

White Paper

CLUSTERS, TECHNOLOGY PARKS AND INCUBATORS IN POLAND

F R O S T & S U L L I V A N

In Cooperation With



POLISH INFORMATION AND
FOREIGN INVESTMENT AGENCY

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About This Document

The following whitepaper outlines the findings of a study conducted by Frost & Sullivan for The Polish Information and Foreign Investment Agency (PAIiZ) on clusters, technology parks and incubators in Poland. The paper focuses on clarifying the nature and the role of the clusters, technology parks and incubators.

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Executive Summary

In 2000, the EU implemented the Lisbon Strategy. Its goal is to increase the economic performance and competitiveness of the EU, by creating a knowledge-based society. By being a member of the EU, Poland has to meet those standards by increasing its R&D performance. In attempting to do this, the country has been promoting the creation of clusters, technology parks and incubators, so as to increase cooperation between the business sector and academia.

Clusters have been emerging in Poland. These clusters can either apply only to Poland or they can be in Poland but apply at a pan-European or international level. Over the years, Poland has established an aerospace cluster attracting aviation companies from around the world. The country is now also a part of the New Detroit: Poland is part of an automotive cluster spread across four countries of Eastern Europe, including Slovakia, the Czech Republic and Hungary. Additionally, in recent years, Poland has become a leader in the IT market, as a result of which it is often referred to as the Silicon Valley of Central and Eastern Europe.

Technology parks are also key factors promoting innovation and economic growth by actively creating a cooperative environment for business and science. There are several in Poland, such as the Wrocław Technology Park. Technology parks are entitled to EU funding, can often be found in Special Economic Zones (SEZ) and may often play the role of business incubators.

Another factor helping increase innovation and competitiveness is business incubators. Similar in behaviour to certain technology parks, business incubators are also entitled to EU funding. Despite certain challenges these business incubators face in Poland, they have proven to be successful.

1. Transforming Poland into a Knowledge-based Society

The EU, having been faced with the growing problem of reduced economic competitiveness, when compared to countries such as the United States and Japan, decided to implement policies that would increase its economic performance and competitiveness. In order to achieve this, the European Commission adopted the Lisbon Strategy in 2000. The goal of this strategy was, and is to this day, to make the EU one of the most dynamic and competitive knowledge-based economies in the world, by 2010. This strategy identifies R&D as the predominant source of innovation, which in turn is considered as one of the key drivers of productivity. As a result, this strategy urges all member states of the EU to increase R&D spending to 3.0 per cent of their gross domestic product (GDP). Additionally, two-thirds of this spending should come from the private sector.

Following Poland's accession to the EU in 2004, the targets set out by the Lisbon Strategy have become applicable to Poland. When comparing Poland to the other EU nations, it is clear that Poland has higher potential in its different areas of R&D. The EU has an average R&D expenditure of 1.9 per cent of its GDP. Poland only allocates 0.6 per cent of GDP to R&D. According to EU statistics, in 2005, Poland ranked 21st out of 25 on the Summary Innovation Index. Further, the percentage of innovative companies among the businesses that are active in the EU is 51 per cent, whereas in Poland it is only 16.9 per cent.¹

According to EU standards mentioned above, Polish State involvement in R&D is still too high. 57 per cent of the R&D financing in the country is based on the national budget, whereas the private sector accounts for the remaining 39.3 per cent, where 26 per cent is funded by business entities and 16.3 per cent by other sources.² In order to change these proportions, the private/business sector must cooperate to a greater extent with researchers and academics. Additionally, because research and innovation activities tend to be mostly concentrated in the capital regions, which can further accentuate the already large number of economic and social discrepancies within given societies, the promotion of technology parks, clusters and business incubators is seen as a key driver in promoting cooperation between business and science. Clusters, technology parks and technology incubators guarantee a more equal spread of business-driven innovation throughout Europe and its member states.

¹ Eurostat, 2007

² Ibid

2. Polish Clusters

A “cluster” can be defined as a geographical concentration of firms active in similar technological activities. These clusters include a wide range of actors that are part of a given sector’s supply and demand chain and play a symbiotic role in relation to each other: competitors, suppliers, distributors/re-sellers and end clients. Since clusters create highly innovative and productive environments in order to promote growth, they often find themselves close to universities or research establishments such as technology parks.

