

**Development of Innovative Business Parks to  
Foster Innovation and Entrepreneurship in the SEE Area**

**Best Practice Analysis**

**Regional possibilities usage for transnational thematic park**

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<b>Authors:</b>	Katarína Grandova, Andrea Haringova, Malcolm J. Jones		



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## **A. Executive Summary**

Slovakia is a modern and democratic country, situated in the heart of Europe. It is also a highly attractive country for foreign investment.

Slovakia's economic potential depends on the economic strength of its regions. One successful instrument of regional development is the inflow of foreign and domestic investment into industrial parks, where industry, companies, and services are concentrated, according to the zoning plan of the site. They encompass many subcontractors and thereby generate employment and improved living standards.

With its strategic location near the capital of the Slovak Republic, Bratislava, and its excellent connections to Austria, the Czech Republic and Hungary, the Trnava region provides very favorable conditions for investors, as can be seen in the development of the region and the creation of industrial, logistics, technology and business parks.

In this study of best practice analysis, we focus mostly on the area encompassing the city Trnava, which is situated at a distance of 50 km from Bratislava and Nitra, and 95 km from Vienna and Brno. It is part of the Central European region. As a result of its unique location Trnava represents a very interesting place for foreign investment.

The first part of this study describes the Trnava region, its geographical location, infrastructure, industrial history, the conditions for creating a successful industrial location, and the arrival of one of the first, as well as one of the main investors in Slovakia- the PSA Peugeot Citroen company.

This best practice analysis study describes the preparations for and the arrival of French carmaker PSA Peugeot Citroen, to Trnava. We examine the impact it has had on the development of the region, in terms of its effect on employment, competitiveness, on further inflows of foreign capital, on education and in general on the overall development of this area. We also describe the influx of additional investments in this area that have been linked to the initial investment of the PSA group.

Successfully obtaining an investor such as the French carmaker has brought tremendous benefits and has made a significant contribution to the development of the region, especially in the selected district. Dozens of Slovak companies have found openings in the new Trnava car plant or through it.

In the study we describe the criteria and the assumptions that influenced the decision to choose the Trnava region, as well as the process of the construction work, and the unique approach to education adopted with the creation of the educational center "Campus for Professional Development". The Campus of professions is a very unusual and interesting project that not only provides education and training for

employees, but also offers a new and unique approach to the methodology of education, incorporating international exchange of knowledge, the development of a modern laboratory and technical equipment in schools involved in the project, which still operate, the training of PSA Peugeot Citroen employees as well as other production companies and their employees.

The last chapter of the study describes all the assumptions and best practices that lead to successful investment inflows by PSA Peugeot Citroen. The investment is evaluated from the point of view of regional policy and regional development, according to the development of employment and the creation of new jobs. The chapter also deals with a description of new investment, and new industrial/logistics/business parks that are currently being built or are planned for the near future in the close neighbourhood of the Trnava PSA Peugeot Citroen plant.

Finally, all the facts mentioned in the study represent an opportunity, but also a challenge for the Trnava self-governing region and other regions, showing how the district described was able to take advantage of the potential that significant foreign investment provides. Strategic investment in the region has brought not only a higher level of economic growth, but also a huge fund of knowledge that can be utilized for mutual benefit..

**Trnava self governing region**



## B1. History and analysis of best practice – Trnava region

The Trnava region is a self-governing territory in western Slovakia. Although it is one of the smallest regions of Slovakia, with an area of 4148 km (8,5% of the total area of the SR's territory), from the point of view of productivity it is one of the most developed regions in the industrial and agricultural sectors. Geographically it is bordered in the south by Hungary, in the northwest by the Czech Republic and Austria, as well as by the regions of Bratislava, Trenčín and Nitra. In the north it is bordered by the river Morava and in the south by the river Danube, and partially by the river Vah. The region is part of the Vienna-Bratislava-Gyor-Moson-Sopron development region.



Source: SARIO

Map of regions in SR

According to the local authority arrangements, under the National Council law no. 221/1996 Z.z. the Trnava self-governing territory (TST) is divided into seven districts (Dunajská Streda, Galanta, Hlohovec, Piešťany, Senica, Skalica, Trnava). The largest district by area is Dunajská Streda covering 1075 km and the smallest district Hlohovec. Generally, the whole region can be divided into 3 parts: Záhorie in the northwest, the Trnava region in the central part and Žitný ostrov in the south. The TST is spread mostly across the western part of the historical area of Bratislava and in the north in the region of the historical area of Nitra. The regions that form the TST are typified by their unique villages, folk architecture, local traditions and expressions.



Map of the districts of the TST

represented in the region include the food industry, focusing on the processing of milk and dairy products, meat processing and meat products, confectionery and biscuits, sparkling wine and sugar production; the paper industry, which focuses on the manufacture of packaging, labels and polygraphical production; and the chemical industry, focused on the production of detergents, drugs and medical cosmetics, as well as viscose and polyester fibers. The TST is an agro-industrial region that includes almost all branches of industry. First is mechanical engineering, focused on the repair of railway wagons and carriages, the production of clutches for cars and trucks, the manufacture of bearings, and bearing supports. and the production of accessories for the automotive industry. The textile industry produces men's clothing, scarves, shawls, ties, underwear, outerwear and knitwear. The glass industry is concentrated on the production of glass fibers, whilst the wood-working industry produces chipboard veneer furniture. Electrical engineering focuses on the manufacture and assembly of consumer electronics. The metal and metallurgy is secondary manufacturing, producing wire and wire products, sheets and galvanized products. Other industries

The most important industry in the SR is the energy industry. The Jaslovské Bohunice Nuclear Power station, the Gabčíkovo Waterworks and several smaller hydropower plants are located in this region.

One of the very important preconditions for the development of industry in the region is external investment which is attracted by a cheap and skilled workforce and also by the geographic position of the TST. The proof of this can be seen in the decision of French carmaker PSA Peugeot-Citroën to build its plant in Trnava. This step meant an investment of 28 billion Slovak crowns (1€=30,1260 SKK). The determining factor that influenced its decision was the possibility of obtaining 190 hectares of land for the infrastructure and also the possibility of creating a park for sub-suppliers near the plant.

