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**FACULTY OF ECONOMICS  
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# **ABSTRACT OF THE DOCTORAL THESIS**

**INDUSTRIAL, SCIENCE AND TECHNOLOGICAL PARKS  
BUSINESS INCUBATORS, THEIR ROLE IN LOCAL  
AND REGIONAL DEVELOPMENT**

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**To** \_\_\_\_\_

We present below the summary of the doctoral thesis entitled **“Industrial, science and technological parks, business incubators, their role in local and regional development”** so as to obtain the scientific title of PH.D. in Economics.

Your assessments and comments with regard to the dissertation can be submitted to the faculty of Economics and Business Administration of Cluj-Napoca.

We kindly invite you to the public defence of the thesis that will be held on \_\_\_\_\_ 2011, at \_\_\_\_\_, room 118, at the Faculty of Economics and Business Administration, 58-60 Theodore Mihali Street, Cluj-Napoca.

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## LIST OF ABBREVIATIONS

ADC	Adriatic Danubian Clustering
AHP	Analytic Hierarchy Process
AICAR	Incubators and Business Centers Association from Romania
ANIMMC	National Agency for Small and Medium Enterprises and Co-operation
APITSIAR	The Association of Industrial, Technological, Science Parks and Business Incubators in Romania
ARIS	Romanian Agency for Foreign Investments
ASE	The Academy of Economic Studies
AURP	International Association of Research Parks affiliated to Universities
BSC	Balanced Score Card
CAEN	National Classification of Economic Activities
CDI	Research, Development, Innovation
CEIM	European Charter for Small Enterprises
CESE	European Economic and Social Committee
CJC	Cluj County Council
CKO	Chief Knowledge Officer
CL	Local Council, Local Councils
CRIMM	Romanian Center for Small and Medium sized Enterprises
CRPCIS	Romanian Center for Trade and Investment
CTQ	Critical to Quality
EBN	European Business & Innovation Centre Network
EFQM	European Foundation for Quality Management
ERIK Network	European Regions Knowledge based Innovation Network
EURADA	Association of Regional Development Agencies
FP6, FP7	Framework Program 6,7
IASP	International Association of Science Parks
ICT	Information and Telecommunication Technology
IMM	Small and Medium Enterprises
INS	National Institute of Statistics
ISO	International Organization for Standardization
ISD	Foreign Direct investments
KM	Knowledge Management
MAI	Ministry of Administration and Interior

MEC	Ministry of Economy and Trade
MBNQA	Malcolm Baldrige National Quality Award
MQ	Quality Management System
NBIA	National Business Incubation Association
PIDU	The Integrated Urban Development Plan
PIB	Gross Domestic Product
PAEM	Program of active measures for combating the unemployment
PND	National Development Plan
PNUD	United Nations Development Programme
POS	Sectoral Operational Programme
PUZ	Area Urban Plan
QFD	Quality Function Deployment
SCS	Solutions Communicantes Sécurisées
TETAROM	Transylvania Advanced Equipments and Technologies made in Romania
TIC	Information Technology and Communication (IT&C)
TQM	Total Quality Management
UE	European Union
UKBI	United Kingdom Business Incubation
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organization or World Bank
USAID	United States Agency for International Development

## **KEYWORDS**

Business Infrastructures  
Industrial Parks  
Science and Technological Parks  
Business Parks  
Business Incubators  
Industrial Clusters  
TETAROM SA  
Business Infrastructures Organisations  
Successful Models  
Economic Development  
Business Infrastructure Management  
Excellency in Business  
Sustainable Development  
Durable Development  
Romania's EU Accession  
Questionnaire  
Focus-Group  
Territorial Marketing and Strategy  
Lisbon Strategy  
Knowledge-Based Economy  
Start-Up Companies  
Spin-Off  
Technological Transfer  
Low / Best Cost Location  
Foreign Direct Investment



## INTRODUCTION

I graduated from the Babes-Bolyai University Doctoral School in 2006. I started working to the present Ph.D. thesis in the same year. In this period of time, from economic point of view and especially on what investments were concerned, Romania and Cluj were on a huge wave that never seemed to end in time. Working parameters were significantly changed once the global economic crisis broke out. Since July 2007, as a consequence of U.S. investors' loss of confidence in secured mortgaging, the outbreak of the crisis caused a liquidity crisis that led to a substantial capital injection in financial markets from the Federal Reserve (USA) and then from other European banks (Bank of England, European Central Bank, etc). One by one, almost all European countries and then many have been strongly affected by this crisis. The investments have dramatically decreased. Regardless of the field, investment sector crediting was reduced almost instantly. This was experienced worldwide and Romania was no exception. All investments in business infrastructures were stopped, both by the developers and by the potential customers. A real battle to attract resources and investments started. Initial strategies, were, suddenly no longer valid, theories, analysis, diagnoses, had to be reformulated if not, changed completely. In this context, I carried out the research on the phenomenon of business infrastructures. I tried to find out the situation worldwide, the situation in Romania, before and after the crisis, to find solutions and to suggest ways to approach or solve the problems in this field.

The importance of business infrastructures phenomenon research can best be motivated by the opinion of reputed scientist, Professor Acad. Ionel Haiduc, President of the Romanian Academy and professor at the Babes-Bolyai University.

In a newspaper interview for "Adevarul" from Bucharest (Adevarul, May 11, 2007), Professor Haiduc stated that we, Romanians, should seriously invest in infrastructure, education, research and technological innovation.

Luis Sanz, General Manager of IASP, compares classic economy with the knowledge economy by saying:

"classic economy: the more something is consumed, the less remains, knowledge economy: the more knowledge is consumed, the more is" (IASP World Conference, June 2011, Copenhagen).

The words of the two great personalities in the field of research, innovation and technology transfer represent almost the quintessence of a truth that globalized economy and Romanian economy in particular, is facing.

The major risk, for industrial parks would be to develop only production activity or worse, to work in industries with very little added value. The purpose of such business is to create jobs with high added value.

Therefore, I consider an activity of exploration (research), as wide as possible, of these structures to be extremely important. As a result of these studies and their application in the case of TETAROM Parks, today, in Cluj, we have business parks, not only industrial parks, research and development centers (Emerson, Nokia, Energobit, etc.), an operating business incubator, a second one in developing and a protocol signed with UTCN and UBB Cluj, concluded for the preincubation activity and to create spin-offs in order to capitalize in business, university research results.

In the conduct of research, I had as reference the success of industrial parks in the USA (model successfully exported to Asia - China, Taiwan, India, Singapore, etc.) and models from Europe (Italy - "distretti industriali," UK and Ireland, Germany, France and Austria).

The results, correlated with the situation in Romania, through the government programs as the main short and medium term challenges for Romania, were presented in Chapter 1, entitled "Business infrastructures."

Industrial Parks TETAROM are a business model for small and medium enterprises performance improvement in Romania and can be studied and taken as an example of good practice.

Since the thesis also includes business incubators and business infrastructures, they were approached in Chapter 1, subchapters 1, 2 and 3.

Since TETAROM Industrial Parks include and develop two business incubators, I treated the issue from concept, development, implementation and operation up to the functioning at the initially proposed parameters.

In Chapter 2 I highlighted the role of business infrastructures in local and regional development, focusing on durable and sustainable development both in Europe and in Romania.

Chapter 3 is dedicated to the role of management in achieving excellence in business. I described the situation up to date of SMEs, I conducted a study on organizational models and respectively on how business infrastructures are managed (industrial parks, in particular) in Romania.

In Chapter 4 I presented the research, research methodology, research objectives, goals and premises. Research approach methodology was designed as a descriptive model

which, along the way also included a SWOT analysis, highlighting the component of "entrepreneurship."

In Chapter 5, section 5.1, "Case Study - TETAROM Industrial Parks" the results achieved in TETAROM parks are presented in detail. The title was especially chosen in the desire to complete the applicative research carried out in the previous chapters, because the industrial parks are business entities, part of economic development infrastructures, TETAROM Industrial parks in particular, being among the biggest in the country.

## **Chapter 1. BUSINESS INFRASTRUCTURES**

This chapter lists the types of business infrastructures, the circumstances under which they were developed, the current situation of business infrastructures in Romania and international organisations that govern them or they are affiliated with.

### **1.1. Concepts on business infrastructures**

These can be divided into: industrial zones, free zones, districts and industrial metadistricts, industrial clusters, industrial parks, science parks (technological, incubators, innovation centers, and technological transfer centers), trade parks, business parks, etc.

The most famous business infrastructures, analyzed in the international literature are: science parks, industrial parks, industrial clusters and a slightly smaller proportion, incubators.

#### **1.1.1. Science parks**

Under this name we find various typologies such as: *technology parks, research parks, science and technology parks, innovation centers, technological incubators, business incubators, technopolisuri*, etc.

As defined by IASP (International Association of Science Parks) a science-technological park is an initiative which:

1. has operational links with the academic environment, research centers and other institutions in the field of education
2. is designed to encourage the forming and the development of industries in the knowledge economy field;
3. has a team of experts able to achieve technological transfer to business area and production ([www.iasp.ws](http://www.iasp.ws)).

Science and technological parks in Romania represent an area which is engaged in teaching, research, technological transfer of research results and their capitalization in economic activities (*Law no.50/2003*)

### **1.1.2. Industrial parks**

Industrial parks are the most common business infrastructures and represent a defined area in which take place economic activities, scientific research, industrial production and services, capitalization of research and/or technological development, in a system of particular facilities in order to exploit the human and material potential of the area.

An industrial park can be created by the association between central government and local authorities, businesses, research and development centres and/or other interested parties (*Law no.490/2002*).

The simple concept of industrial park evolves towards "Business Park" where, beside the plot and the related utilities of production companies, services providing companies appear massively (banking, financial, retail, hotel, medical services, sports and leisure services, social services (kindergardens, vocational schools, technical colleges, police, fire prevention, first aid, etc.) exhibition centers, multifunctional conference rooms, etc.

### **1.1.3. Industrial clusters**

The concept of "*cluster*" has a long enough history, having been assigned different names including "pole of competitiveness" "industrial district", "industrial cluster".