Clusters are considered as key to increase growth and productivity, and are often supported at the regional, the national as well as the EU level. Regional authorities support clusters by providing an in-depth analysis of a region’s potential and its value-added structures. At the national level, authorities identify emerging clusters and provide the adequate assistance and coordination tools to promote their growth. The EU supports clusters by means of funding (structural funds, the Competitiveness and Innovation Program and the 7th Research and Technology Development Framework Program).

Clusters have life cycles composed of four stages, and come to an end once they have served their purpose, which is to increase innovation and competition. The four stages are the following:

- The embryonic stage, which can be generated by innovation, invention or inward investment
- The growth stage, where markets have developed sufficiently to spin off and attract imitators and competitors and to stimulate entrepreneurship
- The maturity stage, which is when the processes or services have become standard, more imitators enter the market and costs become a key competitive advantage
- The stage of decay, when the products become replaceable by lower cost or more effective substitutes

In Poland, several clusters are present. However, it is important to remember that clusters can be found within Poland itself as can Poland be a cluster, or part of a cluster, within a larger context such as the European Union.

2.1. Aviation Valley

One of Poland’s main clusters is the aviation sector in the South-eastern part of the country. Not only is this region a cluster within Poland, but it is a cluster at the European level as well. This cluster is currently in its growth phase and has become a cluster due to the fact that it has:

- More than 100 years of aviation history
- 70 years of experience in the aircraft industry

- 90 per cent of Poland’s aerospace industry output is to countries such as the United States, Venezuela, Italy, Greece, Canada, Spain, Germany, South Korea, Indonesia, Vietnam and Iraq
- A cost-effective work force and production costs
- More than 20,000 experienced employees
- The University of Technology with a highly developed Aerospace Engineering Faculty
- A centrally located international airport
- It employs 8,000 highly qualified workers

This area is known for the production and maintenance of all types of airplanes, including the following:

- Light sports, passenger, agricultural and training aircraft
- Helicopters
- Gliders
- Aircraft parts and accessories

The Aviation Valley offers the services of specialists associated with the Rzeszów University of Technology and 21 other institutions and firms, such as:

- WSK Rzeszów (manufacturer of engines)
- PZL Świdnik (manufacturer of helicopters)
- PZL Mielec (manufacturer of light transport and special-purpose airplanes: fire-fighting and trainer aircraft, supplier of aerostructures and aircraft components for international industrial cooperation programmes)
- Pratt & Whitney Kalisz (manufacturer of engine parts)
- Wytwórnia Zespołów Kooperacyjnych (subcontractor of doors for Boeing aeroplanes)
- Zakłady Narzędziowe w Mielcu (producer of processing lines for the aviation industry)
- Stamet Zakład Mechaniczny S. Stachura (producer of aeroplane parts)
- Serwis Samolotów Historycznych (producer of historical plane replicas that are 100 per cent exported to foreign markets such as Canada, Switzerland and EU countries)

This cluster has proven to be quite effective, predominantly due to the high quality/labour to cost ratio. With its large amount of universities specializing in aviation, Poland provides aviation companies with a large human capital in this industry.

Table 1: Polish Universities with aviation related profiles

University	Profile
Warsaw University of Technology	Faculty of power and aeronautical engineering branches offering studies in aerospace, automatics and robotics, mechanics, machine design and power engineering
Rzeszow University of Technology	Centre for Air Education: the only university that educates civil pilots

Wroclaw University of Technology	Mechanical faculty
Lublin University of Technology	Specialization: construction and operation of helicopters
Advanced Vocational School (WSKZ), Chelm	Faculty of piloting
Air Force Officers' Academy, Deblin	Faculty of aviation
Military University of Technology	Faculty of aviation engineering with a specialization in avionics, fixed and rotary wing aircraft and aviation armament

As a result, this large human capital potential has attracted some the world's leading aviation companies such as:

- Pratt & Whitney
- EADS
- British Aerospace
- Lockheed Martin
- Boeing
- R&D Precision

2.2. Poland: Part of the New Detroit

In recent years, a few of the Eastern European countries such as Poland, Slovakia, the Czech Republic and Hungary have been witnessing many foreign car companies establish their assembly lines in their countries. As a result of low wages and a skilled labour force, these four countries have been witnessing the entry of car companies such as Ford, Toyota, Kia, Porsche, Peugeot and so on. This has turned the region into the New Detroit, the new automotive cluster, at the European level and is currently in its growth phase due to the large amount of investors coming into the region.