The JM Slovakia company, owned by Johns Manville, also contributed to the development in the region through its investment in a new facility for the manufacture of glass fibers, used as reinforcement for plastics, and glass matting used as an

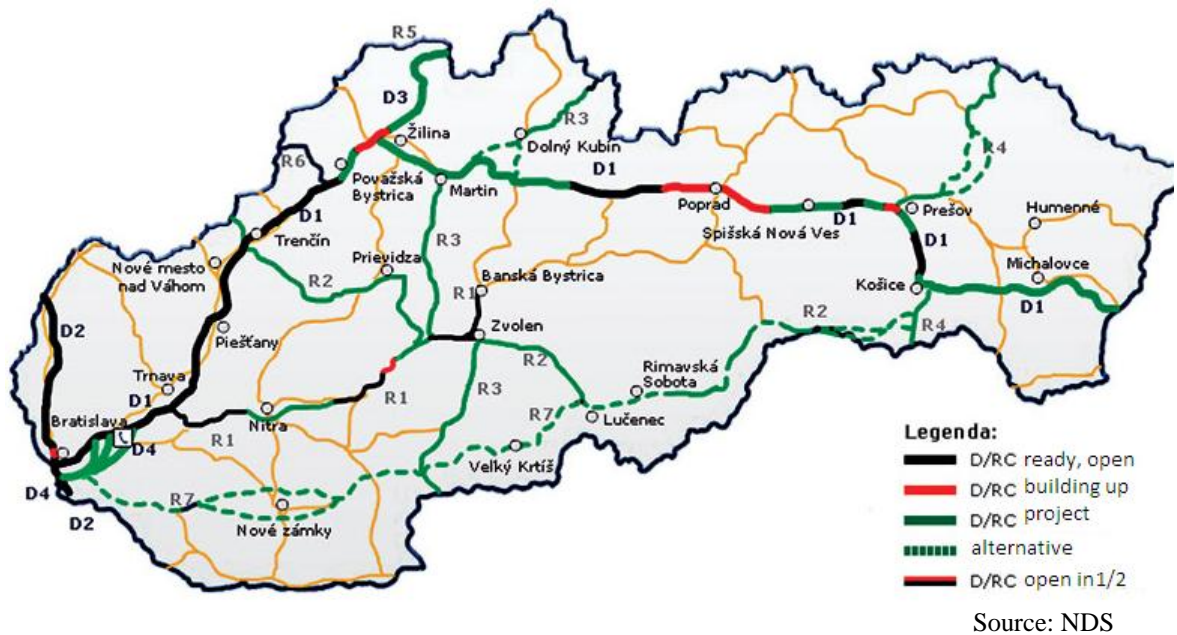
insulating material in the building industry. The new operation in Trnava will extend the current range of new products and create around 200 new jobs.

Sony shifted the production of its tuners and other components for production of televisions, to Trnava. As a result, the manufacturing plant in Trnava, became the largest producer and exporter of television sets and components for televisions in Slovakia. The current number of employees is around 1,400.

South Korean company Koam Elektronik, which has a plant in Sládkovičovo plans to invest in upgrading and expanding its production capacity. Koam Electronics also aims to become one of the suppliers of plastic components for the Kia Motors factory. The company is one of the largest suppliers of components for the Samsung Electronics, Canada plant in Galantas. A substantial proportion of the European production base of this South Korean company is concentrated in Galanta and they are planning to produce laser printers, satellite sets, plasma TVs, LCD TVs and DVD players there too. The factory in Sládkovičovo specializes in the production of plastic enclosures and components used in the assembly of computer monitors and televisions.

The other South Korean company, that has decided to invest in the Trnava region is Dong Jin Precision, Philippines, which supplies components for Samsung Electronics and which is building a factory in Dunajska Streda.

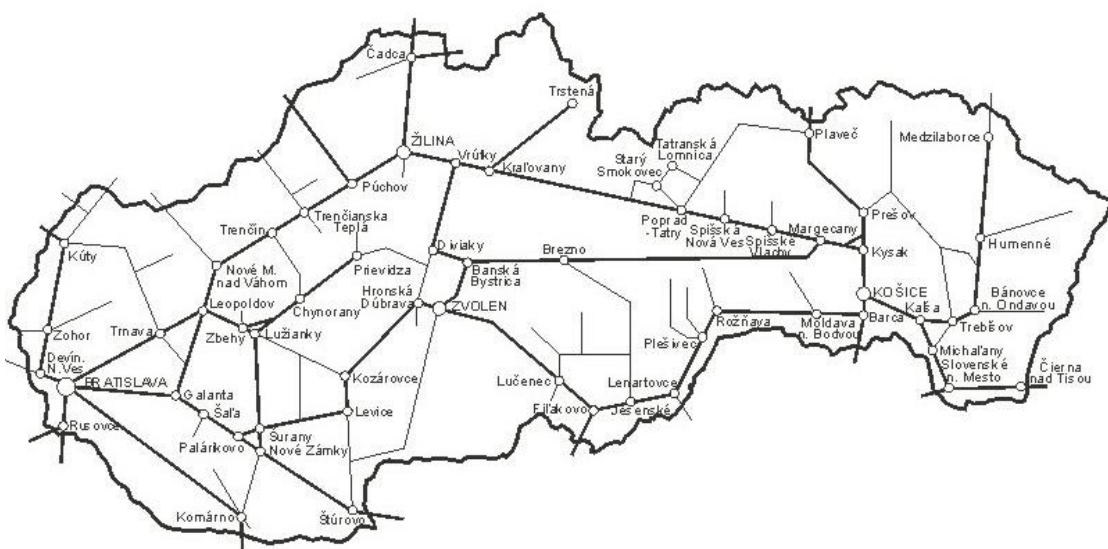
The TNT benefits from a favourable location in the transport network. The region has a relatively dense road and rail network of supra-regional significance. The region is crossed by important routes from Bratislava through Trnava to Zilina, as well as from Hodonin (CZ) through Trnava to Nitra. The total length of highways in the region is 67.439 km (which represents 17,34% of the total number of highways in Slovakia), in the direction Bratislava-Horná Streda and part of the D-2 highway leading from Bratislava to Prague (CZ) via Kutý.