For a national economy, the cluster has the potential to create higher added value than a location/ isolated company

I presented some concepts and theories of "cluster": that of *Alfred Marshall* (1842-1924) - known as one of the founders of neoclassic economy and *Michael Porter*, Harvard Business School expert who made popular the term of "cluster".

In Europe, the concept of "cluster" was brought by Pierre Lafitte and implemented for the first time in France, by creating competitive Pole SCS - Solutions Communicantes Sécurisées ([www.pole-scs.org](http://www.pole-scs.org)).

### **1.1.4. Business incubators**

In this chapter in this section I did a brief history of the concept of business incubator and I enumerated some of its definitions as they are presented in the literature (*start-up and the spin-off*).

The formal concept of *business incubator* was born in 1959 in the United States, when Joseph Mancuso established *Batavia Industrial Center* on the location of a warehouse in Batavia, New York.

According to European Commission's definition, a business incubator is a place where newly created companies are concentrated in a limited space.

## **1.2. Conditions and facilities for business infrastructures development**

The picture of cities' gloomy suburbs before 1990 dominated by vast fields, mammoth factories and plants changed gradually. The place of former industrial platforms was taken by modern, industrial, science and technological parks, where top companies are operating. Industrial, science and technological parks, business incubators and maybe even some clusters would better be located in the vicinity of academic institutions, thus enabling cooperation initiatives and education of the workforce in industry. Business infrastructures policy should become a regional policy or even national. Fiscal policy, industrial, research and technology policy and labor market policy are still of national priority which should contribute in establishing a complex legal framework for operating the entity of the business infrastructure.

### **1.2.1. The international situation regarding industrial and science parks**

The first industrial parks appeared in England and in the USA as the real estate business, aiming at two basic concepts: cheap fields unfit for agriculture, which could be used for industrial activities and increase the value of these fields by setting the necessary infrastructure for industrial production.

In Europe the first industrial park (industrial district) appears in 1959 in Ireland, in Shannon region.

Today the situation worldwide is an exception. Basically there is no statistic regarding this situation and anyway, industrial park infrastructures development is extremely dynamic. We can only refer to the situation in certain countries which presented statistics on certain occasions, (China, India, Indonesia, Japan, Mexico and Taiwan)

Successful models of industrial parks both in Europe and Asia are many: Singapore, Japan, Italy, Padova, The Netherlands, and Rotterdam, Germany.

The evolution of these infrastructures for business is from industrial park to specialized industrial parks (science, technological, etc.) and then towards business parks, districts, and finally clusters.

### **1.2.2. The international situation regarding industrial clusters**

At EU level, innovative clusters are considered "the engine" of economic development and innovation; they are a proper environment for business development, collaboration between companies, universities, research institutions, suppliers, customers and the competitors located in the same geographical area (local, regional, national, transnational).

EU industrial clusters have evolved tremendously from French Industrial Districts Club, founded in 1998, or Cambridge High-Tech Cluster, The Motor Sport Cluster in Birmingham up to the organization of industrial sectors such as automotive, biotechnologies, eco-innovation, optics, IT and telecommunications, space technology, etc.

In the past 15 years the trend has moved towards developing the old industrial and business parks into *industrial districts*, later to evolve into *industrial clusters*. According to the latest estimates, in the mid 90s in USA, over 67% of the active population was working in more than 380 operating industrial clusters. Most clusters are in California but there are some also in New York, Minnesota, Oklahoma and Oregon (Gordon I., 2000).

A special situation is in Japan, where the phenomenon of industrial clusters is beyond description. According to a study carried out by Japanese National Agency for SME's, in 1996 there were 537 industrial clusters (Hideki Yamawaki, 2002).

### **1.2.3. The international situation concerning business incubators**

Incubation phenomenon has grown in the U.S. in the '80s and has spread to England and Europe in various forms: innovationcenters, business incubators (Pepinieres d'Entreprises), technical/science parks (technopoles/science parks).

Estimates of the National Business Incubation Association in the U.S. showed that starting October 2006, there are about 5000 business incubators worldwide. The same sources said that in North America are over 1400, compared to 12 in 1980. ([www.nbia.org](http://www.nbia.org)).

A study financed by the European Commission mentioned in 2002, the existence of approximately 900 incubation environments in Western Europe (*Final Report - Benchmarking of Business Incubation*, European Commission Enterprise General-Directorate, Centre of Strategy and Evaluation Services, February 2002).

## **1.3. The current situation of infrastructures for economic development in Romania**

After 1989, the Romanian government tried to encourage territorial concentrations through public policy. Several instruments have been used as part of regional and industrial policy to create or facilitate the foundation of industrial infrastructures as modern means of attracting especially foreign investments.

Among these concepts, of which definitions I have highlighted through the relevant legislation, I may mention the following:

1. *Industrial parks.*
2. *Science and technological parks.*
3. *Free zones.*
4. *Disadvantaged areas.*
5. *Areas of industrial restructuring*
6. *Assisted Areas*
7. *Business Incubators.*

### **1.3.1. Industrial, technological and science parks in Romania**

The development of industrial parks in Romania started in 1998, when there was no legislation in force in this field.

*Law no. 134 / 21 July 2000* was the first law in Romania that regulated the system of industrial parks establishing and functioning. Later it was abrogated by *Government Order no. 65/30 August 2001*, and after the negotiations for Romania's accession to the EU, many of the facilities have been removed.

The conditions which industrial parks must meet cumulatively are: to have an area of at least 10 hectares, to have access to a national or European road, to be connected to public utilities infrastructure, to be owned or used by the association requesting the title of industrial park for at least 30 years and to be free of any charge. The facilities offered by the industrial parks are: exemption from tax on buildings, exemption from land tax, exemption from fees for land destination change, exemption from fees for removing the industrial park land from agricultural circuit.

Since June 2004, Ministry of Administration and Interior is the specialized body of central public administration to give the title of industrial park by request for a period of minimum 15 years.

The title of industrial park can be obtained by an "Association", Romanian legal entity and managed by a company called the administrator.

In July 2011 in Romania there were 49 industrial parks.

The total number of industrial parks, local institutions (local and county councils) have initiated 35 projects, while a number of 13 were developed by the private sector.

Regarding science and technology parks, the available data are less coherent for a correct assessment. From legal point of view, the project for the establishment and operation

of science and technology parks was initiated in 2003 and provided facilities for research-development and innovation activities in the parks.

### **1.3.2. Industrial clusters in Romania**

The definition of "cluster" can also be found in Romanian legislation as a group of producers, users and/or beneficiaries, in order to implement best EU practices to increase competitiveness of economic operators (*GD 918:2006 - The "Impact" Programme*)

The most famous cluster in Romania is in the auto industry around the Renault investment in Mioveni.

There are also excellent premises for Ford corporation investment in Craiova to be added to this cluster.

Fields other than automotive, where clusters were formed in our country, are: agro-food (in Iasi and Covasna), textiles (Iasi).

### **1.3.3. Business Incubators in Romania**

After 1989, another instrument meant to promote economic competitiveness by bringing more businesses in one location, was the establishment of technological and business incubators.

The first incubators were established in Romania in the early '90s, mainly through Phare / CRIMM

Uneven geographical distribution and very low survival rate, have made a number of incubators established with international support to stop working when the funding ended, due to the fact that support from local authorities / government / private sector was inexistent or insufficient to keep them functioning until they could be self-supporting.

So far, through the creation of business incubators financed by UNDP, five such entities were created at: Alba Iulia, Brasov, Sfântu Gheorge, Mures and Mangalia. The incubator in Alba Iulia had, in October 2010, the official opening for the second cycle of incubation.



## **1.4. National and international organizations for business infrastructures**

### **1.4.1. Associations for business infrastructures**

In order to obtain good results for each one of the parties, the idea of association between various business infrastructures appeared. The association of parties may bring a partner who owns money or “know-how”, which helps you to develop a profitable project. This association can support much better a common cause of all entities in the business infrastructure, in front of the governing authorities.

*International Association of Science Parks - IASP* is the Association of Science and Technology Parks around the world. Science and technology parks promote the economic development of regions and cities by:

- creating new business opportunities and by adding value to the existing companies;
- entrepreneurial monitoring and incubation for start-up companies;
- creating jobs in science field;
- increasing cooperation (synergy) between universities and companies.

Other relevant associations are:

*Association of Regional Development Agencies – EURADA*

*Association of Industrial, Technological, Science Parks and Business Incubators in Romania - APITSIAR, was founded in May 26, 2005, in Brasov.*

*National Business Incubation Association - NBIA (USA)*

*European Business & Innovation Centre Network - EBN*

*Incubators and Business Centers Association from Romania - AICAR.*

### **1.4.2. Successful models of business infrastructures**

In this section I have presented two successful models of business infrastructures: Tefen, Israel and the TechCenter Linz.

#### ***Tefen Model, Israel***

In 2003, Israeli businessman Stef Wertheimer presented in detail the so-called concept of "capitalist Kibbutz" - concept which brings together private initiative, liberalism, education and high quality of life,. "*People are dangerous when they have nothing to lose,*" says Stef Wertheimer.

The idea of opening industrial parks in the Middle East and at Israel's borders with neighboring countries is based on the theory that they will bring jobs to the area and people will be too busy working to engage in terrorist activities. The four industrial parks in Israel opened by Wertheimer have already created over 250 companies and generate, annually, sales

of one billion dollars. Companies located here export almost everything from CDs and electronics to spices and natural foods.

### ***TechCenter Linz Winterhafen Errichtungs und Betriebs GmbH***

TechCenter Linz und Betriebs GmbH Winterhafen Errichtungs - Linz, Austria was founded in 1998. The reason for this incubator's success is the network of entrepreneurs and start-up companies which is constantly growing, and the fact that tasks and goals meet a high standard of quality.

The incubator's aim is information transfer and innovation towards companies and corporations. The good cooperation between clients and employees is one of the daily objectives of the Incubator.

