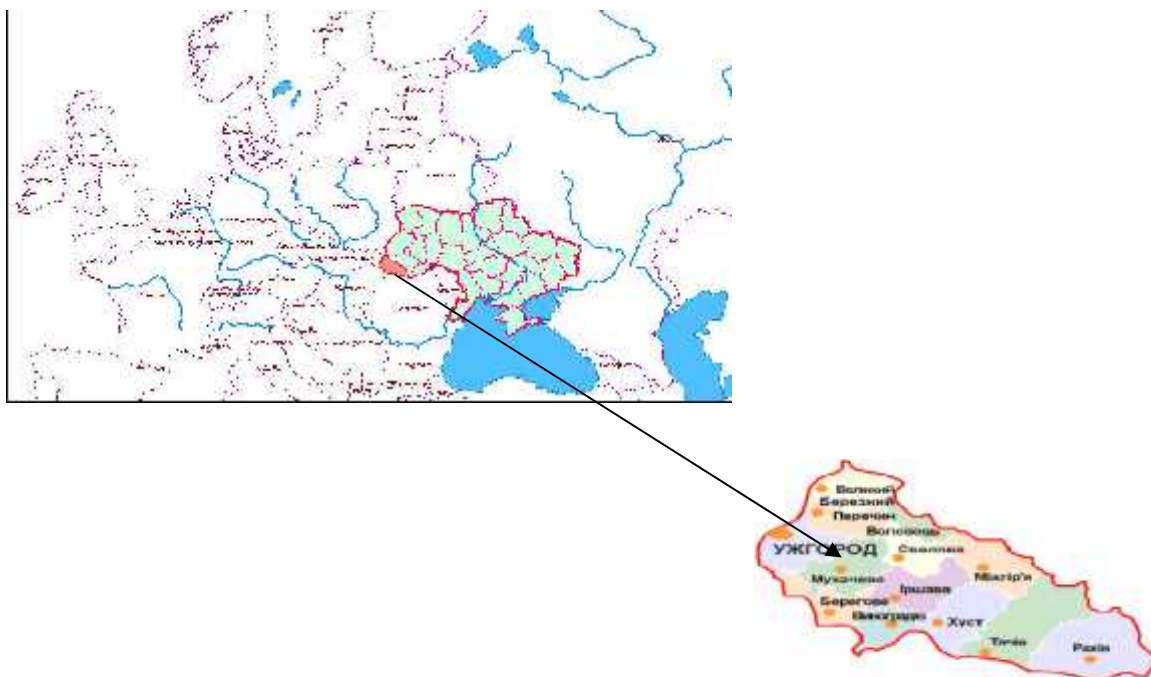
CAP 2 STATISTICAL INDICATORS OF THE REGIONAL / LOCAL ECONOMY AND LABOUR

2.1 Current statistical indicators for the region / district

Statistical information is essential for understanding our complex and rapidly changing world. Eurostat regional yearbook 2009 offers a wealth of information on life in the European regions in the 27 Member States of the European Union, therefore this survey is focused on the same indicators⁶ while the target (according to the ET-Struct project indications) is the NUTS III administrative level in each of the 10 partner's regions involved. A broad set of regional (NUTS III level) data⁷ are presented on the following themes: population, labor market, gross domestic product, household accounts, structural business statistics, information society, science, technology and innovation, education, tourism and agriculture.

General characteristic

Zakarpatska oblast is the gate on the way from the countries of Western and Central Europe to Ukraine, CIS and further east and south.



Uzhhorod is the oblast centre. It is located at the distance of 788 km by highways and 898 km by railway from Kyiv.

Borders: the region borders on 2 regions of Ukraine and 4 countries of Europe. Number of inhabitants by 01.07.2010 12 - 1244.8 thou.- 27.% of the population of Ukraine. In the view of administrative-territorial

⁶ Some specific indicators have been added in order to provide an even more detailed picture of each area.

⁷ The survey should be based on year 2009 data for all the 10 regions (*where available - otherwise the most recent data have to be used*).



system Zakarpattya is divided into 13 districts, 11 towns, out of which 5 ones are of oblast importance, 19 urban type settlements and 307 Village Councils. There are 609 settlements in the oblast, out of which 193 ones have a status of mountain settlements.

Administrative and territorial units

#	Name of town and districts	Population, (thousands)
1	Uzhhorod	116,5
2	Mukachevo	83,8
3	Khust	31,5
4	Beregovo	24,9
5	Chop	8,9
Districts: 13		
6	Beregovo	51,8
7	Velykoberezhnyanskiy	26,5
8	Vynogradivskiy	117,9
9	Volovets	24,3
10	Irshavskiy	98,8
11	Mizhgirrya	48,3
12	Mukachevo	100,4
13	Perechyn	31,1
14	Rachiv	90,4
15	Svalyava	54,1
16	Tyachiv	172,4
17	Uzhhorod	68,0
18	Khust	95,2
Total number of population in region:		1244,8

Number of towns, urban type settlement and villages are presented in following table:

	Cities (units)	Urban type settlement (units)	Villages (units)	Total (units)
Total in region:	11	19	579	609
Uzhhorod	1	-	-	1



Mukachevo	1	-	-	1
Khust	1	-	1	2
Beregovo	1	-	3	4
Chop	1	-	-	1
Districts: 13				
Beregovo	-	1	42	43
Velykoberezhnyanskiy	-	1	31	32
Vynogradivskiy	1	2	47	50
Volovets	-	2	24	26
Irshavskiy	1	-	46	47
Mizhgirrya	-	1	43	44
Mukachevo	-	2	86	88
Perechyn	1	-	24	25
Rachiv	1	3	28	32
Svalyava	1	-	28	29
Tyachiv	1	5	56	62
Uzhhorod	-	1	64	65
Khust	-	1	56	57

2.1.1 POPULATION

Population number (also per gender) and density, population change in the last 20 years, fertility rates (*child per woman*), crude birth rates (*birth per 1.000 inhabitants*), percentage of population aged between 0 and 15 years old, percentage of population aged 65 years old and more, number and percentage of foreign citizens by gender and country.

From the ethnographic point of view Zakarpattia is typical European multiethnic and multicultural border region. There live representatives of about 76 ethnic groups on the territory of the oblast. So, according to the statistical data of 2004-2005 there compactly live Ukrainians (78.4%), Hungarians (12.5%), Russians (4.0%), Romanians (2.4%), Romas (1.0%), Slovaks (0.6%), Germans (0.3%), Jews (0.2%), Belarussians (0.2%) as well as Czechs, Poles, Italians, Armenians, Azerbaijani and others (in total 0,6%) on the territory of oblast.

In spite of decrease of the population of Zakarpatska oblast in the last years, the better demographic indicators than in average in Ukraine were observed in the oblast.