Although Poland is part of the automotive cluster in the European context, the automotive industry in the country has clustered predominantly around four major agglomerations: Warsaw, Wroclaw, Katowice and Poznan. They find themselves in these locations in order to be close to target export markets such as Germany, as well as to be near large manufacturing plants in the Czech Republic and Slovakia, where many suppliers send their products. At present, there are 2,600 automotive producers in Poland, including more than 250 foreign plants. Since 1995, 180 greenfield plants have been built by foreign investors. 48 of the top 100 global automotive suppliers are found in Poland. 9 of the top 10 automotive suppliers have built a total 39 factories and 4 R&D centres in Poland. However, Poland has a total of 19 automotive R&D units in its territory.³

³ Automotive Report by Boleslaw Domanski, Jagiellonian University, 2007

As a result, the automotive industry plays a key role in the Polish economy. It accounts for 6.5 per cent of manufacturing employment. It also accounts for 8.3 per cent of foreign inward investment and 15.2 per cent of manufacturing production. Automobile exports have also been constantly rising. In 1999, they were \$2.50 billion; in 2006, they amounted to \$20.50 billion.⁴

One of the driving forces for the development of such a cluster is that Poland has the largest human potential of all the new EU countries with world-class engineers. In 2007, there were 1.9 million students in Poland, and the student to population ratio (5.1 per cent) was higher than in Hungary, the Czech Republic and Slovakia (4.2 per cent, 3.1 per cent and 3.2 per cent, respectively). Investors also have a large academic base, with more than 315,000 students in technical faculties alone, 39 schools with faculties of Mechanics and Machine Buildings and 22 schools with Transportation faculties⁵. Low labour costs and a network of 650 subcontractors who are ISO/TS 16949 certified have also contributed to the formation of this cluster.

This human capital has attracted a large flow of FDI into the car manufacturing sector and has created a dynamic development of the Polish subcontractors' base, attracting a large amount of leading automotive companies. With this inflow of FDI, Poland has become a leading manufacturer of components such as: engines, tires, car seats and upholstery, car electronics, electric cables and car brake's systems and supplies components to automotive companies such as: Mercedes, Nissan, Opel, Porsche, Toyota, Volkswagen, Isuzu, Fiat, Citroen, Honda, Peugeot, Volvo, BMW, Rolls-Royce, Lamborghini, Ferrari. Poland is now also witnessing the entry of new investors such as Grupo Antolin, TRW, Lear, Nord, Voss, NTK, Daicel, NGK and Stahlschmidt & Maiwor. The following table lists the top 10 automotive companies investing in Poland.

Table 2: Top 10 Automotive Investors in Poland

Company	Capital Invested (€ Million)	Headcount
Fiat Auto Poland S.A.	1,800	4,173
Toyota	740	2,000
Volkswagen Poznań Sp. z o.o.	729	5,889
General Motors Manufacturing Poland	650	2,700
Fiat-GM Powertrain	400	1,416
Delphi Automotive Systems*	303	6,898
Faurecia	200	1,314
Ispol-IMG Holdings*	154	430
Eaton Corporation (Eaton Truck Components S.A.)*	100	613
Lear Corporation	65	1,500
Total:	5,141	26,933

Note: Values represent investments until the end of 2007. Companies marked with "" are shown with values from 2006. Some values have been converted from USD to Euro.*

Source: PAIiZ, Company Information

⁴ Ibid

⁵ Studentnews.pl; Eurostat, GUS

2.3. Poland: Silicon Valley of the CEE

In the IT space, Poland, has been gaining increasing recognition, and has been turning into a rapidly growing IT cluster in Central Eastern Europe. Poland is the regional leader in terms of quality and availability of human resources in the IT sector. Warsaw University has been ranked #1 in the world for coder events. Southern universities, like the Krakow and Wroclaw University of Technology have also played a key element in Poland's IT development. In the four southern oblasts, Krakow, Katowice, Opole and Wroclaw, one third of the Polish student population, some 600,000 people, study in universities and around 40,000 of these are doctoral students.

