WP 3 "ET-INVENTORY"

CATALOGUE OF TRANS-NATIONAL INVENTORY CRITERIA

FINAL VERSION

INDEX

INTRODUCTION	2
METHODOLOGY	4
CAP 1 LEGAL FRAMEWORK	5
CAP 2 STATISTICAL INDICATORS OF THE REGIONAL / LOCAL ECONOMY AND LABOUR	8
CAP 3 EDUCATION / TRAINING DEMAND	.12
CAP 4 EDUCATION / TRAINING OFFER	.16
CAP 5 IMPACT OF THE LOCAL EDUCATION / TRAINING OFFER	.18
CONCLUSIONS	.20





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.

<u>WP 3</u> ("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 (*serving 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 *EuroStat²* and *Euridice³*). 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.

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





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

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*).

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 Transnational 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):

- <u>Secondary education</u> 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;
- <u>Post-secondary education</u>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 <u>academic degrees</u>;
- <u>Vocational training</u> (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

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").





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.

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.

1.1 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>





1.2 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>





1.3 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>





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 <u>regions</u> 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 <u>NUTS III</u> 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.

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.

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*).

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 as % of primary income, development of disposable income of private households per inhabitant (from 2001).

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 <u>added value</u> 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

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).





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

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.

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).

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.

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).

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.





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.





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>





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.

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

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.

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.



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.

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).





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





CAP 4 EDUCATION / TRAINING OFFER

4.1 Framework of <u>schools and professional profiles</u> and <u>competences level</u> 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 <u>qualifications</u> provided by the local system (*NUTS III level*) of secondary education, post-secondary education and vocational training, according to the following table:

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

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





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

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

During these months the <u>Italian secondary school system</u> 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.





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 <u>secondary</u> <u>education</u>, <u>post-secondary education</u> and <u>vocational training</u>). 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

 $^{\rm 10}$ 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 <u>direct and representative sample survey</u> 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





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>