## **CHAPTER 2. THE ROLE OF INDUSTRIAL PARKS IN LOCAL AND REGIONAL ECONOMIC DEVELOPMENT**

In Europe, after the foundation of the first industrial park in Ireland, in 1959, the situation of business infrastructures has evolved in a highly complex manner. With the emergence of the European Union and globalization, more and more European institutions, both political and economic, have strongly engaged in concepts and directions where the EU economy should evolve.

The Lisbon Declaration defined the role of universities in European research, creating the triangle: research-education-innovation, establishing the framework program of the European research area, concluded in FP7 Framework and beyond FP6 (2007-2013). The goal is to make Europe "the most competitive and dynamic knowledge-based economy in the world, capable of sustaining economic growth to create better jobs in the context of greater economic and social cohesion" ([http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/00100-r1.en0.htm](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/00100-r1.en0.htm)).

Referring only to European Commission cohesion programs and policies correlated with the Lisbon objectives, for improving knowledge, growth and innovation, for the period 2007-2013, 86 billion Euros were assigned.

From these funds, significant sums will be used to support initiatives and cluster infrastructures.

At present 99% of European industry is sustained and carried out by SMEs. That is why the SMEs must be supported by industry, research and local government (by the cluster's "triangle").

Statistically speaking, so far in Europe, over 2000 possibilities for the establishment of regional clusters have been identified. Still statistically speaking, 38% of the total workforce in Europe is engaged in businesses that are part of clusters (especially in automotive industry).

### **2.1. Sustainable development in the context of European policies**

The first steps in defining European policies on economic development have emerged since 1997. That year, sustainable development became a fundamental objective of the EU when it was included in the Treaty of Amsterdam, as a major objective of EU.

At the Goteborg Summit, in June 2001, EU leaders launched the first Sustainable Development Strategy (SDS) based on a proposal from the European Commission.

Goteborg Declaration formed the core of EU development policies towards sustainable development. But they also included programs and other commitments such as those made in 2002 at The World Summit on Sustainable Development, in Johannesburg, those agreed in 2000 stated in the Millennium Development Goals, and global commitments to increase official development aid and take into consideration the needs of developing countries in international trade.

In July 2009 the Commission approved a new review of the SDS and requested proposals especially in the context of the Lisbon Strategy, thus making direct contact with the development of business infrastructures, innovation, technology, science parks, technological parks, incubators and economic clusters.

### **2.2. The role of industrial parks in the EU Sustainable Development**

On February 10, 2005, the Economic and Social Committee (EESC) decided to draw up a note on the role of technology parks in the industrial transformation of the new Member States ([ww.eesc.europa.eu](http://ww.eesc.europa.eu)). The note was adopted on November 23, 2005 and by the European Parliament on December 15, 2005.

In this note there are general guidelines of European policy stating that industrial parks should facilitate innovation and change into "innovation poles", bringing together universities, research institutes, large and small companies, other productive organizations or services providers, thus contributing to local and regional integration and reducing the technology gap between countries and regions.

Although there are a variety of terms for these infrastructures: industrial park, science park, technology park, Techno polis, research park, business park, innovation and incubation centers, the basic idea should remain the same: to facilitate interaction between science,

technology, education and economic development and creating synergies through cooperation between these organizations.

The Committee recommends the development of such business infrastructures, which have proved to be very successful in the EU15 and new Member States. It also recommends the classification as follows: science parks, technology parks, innovation centers, business parks, Technopolis - technological poles, technological districts, clusters and metadistricts.

The ultimate goal should be (briefly):

1. Stimulating competitiveness of the new Member States and reducing regional disparities;
2. achieving the single extended European market by creating networks of parks at trans-regional level;
3. innovation expenditure to be at least 3% of GDP;
4. unemployment, ensuring sustainable development, equality of opportunities to be achieved by interaction and consensus;

In what follows, I will present some situations in the new EU member states to illustrate the role of business infrastructures in the European economy.

- Cyprus- 'Enterprise Incubators' co financed by the government.
- Czech Republic, industrial zones were established through "Czech Invest" governmental agency for investment promotion.
- Estonia - industrial parks set up with the support of local or regional authorities. Significant ones are in Tartu and Tallinn.
- Poland - "Special Economic Zones" established by governmental decisions between 1995-1997 for a period of 20 years.
- Latvia - "business parks" set up by a national research and development program.
- Lithuania - a program of building industrial parks, especially near cities with adequate infrastructure was initiated in the late 1990s.
- Hungary - industrial parks created by the government since 1997, through a national program, where are now over 2,500 companies that have created over 140,000 jobs.

### **2.3. Stages of development of business infrastructure**

As a result of the experience acquired over the years, by creating and developing three industrial parks and a business incubator and after the documenting and research carried out for this doctoral thesis, I managed to outline the necessary steps to be followed in order to create such entities in the business infrastructure.

### **2.3.1. Considerations on the development of new industrial parks**

Identified from experience, the suggested steps to be followed in creating and developing an industrial park are (all steps are detailed in the thesis):

- a. identification and assessment of land;
- b. evaluation of existing utilities and utility capacity for this land;
- c. assessment of infrastructure implementation costs;
- d. carrying out pre-feasibility and feasibility studies;
- e. preparing a feasibility analysis report that includes:
  - target setting;
  - funds for financing;
  - diagrams of time and planning;
  - technical and environmental analysis
  - marketing strategies, competition analysis;
  - SWOT analysis;
- f. assessment of human resources (unemployment, willingness to change, salary level, structure by age, gender, occupations, etc.);
- g. evaluation of the education potential and of training structures for the identified locations;
- h. carrying out topo-cadastral surveys, identification of ownership;
- i. preparation of topographical surveys, geotechnical, water and soil analysis;
- j. profiling park (industrial, science, technological, business, logistic, innovation, incubator, etc.);

### **2.3.2. Considerations on the development of a business incubator**

Stages of setting up a business incubator are (briefly here, detailed in the thesis):

- Carrying out an opportunity study/incubation strategy
- Choosing location
- Selecting the incubator management
- Elaborating a Business Plan
- Establishing funding resources
- Identifying potential clients
- Signing contracts

## **2.4. The role of business infrastructures in Romania's economic development**

The existence of the business infrastructures able to compete on national and international markets is vital for Romania's competitiveness in an enlarged EU and will create premisses for a better integration of national economy in the European economy.

In this sense, the existence of appropriate business infrastructures will substantially contribute to increase Romania's attractiveness as a location for investments in economic activities and will be a keytool for stimulating the business environment.

## **CHAPTER. 3. BUSINESS INFRASTRUCTURES MANAGEMENT ROLE IN SMEs' BUSINESS EXCELLENCE ACHIEVEMENT**

With very few exceptions, industrial parks around the world are administrated by companies. Exceptions are found especially in countries ruled by communist regimes or in former communist countries. The exception is also found in Romania where we have several examples of administration belonging directly to public authorities (local or county councils). Since this represents a very important issue, I considered necessary to conduct a study on the situation of SMEs, to explore this field and its development trends.

### **3.1. Small and Medium Entreprises, current development trends**

In accordance with Article 2 of the European Commission Recommendation 2003/362/CE and with Romanian legislation are considered SMEs those enterprises which meet the following conditions:

- a) they have an annual average number of employees under 250;
- b) they make an annual turnover of up to 50 million Euros, or have total assets of up to 43 million Euros (in EU) and in Romania, those which have a turnover of 8 million Euros, or have a result of the annual balance sheet that does not exceed the equivalent in lei of 5 million Euros.

According to the annual average number of employees, SMEs are classified in the following categories:

- a) up to 9 employees - micro enterprises;
- b) 10 to 49 employees - small enterprises;
- c) between 50 and 249 employees - medium sized enterprises. "

*(Law 346/2004 on stimulating the creation and development of small and medium enterprises, Article 3 and Article 4, 2004).*

Regarding the characteristics of SMEs the following are predominant:

- substantiating activities on the central role of the entrepreneur;

- frequent overlapping of the roles of entrepreneur, owner and manager;
- the exercise of participatory entrepreneurship;
- resorting to cooperation strategies with other companies;

In the EU there are about 40,000 large firms, representing only 0.2% of all enterprises; 90% are SMEs, nearly half of them have no employees, providing employment and income for family members and in this situation are almost 9 million enterprises (Europäische Gemeinschaften, *Beobachtungsnetz der Europäischen KMU*, 2004).

The basic mission of any company, regardless of size or layout is to maximize profit. This is not possible without good management which automatically implies the existence of a performance culture, of strategic management, trends, of methods and evaluation criteria and self-evaluation.

### **3.2. Modern approach on management and business excellence**

Worldwide there are several models of business excellence based on similar principles, structures and objectives.

In the following I will present several models, recognized worldwide.

#### **3.2.1. The American model of business excellence**

The model is also called the Malcolm Baldrige, who was secretary of commerce in the U.S. from 1981 until 1987. Applying the model led to strengthening the competitiveness of American enterprises on international market, aiming at continuous improvement of processes quality and thus of their results ([www.baldrige.com](http://www.baldrige.com)).

#### **3.2.2. The Japanese model of organizational excellence (Deming Award)**

As in the case of the American one, the Japanese model wears the name of a personality, in this case Dr. W. Edwards Deming. There is a committee (Deming Committee) annually offering the so-called Deming Award for Business Excellence (Catuneanu V. Dragulanescu M.)

#### **3.2.3. Romanian Quality Award J.M. Juran**

The foundation "Romanian Quality Award J.M. Juran" was founded in 1998, acquiring legal personality in 1999, characterized as an independent, non-governmental organization. Its objective is to stimulate economic organizations, schools and research of various public sector organizations in order to implement the best management methods, targeting in particular the methods of quality management, aiming to validate the managerial levels of excellence that they have reached ([www.fundatia-juran.ro](http://www.fundatia-juran.ro)).

### **3.2.4. The European model of business excellence**

Large European companies founded in 1988 "European Foundation for Quality Management (EFQM)." EFQM excellence model has been defined and completed in 1997 and since 1992 awards are awarded annually for business excellence. EFQM model is based on eight principles ([www.efqm.org](http://www.efqm.org)):

- a. results orientation;
- b. focus on customer satisfaction;
- c. business performance management (leadership) and constancy in purpose and objectives;
- d. processes and facts oriented management ;
- e. human resource development and involvement;
- f. continuous improvement and innovation;
- g. development of partnerships based on mutual benefit;
- h. public responsibility.