	Number of population, Thou.
Total in region:	1244,8
including	
Urban population	462,6
Rural population	782,2
Population density (person in sq2)	97
Birth rate per 1000 inhabitants	14,6
Death rate per 1000 inhabitants	12,5

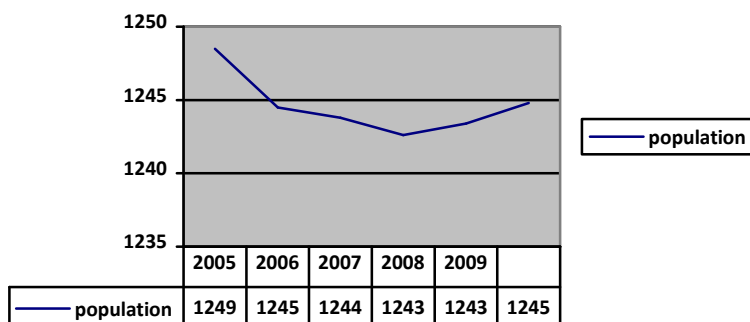
Territory, number and density of population in towns and districts of Zakarpattya

Name	Territory (Sq km)	Population number (thousands)	Population density on sq km.
In whole region	12,8	1244,8	97
Uzhhorod	0,03	116,5	3883
Mukachevo	0,04	24,9	622
Khust	0,03	83,8	2793
Beregovo	0,07	31,5	450
Chop	0,006	8,9	1483
In districts:			
Beregovo	0,6	51, 8	86
Velykobereznyanskiy	0,8	26,5	33
Vynogradivskiy	0,7	117,9	168
Volovets	0,5	24,3	49
Irshavskiy	0,9	98,8	110
Mizhgirrya	1,2	48,3	40
Mukachevo	1,0	100,4	100
Perechyn	0,6	31,1	52
Rachiv	1,9	90,4	48
Svalyava	0,7	54,1	77
Tyachiv	1,8	172,4	96
Uzhhorod	0,9	68,0	76



Khust	1,0	95,2	95
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Number of population in region during last years (Thou.) is presented in following diagram:



2.1.2 LABOUR MARKET

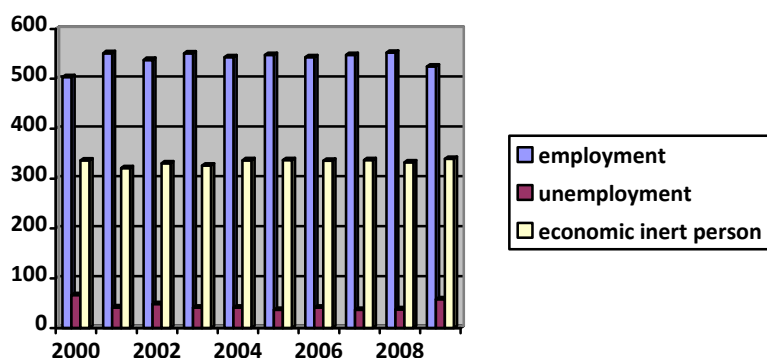
Employment rate for the 15-64 age group (per gender), unemployment rate (per gender), employment rate change in the last 20 years (per gender), share of employees per economic macro-sector, usual weekly hours of work in main job, national rank of unemployment rate (*position of the NUTS III region*).

Rate of employment according to statistics data by 2009 year.

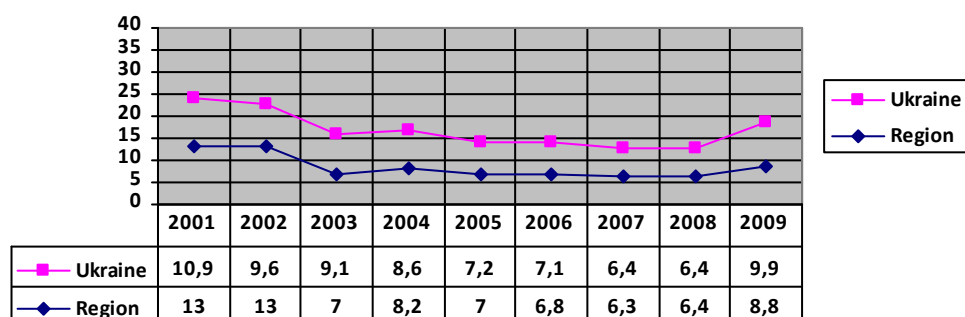
#	Name	
1	Population for 15-70 age group, people	922,3
2	Including:	
3	Economic active population, number	586,1
4	Employment in sphere of economic, number	528,1
5	Level of employment, %	58,0
6	Economic inert inhabitants, number	336,2
7	Level of unemployment (01.01.2010) , %	1,7
8	Average monthly wages, UAH (1 Euro is 11.05 UAH according to national exchange rate on 15.11.2010).	1562
9	Debts in salary's payments (on date 01.01.2010, million UAH)	13,2



Share of employment and unemployment levels as well as economic inert persons are presented in following diagram:



Share of unemployment level, in according to methodology of International Labor Organization is presented in following graph:



Number of unemployment, registered during 2004 -2010 years

	2004	2006	2008	2009	2010
Totally in the region, number	33164	26126	17990	23353	13059
Uzhhorod town, number	1412	1202	692	936	623
Mukachevo town, number	1155	1058	850	1283	784
Uzhhorod district, number	799	532	376	634	343
Mukachevo district, number	1216	1222	831	1287	656
Others, number	28582.00	22112.00	15241.00	19213.00	10653.00



2.1.3 GROSS DOMESTIC PRODUCT AND HOUSEHOLD ACCOUNTS

Share of GDP in the NUTS II region, GDP per inhabitant and reference to the national average, GDP per inhabitant in the last 20 years, primary income of private households per inhabitant, disposable income of private households per inhabitant, disposable income of private households as % of primary income, development of disposable income of private households per inhabitant (from 2001).

Gross Regional Product is presented in following table:

	2000	2004	2005	2007	2008	2009
Total GRP in region (millions, UAH)	2151	5297	6700	10508	13208	
Index of physical amount of Gross Regional Product (in the view of prices of previous year), %	107,8	106,4	98,5	108,2	103,9	81,6
Share of GRP in economy of country, %	1,6	1,5	1,5	1,5	1,4	
Place of region among others, number	24	22	22	21	22	
GRP per person, UAH	1677	4238	5373	8452	10626	
Index of physical amount of Gross Regional Product per person in prices in comparison with previous year, %	108,1	106,6	98,7	108,3	103,9	

The rate of GRP in view of the economic sectors during 2005 -2007 years, %:

	2005	2006	2007
Agriculture, hunting, forestry industry	17,5	19,9	13,8
Extractive industry	0.5	0.5	0.5
Processing industry	17.2	21.0	23.1
Electric power, gas and water production and distribution	1.4	1.5	1.5
Construction	1.8	6.8	4.9
Transport and communication	12.4	12.6	11.4
Trade, vehicles repairs, personal and household good	18.9	17.5	11.4



Average annual of GDP

	2005	2006	2007	2008	2009
In comparison prices of 2005 year	2103.1	2096.2	2076.5	2142.8	2152.5

2.1.4 STRUCTURAL BUSINESS STATISTICS

Number of business activities per 1.000 inhabitants, business local units per square meters, degree of regional specialisation by activity (*NACE sections*), definition of the added value per sector of activity (*agriculture, manufacturing, construction and services*), evolution of the industrial production in the last 20 years, share of exports per NACE macro-sector, national rank of exports (*position of the NUTS III region*), first 10 countries of destination of local goods (*exportations*), structure of employment in real estate, renting and other business activities, persons employed in business services (NACE divisions K 72 and K 74), growth rate in business services (NACE divisions K 72 and K 74) in the last 20 years.