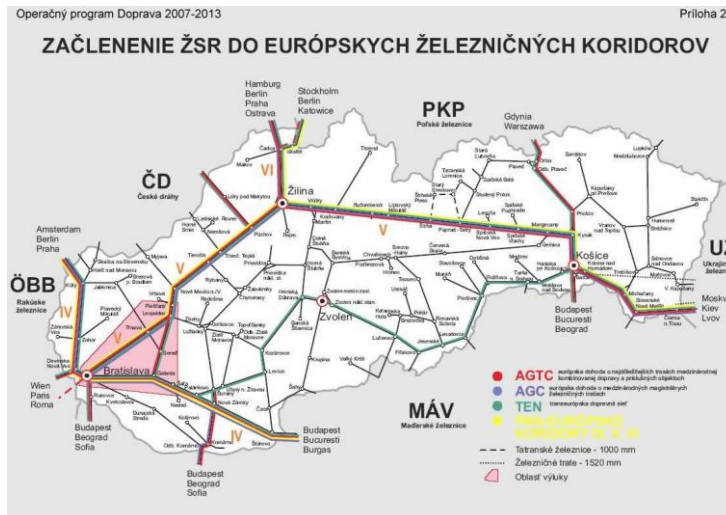
Map of highways in the SR

The opening of a new motorway section Považská Bystrica - Žilina has improved links with the capital city and central part of Slovakia, and provides good connections with other neighboring countries.

The railway also plays important role in the regional infrastructure. The length of railway lines in the Trnava region is 304, 45 km, which represents 4% of the total length of railway lines in Slovakia. Major routes are Bratislava-Žilina, and Trnava-Kuty. Trnava-Sereď-Galanta, Leopoldov-Kozárovce, Bratislava-Galanta-Štúrovo are also important lines. On some sections of the railway, reconstruction and modernization is receiving support from European union funds.



Source: ŽSR



Map of railway lines in SR

The distance to the capital and its airport is approximately 45 km, and the international and intercontinental airport in Vienna is located about 110 km away (with a direct connection with Trnava by highway), which also contributes to the good infrastructure and accessibility of the region.

At the moment, water transport is does not occupy a prominent position within the transport infrastructure in Slovakia. However, it has great potential for the future, with plans to establish the South Eastern European logistics center on the river Danube in Bratislava. The following rivers are used for water transport in Slovakia: the Danube (172 km) the Vah (78.8 km) and the Bodrog (7.8 km). In other areas of Slovakia, rivers are used mainly for technological and recreational boating. The Danube river is essential for passenger and freight transport in Slovakia and is the most important of rivers for transportation. The Danube connects the capital cities, Bratislava, Vienna and Budapest of the states of Slovakia, Hungary and Austria respectively, whilst the Danube-Rhine-Main canal links the North Sea with the Black Sea.



Map of water transport lines in the SR and water course North sea- Black sea

The foreign investment of french carmaker PSA Peugeot Citroen played an important role in the development of the infrastructure, and the creation of employment opportunities. The PSA group wanted to penetrate Central and Eastern European markets, therefore in 2002 they sought a suitable site to build a manufacturing center to produce vehicles as a priority for this european region. The shortlist of suitable sites included Poland, the Czech Republic and Slovakia. The final decision considered Poland and Slovakia. The final decision was made in January 2003 - the choice was the region of Trnava in Slovakia.

At the end of January, the PSA group and the Slovak government signed the first investment agreements. On 17 June 2003 the foundation stone of the plant of the PSA Peugeot Citroen Slovakia was laid. Construction of the first buildings took place in October 2003. In May 2005, they signed an agreement promoting education in the automotive industry, spearheaded by a project called Kampus povolání (Campus of professions). In the summer of 2005, the construction and installation of the technological equipment was completed .

Source: PSA



Constructing the plant in Trnava - PSA Peugeot Citroen



Constructing the plant in Trnava - PSA Peugeot Citroen

Source: PSA



Car factory in Trnava PSA Peugeot –Citroen

At the beginning of 2006, pre-production of the Peugeot 207 car began, with mass production starting in the middle of 2006 and increasing gradually. Through this investment PSA created 3000-3500 new jobs directly, as well as other job opportunities in the still emerging subcontractor sector related to the automotive industry. In the vicinity of PSA Peugeot Citroen the largest logistic park in Slovakia is to be found, with an area of 180 thousand square meters. The developer of the park, which was built in 2005, was the financial group J & T, together with a Belgian group Immo Industry Group. Many suppliers of the French carmaker are located in this logistics park, such as Valeo, Faurecia, Sofitec Plastiques, Streit Groupe, Inergy Automotive Systems and VMA Infra Industrie. The park is divided into four zones and within it are the “just-in-time” suppliers of Peugeot.

Source. [www.poko.sk](http://www.poko.sk)



Operation of supplier for PSA- Faurecia – production of interior facilities

The PSA Peugeot Citroen Slovakia manufacturing plant was inaugurated. in October 2006. At the end of 2006 this new plant produced 50,000 Peugeot 207s. In January 2007, PSA Peugeot Citroen Slovakia received the ISO 9001:2000 certificate of quality. In October 2007, Mr. Jean Mouro had become the general

director of the plant, replacing Mr. Alain Baldeyrou, who was retiring. In December 2007, the first Citroën C3 Picasso was produced under pre-production manufacturing. In January 2008, PSA Peugeot Citroën Slovakia obtained the ISO 14 001 environmental management certificate. In the autumn of 2008 at the Paris Car Show, the C3 Picasso Citroën model, made in Slovakia, was given its world premiere.. Subsequently, in March 2009, mass production of the model started. In June 2009, the factory produced its 500,000 vehicle. In June 2009, PSA Peugeot Citroën Slovakia won the National Business Prize for the environment, and launched the production of the diesel-powered C3 Picasso which reduced emissions from 125grams to 119grams of CO<sub>2</sub>/km. According to the Environment Commission of the European Parliament, cars should emit no more than 120g of CO<sub>2</sub>/km by 2012, a target. suggested by members of European Parliament, and one which the new C3 Picasso model already meets.

1<sup>st</sup> November 2009, Mr.Luciano Biondi became the new general director, replacing Mr. Jean Moura, who became general director of the PSA production center in Mulhouse, France.

PSA Peugeot Citroën is the world leader in a range of environmental technologies. For three consecutive years, the company has sold more than one million vehicles with emissions lower than 140g of CO<sub>2</sub> / km.