This model focuses especially on leadership, strategy, planning, and change implementing contact with external and internal environment.

### **3.2.5. The ISO Standards**

ISO 9000 standards appeared in 1987 as a set of models which provided the requirements that an organization must meet in order to build the quality system.

In 1994 these standards were reviewed. This included the organization and assignment of responsibilities, procedures, processes and resources to provide together leading products / services in accordance with company's policy and objectives related to quality (Macey, 2001).

In December, 2000, ISO 9000 series was reviewed and updated again. The 1994 version was replaced by ISO 9001:2000, version that was developed to assist organizations in implementing effective quality management systems. In 2008, the standards were updated again.

At this point, the ISO 9000 series consists of a pair of quality management standards: ISO 9001 and ISO 9004 (Macey, 2001).

These two standards can be implemented and used separately, or can be used as complementary models of a quality management system within an enterprise.



### **3.2.6. Knowledge Management**

Knowledge Management (KM) or knowledge-based management comprises a series of strategies and practices used in an organization in order to identify, create, represent, distribute and enable adoption of insights and experiences. These experiences and insights include a whole range of knowledge that are embedded in processes and practices of an organization.

Knowledge based management is usually focused on organizational target such as improved performance, competitive advantage, innovation and continuous learning.

KM approaches vary from author to author and from organization to organization, whether it's a company or academic environment.

OECD (Organisation for Economic Cooperation and Development) defines knowledge-based economy, as "the economy based directly on the production, distribution and use of knowledge and information "and receptors' capabilities through, to "know who", to "know what", to "know how", to "know why".

### **3.2.7. The Manager - the main actor of the organizational system**

In this subsection, I summarized several theories related to quality and the responsibility of the manager and of the entire organization with regard to quality.

Under the slogan "quality is everyone's responsibility," Joseph Juran believes that managers are responsible for 80% of quality issues.

Armand V. Feigenbaum, the father of "total quality control" concept and the first president of the International Academy for Quality (IAQ), founded in 1970 with Ishikawa and Borel, says that for the U.S. industry, the message is simple: "Be the best or be a loser, ", noting that current economic development in United States is the answer to the the Japanese quality revolution made in the mid-twentieth century (Samuel Certo, 1997).

Kaoru Ishikawa suggests quality circles and the "cause - effect" diagram, that bears his name, one of the most known and used quality instruments.

M. Bosche and others define quality circles as a homogeneous group of volunteer employees, which meets regularly under the authority of a direct hierarchical leader, to resolve, using precise methodology, established problems related to proper performance of duties and have as positive effects labor productivity growth, giving great importance to involvement of employees in TQM practices (Lefter, 1995).

### **3.2.7.1. Conceptual approaches on managers**

The concept of *manager* is one of the most frequently used neologisms of Romanian language post-90s. It is subject to multiple pages by both science and journalism and of many debates.

In this subsection, I approached the concept and some definitions of the "manager" term, from different perspectives: from that of *chief, director, general manager*, to that of *main factor of innovation and progress*.

All theorists: Bernhard Görg, James Burnham, Constantin Rosca, etc., reiterate that "a manager", regardless of the title he has, is generally perceived as the top-level of economic organization, invested with authority and decision-making responsibility. .

### **3.2.7.2. Manager skills**

In this last subsection of the subchapter dedicated to the manager, I presented the origin, various definitions, concepts about his competencies and their evolution in time, from the perspective of several experts: Larrousse Encyclopedic Dictionary, Le Boterf, Viorel Lefter, Rosca, Patrick Gilbert, Michael Parlier, etc.

The term *competence*, of Latin origin, has a double meaning. Thus, the term *competence* comes from the Latin *competitia* which means competition, equitable proportion. In the familiar sense, the term can be translated as "qualified person" and more generally as "capacity in a recognized profession, according to the knowledge possessed, which entitles a judgment." More, the term has roots in the phrase "*cum petere*", strictly translated as: "to seek to obtain a set" and broadly by "that knows a problem well, a profession, a field, his work."

## **3.3. The industrial parks management in Romania**

Industrial parks in Romania are managed by a company established under Law no. 31/1990. Therefore, these companies should be seen as independent economic organizations with mission, strategy, objectives, functions, principles and organization in accordance with the latest concepts in the field.

### **3.3.1. The company as an economic organization**

#### ***a. Mission***

The basic concept that makes an organization work is strategy. The starting point for strategy is determining the organization's mission.

*Determining company's mission means:*

1. ensuring consensus on the objectives of the company;

2. setting standards for organizational resources;
3. establishing an appropriate work environment;
4. motivating employees to tasks performing;
5. facilitating identification of targets and their transformation into a working structure able to achieve them;
6. stating the company's objectives in order to transform them into measurable parameters (time, cost, etc.).

### ***b.Objectives***

A company has only one objective: to create a customer (Drucker, P, 1979). Other specialists say that any company has only one objective: to make money, for that he must increase sales and cut costs. My opinion is that things are not so simple. If we consider the company as economic organization, its purpose is to make profit and to try to maximize it continuously (Ilies, 2003).

In TETAROM SA's specific case, first objective was, is, and always will be, creating jobs in industrial parks in the Cluj County and neighboring counties, added value jobs, safe and well paid.

### **3.3.2. Industrial Parks management in Romania**

The industrial park is managed by a company established under Law no. 31/1990, republished as amended, whose shareholders can be partners, as referred above. No client company, also shareholder which uses utilities and/or industrial park infrastructure may, directly or indirectly, have control over the managing company.

Managing company has many obligations, the most important being (largely in the thesis):

- ✓ to supply/provide necessary utilities and services for activities in the industrial park;
- ✓ to select the admission applications of new companies in the industrial park;
- ✓ to attract investors for the development of productive activities and services;
- ✓ to develop operational and development strategy of industrial park;
- ✓ to ensure collaborative relationships with governments, local and central public authorities.

The legislator has provided a generous legal framework on how to manage industrial parks. No reference is made about the type of management company (SRL, SA, etc.), nor about the selection or establishment of such companies or the financing, or about the

organization, etc. The legislator left to the owners (shareholders) the management issues, strategies, policies, models and approaches.

### **3.3.3. National strategy for improving competitiveness of SMEs in Romania**

Romanian Government Strategy on SMEs aims at:

- a. creating a favorable business environment for the establishment and development of SMEs;
- b. developing the competitiveness of SMEs;
- c. improving SMEs' access to finance;
- d. improving SMEs' access on foreign markets;
- e. promoting entrepreneurial culture and strengthening management performance.

*(Government strategy to support SMEs' development for 2004 - 2008, page.6)*

### **3.3.4. The Management of TETAROM SA**

In accordance with the law for autonomous companies and national companies and companies where the state or an administrative-territorial unit is sole or major shareholder as well as their subsidiaries, CEOs/directors ensure the management under a mandate signed according to the Law no. 31/1990, republished (OUG 79 / 18 June 2008).

This aims at fulfilling objectives and performance criteria approved by shareholders in companies/national companies and by the management of ministries, in companies where the state or an administrative-territorial unit is the major shareholder, respectively by central or local public authorities, for autonomous administrations, under whose subordination, coordination or authority is.

Criteria and objectives listed in the mandate are updated annually, within 30 days from the budget approval.

Quantifiable objectives and criteria are pursued monthly based on the accumulated achievements from the beginning of the year.

Executive management of the company must present and submit to Cluj County Council a monthly report regarding the performance criteria achievements and quantifiable targets, as in the forms attached.

Cluj County Council, as a shareholder of TETAROM SA, aims at fulfilling the objectives and performance criteria as well as their assessment conditions.

Performance criteria and measurable objectives are determined and calculated according to the company's activity.

In Chapter 5, other aspects of TETAROM SA's management are detailed.

TETAROM SA also has its own policy on quality, which is why we have implemented, maintained and continually improved the quality management system in accordance with SR EN ISO 9001:2008.

## **CHAPTER.4. RESEARCH METHODOLOGY**

This chapter presents specific research instruments (*library and its resources, computer and software, measurement techniques, statistics, human mind, communication facilities and professional language*) and make a classification of research types: *fundamental, applicative and development research*.

The present work is an applicative research; therefore I undertook the following steps:

- I studied concepts; I investigated the basic bibliography of organizational management for small and medium enterprises, underlying the management of industrial park type business infrastructure.
- I have made comparative analysis, trying to make an evaluation of the global, European Union and Romanian situation.
- I tried to establish the role of such infrastructures in local and regional business development, studying several types: industrial, science, technological parks, incubators, clusters, etc.
- I sought direct or indirect links between the role of these infrastructures, the forms to develop themselves and their local and regional communities, and the creation of jobs, both horizontally and vertically, jobs with high added value, etc.
- We established, for the first time in Romania, a complex documentation on the phenomenon of industrial park type business infrastructure, etc., legislation, international concepts, successful models, ways of defining and achieving, statistics, comparative analysis, points of view of the personalities in the field, opinions and personal contributions.
- The main research (investigation) used methods and instruments were:
  - *questionnaire method;*
  - *focus groups;*
  - *seminars and "workshops", interview;*
  - *visits and attendance at various events.*

## **CHAPTER.5. SURVEY ON THE ROLE OF BUSINESS INFRASTRUCTURES IN LOCAL AND REGIONAL DEVELOPMENT - CASE STUDIES -**

In this chapter we present two cases, two empirical studies that I have directly participated in during the last 10 years, years that have led to the creation of three industrial parks, that have attracted direct local investments, national or international, that have created a impressive number of jobs, mostly in the top fields, well paid, with a high added value both locally and at regional level (The counties of: Cluj, Mureș, Bistrița-Năsăud, Sălaj and Alba).

### **5.1. Case Study - TETAROM Industrial Parks**

Creating and developing technological, industrial and business parks is unanimously acknowledged as a way of developing a business environment in a region by promoting the establishment of new companies and support the existing ones. The idea of creating an industrial park in Cluj area emerged in the year 2000 based on a project developed by the Cluj County Council (CJC).