Today in Zakarpattya there are 57 small business entities per 10 thousand people, which is one of the best figures in Western Ukraine. 103 thousand people are employed in small businesses. They account for over 34% (31% last year) of the total number of employees working in the region's enterprises. Small businesses provide in the region more than 40 percent of inflow of funds to the budget of Ukraine. Index of development of small enterprises in region is presented in following table:

	2000	2004	2005	2007	2008	2009
Number of small entrepreneurs per 10000 inhabitants	46	60	63	63	51	57
Volume of product sold (work and services), %	22.9	9.2	11.2	22.7	23.9	24.3
Average number of employees in small enterprises, person	41666	39914	36723	38283	38371	37063
Volume of sales (work, services, thou. UAH)	654065.6	1005884.5	1188834.3	3546176.6	4548510.9	3953885.2



Number of small enterprises in towns and districts in region is presented in following table:

	2000	2004	2005	2007	2008	2009
Total in region	46	60	63	63	51	57
Uzhhorod	111	164	165	184	163	190
Mukachevo		122	137	120	94	106
Khust	78	138	133	99	83	89
Beregovo		100	113	110	85	94
Chop		70	84	90	83	88
Districts:						
Beregovo	38	34	37	37	31	32
Velykoberezhnyanskiy	40	45	48	48	33	45
Vynogradivskiy	27	31	34	35	24	28
Volovets	36	53	55	62	57	60
Irshavskiy	21	28	31	32	26	26
Mizhgirrya	27	48	50	42	32	42
Mukachevo	22	36	37	40	27	28
Perechyn	31	46	47	42	36	45
Rachiv	61	48	49	49	40	40
Svalyava	39	63	67	64	46	49
Tyachiv	41	38	40	41	30	33
Uzhhorod	59	57	59	73	66	76
Khust	36	16	18	18	15	16

Average number of small enterprises in different type of activity is presented in following table:

	Average number of employees (person)	Volume of sales (work, services), thou. UAH	Share of small enterprises in total of proper type of activity, %	Share of small enterprises in view of type of activity in total, %
Total	38371	4548510.9	23.9	100
Agriculture, hunting, forestry industry	1884	99475.6	30.2	2.2



Industry	9606	559919	7.4	12.3
Extractive industry	399	37715.4	69.7	0.8
Processing industry	8969	508753	7.6	11.2
Electric power, gas and water production and distribution	238	13451	1.6	0.3
Construction	4433	452272.4	47.2	9.9
Trade, vehicles repairs, personal and household good	8669	2609025.7	30.5	57.4
Hotel and restaurants activity	2319	75617.8	67.9	1.7
Transport and communication	2570	262644.3	40.4	5.8
Financial activities	198	33892.9	53.4	0.7
Education	201	7052.1	77.5	0.1
Health and social sphere	567	12620.8	7.6	0.3

Region industry in the Economy of Ukraine

Region intensity in the economy of Ukraine on the volume of (by the first half year of 2010), %

Realized industrial products	0.7
Agricultural commodities	2.1
Construction products	1.4
Fixed asset investments	1.2
Export of goods, services	1.6
Import of goods, services	2.1
Income of common fund local budgets (without transfers)	1.5
Enterprises-legal entities retail turnover	2.1

Industry



Structure of industry	Specific gravity,%
Industry	100
Extractive industry	0.7
Processing industry	16.2
Food processing industry	13.5
Light industry	5.3
Wood and wooden wares products	4.3
Pulp and paper industry, printing industry and publishing business	0.5
Chemical and petrochemical industry	7.9
Other non-metal mineral wares production (building materials, glass wares)	0.8
Metallurgy and treatment of metal	0.5
Mechanical engineering	28.0
Electric power, gas and water production and distribution	22.3

2.1.5 INFORMATION SOCIETY

Internet access and broadband connections in households, development of Internet access and broadband connections in households (from 2001), regular use of the Internet (*percentage of persons who accessed the Internet, on average, at least once a week*), Internet activities (*percentage of individuals using the Internet in the last three months for the following activities: on-line courses, sell / buy goods and services, E-mail communication, information on goods and services, Internet banking, interaction with public authorities, health information search, read online newspapers or magazines, listen to web radio or television*), e-commerce by private persons (*percentage of persons who ordered goods or services, over the Internet, for private use, in the last year*), non usage of Internet (*in percentage of the population*).

N/A

2.1.6 SCIENCE, TECHNOLOGY AND INNOVATION

Total R & D expenditure as a percentage of GDP (*all sectors*) in the NUTS III region and at national level, researchers as a percentage of persons employed (*all sectors*) in the NUTS III region and at national level, human resources in science and technology by virtue of occupation (*percentage of active population*), employment in high- and medium high-tech manufacturing (*percentage of total employment*), patent applications to the EPO (*European Patent Office*) or to national patent offices per 1.000 inhabitants.



Number of science organization in towns and districts are presented in following table:

	1995	2000	2005	2007	2008	2009
Total in region	22	18	21	21	20	18
Uzhhorod	16	10	11	14	13	12
Mukachevo	3	3	3	4	4	3
Other districts	3	5	7	3	3	3

Science workers

	1995	2000	2005	2007	2008	2009
Number of employers in science institutions	1509	813	1106	1005	929	928
Number of specialists perform scientific and technical types of activities	1133	647	661	626	576	576
Specialists with doctor degree	20	20	25	31	30	25
Number of candidate of science	196	158	135	154	146	148

Number of innovation and active industrial enterprises in economic structure in region is presented in following table:



	2005	2007	2008	2009
Industry	33	28	31	36
Extractive industry	1	2	3	2
Processing industry	32	25	28	34
Food processing industry	6	6	5	12
Light industry	9	3	2	1
Textile industry	8	3	2	0
Wood and wooden wares products	2	3	4	5
Chemical and petrochemical industry	3	3	4	3
Mechanical engineering	7	8	8	7
Vehicles and equipment engineering	2	3	4	4
Engineering of electrical, electronic and optical equipment	4	5	4	3

2.1.7 EDUCATION

Students in all levels of education, as a percentage of total population (*ISCED levels 0-6*), participation rates of 4-year-olds in education (*at pre-primary and primary education - ISCED levels 0 and 1 - Percentage*), students at upper secondary and post-secondary non-tertiary education, as a percentage of the population aged 15 to 24 (*ISCED levels 3 and 4*), students in tertiary education, as a percentage of the population aged 20 to 24 years old (*ISCED levels 5 and 6*), Educational attainment level (*percentage of the population aged 25-64 having completed tertiary education*), Lifelong learning (*percentage of the adult population aged 24 to 64 participating in education and training during the last year*).

