



CAENTI
Coordination Action of the European Network of Territorial Intelligence
A project funded under FP6 of the E.U.
<http://www.territorial-intelligence.eu>



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**State-of-the-art about the notion
of competitiveness of territory
Deliverable No 27**

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December 2006, 31st

SUMMARY

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INTRODUCTION

To approach the notion of competitiveness from a regional perspective has become productive in many ways recently. On the one hand, as a consequence of developing in a globalized environment, it has become necessary for theories relating to the region to introduce an umbrella term, and on the other hand, the previous use of the term on the macro- and micro-level lacked the intermediary level that, as a localised level, could refer to an economic field for developments and investments.

Competitiveness is often viewed as a key indicator of the success or failure of policy. The concept of competitiveness, however, while relatively clear when applied to enterprises, is more difficult to define and measure when applied to regions or countries. An industrial region, for example, is not directly competing against a predominantly agricultural region or a financial centre, so the measurement of its relative competitiveness is problematic. Moreover, the term itself tends to convey the impression of a win/lose situation, in which regions can improve their position only at the expense of others, whereas, in practice, there are mutual gains to be achieved from individual regions becoming more competitive.

COMPETITION, PRODUCTIVITY, COMPETITIVENESS – DEFINITIONS

The notion of *competition* has been defined by many in many ways. According to one of the most comprehensive approaches, competition is an activity where two or more players strive to gain advantage over one another within set rules.

Productivity means efficient use of all the available resources.

Competitiveness means acquiring and retaining position in the market, increasing market share and profitability and being commercially successful.

REGIONAL COMPETITIVENESS

Similarly to competition in the market of products, where specific product features are compared, regional competitiveness cannot be interpreted as a competition of the regions as such, rather, as a competition based on the comparison of certain regional conditions and segments. Naturally, these segments with all their positive and negative qualities make up the region, which is by no means homogeneous.

When examining the goal and object of competition, we can mention functions, institutions, investments, infrastructural developments, social, cultural, sport and other events or other factors with limited availability (such as resources for the development, information, valuable workforce), which all relate to the aim of reaching some more favourable position.

To distinguish between the supply and demand sides of regional competition, we can say that on the demand side there are the regions' goals, on the supply side there are the regions' conditions, and these two determine the produced goods and the standards of living through the general competitive position of the areas.

Regional competitiveness differs from company competitiveness, and accordingly we can make a distinction between two points of views. On the one hand, we can analyze the competitiveness of given regions by interpreting the regions as integral wholes. On the other hand, we can use the lower level of company competition as a starting point and examine what factors and conditions bring competitive advantage to a given region. In our studies we use this latter approach as a guiding line.

To be able to interpret the notions of competition and competitiveness on a regional level, we need to extend a micro-level approach to a macro and global level. Global competitiveness can be approached from various standpoints. We aim to integrate these approaches and develop the definition of „territorial intelligence” relying upon these findings.

Naturally, a variety of changes in other conditions, such as unpredictability of economic environment, intensifying competition among companies, changes in company organisation or the process of social and political transformation, may also have contributed to the intensification of competition among regions.

Factors in regional competitiveness for an economic perspective:

- based on the total sum of adaptive skills of companies operating in the region („practical” approach)
- based on the economic basis and economic environment (capital and labour market, quality of inputs, infrastructure) provided by the region for its dominant companies. („environmental/system” approach)
- and based on the capacity of the region to attract investments, its accumulation of human and physical resources (the approach of „capital development”)

Various documents of the European Union attempt to specify the factors determining the competitiveness of a region with different degrees of elaboration. By looking at some of the documents it becomes evident that the idea of competitiveness has a key role in economic and social cohesion, in economic growth, in employment, that is, in the successful operation of the single market, not forgetting environmental protection and conservation either.

A more balanced competitiveness of the European area is one of the three main objectives defined by the *European Spatial Development Perspective*, besides economic and social cohesion and conservation of natural resources and cultural heritage. (EC 1999)

The *Sixth Periodic Report on the Social and Economic Situation and Development of Regions in the European Union* also deals with the notion of competitiveness, defining it as „the ability of companies, industries, regions, nations and supranational regions to generate, while being exposed to international competition, relatively high income and employment levels” (EC 1999, 75 pp.)