The company also continues to increase the passive, as well as the active safety of its vehicles. Each year, a considerable amount of budget is devoted to research and development for this purpose.

At the same time as building the plant of PSA group, it was planned to build a park near the plant for PSA suppliers such as Banque PSA Finance, Gefco (transport and logistics), Faurecia (producer of interior equipment for automobiles) and Peugeot Motorcycles.

Source. [www.poko.sk](http://www.poko.sk)



Tрнава logistic park for suppliers of PSA

## **B2. Success factors of best practice**

### **A , Identification**

The car factory in Trnava has the most up-to-date technology in the PSA Peugeot Citroën group. Already by the first quarter of 2009, the new model Citroën C3 Picasso, exclusively produced in Slovakia, had been launched onto the market. Daily production in two shifts is currently 900 cars. In 2009, they produced 205,000 vehicles, and this level of production, has helped the Trnava carmaker to become the largest car manufacturer in Slovakia.

The decision of investors to select a suitable site was influenced by various factors. Many parameters were taken into account: technical, economic, logistical and geopolitical. An analysis was undertaken of the legal and administrative systems of the country, of the workforce in terms of age, and educational level, and the availability of sufficient numbers of suitable employees in the selected locality. The main criteria of the investor that led to the choice of Slovakia were:

- Location, settlement
- Good, pre-existing infrastructure
- Availability of an area of 190 ha with a good road and rail links
- Possibility of building an industrial-logistics park nearby for sub-suppliers
- Locality with a tradition of manufacturing, and a workforce with a good level of education
- Good distance from the sales markets of Central and Eastern Europe
- Political stability in the country and assistance from the national government
- Economic reforms in the country
- Active and good government involvement throughout the whole project
- Quick access to international and intercontinental airport in Vienna, close to the capital
- In the school system, plans to open a French school in Trnava
- The proximity of universities and schools in Bratislava and Trnava with their ability to cooperate with investors
- The potential for efficient installation, and use of technical means of production
- Potential for development of the automotive group
- Opportunities for possible expansion of production

The Trnava branch of carmaker PSA Peugeot Citroën is the latest manufacturing technology center of the group. The most modern technological plant of PSA Peugeot Citroën Group has four main parts, pressing, welding, coating and assembling. The pressing shop in Trnava has the quietest operation in the whole PSA Peugeot Citroën

group It consists of one cutting and three finishing lines that are used for pressing large parts and for the production of small parts. In the welding line various moldings are welded. The operation is highly automated, with robots moving various parts from one place to another.

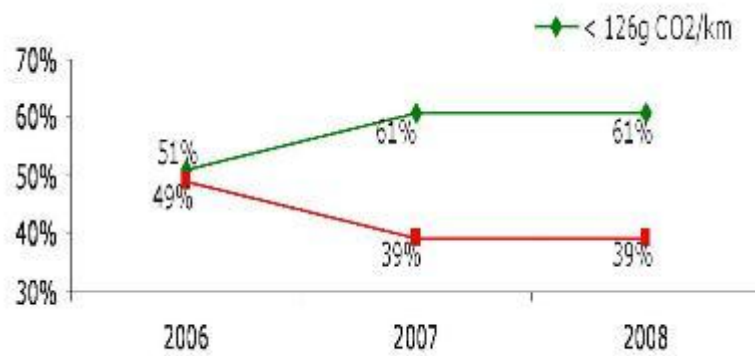
The quality of the bodyshell is controlled by a measuring tool operating using laser measurement. The paintshop (coating line) provides the protective and aesthetic finish to the vehicle, the colors are water soluble and highly organic. After painting, the models are shifted to the assembly hall and divided according to the color. The assembly hall is the largest operation of the Trnava plant. Most of the employees work on these eleven lines.

Despite the significant decline in demand for cars and the global economic crisis, the production at the PSA Peugeot Citroën plant remains relatively stable. Production continued even in the crisis year of 2009, with a total production of more than 186,000 cars per year in 2009, which was an increase of 5% in comparison with the year 2007

Stability was significantly influenced by the start of mass production of the new Citroen C3 Picasso, which was launched onto the market in 2009, Other significant factors contributing to this stability are the quality of production, the skilled workforce and lower production costs. With regard to production output, the factory in Trnava is the exclusive manufacturer of the Citroen C3 model, and there are plans to produce smaller cars, that are not anticipated to suffer from a significant dip in demand.

The PSA Peugeot Citroen plant in Trnava, would be able to continue manufacturing with more than three thousand employees. The car factory in Trnava has the latest technology in the group. Strategic investment for the initial production phase reached 700 million euros. Investment in the launching of its additional production reached 100 million euro. Following start-up, the production of the new model 850 reached vehicles per day. The Citroen C3 Picasso is produced simultaneously with the Peugeot 207 model, with a view to reducing the production of the Peugeot 207 in favour of the Citroen C3 Picasso.

According to the former General Director of PSA Peugeot Citroen, Slovakia Mr. Mouroa, many suppliers were attracted by the exclusive production of the Citroën C3 Picasso model. The new General Director Mr. Luciano Bionda thinks that despite the economic and financial crisis, he will try to maintain the stability of the plant, and sincerely believes he will succeed, precisely because of the production of segment B small cars with low consumption and low CO<sub>2</sub> emissions. He also relies on a unique system of production employed in the PSA group, which has been successful in rapidly reducing mistakes in both the Peugeot 207 and Citroen C3 Picasso models.



Graph – Emissions of CO<sub>2</sub> per km, according to engine

Research in the field of the environment in the PSA Peugeot Citroen Slovakia plant is also focussed on hybrid engines, which are fuelled by biofuels. According to the plan, in 2011, they are planning to introduce to the market the first mass-produced vehicles powered by a hybrid system with an electric and a diesel engine HDi.

Source: PSA



Citroën C3 Picasso

## **B2. Success factors of best practice**

### **B, People/ Human resources**

The success of each company is influenced by several factors, one of the most important being its human resources and qualified, motivated and satisfied employees. After the PSA group definitely announced its decision to construct a new plant and after laying the foundation stone, it was very important to start working on creating a human resources training programme for the future employees of PSA. The estimated production was 300,000 vehicles per year, that meant the creation of 3,500 new jobs, particularly in industrial maintenance, quality management and control of automated production lines. The original plan was to start production in three shifts, which meant the need to recruit staff and then follow up with trainings as required.