Not only are these southern regions popular because of their highly skilled labour force, they also provide a favorable business climate for foreign investors through tax exemptions or exemptions from taxes on profits. Since 2005, Wroclaw alone has attracted over 5 billion euro is investment where over 50% of those investments have been directed towards the high-tech industry.

Many world-renowned computer and IT companies have been establishing their R&D centres in the country. The list includes but is not limited to: Motorola, Nokia, Intel, Microsoft, IBM, Hewlett Packard, Compuware, LG Electronics, Lucent Technologies, Delphi, TopGaN, Oracle and Mentor Graphic

It is also important to note that over the past few years, Polish IT companies have been gaining publicity and prestige on the international scene, as well as conquering foreign markets. The Polish company Logotec Engineering Group has won several international awards and distinctions in he past years; in 2004, Microsoft listed this company as one of the 25 most innovative IT companies in the world. Logotec's systems are used in countries such the United States, Italy, Germany, the Netherlands and Switzerland.

Another Polish company that has received international attention is ComArch. Not only does it export to countries such as Russia, Brazil, France, Ireland, Finland, Nicaragua, the United Arab Emirates and Ukraine, but it has also been recognised by the Financial Times as one of the most innovative IT companies in the world. In between 2004 and 2007, the company's exports have increased by 65% reaching sales of approximately 28 million Euro.

Other Polish IT firms include:

- Young Digital Poland: a world-leading company in interactive language learning software
- Psiloc Mobile Solutions: a leader in application design for Nokia phones
- Softsystem: performs software production for hospitals and medical laboratories in the United States, Brazil and Canada

In the electronics sector, Polish firms have found several niches, permitting them to excel in the production of unique high-tech components. Vector is an example of a Polish firm becoming a European leader in the design and production of advanced telecommunication and television technology systems, with a 75 per cent export rate to countries such as the United States,

Pakistan, Australia, Russia and Vietnam. Its equipment is used by cable television operators such as Telewest, Essent, Kabelcom and United Pan-European Communications.

ABD is a Polish electronics company specialising in digital television decoders. Its IT specialists have designed electronics that have been rated as Products of the Year by Mediacast fairs in London. The company's operating system for decoders has been set as the standard system for the EU. In recent years, ABD has been increasing its presence in the international market by entering the Thai, Italian, South African, Spanish, Israeli and Swiss markets.

WB Electronics is a Polish firm leading in the manufacturing of high-tech appliances and software for military purposes. It manufactures products such as:

- Internal communication systems for radio and electronics for reconnaissance vehicles
- Emulators of processes
- Steering devices
- Military computers
- Programmes for automated command in the battlefield
- Systems of field telecommunication

WB Electronics also specialises in the design and production of computers, terminals and appliances for data transmission. The company exports its products to Sweden, South Africa, Egypt, India and Argentina.

3. Technology Parks

Most often, a technology park is a property development, and its infrastructure is used to facilitate the flow and exchange of knowledge and technology between the academic and entrepreneurial areas. Technology parks can be used for the following reasons:

- Advice on creating and developing businesses
- Technology transfers
- Application of scientific studies and theory into technological innovation
- Creation of conditions conducive to a healthy business environment

There also exist industrial technology parks, which, unlike technology parks, are created on already existing infrastructure. Most often, these are created by local authorities with the goal of creating preferential conditions for positive economic performance, especially for small and medium enterprises. The goals of such parks are:

- To create jobs
- To attract investors
- To attract market-efficient companies using new and modern technology

These parks are often unique in character and reflect local business and academic environments, for they are often the result of a region’s social, cultural and economic factors and context. There is no one universal model for such a park, nor is there a model guaranteeing success.

The following map demonstrates the location of the technology parks in Poland.

Map 1: Industrial and Technological Parks in Poland



Source: PAIiZ

The table below lists examples of science and technology parks in the country with the year they were founded in, their area of specialization as well as the number of companies that they are cooperating with.