System of education is incumbent upon all teachers to be aware of the changes outlined by the President's Committee for Economic Reforms, effective 2010 - 2014, for the program "Prosperous Society, Competitive Economy, Effective State". Funding needs for regional education are estimated at 1632000 UAH. Presently 10 regional education programs are established in Zakarpattya region.



In Zakarpattia region, there are 118 educational institutions. These are attended by 20,551 students, who received education in following languages: 66 of schools - in Hungarian, 12 - in Romanian, 2 - in Russian. In 38 schools the studies are conducted in two or more languages.

The list of educational institutions in region is presented in following table:

Title	1990/1991	1995/1996	2000/2001	2005/2006	2007/2008	2008/2009
Post secondary education (I-II level of accreditation)	15	16	15	14	14	11
Number of students	11393	10506	8207	6990	7320	4844
Post secondary education (III-IV level of accreditation)	1	1	4	5	6	7
Number of students	7954	8533	14460	20090	21713	23143
Secondary education	716	734	722	716	714	711
Number of pupils, thou.	216	209.6	207.8	181.7	170.3	164.3
Technical education	23	24	19	20	20	20
Number of students, thou.	15.0	12.6	11.5	9.5	9.2	9.3
Kinder gardens	668	613	505	506	521	528
Number of children, thou.	51.0	31.4	20.1	26.9	30.5	32.8

2.1.8 TOURISM

Accommodation capacity (*number of bed-places by type of accommodation: 1-2-3-4-5 stars hotels, guest houses / pensions, B&B, rural-tourism accommodation, youth hostel*), overnights (*number of nights spent by type of accommodation: 1-2-3-4-5 stars hotels, guest houses / pensions, B&B, rural-tourism accommodation, youth hostel*), number of bed-places per 1.000 inhabitants, average length of stay (*by type of accommodation: 1-2-3-4-5 stars hotels, guest houses / pensions, B&B, rural-tourism accommodation, youth hostel*), overnights trend in the last 20 years, overnights and average length of stay of foreign tourists.

Tourism and recreation industry in Zakarpattia region shows a positive momentum within the period of last few years. The volume of the given services increased by 7% and makes 121.1million of UAH for the period of January - June of 2010 if compared with the same period of 2009. Thus local budget deductions increased by 17% and make 6.5 million UAH; 99 new workplaces were created in this field. The network of sanatorium-resort, tourism and recreation, hotel establishments counts 328 objects.



Number of sanatoriums in the region is presented in following table:

Total in region:	69	65	68	69	61	60
Uzhhorod	1	1	2	2	1	1
Mukachevo	0	0	0	0	0	0
Khust	0	0	0	0	0	0
Beregovo	0	0	0	0	0	0
Districts						
Beregovo	4	5	3	3	3	3
Velykobereznyanskiy	7	6	4	2	2	2
Vynogradivskiy	12	10	9	7	7	7
Volovets	0	0	1	1	0	0
Irshavskiy	2	1	2	3	3	3
Mizhgirrya	6	6	4	2	2	2
Mukachevo	7	6	9	9	9	9
Perechyn	5	5	3	2	2	2
Rachiv	4	4	5	5	4	4
Svalyava	7	7	10	14	11	10
Tyachiv	4	4	6	6	5	6
Uzhhorod	4	3	5	6	5	4
Khust	6	7	5	7	7	7

2.1.9 AGRICULTURE & BREEDING

Cereals (including rice) as a percentage of utilized agricultural area, permanent crops as a percentage of utilized agricultural area, active farms (*number and percentage over 1.000 inhabitants*), percentage of cultivated area, agro-food production export, agro-food export per country.

Agroindustrial complex is an important sector of economy of the region and forms about 20% of gross value added. The agroindustrial production of Zakarpattya differs from thatr of the other regions of Ukraine. The main differentiating features are:

- prevalence of rural population with makes 63% at only 31.9% on the rest of the territory of Ukraine;
- Transformation of land to the private sector (85% of the land, including 81% of plough-land);
- Insufficiency of the lands of agricultural assignment, there are 0.32 hectares of farmland per inhabitant, including 0.16 hectare of plough-land.



- In condition of shortage of land (2.1% of the areas of state agricultural assignment) the efficiency of land usage in the region is considerable higher in comparison with other regions.

Due to the attracted investments the intensive industrial production of pork is being redumed by modern technologies in New level - 2006 farmer economy.



2.2 Socio-economic trends for the future

Brief presentation of studies / researches showing experts perception over regional economic development for the forthcoming year (all the relevant information which directly affect the labour market) <max 2/3 pages>

Economy

In conditions of reforming of economic relations emphasis is placed on the development of priority branches of economy - forest and wood industry, light and food industries, development of cross-border cooperation, recreation and tourism etc. Attention is focused on further restructuring of the whole national economy, attracting domestic and foreign investments in the economy, development of small and medium-sized businesses and effective use of the natural resource potential. The region is one of the leaders in Ukraine by investments made per each inhabitant. Zakarpattyan region is famous for being one of the most prestigious places for treatment and recreation. The well-developed network of sanatoria and health resorts, tourist camps, unique mineral springs and thermal waters over 400 of which have already been studied as well as the beauty of the Carpathian nature attract tourist and holiday-makers in any season. Sanatoria, holiday centres and recreation centres in the region can receive up to 4,000 people at the same time together. The natural resources (minerals): more than 30 types of minerals have been found. There are 150 deposits. They are non-traditional for the state polymetals, pearlites, zeolites, liparites, deposits of barium ores, kaolin and others. The following minerals are extracted: mine salt, marble limestone, dolomite etc. Recreational resources of the region account for 5.2% of the volume potential and 5.1% of the cost potential of the natural resources of Ukraine's recreation. Among them are 75 types of mineral waters which have been found and 38 ones which have been included in the Cadastre of Mineral Waters of Ukraine - with a yield of 3.3 thousand cubic metres per twenty-four hours - which are unique and correspond to the waters like *Yessentuki* and *Borzhomi* and by their chemical composition and medicinal properties are not inferior to the famous waters of the Caucasus, Czech Republic, Poland and France.