Based on the experiences of the PSA group with educational projects around the world such as in Mexico, Brazil, China, Cuba, Algeria, Senegal, Egypt, Poland, a tripartite partnership was created, comprising the French Ministry of Education, the Slovak Ministry of Education and PSA Slovakia s.r.o. This tripartite grouping, subsequently founded the project "Campus of professions" which resulted in a training center, "The Institute of Education for PSA."

The areas identified for the construction of the specialized laboratories were selected very carefully by the French partners and had to fulfill strict criteria. After the selection, the French partner selected, as the main administrative and training centre of the project, the Faculty of Mechanical Engineering at the STU in Bratislava, and three secondary schools, the Secondary School of Mechanical Engineering in Bratislava on Fajnorovo nábrežie, the Secondary School of Mechanical Engineering in Trnava (at that time an Associated secondary school) on Komenského street, and the Secondary School of Transport in Trnava on Študentská Street. Consequently, a training center was created across four centers of learning and coordinated in the center from the site of the Faculty of Mechanical Engineering STU in Bratislava.

Training centers were set up in each of these establishments, where each training center is focused on a particular technical aspect and deals with training of a specific group of workers. The Training Centre at the Faculty of Mechanical Engineering at STU, which is also the administrative and coordination center, is concerned with a group of senior and middle management staff, who specialise in issues of industrial maintenance, industrial automation, electricity and safety at work and safety when working with electrical equipment.

PSA invested 3.4 million euros in technical equipment for the training centres. The main objective of the project, "Campus of professions", which was unique in Slovakia, was not only at the stage of plant construction and production to provide for the necessary training of staff in various positions, but also to significantly expand

the laboratory facilities and equipment available at the selected schools in order to improve the educational process in vocational subjects .

Thanks to this project, a place was created for providing various forms of additional education for adults from various other companies, mostly in the field of production technology.

DECEMBER 2003: selection of four partner schools

- JANUARY 2004 - APRIL 2004: selection of suppliers of teaching materials
- MAY 2004 - AUGUST 2004: renovation work of training facilities and equipment and educational materials, (total investment of 3.4 million €)
- July 2004: the first staff training PSA
- 2005: Training of PSA trainers by trainers from France
- 12/05/2005: Signature of the fundamental contract and specific agreements
- 2006: Commencement of the training of Slovak trainers on methodology and on the technical equipment
- 2007: completion of training of Slovak trainers
- 31/12/2007: the end of first phase of the project
- 01/01/2008: creation of a coordination center for vocational education

#### Brief history of Campus of professions project

Following the construction of specialized classrooms and laboratories, French trainers, led by project manager Mr. Serge Saquet, came to Slovakia and began to train the local staff of the plant, and also selected Slovak teachers from different schools as future trainers for this educational center. From 2004 until the end of 2007, 814 skilled workers and technicians and more than 1,394 production assembly workers were educated by PSA Slovakia through the Campus of professions. Most of the qualified workers were maintainers (253 people) and heads of the facilities (142 persons). PSA Staff received 241,412 hours of training in the four training centers of the project Campus of professions.

The experiences that the Slovak trainers received during two years were beneficial. According to the interviews with trainers and trainees, the main experience obtained was a different methodical look and approach to education. In particular, the French trainers preferred an individualised approach to training and strongly focused on the practical aspect of education. In the training process, entrance tests were initially set to check the knowledge, skills and competencies of perspective employees, and the results obtained determined the design of the training programme for the individual trainee. At the end of the training module, trainees undergo a final test to find out the degree of knowledge acquired.

Training modules are developed for specific area - automation, maintenance, robotics, quality and control of production, electrical safety at work, awareness of electrical risks. Trainers also attended training sessions where they received a complete package of teaching materials in different modules. By the end of the nearly two-year cycle of training, instructors have undergone what was, in their words, a series of very difficult tests and final examinations, and at the end of 2007 they obtained their certificates on completion of the French training phase.

From the 1st January 2008, the Campus of professions project has been transformed into the the Coordination Centre for Vocational Training (KCOV), which is grouped around four partner schools. The organizational structure of the Coordinating Centre stayed in the original form, with the administrative and organizational center also remaining at the Faculty of Mechanical Engineering at STU in Bratislava. The administration of the technical and laboratory equipment has been transferred to the Faculty of Mechanical Engineering.

PSA Slovakia remains one of the customers of KCOV. In addition to providing training for PSA, KCOV cooperates with several external companies to provide required technical training according to their requirements. The permanent KCOV course, the "Master of maintenance", was prepared in cooperation with the Slovak Society of maintenance. Other training courses provided to external companies are prepared according to the agreement with the client and are "tailored" to the customer and the design is developed according to client's exact requirements.

Working with human resources is also reflected in PSA through its close cooperation with the Faculty of Mechanical Engineering at STU in other areas, in particular, in discussing new developments in the automotive industry and giving advice on bachelor and diploma study programmes ; providing student brigades; cooperation in recruitment of students; the possibility of participating in the development of vocational education and training in Slovakia. PSA also participates in improving the quality of the workforce as a key factor in productivity; and assists in highlighting the need for lifelong learning as one of the key contributors to employment and competitiveness. PSA supports the school-business relationship in order to prepare high-quality potential employees, and to increase the flexibility in responding to the needs of industry in the region.

Nowadays, PSA employs about 3,000 people on permanent contracts. In addition, they use about 170 temporary staff, through temporary work agencies. As a result of changes in the labor market, the current size of the workforce is sufficient, and temporary staff are used where necessary as production operators. In the current crisis, the natural staff turnover is minimal and seconded staff are used mostly in case of increased sick leave or if employees leave. Employing a certain percentage of seconded staff is the ideal solution to flexibly requirements and promptly ensures enough workers on the production line. During the secondment of staff, there is the opportunity to directly check their quality of work and their personality. Seconded

employee may become a company employee dependant of course, on their meeting the criteria, which includes work performance and attendance. For them it is a positive motivation and an opportunity to gain permanent employment. If they do become a company employee, they would also gain from other social benefits, such as for example, the use of the employer's contribution to the purchase a motor vehicle or home. Currently, there are temporary staff positions as production operators in the mill operations, welding, coating, assembly, logistics and quality sections.