The major objective of the project was intended to provide services in order to ensure business facilities, to support and stimulate the competencies of the region in the development and implementation of software and high technology products (high technology), by clean industries such as information technology (IT), communications and applied electronics, nanotechnologies, biotechnologies. It can be said with certainty that TETAROM's industrial parks of today are business models for increasing the industrial performance of small and medium enterprises in Romania.

#### **5.1.1. The initial development**

TETAROM SA Company (Transylvania Advanced Equipments and Technologies Produced in Romania) was founded in November 2001 in order to carry out the project and to implement the idea. The main activity of the company is the management of industrial parks.

The Goals envisaged by TETAROM SA from its very inception were:

- to create and develop high technology industries;
- to stimulate research in the field of advanced technologies;
- to create, in accelerated pace new skilled jobs, especially for university graduates from Cluj;

The initial feasibility study has addressed several issues. As a *substantiation of the need for investment* it was established that the profit would have a dual purpose:

- to ensure self-financing after the funding of the park is completed;
- to obtain socio-economic benefits through this project

The Feasibility Analysis Report was presented to the European Commission and it received funding for the PHARE project "The Development of Western Economic Area of Cluj - Industrial park for advanced technologies", amounting to 6,464,945 Euro.

### **5.1.2. Sustainable development**

#### **5.1.2.1. Infrastructure**

Building work began in 2003, on an initial area of 20 ha, later supplemented to 26 ha, and was finalized in 2007. The following year, due to many requests for location in TETAROM I Industrial Park, its area was extended and, at the moment, TETAROM measures 31.9 hectares.

During the above mentioned development, new opportunities have emerged for TETAROM I as well as important customers on the world economic market. Therefore, the initial idea of TETAROM ended up being so feasible, that the need to create two other industrial parks of the same "brand" - TETAROM, came into perspective, as well.

This is how industrial parks came into being in order to locate the two giants of the motor industry (the American company, Emerson) and the mobile industry (the Finnish company, Nokia).

In August 2011 the situation of the three TETAROM Industrial Parks looked like this:

1. TETAROM I *Industrial Park*: Area: 31, 9 ha, occupancy rate: 94.68%, number of companies: 50, value of investment: exceeding 37 million euro; number of jobs created: ~ 1000 (on 31.12.2009).
2. TETAROM I *Business Incubator*: occupancy rate: 100%;
3. TETAROM II *Industrial Park*: Area: 12 ha, occupancy rate 100%, value of investment: 75 million euro, number of jobs created: ~ 1,000.
4. TETAROM III *Industrial Park*: Area: 154,562 ha;
  - 17 hectares are occupied by the related infrastructure (roads, water, sewer, electricity, telecommunications, natural gas, water treatment plant, pump station);
  - 50 ha available for future development;
  - significant clients: Nokia Romania SRL;
  - value of investment: 60 million euro;
  - number of jobs created ~ 4500.

### 5.1.2.2. Main activity

The vision of the company - realistic and attainable in the medium and long term - outlines a strong company, whose characteristics shall be transparency, quality and performance. This is the management policy, implemented in the activity of the company from the very beginning

Providing effective services, quantitatively and qualitatively, services that are responsible to the environment will be carried out in real conditions and constant concern for the needs and wishes of our customers. The imperatives of the law will shape the framework for achieving this vision.



*The management policy in SC TETAROM SA*

The company currently manages three industrial parks: TETAROM I, TETAROMII and TETAROM III, on the basis of a management contract signed with Cluj County Council (CJC). TETAROM SA had and still has, for the future project that it wishes to develop - namely the fourth TETAROM Industrial Park - the status of Project Implementation Unit for the the infrastructures currently under construction, and related to the other three industrial parks.

In addition to the actual management of these parks, the company carries out, on the basis of licenses, activities of supply and distribution (electricity and natural gas) for the customers of TETAROM Industrial Parks.



### **5.1.2.3. Human and material resources**

TETAROM SA had at the end of 2010, 50 employees out of 64 as the company organizational chart states, and management is ensured by a Board of Directors consisting of a President, eight members and three auditors.

The Rules of organization and operation of TETAROM SA allow for the following offices: the operational office, the development office, the commercial office, the financial position, the office of human resources, and public relations office.

TETAROM's own heritage includes fixed assets (land, administrative buildings, warehouses, vehicles, furniture, computing equipment) and current assets, i.e. money, material resources, etc.

TETAROM SA also manages assets that are part of the public patrimony (land, water and sewerage public networks, electricity, natural gas).

Public local authorities that own public patrimony are required to invest in its modernization.

### **5.1.2.4. Other achievements**

In 2008, the share capital of TETAROM SA was raised to the value of 14,140,510 lei, maintaining this value until now.

TETAROM SA is

- registered with the State Office for Inventions and Trademarks since December 2007;
- ISO 9001:2008 certified by the German company DEKRA Certification GmbH for implementing and maintaining a quality management system according to the above-mentioned standards;
- Member of the Association of industrial, technological, of scientific research and of business incubators in Romania (APITSIAR) through which is a member of IASP (International Association of Science & Technology Parks) and EURADA (European Association of Development Agency);
- member of the AICAR - Association of Business Incubators and Centers in Romania

In terms of achievements, also:

- ✓ Creation of a business incubator in TETAROM I Industrial Park, opened in June 2007, fully occupied.
- ✓ Signing a protocol between TETAROM SA and two of the universities from Cluj: Babes-Bolyai University and Technical University, in order to support feasible business ideas of students and graduates of both universities, to encourage and support by

TETAROM SA and CJC the students and/or the establishment of new business innovative technology.

✓ Various local, national and international recognitions of excellence in business and contributing to the economic development of the region.

✓ Organizing seminar "TETA - Business Infrastructures, from the idea to international recognition"; The seminar reached its third edition and it is an important communication platform for all those involved in the field: industrial parks, business incubators, central authorities and local SMEs, universities, research - development units, etc.

### **5.1.3. Strategy and territorial marketing**

With the development of clusters, science parks, industrial parks, business parks, assisted areas, disadvantaged or other types of business facilities, all with support from national governments, regional or local authorities, TERRITORIAL SUPPLY is becoming wider and wider.

Business infrastructures such as industrial parks have become highly developed economic sectors, even if it differs from the approach from one country to another and in any case became the subject of a competition sometimes lacking fair play, in order to attract investment, especially foreign.

This is how the notion of territorial marketing appeared, which seeks solutions for the maximum exploitation of resources in a territory.

In this respect, the executive of TETAROM SA came up with a Development Strategy for TETAROM Company and Industrial Parks, between 2006 and 2008, thus sketching the necessary steps in order to ensure the success of such strategies.

### **5.1.4. Customer relations and the media**

#### **5.1.4.1. Mass-media**

Relationships with the media were cultivated through:

- ✓ press releases, TV and Radio talk shows,
- ✓ promotional materials, advertising and raising awareness, published in the press
- ✓ company presentations on various occasions, video presentations, press conferences
- ✓ participation at trade fairs, seminars and conferences in the country and abroad
- ✓ Point Meetings with local and foreign business partners
- ✓ Creating a website that is regularly updated and improved in order to maintain a professional image of our company.

### **5.1.4.2. Corporate Identity**

During the year 2010, the Corporate Identity Manual of the company was drafted. As a result, some changes have been made in the company's image, in order to obtain and maintain a visual identity.

The business card of a company is, primarily, the way in which it is visually presented on the market, this meaning: message, colors, graphic signs, fonts, presentation folders, CDs, business cards, etc. With time, these gain reputation which relates to the company, certifying the proper business behavior.

TETAROM SA has undergone a long process of restyling, and visual identity for the year 2010 includes the amount of the primary elements of the brand, namely the set of graphical symbols - combinations of colors and shapes, accents and ratios, images - representing the brand in any communication. The combination of these elements is considered to be defining for the unique, systematic and distinctive identity of TETAROM brand.

### **5.1.4.3. Negotiation and contracting**

Regarding the company's relations with its customers, they are carried out in good conditions, on a contractual basis. The quality system implemented in TETAROM SA, as well as the legislation regarding utilities, require it to provide ongoing monitoring of customer satisfaction. The communication policy adopted by the company's management team actively supports the need for strong *customer-oriented* work.

A special chapter for TETAROM SA is the negotiating and contracting activity. I say that this chapter is special, mainly due to very heterogeneous structure of the clients (Romanian companies, foreign companies, joint ventures, companies being set up, spin-offs, incubation stage companies, production companies, service companies, European companies, American companies, multinationals, law firms Romanian and foreign representations of companies, etc.).

#### *1. Negotiation*

Negotiation is the achievement of objectives through an understanding on which both parties agree and endorse. Regarding the approach we are and always have been aware of the existence of the three types of approach, not forgetting the win-win formula:

- offer / receive - offer / receive;
- offer / receive - receive / offer;
- receive / offer - receive / offer.

Unfortunately, especially in negotiations with multinational companies and their advisors (law firms), the principles and methodologies described above did not always work.

Compromise and objectives achievement have always been the most useful recipes.

*b. Contracting*

The contract is the result of negotiations and represents the agreement of the parties as the Civil Code says: The Convention is the law of parties. Contract relates to the transfer, management, leasing, joint ventures, sale-purchase, superficies, connection, supply and distribution of electric energy, service provision and procurement.

The most important legal characteristics of the contracts that TETAROM SA signs and the ones that are most insisted on are "reciprocal" and "consensual".

**5.1.5. Analysis regarding the potential of TETAROM SA**

During 2010 we made various tests for TETAROM SA, with the purpose of assessing the evaluating the functioning of the company.

**5.1.5.1. Analysis regarding the TETAROM SA competitiveness potential - SWOT Analysis**

SWOT Analysis is a strategic, flexible and easy to apply, instrument which an organization or project team uses to identify the most appropriate course of action.