According to the sixth regional report, the main determinants influencing the competitiveness of regions are the following:

- research and technological development
- small and medium-sized enterprises
- direct foreign capital investments
- infrastructure and human capital
- institutions and social capital

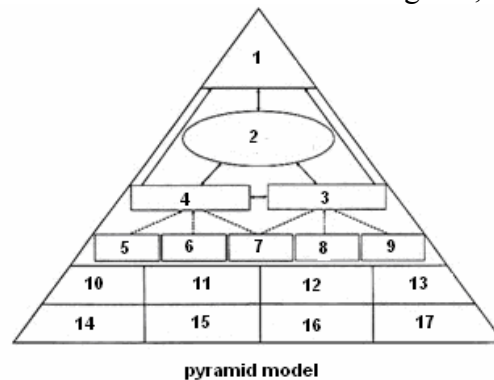
The sixth regional report also includes the principal factors that usually characterize successful regions, namely, high rate of employment in business services and in the processing industry, the extent of innovative activities, favourable conditions of regional accessibility, skills of the workforce and a high proportion of university/college graduates.

Broadening the notion of competitiveness, *successfulness* can also be a useful term in characterising regions.

Specifically, the presence of the following factors can make a region successful:

- the capacity for economic structural change, especially the emergence of value-adding industries with multiplicative effect
- high proportion of value-generating service sector (business services, research and development, higher education, culture)
- typically knowledge-based production
- strong innovative skills
- the decision-making takes place in the successful region
- a strong and thriving middle class
- valuable settlement environment, an urban policy of high standards, and the availability of good quality public utilities and municipal services
- successful conflict management
- significant external (international) relations, integration into the system of towns and relations of an international region
- increasing income and employment

Using the determining factors of the sixth regional report and incorporating the above-mentioned points about the successfulness of towns and regions, we get a „pyramid-model”



1st level

- (1) necessary and standard of living

2nd level

- (2) regional, territorial, municipal income

3rd level

- (4) productivity of labour
- (3) employment

4th level

- (5) research and technological development
- (6) small and medium enterprises
- (7) direct capital investments
- (8) infrastructure and human capital
- (9) institutions and social capital

5th level

- (10) economical structure
- (11) innovational culture
- (12) regional accessibility
- (13) qualified human resource

6th level:

- (14) social structure with strong middle class
- (15) decision centres
- (16) quality of environment

- (17) *social cohesion of region*

The social and economic factors essential for long-term successfulness form the base of the model, the determining factors are in the middle and the ultimate goal of higher standards of living and better quality of life for the population of the region is at the top.

- *Economic structure*: in successful regions most of the people employed work in business services and the processing industry, which are characterised by high added value, intensive multiplicative effects and great flexibility.
- *Innovation culture*: successful regions are characterised by extensive innovative activities, the effective diffusion of innovation, a large number of patents. It should manifest itself not only in research and development institutions and universities; adequate business capacities and well-prepared, innovative small and medium-sized enterprises are equally important.
- *Regional accessibility*: successful regions are easy to access, with convenient transport connections and geographical location. Supplemented by the transport and communications infrastructure, these form an integral whole.
- *Skills of workforce*: in successful regions the proportion of qualified labour within the workforce is relatively high, which obviously requires an effective education system focussing on the actual demands of the labour market.
- *Social structure*: in successful regions a strong and thriving middle class emerges, which helps the region develop by virtue of its discerning demand and higher income.
- *Centres of decision*: successful regions are the regional bases of companies, they are units that undertake important activities of the enterprises operating there, and have decision-making competencies. New, innovative, strategic units are typically developed in the region or town where the company headquarters are found.
- *Quality of the environment*: successful regions possess high-standard settlement environment (public safety, pleasing urban architecture, good quality accommodation, efficient public transport etc.) and healthy natural environment.
- *Social cohesion of the region*: successful regions have an ability to manage conflicts, no matter whether they arise from economic structural change, dynamic economic growth or from inequalities among areas or communities within the region. The municipalities aim at cooperation and regional identity and local pride become stronger.

The indirect factors can be divided into two groups, one including those that determine short-term economic output (economic structure, innovation culture, regional accessibility, skills of work force) and the other including those that show their influence only in the long run (social structure, centres of decision, quality of environment, social cohesion of the region).

Following a different classification, we can put the indirect factors of the pyramid into five groups:

- a group of socio-economic activity (which includes the factors best expressing the economy and income potential of town): economic aspect, regional accessibility
- a group of functional and organisational innovation: innovation culture,
- a group referring to employment, intellectual resources and skills of the work force: skills of work force
- a group relating to demographic factors and to the traditional and new functions of centres: centres of decision, social structure, social cohesion,
- and treating quality of environment as a separate category, as it does not fit into any of the previous groups clearly

Regional competition can be seen as a process in which certain groups try to influence the development of regional or local economy through local policies, in explicit or often implicit ways, in competition with other regions. Consequently, competitiveness of a region is made up of several components, which can be described with various indicators.