## Campus of professions Project- training centres

Source: KCOV



Classroom of industrial maintenance, training center, Faculty of Mechanical Engineering STU

Source: KCOV



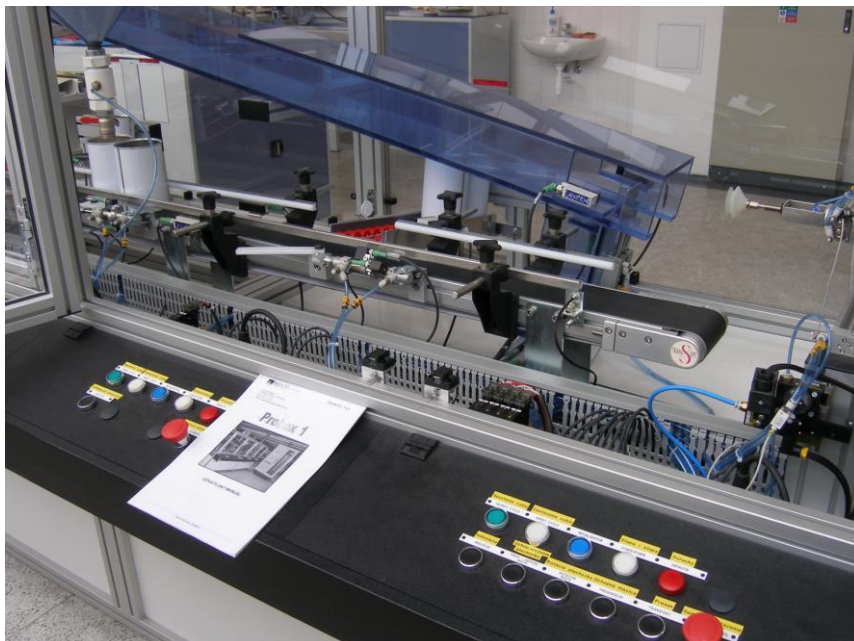
Automatic filling, line-ERM Training Centre, Faculty of Mechanical Engineering STU

Source: KCOV



Technical equipment of electrical classrooms- training centre, Faculty of mechanical engineering STU

Source: KCOV



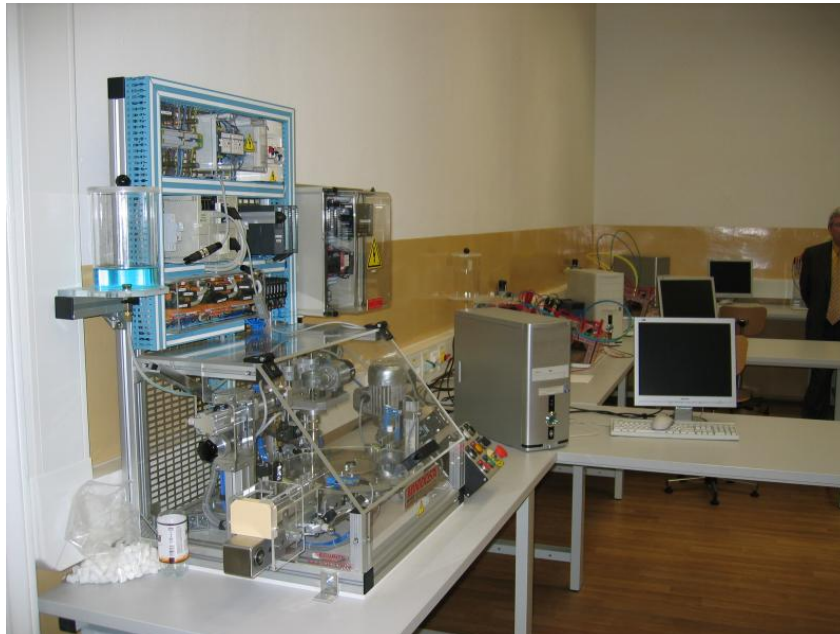
Automatic line in the classroom of industrial automation-  
Training Centre, Faculty of Mechanical Engineering STU

Source: KCOV



Automatically controlled line for soap production- training center Secondary School of Mechanical Engineering Bratislava

Source: KCOV



Teaching of computer systems, training center Secondary School of mechanical engineering Bratislava

Source: KCOV



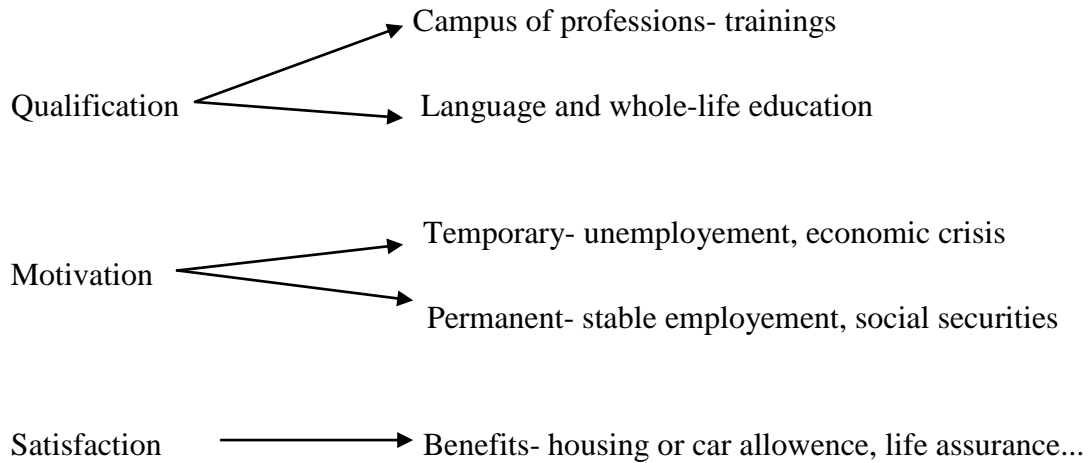
Technical and laboratory equipment, training center Secondary School of mechanical engineering  
Trnava

Source: KCOV



Special department for assembly of car parts, training center,  
Secondary school of transport, Trnava

According to the General Director of PSA Mr. Luciano Bionda, for PSA an educated and qualified staff is the greatest asset. If difficulties arise with a shortage of jobs for people during times of crisis and PSA is forced to reduce production, they use this period to educate workers, instead of dismissing them and potentially losing the opportunity of being in a position to return to full production when markets pick up



Of course, the primary investor will attract other smaller investors, or suppliers. An example can be seen in the expansion and development of the industrial and logistics park near the PSA plant. In the vicinity of the plant a number of smaller suppliers plants were created.