The main advantage of such an analysis is the consensus among team members. Once agreed on the "Strengths", "Weaknesses", "Opportunities and "Threats" that affect the team it is much easier to identify appropriate solutions. After the data were obtained from the SWOT analysis the decisions on what has to be done must be made.

The SWOT analysis for assessing the potential of the company TETAROM SA, seen as a business support structure is shown below:

<i>Strengths</i>	<i>Weaknesses</i>
<ul style="list-style-type: none"> <li>• Customer Focus</li> <li>• Creating a large number of jobs</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of a specialist and a Public Relations Strategy for the company</li> <li>• Lack of feedback from most customers following the surveys and questionnaires</li> </ul>
<ul style="list-style-type: none"> <li>• The development of a modern business infrastructure, the idea of industrial parks being a magnet for investors</li> </ul>	
<ul style="list-style-type: none"> <li>• Increased number of well-paid jobs and high added value, especially due the presence of RD centers and design centers in Energobit, Nokia and Emerson</li> </ul>	<ul style="list-style-type: none"> <li>• Insufficient funds for development and diversification of service of TETAROM industrial parks, due to the economic crisis</li> </ul>
<ul style="list-style-type: none"> <li>• Providing services (utilities, consulting, etc.) to the highest standards of quality</li> </ul>	<ul style="list-style-type: none"> <li>• Insufficient space in TETAROM industrial parks</li> </ul>

<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> <li>• Professionalism and responsibility of the staff</li> </ul>	<ul style="list-style-type: none"> <li>• The form of establishment – joint stock company owned by the state – long time needed for important decisions to be made : Administration Council, General Shareholders Meeting, Cluj County Council, Cluj Local Council</li> </ul>
<ul style="list-style-type: none"> <li>• Optimal location of the three TETAROM industrial parks for all economic activities</li> </ul>	
<ul style="list-style-type: none"> <li>• Clearly outlined measures to assist customers that were affected by economic crisis</li> </ul>	<ul style="list-style-type: none"> <li>• Partial application of the development strategy, for objective reasons (including the economic crisis)</li> </ul>
<ul style="list-style-type: none"> <li>• Transparency in customer service</li> </ul>	
<ul style="list-style-type: none"> <li>• Attracting nonrefundable funding for investments that support public and private sector increase of competitiveness</li> </ul>	<ul style="list-style-type: none"> <li>• Reducing of investments in all sectors of the economy due to the economic crisis</li> </ul>
<ul style="list-style-type: none"> <li>• Increasing the degree of innovation in companie, through investments</li> </ul>	<ul style="list-style-type: none"> <li>• Resizing of economic activities</li> </ul>
<ul style="list-style-type: none"> <li>• Attracting investments leading to economic growth in the region using human and material resources in the area</li> </ul>	<ul style="list-style-type: none"> <li>• Migration of specialists</li> </ul>
<ul style="list-style-type: none"> <li>• Development of local brands that provide competitive advantages on foreign markets</li> </ul>	<ul style="list-style-type: none"> <li>• The penetration of private foreign competitors</li> </ul>
<ul style="list-style-type: none"> <li>• Development of products/services in both the public and the private sector – horizontal development of the regional economy</li> </ul>	<ul style="list-style-type: none"> <li>• Competition in the supply of products and labor from Asian countries</li> </ul>
<ul style="list-style-type: none"> <li>• Cluj is an important unversity center (over 10000 college graduates annually)</li> </ul>	<ul style="list-style-type: none"> <li>• Legislative instability, fiscal instability, economic instability, extremly rigid and unfavorable for investors labor code</li> </ul>

#### **5.1.5.2. Economic indicators of clients. Analysis of the relationship between TETAROM SA and its clients in TETAROM industrial parks**

The indicator "Measuring Customer Satisfaction", a requirement of the Quality Management System since 2008 has imposed the sending of questionnaires meant to provide information on communication with TETAROM SA, its staff and services.

Responses were centralized and the findings were compared with the previous year. Then a chart was drawn of the indicators measuring customer satisfaction

On the basis of public economic situations (balance sheets submitted by the business operators in the Parks) on the Ministry of Finance website, we came up with a centralised situation of certain financial indicators.

## **5.1.6. The impact of the global economic crisis on TETAROM industrial parks**

### **5.1.6.1. National framework analysis**

Romania had an average economic growth of 6.3% between 2001-2008, one of the highest in the EU. However, the effects of the crisis were felt in Romania more than in the rest of the EU. Romania's GDP diminished by 7.1% in 2009.

The main reasons for these adverse developments in Romania can be found in the unsustainable economic growth model before the crisis:

The crisis has revealed major weaknesses of the Romanian economic growth model before the crisis, including the fact that it should be changed to ensure a healthy and sustainable growth in the medium and long term. Under these circumstances, the main engines of growth in the medium term should come from the export sector: industry, agriculture and, to some extent, energy.

### **5.1.6.2. The impact of the global economic crisis on TETAROM industrial parks**

The economic and financial crisis has not spared industrial parks. A solutions might be to diversify the services provided, from selling utilities to consulting services.

The solution to overcome the crisis for TETAROM SA was to continue investment in infrastructure and services (gas supply and distribution, electricity supply and distribution) and a careful policy of reducing rent and management fees.

- In October 2010, IUDP, CJC, and TETAROM SA initiated two new investment projects, as part of the Regional Operational Programme, Priority Axis 1: TETAROM IV Industrial Park, 85 acres, Feleacu village, Cluj County, initial estimate of the investment - 10 million Euro;
- Expansion of TETAROM I Industrial Park infrastructure, initial estimate of the investment value - 10 million Euro.

### **5.1.7. Ways to improve and develop TETAROM business infrastructures**

As was stated back in 2006 in the TETAROM SA Development Strategy, the guidelines have been and will be to maximize performance in terms of management, as well as from a technical and financial point of view, in order to exploit more efficiently environmental, material, and human resources, with a view to sustainable development.

The model implemented by TETAROM SA is a model of business parks, given that the activities carried out by the clients of these parks are production activities, services, research, and business incubators.

Another element leading to profit maximization in TETAROM SA has been a diversification of our activities.

TETAROM's offer has always been the best, as compared to what the local and even national real estate market has to offer.

TETAROM SA managing company is financially self-supported; it is not funded/subsidized either from the national budget or from local budgets. It is licensed to supply and distribute electricity and natural gas. Considerable investments were made from its own revenue in the electricity distribution infrastructure in 2008.

## **5.2. Experimental research applied to other types of business infrastructures**

### **5.2.1. Questionnaires sent to industrial parks**

Din cele 49 de solicitări trimise am primit răspunsuri de la 25 de parcuri industriale, ceea ce reprezintă un eșantion de 51 %, adică o proporție foarte bună, peste așteptări.

In September 2010 we drafted two questionnaires that were sent to the forty-nine industrial parks in Romania.

The purpose of these questionnaires was to provide information on how such parks were set up and how their setting up was funded, on their operation and the way they are managed and promoted, on the number of clients and the activities they carry out. Another purpose was to get opinions and proposals to improve legislation on industrial parks.

Of the 49 questionnaires sent out, we received responses from 25 industrial parks, which amounts to 51%, a percentage that exceeded our expectations.

Conclusions:

#### **1. Regarding the financing underlying the setting up of the 25 industrial parks:**

- more than half of them were funded from the public administration budget (local councils and county councils);
- six industrial parks, that is 24% had multiple funding (local, county, or national government funding, EU funds, or private funds);
- 4 industrial parks, 16%, benefited from PHARE funds;
- 9 industrial parks, 36%, are completely private.

#### **2. Regarding the location of industrial parks, most of them are located in urban areas.**

#### **3. All industrial parks are operational; only 3 of them (12%) are specialized**

#### **4. The degree of occupation of industrial parks on September 1<sup>st</sup>, 2010 increased by 14%, compared to December 31<sup>st</sup>, 2008.**

#### **5. Only eight industrial parks (32%) are engaged in research and development activities. As for the promotion of industrial parks, all 25 carry out activities to this purpose through their**

own methods and resources. Only 10 of them (40%) resort to specialized companies for promotion purposes. 84% use the media and leaflets for promotion, 36%, conferences and fairs, and 72%, the Internet.

### **5.2.2. Questionnaires sent to companies in Cluj-Napoca, developing production activity**

In October 2010 we initiated a poll on the business sector in Cluj-Napoca by drafting and sending out questionnaires to renowned companies whose object of activity is production. By drawing up this new questionnaire we wanted to see if these companies in Cluj-Napoca were aware of:

- the existence of industrial parks in the county;
- the impact of these business infrastructures on regional economy;
- the facilities provided by Romanian legislation to industrial parks (to managing companies and businesses located in the park).

Conclusions:

1. companies are aware of the existence of industrial parks in the county;
2. as for the conditions propitious for the company's relocation to another area (industrial park) outside Cluj-Napoca, 100% of the companies mentioned the need for "the existence of tax relief (national, regional, local)", 66.6% the acquisition of land that should be possible at a low price;
3. 66.6% have chosen the new location of the future TETAROM VI Industrial Park in the Baciú/Mera/Gârbău area;
4. 66.6% have implemented a policy of environment protection, which is functional.

### **5.2.3. Focus-groups**

This method was implemented by the undersigned in his capacity of partner in the projects Oradea Metropolitan Area, Cluj Metropolitan Area, TETAROM Industrial Parks, Cluj County Development Strategy (2004-2007).

There have been focus group discussions on specific, strictly defined topics, part of the qualitative data collection techniques meant to analyze people's perceptions, motivations, feelings, needs, and opinions.

The technique consisted of a planned, organized, group discussion, meant to provide information about a strictly defined area of interest in which the participants share their ideas and perceptions.

Group discussions were a research technique for gathering data, in which the support for data gathering was group interaction on a previously established theme, where a number



of key issues were mentioned: the purpose of the focus group, location of data source, highlighting and clarifying the role of researchers.

#### **5.2.4. Attending public events**

Participation in events such as seminars, workshops, conferences, fairs, is aimed at drawing attention to the national and international business environment, to the potential of Romanian market and hence of the company (company promotion) and of opportunities for achieving mutually beneficial business relationships.