Table 3: Example of Technology Parks in Poland

Name	Year of foundation	Specialization	# of firms present
Krakow Technology Park	1998	IT	8
Nickel Technology Park	2006	IT	16

Science and Technology Park "Technopark Gliwice"	2004	ICT, Biotechnology, Technology for quick prototyping	15
Pomeranian Science and Technology Park	2001	IT, Biotechnology, Environmental protection, Industrial Design	70
Poznań Science and Technology Park	1995	Chemicals, Chemical Technology	53
Warsaw Technology Park	2005	Intelligent Transport, Security	14
Wroclaw Technology Park	1998	ICT, Agricultural Food Processing, Chemical Industry, Environmental Protection, Energy, Electric Energy Industry	79
Podkarpackie Science–Technology Park	2004	Aviation, Electro-machinery	8
Lodz Regional Science Technology Park	2003	Telecommunication, IT, Electric Energy	14
Gdansk Science and Technology Park	2006	n/a	14
HM LETIA Legnicki TecKGhnology Park	2007	Coper, Metals, Motorization, Electric Machinery, Environmental Protection, Nanotechnology	n/a
Tarnowski Science and Technology Park	2005	IT, Medicine, Mechanics, Chemicals	18
Torun Technology Park	2000	IT, Machinery, Furniture, Artificial Materials Processing	28

Source: PARP 2008

4. Technology Incubators in Poland

Incubators are programs designed to help ensure the survival and success of new and emerging companies, by providing them with a wide range of business support resources and services offered in the incubator itself, as well as through its network of contacts.

Technology incubators are most likely to succeed if they have a large support base based on partnerships with public as well as private sponsorship. The capacity to leverage input from the private sector, whether in the form of finance, expertise, access to facilities or corporate venturing, is particularly relevant for an incubator's success.

The location of business incubators can vary, and can range from new developments built for specific purposes to converted buildings. The location of these incubators often mirrors the goals they pursue. Consequently, a specialised incubator that focuses on promoting technology-based enterprises may be located on greenfield sites, such as technology parks often found near universities. Alternatively, multi-purpose incubators tend to be found in inner-city areas or industrial estates.

In general, incubators offer advice, schooling and information in the following areas:

- Business plan formation
- Economic law
- Entrepreneurship and setting up a company
- Helping gain access to EU funds
- Finance and taxes
- New technologies and patents
- Market analysis and marketing
- Implementation of new products and technologies
- Business management
- Accounting and invoicing
- Corporate intermediation
- International trade and cooperation

The purpose of these incubators is to:

- Help firms with innovation based on new knowledge
- Develop new forms of cooperation between the academic and business sectors
- Create new and long-lasting job opportunities
- Transfer and commercialise technology
- Support local development, initiate structural changes and leverage abandoned industrial buildings
- Promote entrepreneurship and the economic development of the private sector
- Promote the region and create networks of cooperation

There are many technology/business incubators in Poland. Many technological incubators can be found in the numerous technology parks in the country. For example, the Wroclaw Technology incubator can be found in the Wroclaw Technology Park and the Poznan Technology incubator can be found in the Poznan Technology Park. The following table lists the technology incubators in Poland with their year of foundation, their size, the number of companies they are incubating and the services they provide.

Table 4: Technology Incubators in Poland

Name	Year founded	Size (sqm)	Number of companies	Schooling/advising provided
Lodz Technology Incubator	2003	370	10	Starting a business, business plan creating, technology/patents, cooperation mediation, finance/taxes, accounting, legal advice, IT, management, EU Funds, international cooperation/business, business management, quality management, venture capital, market analysis and marketing, implementation of new products and services

Lodz Business Incubator	1992	3860	23	Starting a business, business plan creating, finance/taxes, accounting, IT, EU Funds, international cooperation/business
Gdynia Business and Innovation Incubator	2004	2000	8	Technology/patents, cooperation mediation, finance/taxes, legal advice, market analysis and marketing
Mielec Business Incubator IN-MARR	1992	5527	21	Starting a business, business plan creating, cooperation mediation, EU Funds, international cooperation/business, implementation of new products and services
Szczecin Business Incubator-Technology Centre	1995	7500	41	Starting a business, business plan creating, cooperation mediation, finance/taxes, accounting, legal advice, market analysis and marketing, EU Funds, international cooperation/business, business management
Warsaw Centre for Business Development	1991	467	6	Starting a business, technology/patents, cooperation mediation, legal advice, market analysis and marketing, EU Funds, venture capital
Wroclaw Lower Silesian Science and technology Incubator	1998	7075	30	Starting a business, business plan creating, technology/patents, cooperation mediation, finance/taxes, accounting, legal advice, IT, EU Funds, international cooperation/business, market analysis and marketing