CAP 3 EDUCATION / TRAINING DEMAND

3.1 Occupational needs of local enterprises

Research /elaboration of current local surveys / analysis providing information on the occupational needs of local enterprises (based on existing documentation from regional / local institutions supporting the policies concerning employment, education and training, and favouring the matching of labour supply and demand - one first source of information could be represented by the summary of the most significant job advertisement from regional / local official recruitment offices or magazines).

The ET-struct survey will be based on *existing documentation* and on data collected through the questionnaire on enterprises, having at least one employee.

The observation field of the survey will cover the universe of active private enterprises operating in agriculture, industry and services, according to the specific local interests. The survey will not include:

- Public administration's operative units;
- Public enterprises in the sanitary field;
- Public educational units in primary and secondary schools;
- Public University units;
- Other no-profit organizations.

The informations derived from the Business Registers and others administrative archives can cover the key characteristics of the enterprises and local units, such as economic activity, number of employees, localisation. The entity under analysis is both the enterprise in its entirety and its local units in a single "NUTS III level region". Multi-established enterprises are requested to provide data broken down into "NUTS III level region" where they have local units.

Data are collected according to the questionnaire sections or according to other local information sources.

The main data collected will refer to:

- enterprises' stock of employees as at the end of the previous year and expected changes (in-flows and out-flows) during the year of reference. The information collected also covers the expected recruitment of seasonal workers;
- characteristics of the job profiles the enterprise expects to employ during the year and, for those enterprises that do not intend to recruit employees, reasons for this behaviour;
- staff engaged under "atypical" contracts (not employees);
- the training activity provided by the enterprise during the previous year. This information is available for the firm as a whole and disaggregated by occupation (managers, clerks and workers) and gender. The survey also provides information on the type of training activity -internal and external courses, on the job or self-learning

Criteria: if an enterprise in the sample does not respond, it is replaced by another one). Classifications used: - classification of economic activities: NACE; -classification of occupations: ISCO-88; - classification of territories: NUTS III.



3.1.1 Employment forecast by job profile, sector of activity, enterprises size class.

This section will include data concerning enterprises expecting and not expecting to engage employees.

The catalogue will offer the analysis of the local enterprises structure (size class and sector of activity) and will show which are the main requested skills in each activity sector.

Collected data will also show reasons why enterprises do not hire new employees, and the most difficult skills to recruit.

If possible the analysis will give information concerning the occupational in-flows and out-flows.

The section will also include data concerning specific previous experience required by enterprises in recruiting employees, specifying what is required (i.e. Previous work experience in the same job profile, Previous work experience in the same field of activity, Previous generic work experience, Previous vocational training courses, no previous experience).

Regarding the classification used to express the enterprise size class, enterprises qualify as micro, small and medium-sized enterprises (SMEs) if they fulfil the criteria laid down in the EU sectoral laws and regulations. For this survey only the staff headcount ceiling will be considered, not taking into account the turnover ceiling or the balance sheet ceiling.

<i>Enterprise category</i>	<i>Headcount</i>	<i>Turnover</i>	<i>or</i>	<i>Balance sheet total</i>
<i>Medium-sized</i>	<i>< 250</i>	<i>≤ € 50 million</i>		<i>≤ € 43 million</i>
<i>Small</i>	<i>< 50</i>	<i>≤ € 10 million</i>		<i>≤ € 10 million</i>
<i>Micro</i>	<i>< 10</i>	<i>≤ € 2 million</i>		<i>≤ € 2 million</i>

3.1.2 Recruitment forecast by Contract classification,

This section will contain information about contracts that enterprises use to hire people (Open-ended contract, specifying if open ended contracts or fixed-term (explaining reasons and duration). It will also give information about other kinds of contract such apprenticeship or youth employment contract, or other contracts including staff engaged under atypical contracts (not employees) or specified-purpose contracts that may be used in order to accomplish specific local needs (please specify) are used.

N/A

3.1.3 Occupation and migrating people

This section will analyze situation of labour market and migration flows. Data will have to show non fixed term job offer (in case of special situations concerning fixed term local needs please specify) and clear the impact of immigrated people in the local labour market.

N/A



3.1.4 Vocational training and education

This section will be parted in two. The first part will contain the analysis the situation of the training in the enterprises and the number of companies that already organize training activities. The report will show which kind of training enterprises normally uses (i.e. internal courses, external courses, on the job or self-learning).

The second part will resume all the data concerning the level of instruction required by enterprises in recruiting employees. The classification adopted is explained in chapter “Methodology”.

A specific attention should be used to analyze the perceived importance of the educational qualifications.

N/A

3.1.5 Main sources for enterprises’ job recruitment

This section will explore the main recruitment instruments used by the enterprises (i.e. direct contact with employers/employees, University/School database search, Resume (curricula vitae) received from candidates. Internships /stage, Employers/employees Federations, Job Centers, Recruitment Agency, Job search companies (i.e. Adecco), News papers, Web sites - internet, Eures).

N/A



3.2 Quantitative / qualitative research over a precise and representative sample of local enterprise

This section will report the results of the direct survey implemented through the questionnaire according to the following structure:

- 5.1.1 general overview of the data collected and processed,
- 5.1.2 evidence of the percentage of each single answer (*according to the questionnaire structure*) out of the whole sample,
- 5.1.3 graphics and charts

Annex_I - Questionnaire over the training / education demand

10 companies have been interviewed in Zakarpattya region. More than 80 % are placed in Uzhhorod City what is shown in following table:



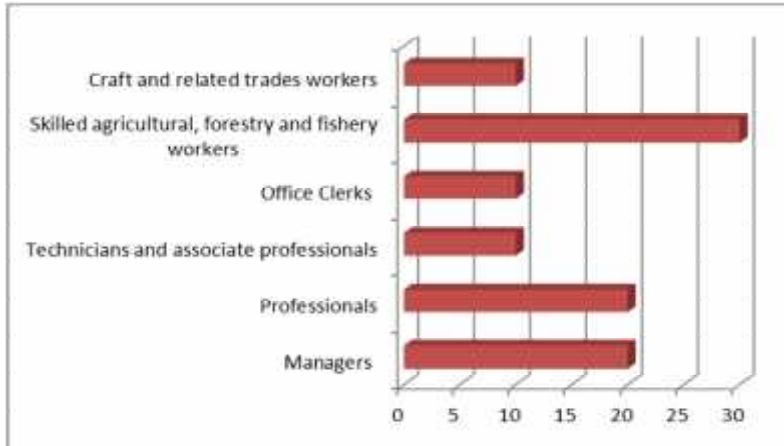
Companies operate in following economic sectors, including agriculture, forestry and fishing, manufacture of food products, beverages and tobacco, wholesale and retail trade, construction, accommodation and food service activities, information and communication, human health and social work activities.