Significant Participation:

- The CLIPreg seminar (project funded by the European Union), a seminar with international participation, organised in Timisoara.
- The ERIK Network Kracovia regional conference, Poland, 2005
- Fairs, seminars and conferences: Hanover, Passau, Landshut, Munich, Parma, Székesfehérvár, Clermont Ferand, Vienna, Linz, Vichy, Treviso, Udine, Kracovia, Alba Iulia, Satu-Mare, Brasov, Bucharest. These events provide the opportunity for participants to talk with business partners and potential business partners at home and abroad, both parties sharing their own experience gained over time.

In June 2009, we organized our first seminar entitled **TETA - Business Infrastructure, from a simple idea to international recognition**, where we managed to gather under the same "umbrella" representatives of ministries, of North-Western Development Agencies, representatives of various industrial parks in the country and of the clients of TETAROM industrial parks. The organizing of this seminar is meant to establish a tradition in the local business environment. The event is an important communication platform for all those involved in the field: industrial parks, business incubators, central and local authorities, SMEs, universities, research and development centres, etc.

## **CHAPTER.6. CONCLUSIONS**

Conclusions on the research of business infrastructure have been presented in each chapter or subchapter of this dissertation. For a better understanding, this chapter will present a more organized approach to our own opinions on the topics studied.

### **6.1. General Conclusions**

A classification of economic development infrastructure is quite difficult to achieve.

There are numerous case studies, research and analysis studies, feasibility studies, and papers published in professional journals on the topic. According to them, there are industrial zones, free zones, industrial districts and metadistricte, industrial clusters, industrial parks, science parks (technology parks, incubators, innovation centers, and technology transfer centers), commercial parks, business parks, etc.

However the most popular business infrastructure discussed in the international literature are: science parks, industrial parks and industrial clusters, and business incubators.

The development and modernization of infrastructure is essential to the progress and prosperity of a country. Infrastructure is the backbone of economy in any country.

With the advent of the European Union and globalization, level, more and more European bodies have been increasingly involved, both politically and economically, in the concepts and directions in which the EU economy should evolve.

The Lisbon Declaration defined the role of universities in European research, and brought forth the triangle: education-research-innovation, establishing the framework program of the European research area, which resulted in the FP6 Framework Programme and later the FP7 Framework Programme (2007-2013).

The concept of science parks worldwide implies a close relationship between the private or public academic environment and the business sector.

An industrial park is a group-consortium of production and services units, located in a limited space, which provide modern technological conditions, and is mainly used by small and medium size companies, with a view to providing high quality products and services. Local, regional, and global economic development, as well as the process of globalization has encouraged fierce competition between the owners of industrial parks, each of them trying to provide better conditions for potential investors.

Therefore, the simple concept of industrial park is currently evolving towards that of business park, which, along with the plot and the production companies related utilities, also provides services, such as banking and financial services, commercial properties, hotels, medical services, sports services, social services (kindergartens, vocational schools, technical colleges, police stations, firefighting services, first aid, etc.), exhibition centers, multipurpose conference rooms etc.

The trend in the past 15 years has been to develop industrial districts meant to later become industrial clusters. In the global competition for markets, the chances of economic success of a country or region are based on specialization of the supply and on focusing development efforts on key areas where they have a competitive edge, resources and skills.

In this context, innovative clusters are a successful solution because they provide a combination of entrepreneurial dynamism, active connections between "top level" companies and institutions, and a pro-active synergy between the main actors of innovation.

Nowadays, many clusters are transnational structures, with millions of employees.

In small and medium-sized enterprises, what is important is not the idea, service or product they provide, nor the customers, but space. It is no longer a secret to anyone that the high prices of production and office spaces are sometimes essential for the survival of a small business on the Romanian market. Hence the idea of setting up business incubators, locations that provide SMEs with subsidized support services to develop.

## **6.2. Conclusions on the situation in Romania**

The pace of development of Romania in general and of a region in particular depends essentially on the existence of modern infrastructure.

Romania is currently undergoing a period of consolidation of its market economy. This process requires another series of structural reforms of our economy, an essential condition for compliance with the Lisbon objectives. After 1989, the Romanian government, tried to encourage the setting up of territorial economic clusters by public policies. This is how industrial parks, science and technology parks, free zones, disadvantaged areas, areas of industrial restructuring with economic growth potential, assisted areas, business incubators, and more recently industrial clusters came into being.

One of the controversial schemes initiated in order to develop economic activity was promoted in 1998 and refers to disadvantaged areas (areas D), strictly delimited geographical areas, where the local unemployment rate is at least three times the national average, in remote areas without adequate infrastructure and means of communication.

In 2001, the Romanian Government introduced another scheme to support industrial policy by selecting 11 areas in the process of restructuring, but with potential for economic growth (GD 399/2001).

The most obvious development in Romania took place in the field of industrial parks.

The setting up of industrial or science parks has been an instrument of industrial policy for local development with positive social effects, which has proven its effectiveness in terms of increasing economic competitiveness.

Another tool meant to promote economic competitiveness by bringing a number of businesses in a single location was the setting up of technological and business incubators.

Support to small and emerging enterprises through business incubators or specially designed workspaces are a major facility to support employment opportunities and economic development. The incubation process is a process of social, economic and entrepreneurial development, both private and public. It is aimed at discovering new business ideas or companies in the initial stage of development, the "start-up" stage, helping to speed up the development of SMEs.

Another national funding program was "The development of innovation and technology transfer infrastructure - INFRATECH", a programme developed by the Ministry of Education and Research, through the National Authority for Scientific Research. Among the main objectives of the programme, which ran during 2004-2008 was the setting up and development of technology and business incubators (TBI).

The management firms within industrial parks would be given preferential treatment over other companies. For example, licenses for the provision of utilities: water, sewage, electricity and gas - should be granted by default if a company is organized according to the principles laid down by law and if it wants to be a supplier. It is imperative that the business infrastructure legislation be radically changed as follows:

*1. Repealing the following acts and passing a single law, as follows:*

*a. Repealing the following*

- EGO 79/2001 - Emergency Ordinance no. 79 of 31 May 2001 on strengthening economic and financial discipline and other provisions of a financial nature;
- GO 65/2001 – Ordinance no. 65 of 30 August 2001 on the establishment and operation of industrial parks;
- L 490/2002 - Law no. 490 of July 11, 2002 on approving Government Ordinance no. 65/2001 on the establishment and operation of industrial parks;
- L 50/2003 - Law no. 50 of 21 January 2003 on approving Government Ordinance no. 14/2002 on the establishment and operation of science and technological parks;
- L 244/2004 - Law no. 244 of 9 June 2004 meant to amend and supplement Law no. 84/1992 regarding the regime of free zones;
- Ordinance 197/2005 - Ordinance of the President of the National Agency for Small and Medium Enterprises no. 197 of 18 October 2005 on changing the procedure for implementing The Multi-Annual National Programme for the Setting up and Development of Business Incubators;
- GD 918/2006 - Decision no. 918 of 12 July 2006 on approving the Programme for Encouraging Research, Development and Innovation, - IMPACT.

*b. Instead of the repealed laws mentioned above, we propose the passing of a single law, which will make provisions for all procedures on the establishment and further development of all business infrastructure:*

- Industrial Parks
- Science and technological parks
- Business Incubators
- Industrial clusters, etc.

This law must be in accordance with the following European regulations and recommendations:

- ⇒ The Treaty of Amsterdam - 1997 - on sustainable development
- ⇒ The Gothenburg Summit - 2001 – on the EU Sustainable Development Strategy (SDS)
- ⇒ the recommendations of the European Economic and Social Committee (EESC), European Union (EU) and European Parliament (EP) - 2005 – on the role of Technology Parks in the industrial transformation of Member States and on the evolution of all parks towards "innovation poles".
- ⇒ The Lisbon Strategy - relaunched in 2005.

*c. This single law is to state the general legal framework: the way these types of business infrastructure are set up, how they receive accreditation, how they are financed, managed, and monitored.*

**d.** All business infrastructure units should respond directly to the Prime Minister, and there should be a Secretary of State directly responsible for these units.

**e.** The companies managing such business infrastructure units should no longer be considered large companies in order to be able to access EU funding.

**2.** Changing legislation on government support, as follows:

**a.** The minimis aid should be terminated and all government support replaced by a single piece of legislation, coordinated by the Prime Minister. At this point the government support is granted by MIA MOFP, MER, local governments, various agencies, etc.

**b.** Government support to business infrastructure (industrial parks, science parks, incubators, etc.) should be extended until 2020

NOTE: The companies set up in industrial parks before 2007 no longer benefit from the tax relief promised when they were set up, which carries the risk of having them reduce their investments or even withdraw them completely.

c. Cancelling all charges on the establishment of new industrial parks (the duty for taking the land out of the agricultural circuit, other duties introduced after the passing of the Industrial Parks Law by various agencies, such as soil studies, etc).

### **6.3. Conclusions on TETAROM parks**

The concept of industrial park is already old and outdated; it should be redefined and renamed as Business Park, because we can no longer talk about an industrial park with no commercial centres, clinics, banks, kindergartens, amusement parks, or sports grounds.

The support granted to enterprises through industrial parks is a major facility meant to support employment opportunities and economic development.

The best example is the successful example of TETAROM.

Constant hard work, discipline, determination and a positive response to relevant requests by investors may be the solution for the success of such a model.

Thus, at the end of the year 2010, when TETAROM I was almost entirely occupied, TETAROM II fully occupied and TETAROM III partially occupied, the energy and experience already gained focus towards the full occupation of the latter and towards the setting up of industrial park TETAROM 4.

The case of TETAROM Industrial Parks is proof that exceptional projects can be achieved when innovative and valuable ideas are put into practice.

The region around Cluj has fully benefited from the positive effects of this industrial concept by the setting up of the TETAROM Industrial Parks, presented here as a case study. The most important effect was that, at the end of 2007, beginning of 2008, the unemployment rate reached record numbers, under 1%, which is well below the national average of about 6%.