MEASURING REGIONAL COMPETITIVENESS

Quantitative measurement

In the most recent EU reports on cohesion and competitiveness, the drafters of the documents clearly opted for the *standard definition of competitiveness*. It has become evident that improving quality of life and increasing standards of living is the ultimate goal of Union and national interventions to promote competitiveness. That explains the position of this category at the top of the *pyramid-model* widely used in studies of competitiveness.

Regional income affects quality of life most directly, and this is the indicator generally used to measure regional competitiveness, so it is placed in the middle of the model, while we must accept that a variety of factors have an influence on the value of this indicator.

Competitiveness can be defined in several ways. As indicated previously, per capita GDP is the generally accepted and used indicator of regional competitiveness. This indicator can be broken down into further components.

In the latest EU report on competitiveness the following index factors were used

- Work productivity: GDP per one working hour
- Choice between work/leisure: completed hours of work per employee
- Rate of employment: the rate of people in employment within the working-age population.
- Demographic factor: the rate of working-age people within the whole population.

By breaking down per capita GDP into index factors, we reach the following formula.

$$\text{GDP/Working hours} = \text{Working hours/number of the employed} \times \text{GDP/Working-age population} \times \text{Working age population/Population}$$

Qualitative measurement

In this approach indicators influencing competitiveness of human resources are included.

- the education level of the areas' population
- the supply and quality of institutions for human resource development in the area
- research activity
- access to cultural services and the nature of consumer habits
- quality of social care and services
- level of healthcare and its infrastructure
- quality of recreational facilities

The appearance of survey of regional competitiveness in the documents of the European Union

In EU documents increasing competitiveness appears as a *general objective* that contributes to achieving cohesion objectives, solving employment problems and fostering economic growth as well.

Annual competitiveness reports deal with the issue of tendencies in regional competition. The 2000 competitiveness report examined the effects of structural changes, and the role of *services* and *quality* in competitiveness in greater detail.

The 2001 competitiveness report incorporates the guidelines accepted at the Lisbon Summit, therefore concentrates on two main areas: *information and communication technologies* and the role of *innovation* in productivity and economic growth. The report emphasizes the competitiveness-boosting effect that the introduction of new technologies produce.

The 2002 competitiveness report concentrates on the *third sector*, and in 2003 the emphasis is on examining the *relationships among information and communication technologies, company restructuring and productivity*.

The 2004 competitiveness report focuses on how public action and economic policy influence competitiveness. In the EU the state plays a much greater economic role (Public spending/GDP), than in the case of the main competitors (USA, Japan), although in this respect there are considerable differences within the EU. The report discusses the healthcare sector in detail, due to its substantial economic impact. In several member states streamlining the healthcare sector is on the agenda, in keeping with the increasing budgetary discipline. Important social interests in healthcare supersede simple economic considerations and justify the need for efficient public action.

The starting point of *cohesion reports* is the view that increasing regional competitiveness can be an effective tool for reducing regional inequalities, and thus can help the whole EU provide more balanced living standards and general conditions of equal opportunities. The *first cohesion report* pointed out first the *deficiencies of the community aid policies focussing on regions where development is lagging behind*. The report concluded that even though differences in income among member states had considerably diminished since the early 80s, disparities among NUTS 2 levels, that is, disparities among regions were basically unchanged - despite national and EU efforts.

The objective of the Lisbon Strategy accepted in 2000 at the Lisbon Summit is to make the EU the most dynamic and competitive economy and the most competitive knowledge-based society in the world by 2010. To achieve this objective the EU aims to guarantee spending 3 % of GDP on research and development by 2010. The Lisbon Summit declares that in the future not only economic growth but also strengthening social cohesion will be a priority, as it can help reducing disadvantages arising from unutilised human capital. Besides human resources, the contribution other sectors – such as the condition of natural resources, healthcare situation – make toward competitiveness is also important to point out.

The *second cohesion report* devotes special attention to competitiveness. The report examines the developments in economic, social and regional cohesion individually. In connection with *regional cohesion* it calls for a *more balanced regional development*. This report was written on the basis of the *European Spatial Development Perspective (ESDP)*, which was accepted in 1999. The ESDP was also motivated by the aim of strengthening cohesion and promoting the use of instruments for regional development to support balanced spatial development.

The ESDP states three main objectives:
- providing economic and social cohesion
- conserving natural resources and cultural heritage

- and promoting a more balanced spatial development of the European area and redefining the relationships between rural and urban regions.

The first part of the second cohesion report explores community cohesion from its economic, social and regional aspect. In the part dealing with regional cohesion the report examines central areas (characterized by a concentration of economic activity, capital and qualified human resources), urban areas, rural areas and areas near borders and it treats areas with special geographical features as a special case (mountains, islands, coastal areas). After the classification and the comparisons of certain areas, it raises the fundamental question: what factors can explain the actual convergence of the regions? It is a common feature of all the six *elements of success* highlighted by the report, that they influence both cohesion and competitiveness.