Enterprise expecting to hire new employees	Yes, %	No, %
Total, %	100	
Seasonal activities/processes	20	
Increasing demand	10	
Opening new branches or departments	20	
Need to expand sales, find new markets	30	



and available employees		10
Can not recruit people because of budget constraints		10

Job profile required by interviewed companies is presented in following diagram, %:



In view on skills and knowledge required by companies when looking for employees the result are presented in the following table:

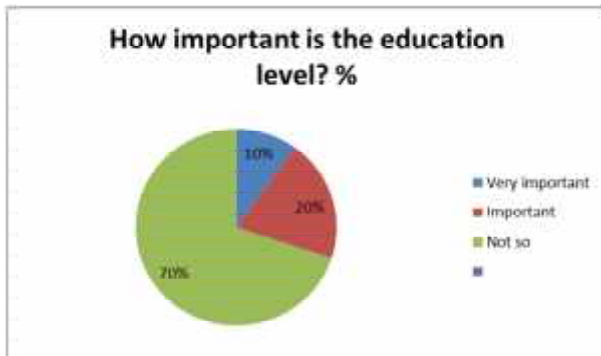
	List of required skills	Number
1	Relational skills	3
2	Mathematics — Using mathematics to solve problems.	1
3	Reading Comprehension	0
4	Speaking — Talking to others to convey information effectively	5
5	Writing — Communicating effectively in writing	0
6	Ability to work in group	4
7	Ability to work independently	3
8	Ability to manage many important tasks simultaneously, managing people	4
9	Coordination capacity	0
10	Negotiation capacity	0
11	Calculation capacity	3
12	Planning activities and resources	4
13	Management of Financial Resources	2



14	Management of Material Resources — Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work	0
15	Management of Personnel Resources	0
16	Customer orientation	0
17	Capacities to design, set-up, operate, and correct malfunctions involving application of machines or technological system	3
18	Knowledge of specific software	0
19	Knowledge of machinery	0
20	Technical skills	1
21	Manual skills	0

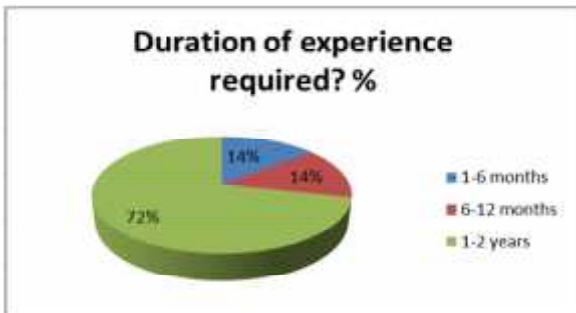
The table shows us clear picture about what skills are more required and necessary in local Ukrainian market.

Diagram shows the level of importance of education in local labor market.



70 % of respondents answered - Yes. Following diagram will show the share which types of experience and its duration are important more %:





Conclusion:

The companies expect that their employees will particularly communicate well and pass the information effectively. The ability to manage many important tasks simultaneously, manage people and be able to work in group without conflicts are equally important. Secondary importance is the ability to remove malfunction, ability to work independently and apply basic mathematic skills in needed calculations. The companies do not focus on education background and prefer previous work experience in the same or related areas of activity, more then 70 % of companies expect it.



CAP 4 EDUCATION / TRAINING OFFER

4.1 Framework of schools and professional profiles and competence level obtained from the different qualifications provided by the local education and training system according to the current legal framework

This survey should clearly outline the different qualifications provided by the local system (*NUTS III level*) of secondary education, post-secondary education and vocational training, according to the following table:

N/A

TITLE	<qualification title>
General subject of the training ⁸	
Length of the training	
Cost of the training (year 2009-2010)	<if any>
Economic sector of reference (NACE code)	<if any>
Basic access requirements to the training	
Specific skills acquired during the training ⁹	
European recognition of the qualification	<if any>
Number of different institutions providing the training	

⁸ Same interpretation as the item “attended education” on the Questionnaire over the impact of the training offer (Annex II).

⁹ Following the list used on the Questionnaire over the impact of the training offer (Annex II).



4.2 **Framework of schools and professional profiles and competences level obtained from the different qualifications provided by the local education and training system according to legal framework evolutions and trends**

During these months the Italian secondary school system is undergoing and intensive reform in terms of structure, contents and (especially) profiles and qualifications. The reform will enter into force starting from the next school year (*meaning September 2010*) but only after some years will produce concrete effects on students. Anyway this Regional Survey should take into account this reform and all its concrete effects (at least for what concerns the current information available) underlining in particular:

- Leading purposes of the reform
- Clear evidence of the major news and changes to be introduced

The same analysis should be applied in all the PP regions where a reform or evolution of the current education / training system is on the run or just foreseen.

N/A



CAP 5 IMPACT OF THE LOCAL EDUCATION / TRAINING OFFER

This chapter should provide an updated picture of the monitoring of graduates' access to the labor market within the 3 years after graduation (covering the 3 fields of this whole analysis meaning secondary education, post-secondary education and vocational training). It is a very important tool for evaluating the effectiveness of the local education / training system and for assessing the attitude of the labour market towards graduates (in all the 3 fields).

5.2 Research / elaboration of current local surveys / analysis giving evidence of the different education / training disciplines (*processing data starting from the year 2008*)

The analysis should provide updated information collected through the analysis of survey / researches in the most relevant regional economic sectors and for the 3 fields of the local education / training system (*NUTS III level*) taking into account the following set of information:

- Assessment of the attended education / training
- Postgraduate training (in case of university)
- Employment condition
- How and when graduates¹⁰ actually access the labour market
- Characteristics of the company and the current work
- Extent to which the obtained degree is useful and required for the current job (*effectiveness and quality*)
- Satisfaction with the current job
- Search of a job

¹⁰ Referred to all the 3 field of education / training here considered.



5.3 Quantitative / qualitative research over a precise sample of graduates on the local education / training system taking into account the leading economic sectors in the region and based on data collected through a direct and representative sample survey for all the 3 categories considered.

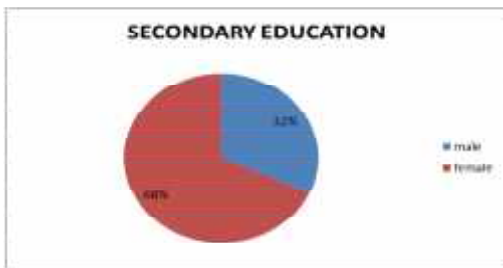
This section will report the results of the direct survey implemented through the questionnaire according to the following structure:

- 5.3.1 general overview of the data collected and processed,
- 5.3.2 evidence of the percentage of each single answer (*according to the questionnaire structure*) out of the whole sample,
- 5.3.3 graphics and charts

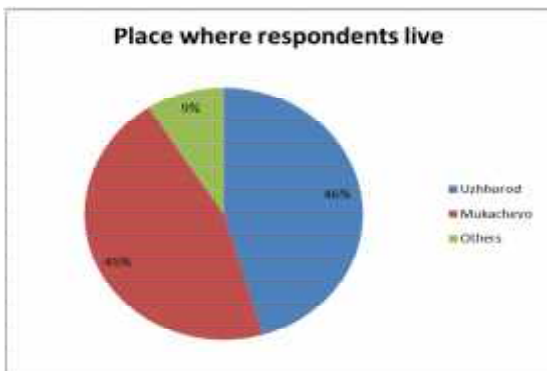
Annex_II - Questionnaire over the impact of the training offer

Secondary education:

Number of respondents : 22 students who attended Secondary Vocational school during last 2-3 years.