Currently there are not only a business park, and a new logistics center under construction, but also a commercial and entertainment center. Since 2003, the whole neighbourhood is becoming a major industrial area in the Trnava region?. At the same time, development of these areas, and the constant demand for a new, qualified workforce is raising the level of education in Slovakia, evidenced by the aforementioned projects.

Source: etrend



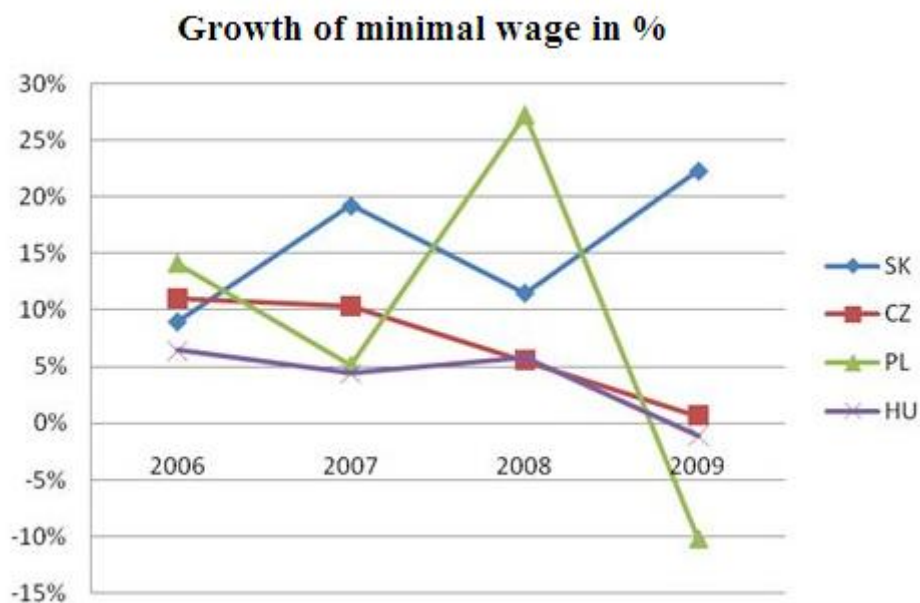
Store land, commercial and entertainment centre in the vicinity of the PSA plant

### C. Regional Policy considerations for the best practice

The arrival of large investors such as PSA is never random. Although the region and state meets the basic conditions for the investor, the attracting and securing of an investor require a number of other arrangements and welcoming actions, on the part of the regional and municipal authorities, as well as by the central government itself. The basis for investment is the stability of the region, both political and economic. Since 1998, Slovakia has put in place a number of significant reforms sending positive signals to potential investors. Postcommunist countries such as Slovakia, have many suitable properties for investors, and in tandem, these reforms, may be highly attractive to the potential investor.

The advantages of post-communist countries include the low costs of production and labor, and also lower logistical costs. On the other hand there are also disadvantages in these countries. Overcoming these problems is fundamental to attracting investors. The main problems are particularly the under-developed infrastructure and the qualifications of the labour force. The region must fulfill the following conditions, in order to overcome the problems mentioned above in the simplest and fastest way:

- A large and cheap workforce.
- The presence of institutions of higher levels of education in the region, or at least in the wider region.
- The willingness of regional authorities to cooperate with investors, and also with the national government in the preparation of appropriate conditions for the investor.
- The region's experience with industry in the past.



Source: Eurostat

Growth of minimal wage in V4 countries

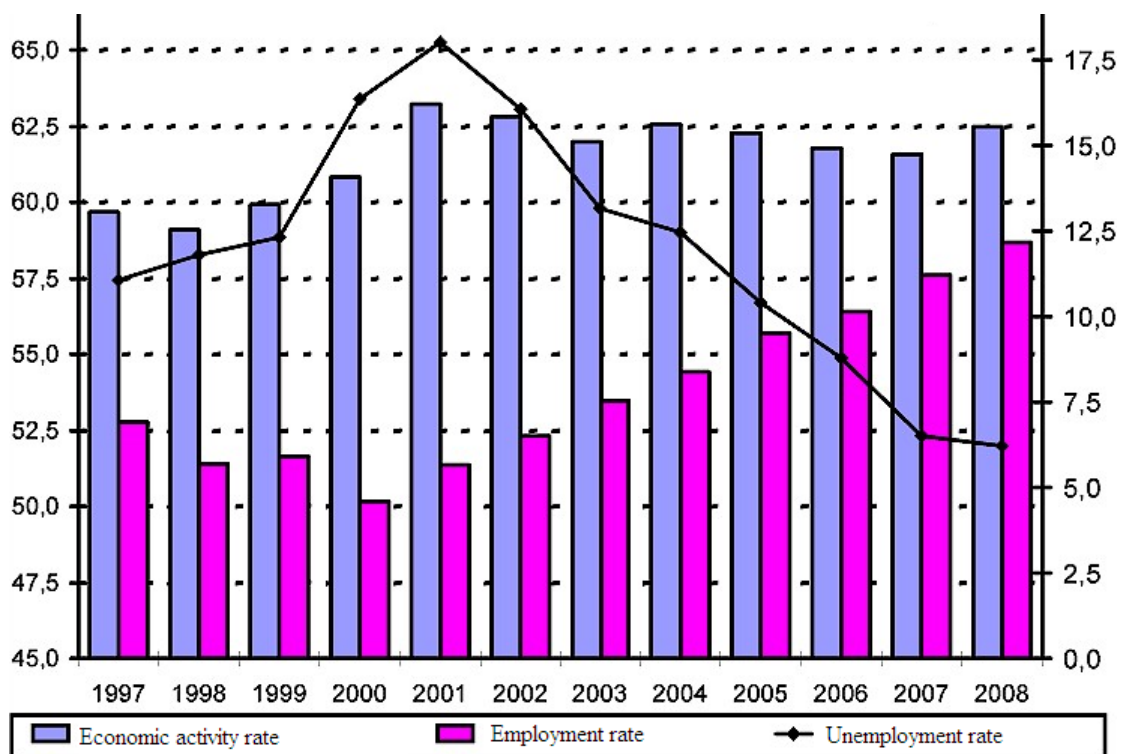
From the 19th century Trnava has been one of the major industrial centers in Slovakia. In 2003, unemployment in Trnava region reached 13%, representing 37,000 people. The municipal government has sought to attract foreign investors, mainly with a view to job creation, but also, of course, for the development of the region as a whole..