These elements are the following:

- The demographic and migratory situation
- Tendencies in investments
- Available infrastructure
- Development of human capital
- Innovation and R&D
- Knowledge economy

The report accepts and applies the standard definition of competitiveness. According to this notion, competitive regions and nations are able to provide high and rising standards of living, and high and sustainable rate of employment. Although the traditionally accepted measure of competitiveness is per capita GDP, it must be accepted that other important factors also influence economic output. The second cohesion report examines one by one the influence community policies, budgetary spending and structural policies have on cohesion. The document points out that although the cohesion policy of the Union has achieved results (e.g. creating 2 million new jobs in the 15 member states during the 1990s), and disparities among member states somewhat diminished, differences in income among regions remained substantial and decreased only in small degrees. The report formulates a new approach to cohesion policy after 2006, since the Union must face increasing regional, social and economic disparities resulting from the enlargement, and the challenges of a knowledge-based society. The main point of this new approach is that it is not the available financial frameworks that should be the starting point when defining priorities and the allocated funding, but that the priorities must come first and the extent of financial frameworks must be decided accordingly. According to the Commission's resolution, funding for regional policy objectives does not have to be fixed at 0,46% of community GDP, but the demands for assistance should determine the extent of the financial frameworks.

Regarding the programming period starting in 2007:

- Increased respect for the principle of concentration of funds appears as a guideline.
- However, funding for aid is expected to increase.
- Priority aid for the most disadvantaged regions is to be maintained, using the established method of direct zoning (although thresholds may change)

Criteria for eligibility for assistance in the case of other regions (e.g. those struggling with structural difficulties) would be set by the member states. *The community would guarantee concentration of funds during the programming period*, and would set the minimum criteria about the amount of community and national aid (indirect zoning).

The *third cohesion report* was published in February 2004. The drafters of the document gave a mixed - partly positive, partly negative - evaluation of the internal cohesion and growth determining the competitiveness of the EU. *Economic growth in the European Union had noticeably slowed down*. Unemployment was rising in most areas of the European Union, which was leading to serious social problems. The long-term underperformance of the economy of the EU suggests that there are several underlying problems to be solved so as to maintain an acceptable rate of growth.

These *problems arise from deficiencies in key factors of competitiveness* – inadequacies in the supply of physical and human capital (infrastructure and skills of work force) and in innovative achievement, efficient business support is insufficient, and the level of environmental capital is low (ruined natural and/or urban environment) Countries and regions need assistance to overcome these structural deficiencies and to make use of their comparative advantages, and thus become more competitive both in the internal and external markets. At the same time, training and education should be made available for people to develop their skills according to the current market demands, regardless of where they live. These aids have become even more important after accession, which will result in a further widening of disparities. Therefore, a *new objective for development in the EU is to strengthen regional competitiveness and to give assistance to people in developing their skills*. Economic growth in the EU can be boosted by consistent development of these areas.

COMPETITIVENESS IS IN THE CENTRE OF REGIONAL PROGRAMMES

The conclusion can be drawn from Commission reports and official documents of the Union that competitiveness has become a central concept in EU development policies, so it is not surprising that it is becoming a more and more determining factor in regional programs as well. In development policy, competitiveness is not only a goal; it is also defined as the means. This change of perspective started some time ago and had an effect on assistance instruments and programming. The Treaty of Rome formulated the need for a harmonious, balanced development of the economy as a general aim, but at that time there was mention of a community regional policy. Overcoming difficulties arising from territorial disparities was continuously on the agenda, but responding to changes in conditions was only possible by changing the instruments. Meanwhile, regional competitiveness became a more and more central issue, as it was recognized that in the global competition huge territorial disparities bring competitive disadvantage for the whole of the EU.

CONCLUSION

In the light of the views presented in the study above, we establish the following indicators of competitiveness for the „competitiveness” programme component of „Fundamental methods” Workpackage 4 (workpackage4 [WP4]) of the CAENTI programme:

- Education & the Workforce
 - level of qualification of the region’s population
 - supply and quality of institutions for human resource development in the region
 - activity of labour market policy
 - rate of employment
- Quality of Life & Social Capital
 - access to cultural services and the nature of consumer habits
 - quality of social care and services
 - level of healthcare and its infrastructure
 - quality of recreational facilities

- quality of settlement environment
- Research & Development
 - regional research activity
- Technology & Innovation
- Transportation & Infrastructure
- Enterprise & Investment
- Business Climate

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