The Cluj-Napoca Business Incubator in TETAROM I Industrial Park is a project of Cluj County Council and TETAROM SA company. The incubator can accommodate the following types of companies: newly founded companies, in their first year of operation; companies in the second year of operation; companies in the third year of operation. The rent and management fees are charged according to the company's development stage. A fresh perspective for the business incubator is that TETAROM SA has partnered with Babes-Bolyai University and the Technical University of Cluj-Napoca to support viable business ideas of students and graduates of these universities. The parties have agreed that the object of this cooperation should be to encourage and support students/graduates of the above mentioned universities in setting up new innovative businesses. In fact, this is a business pre-incubation phase for students, for spin-offs.

The business incubator is exclusively and continuously financed through TETAROM SA's annual budget policies.

Everything mentioned above and throughout the dissertation shows and proves the existence of personal achievements based on 10 years of experience in the field.

#### **6.4. Personal contributions**

In what follows we will present our own contributions to the research, analysis and development of business infrastructure concepts in Cluj County, in the North-West and even throughout Romania, as follows:

- 1.**the development of modern business infrastructures, TETAROM Industrial Parks as an engine for local and regional economic development;
- 2.**the development of strategies and policies for the development of the three industrial parks as business parks;
- 3.**the setting up and development of TETAROM SA in 2001, a company whose main objective was the administration of TETAROM Industrial Parks, a model that was later followed by all industrial parks in Romania;
- 4.**the constant development of services complementary to the main object of activity, thus maximizing the revenue of the management company;
- 5.**creating over 10,000 jobs, both vertically and horizontally;
- 6.**creating well-paid jobs with high added value, especially through the presence of the centers of research, development, and design of Energobit, Nokia and Emerson;
- 7.**employees coming into contact with an organizational culture specific to highly developed companies;
- 8.**the *sine die* import of know-how;
- 9.**reduction of unemployment in the county of Cluj, from 10% in 2000 to 1% in 2008 (according to the National Statistics Institute)
- 10.**increasing skilled labor;
- 11.**export growth (in 2009 Nokia was the second largest exporter in Romania);
- 12.**developing industrial parks infrastructure (roads, airport, cargo, railway transport, etc.), as a result of responsibilities assumed by the authorities in the contracts with Nokia and Emerson;
- 13.**acquisition by the undersigned and employees of TETAROM SA of special expertise on the development of industrial parks;
- 14.**acquisition by the undersigned and employees of TETAROM SA of special expertise in the following activities:

- a. analysis of potential locations for the development of business infrastructure;
- b. design of industrial parks;
- c. development of industrial parks;
- d. negotiation;
- e. contracting;
- f. performing a complex macroeconomic and business analysis;
- g. image analysis;
- h. developing new concepts in territorial marketing;
- i. work in an international environment (intercultural);
- j. leadership and management skills (team development, stress resistance, creativity, time management, change management, knowledge and information management, project management, technology transfer, intellectual and industrial property rights, commercial exploitation of university research results, creating spin-offs, etc.).
- k. development of new concepts in strategy development, such as:
  - extending the concepts of near and distant environmental analysis due to the presence of globalization;
  - extending (at national level) the concept of industrial park to that of business park, or science and technology park to be based on knowledge management;
  - introducing new concepts in marketing strategies (changing the definition from "low cost location" to "best cost location ");
  - developing business incubators according to our own concepts;

### **6.5. Directions and opportunities for further research**

We recommend the following directions and opportunities for further analysis, research and development of this doctoral thesis:

1. conducting a comprehensive study to identify the resources available at the national level to be used for a potential project;
2. developing new territorial marketing techniques, knowledge of competition, methods of negotiation, contracting and promotion, to be later provided to all industrial park management companies in Romania;
3. developing local and regional analyses and strategies to increase the potential for innovation and development;
4. including specific courses on business infrastructure in the curricula of universities;
5. developing local and regional strategies to increase the appeal of already developed sites to prevent the closure of production facilities already in operation;



**6.** drafting a new law of industrial parks and expanding the notion of "industrial park" to other lines of development as presented in this paper and in accordance with the worldwide trend of development, with a view to increasing Romania's competitiveness on the global market and to attracting investment (national or international) and especially to accomplishing the transition from classical economy to knowledge-based economy;

**7.** conducting a comparative analysis of the close and remote competitive environment in which Romania develops and the immediate implementation of the steps to be taken, by setting up institutions with appropriate budgets, able to promote efficiently the Romanian investment environment and to attract important foreign investments as soon as possible.

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Cluj-Napoca

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## QUESTIONNAIRE on the development of Industrial Parks

This survey is meant as a study of the setting up, development and status of renowned industrial parks in the country, based on information provided by you. The purpose of this study is to come to a conclusion regarding the opportunity of setting up such business infrastructures and to highlight some of the complex problems the setting up of such structures faces.

We guarantee the confidentiality of your answers.

Name of Industrial Park .....

### *A. Information regarding the setting up and status of the Industrial Park*

1. How was te setting up of the park funded?
  - a. European funds
  - b. state budget funds
  - c. local budget funds
  - d. private funds
  - e. Other funds (specify)
2. The Industrial Park in question is located in an area that is:
 

Urban  Suburban  Rural
3. How did you choose the location of the Industrial Park?
  - a. proposal from one of the customers
  - b. based on offers from the Local/County Governments
  - c. based on studies conducted by specialized consulting firms
  - d. based on questionnaires sent to public administrations  
by the managing company
4. Is the industrial park operational? If it is, since when?  Yes ,Since.....  No
5. Is it a specialized park (solar, logistic, etc.)?  Yes, Specify.....  No

### *B. Parc Information regarding the degree of occupation of the Industrial Park and services provided by the park*

6. What is the degree of occupation of the Park?
  - a. today (30 September 2010) .....%
  - b. at 31 December 2008 ..... %

7. What is the number of companies accommodated by the Industrial Park? .....
8. Are there any multinational companies in the park?  Yes  No
9. Is the Industrial Park business oriented?  Yes  No

10. Specify the field of activity mainly developed in the park by customers (hint: follow NACE codes)

.....

11. Are there any research and development activities conducted in the Industrial Park?
- Yes  No

12. What additional services are offered in the park?

- a. sports grounds
- b. catering/cafeteria
- c. postal services
- d. carwash
- e. gas station
- f. the park's magazine
- g. taxi station
- h. Other (specify) .....

13. How does the Industrial Park manage to attract customers?

- a. directly (by the managing company)
- b. through the Chamber of Commerce
- c. through the Public Administration
- d. through the Romanian Trade and Foreign Investment Promotion Center (RTFIPC) - formerly the Romanian Foreign Investment Agency (RFIA)
- e. other ways (specify)

14. Is there a Business Incubator running inside the park?

- Yes  No

15. Do you consider that the law of industrial parks fosters investments? Justify your answer.

- Yes  No

Justification .....

16. Do you consider that the law of industrial parks should be modified? If your answer is positive, specify how it should be modified  Yes  No

Justification.....

***C. Information concerning the managing company of the Industrial Park and its management***

17. Have you filled in questionnaires meant to gather essential information on the park's customers?  Yes  No

18. Have there been reviews and evaluations regarding the economic status of the client firms before and after being accommodated in the park? If YES, what was the conclusion?

- Yes  No

Conclusion.....

19. Have you done a SWOT analysis?  Yes  No

20. Have you developed a strategy to develop the industrial park?  Yes  No

If Yes:

- a. is it implemented?  Yes  No
- b. is it functional?  Yes  No

21. Is the managing company's organization scheme designed and implemented?

- Yes  No

If Yes, it has been approved:

- a. by the company
- b. by a public authority in the area

22. The managing company has experts in the following areas:

- a. territorial marketing
- b. legal
- c. energy
- d. constructions and installations
- e. logistics
- f. renewable energy
- g. bio and nanotechnologies
- h. other

23. The manager or employees of the managing company have taken courses in:

- a. contract making
- b. marketing
- c. management
- d. negotiation
- e. government aid

24. Does the manager of the Industrial Park have specialised training/qualification?

- Yes  No

25. Is there a Quality Management System in the managing company?

- Yes, since \_\_\_\_\_  No

26. What methods do you use to promote your Industrial Park?

- a. our own methods and resources
- b. through specialized companies
- c. no promotion methods are employed

27. What are the instruments chosen for promotion (if applicable):

- a. the media
- b. the Internet
- c. conferences

If you have attended conferences meant to promote the Industrial Park, please specify .....

- d. specialized fairs

If you have participated in trade fairs meant to promote the Industrial Park, please specify .....

- e. brochures, leaflets, posters, catalogs, CDs

- f. Other (specify).....



28. Have you had the opportunity to visit industrial parks in:
- a. Romania
  - b. Eastern Europe
  - c. Central and Western Europe
  - d. USA
  - e. India, China or Japan
29. Do you consider appropriate such activities as supporting companies in the park to obtain funding from programs and grants?  Yes  No
30. Does the managing company carry out such activities supporting the companies to obtain financing?  Yes  No
- If yes, how are they carried out
- 

***D. Information on the legislation and bodies involved in the activity of Industrial Parks***

31. What do you think of the ARIS transformation into CRPCIS as an initiative:
- GOOD  BAD  I DON'T KNOW
32. Are you familiar with the way agencies such as ARIS work in terms of:
- a. setting up
  - b. funding
  - c. carrying out the activity
33. Are you satisfied with the work of APITSIAR?  Yes  No
- If your answer is no, please make changing and reorganization suggestions
- 

Do you think that RTFIPC should be divided into 3 organizations: Industrial Parks, Science Parks and Incubators?  Yes  No

34. A bill to amend Law no. 571/2003 regarding the Fiscal Code has recently been presented in the Chamber of Deputies. Among other things, the initiators propose that no tax exemption on land and buildings in industrial parks should be granted. Are you aware of this? What is your position?

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Please fill in the following form to assist us in updating our database:

Company name: \_\_\_\_\_

Fiscal code: \_\_\_\_\_ Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ Mobile: \_\_\_\_\_

Contact person: \_\_\_\_\_ Position within the company: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ Mobile: \_\_\_\_\_

E-mail: \_\_\_\_\_