In terms of education in the region, Trnava lies in close proximity to the capital, which helps to ensure the provision of adequate skills through high schools and universities.

The impact on the Trnava region:

Foreign investments play a vital role in the economic development and economic transition in post-communist countries. In particular, large and direct investments trigger a chain reaction which attracts more and more investors and creates new local companies.

At the same time, large investments in the region are accompanied by increases in the level of overall services and purchasing power in the region. The results of investments in the region are most visible in the number of new jobs created and the consequent fall in unemployment figures. Specifically, in the Trnava region, the initial investment of PSA, along with others which it influenced or attracted, has created 7000 jobs since 2003 .



Source: VSZP

Unemployment rates in the region of Trnava in the years 1997-2008

Undoubtedly the biggest and most important effect and result of the initial arrival of a large investor is to create jobs and reduce unemployment.

Over the past 16 years the composition of the workforce in Slovakia has changed significantly. In the past, an investor who came to Slovakia, had no possibility of finding relevant information about Slovak human resources, and therefore the top and middle management positions were occupied by staff from the country of the investor.

After transferring its know-how and its technology, they also began to raise the incomes of its employees recruited from local human resources.

The situation in the labor market is nowadays different. New potential investors have the opportunity to gain information from their partners who are already active in the Slovak market. Many companies are now locating their second, third or even fourth investment in Slovakia, and from the very beginning of their projects are looking for Slovak project management. The impact on the overall composition of human resources in Slovakia has also featured generational replacement.

The factor that most affects the success of long-term investments and business in the area under discussion is the infrastructure. This applies to all forms of infrastructure - transport, energy, financial services, transparent and clearly interpreted legislation, effective collaboration of governments and the state administration.

At the same time a reformed education system, where the investors have the chance to discuss with education authorities the areas of education important for them, at every level of education, is an essential step. An essential requirement for maintaining competitiveness and attracting foreign investors is the development of a knowledge-based economy and the opportunity for discussion between investors and state authorities.

The economic benefits of the car manufacturer's locating in the Trnava region is widespread in the longer term. Even during the period of construction of the plant, the benefits were visible in the improved export and foreign trade balance figures, in the increased purchasing power of inhabitants in the region, in employment in the region and in the development of services. It has also caused an inflow of new investments, eg. many other industrial and business parks were built.

The industrial and logistics business park, Extensa Business Park (EBP), began to develop in an area of 30 acres just opposite the French car manufacturer. This project includes buildings with commercial spaces, flexible industrial buildings, logistics facilities and office premises.



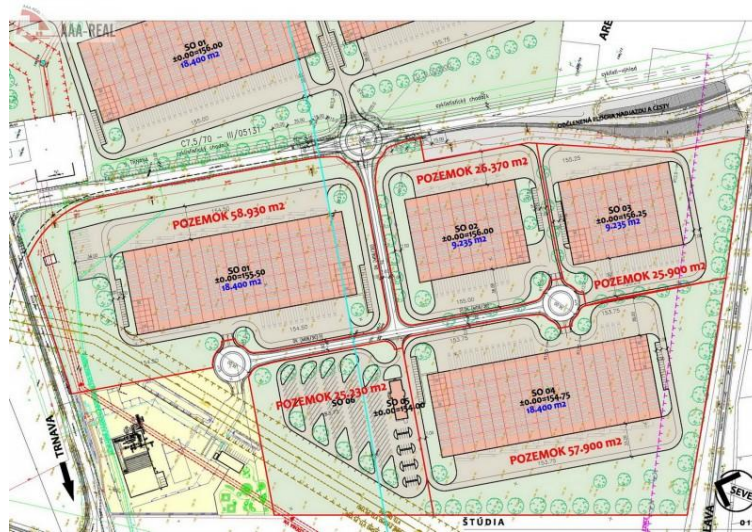
Extensa Business Park

This project aims to build a commercial-industrial-logistic administrative and entertainment zone that, on completion, should serve, not only to the Trnava region, but due to the good infrastructure, should also attract people from a wider area.

The park is to be built in several areas, and part of the commercial center has already been built and is in use. The belief that the project will be successful is also based on its locality - the area is located in the southwestern part of the highway near Trnava's slip road to the D1 Bratislava - Žilina motorway, and R1 in the direction of Nitra. In the surroundings of this zone are many small and medium-sized companies from different sectors of the economy.

In the same locality the construction of the Trnava-Zavar Logistic Park is in preparation also which is also de to be implemented in two phases.

- I. Phase: Total area size of of 241,328 square meters, with an expected date of completion and delivery: year 2010.
- II. Phase: Total area size of 536,728 square meters, with an expected date of completion and delivery: year: 2011-12.



Trnava- Zavar

The representatives of the Trnava city are preparing to build a new industrial and technology park in the industrial zone of Trnava. About 450 new jobs should be created for highly qualified people. This is a pilot project in Slovakia, because it is not a production and assembly oriented project, but rather a project oriented to higher technology activities, such as development, research and project services. The cost of this project is around 10 million euros, 95% of the funding coming from the European Regional Development Fund. The municipality of Trnava participates in the financing with 5% of the municipal budget. The project is currently at the stage of tender preparation for a construction contractor and is scheduled to be open in 2012.

Source:etrend



Industrial and technological zone in Trnava

## Industrial and technological parc of city Trnava

Starting 2nd March 2009

Completing 28th February 2012



current situation

visualisation of project

Currently under construction Industrial and technological park of city of Trnava

One of the important success factors for keeping the investors in the region, is providing them with appropriate conditions for the proper functioning of production - a business-friendly administration, quality manpower, innovative activities and improvements in the infrastructure.

The region of Trnava with it's centre city of Trnava, is a very fine example of the progressive establishment and development of successful industrial and business zones in Slovakia, and could serve as a model for building other similar industrial logistic and commercial zones.

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