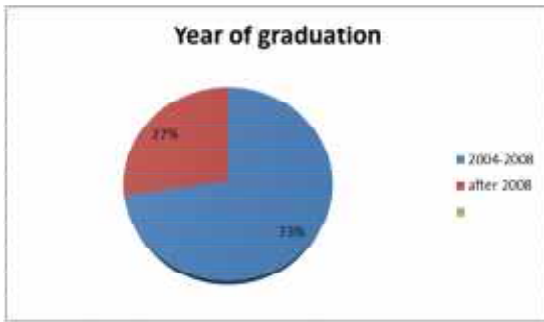


Place where main of respondents live and study is presented in following diagram, %:



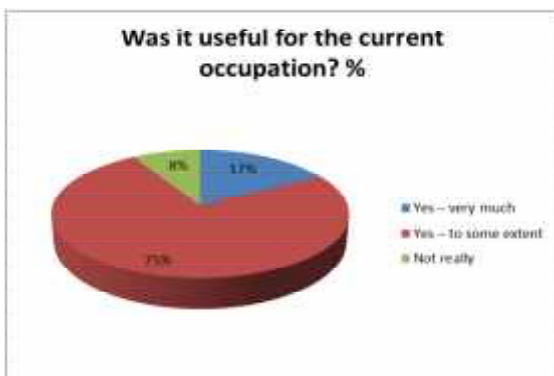
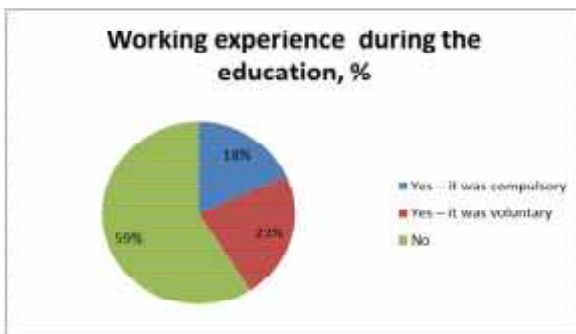
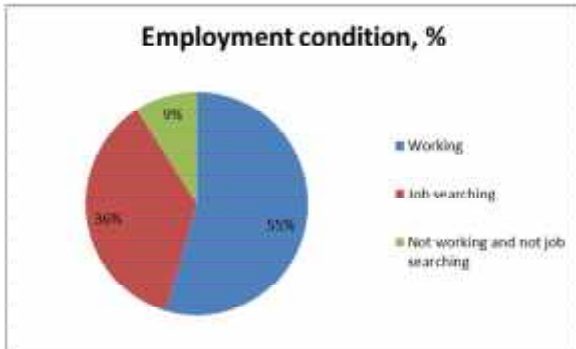
Average age of interviewed students is 21 years.



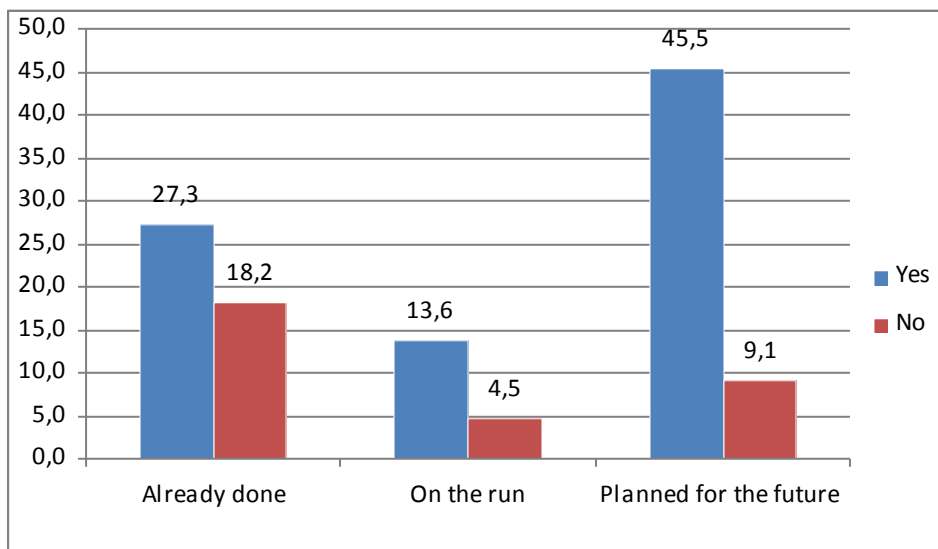


More than 70% of interviewed respondents have graduated in 2008 .

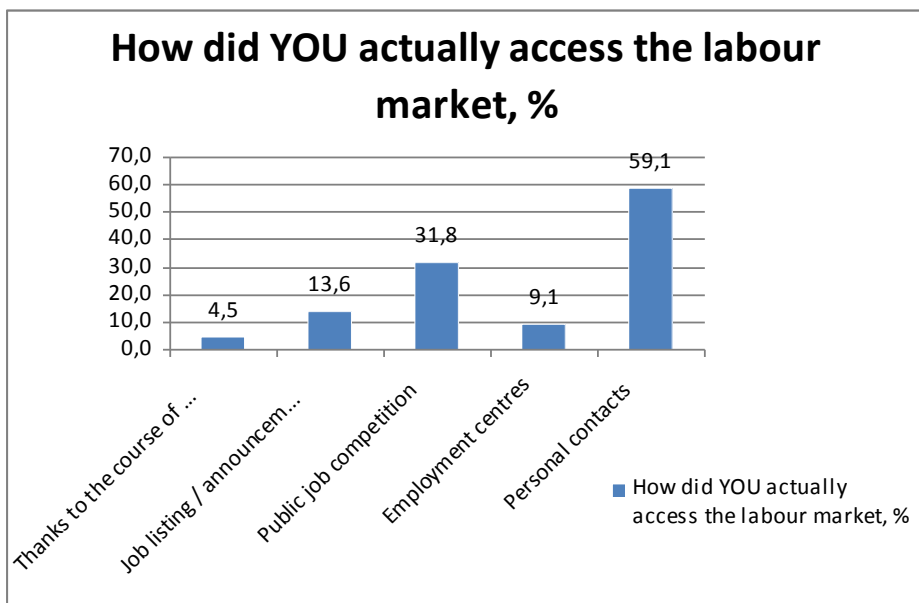
Following diagrams presents the share of employment among interviewed students, in %:



Volume of training post diploma is presented in following diagram, %:



Access to the local labour market.



Within how much time after your graduation did you enter the job market? %

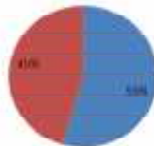
■ within 6 months ■ within 6 to 12 months ■ within 2 years ■ others



Level of employment among interviewed respondents is presented in following diagram, %:

Are you still working in the same company? %

■ Yes ■ No



More than 55 % still work at the same company.

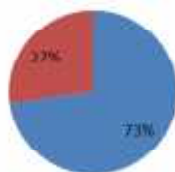
In case of employment, what is the sector of operation of your company, %

■ wholesale and retail trade; repair of motor vehicles / motorcycles, personal and household goods
 ■ professional, scientific and technical activities
 ■ administrative and support service activities
 ■ public administration and defence; compulsory social security
 ■ education
 ■ activities of households



Was the diploma required for the current job position, %

■ Yes ■ No



One respondent had mark several answers, so % have been defined in view of its share in total.

#	List of skills acquired in the education process	Number of positive answer
1	Relational skills	4
2	Ability to work in group	10
3	Ability to work independently	8
4	Managing people	3
5	Coordination capacity	1
6	Negotiation capacity	3
7	Planning activities and resources	1
8	Management of Financial Resources	4
9	Management of Personnel Resources	2

MISSING skills and knowledge from the education process, number

#	Name of missing skills	Number of positive answers
1	Customer orientation	5
2	Capacities to design	6
3	Capacity to use equipment maintenance and installation	6
4	Managing people	7
5	Coordination capacity	5
6	Negotiation capacity	5
7	Planning activities and resources	5
8	Management of Financial Resources	4
9	Management of Personnel Resources	4

Technical education



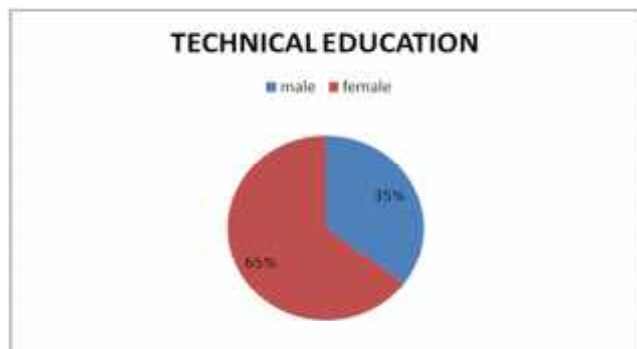
Number of respondents is 17 students of technical specialization. All of them attend the Technical education in Uzhhorod College, in operator specialization.

The average age of respondents is 17 years.

All of respondents will graduate the college after 2008 year Term of education= 3 years

The students during studies participate for 3 months in practical trainings.

Gender share within target group interviewed is presented in following diagram:



The interviews have been done with representatives from different territories who study in Uzhhorod College.

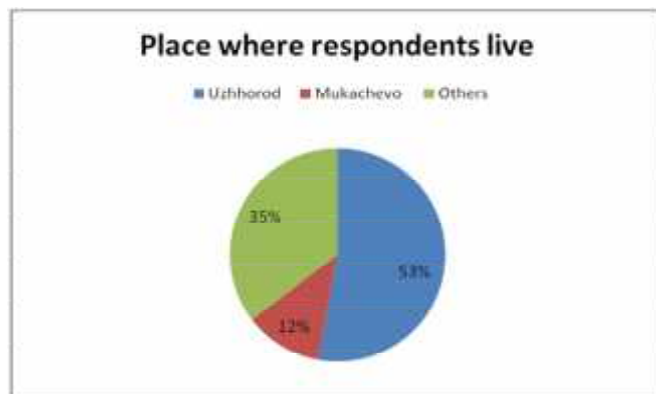
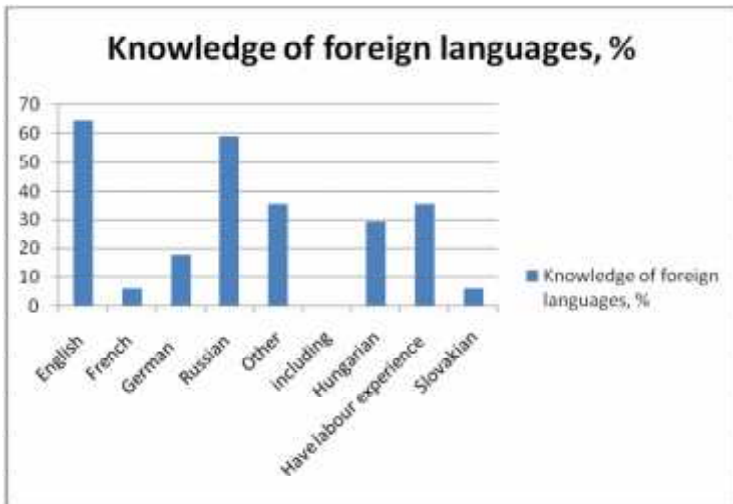


Diagram: Knowledge of foreign languages, including other special skills



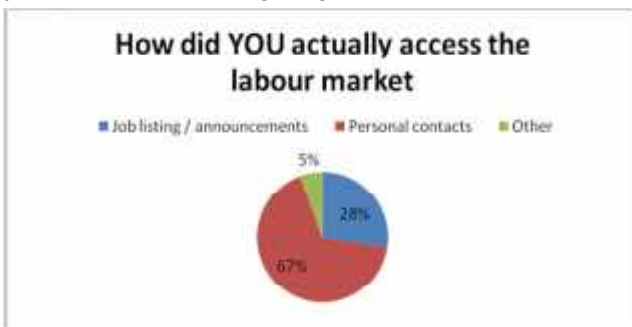


Nobody from group of recipients knows Spanish and Chinese languages as well as some of target group emphasised on importance of available labour experience.

More than 90% of interviewed respondents search a job in this moment.



Share of access to the labor market through job listing, personal contacts and others channels are presented in following diagram, %:



CONCLUSIONS

Summary of all the most relevant and peculiar information collected in the regional report to be used as a very first short presentation of all the data here contained *<max 2 pages>*

Most of the survey participants can find appropriate job within next 6 months after their graduation, the value of 27% indicates that more then quarter of graduates either search for a job or is currently unemployed. Three quarters of graduates state that their current job position requested appropriate diploma, in contrary of the employers statement where the previous experience is more important than the actual diploma obtained.

The graduates as most positive sense the achieved ability to work either in group as well as independently. On the other side the education process by their opinion does not provided them enough practical skills like to manage and lead people, develop own creativity (design) or skills to repair maintain and install equipment. The English language skills dominate the communication languages followed by Russian, secondary important are other languages (outside of Hungarian, Slovak, Romanian due to the mixed ethnic composition of the target territory). The number of employment searching respondents is surprisingly high, maybe due to the specific places of survey conduction (street level).