Source: PARP, 2008

However, the fact that there are many technological incubators in Poland does not mean they do not face challenges. Some of the challenges that incubators face are:

- Legal limitations and the lack of technology transfer
- A lack of resources to equip and adapt the facilities
- A lack of partner- and business-oriented attitude for cooperation with academia
- Reluctance on the part of academic circles to commercialise their scientific breakthroughs
- Lack of projects for commercialisation
- Difficulties in cooperating with local and regional institutions
- Few people want to set up companies

In recent years, authorities have noticed that new firms have not been exhibiting a keen interest in incubators. Between 2004 and 2006, 52 scientific laboratories were modernised, 19 technology incubators were opened and 27 industrial parks and 15 technology parks received funding; in 2007, more than \$53.5 million (120 million PLN) of public funds was invested in technological incubators, yet not even 100 firms took advantage of these resources.⁶

⁶ Gazeta.pl Firma, „Młode firmy nie chcą korzystać z inkubatorów”, 2008

Despite these challenges, incubators have demonstrated certain successes. Lodz, the High Technology Accelerator of the University of Lodz, which excels at chemistry and physics, is incubating 16 companies, mostly in the IT and communications sectors, and is in cooperation with the University of Texas in Austin, Texas. E-learning incubator Doskomp has signed a cooperative agreement with Logistics Austin with regard to software development for the firm's product training.

5. Support for Technology Parks and Incubators

In terms of financing of technology parks and technological incubators, there are two measures of support.

The first measure is the measure 5.2 of the Infrastructure and Environment Operational Programme (IE OP) within the EU Structural Funds. This measure provides support for business environment institutions providing pro-innovation services and their networks of supra-regional significance. This measure is intended for:

1. The co-financing of the preparation and development packages for pro-innovation services, consisting of consultancy and training services as well as networking services, to improve competitiveness of firms operating Poland.
2. The ensuring of access to pro-innovation services for entrepreneurs, through the co financing of the costs of selected services for entrepreneurs and joint projects undertaken by given network institutions.
3. The co-financing of the operation of a unit coordinating the network activity.
4. The co-financing of the building and development of an information network permitting easy access to data regarding innovations, such as the source of innovation, the different innovative projects and their phase of development and the entities involved in their development
5. The supporting of the utilization of industrial design by entrepreneurs.

The beneficiaries of this measure are business environment institutions (BEI) operating in networks or the BEI networks (within the scope of 1, 2, 3 and 4).

The second measure of support is the measure 5.3 of the IE OP that consists of support for innovation centers. This measure of support is intended for:

1. Consultancy related to the preparation of the center's development strategy according to the needs of entrepreneurs.

2. Consultancy and promotion as a result of the center's development strategy.
3. Investments in the center's infrastructure through the extension or the modernization of its facilities.
4. A centers promotional activities, such as audiovisual materials and presentation in the media, which result from its development strategy implemented in terms of the publicity of the pro-innovation business environment institutions at the local, regional and international levels.

The beneficiaries of this support measure are highly specialized business environment institutions that provide services with a high market and technology potential, including entities managing science and technology parks, technology incubators, advanced technology centers, productivity centers and other centers providing specialist services for entrepreneurs, in particular for SMEs. However the requirement concerning the accessibility of this support measure is that the minimal value of the project must be at least 10.9 million Euro with a personal investment of 15%.

All projects are evaluated and accepted by the Polish Agency for Enterprise Development (PARP) on the basis of competition.

6. Prospects for Clusters, Technology Parks and Incubators

With the goals set out by the EU's Lisbon Strategy, clusters, technology parks and business incubators are seen as key drivers for economic competitiveness and innovation. Polish clusters in the aviation sector, the automotive sector and the IT sector have proven to be successful by attracting many large foreign aerospace and automotive investors, and by becoming increasingly renowned in the global IT sector. Poland's Aviation Valley has attracted several aviation giants such as Pratt & Whitney, British Aerospace, Boeing and the like due to its highly skilled labour force coming from the many universities specializing in the field of aviation.

The automotive industry has also been developing rapidly in Poland. Poland is considered to be part of the New Detroit cluster in Eastern Europe. Investors have come to realize Poland's potential with its large academic base, with more than 315,000 students in technical faculties alone, 39 schools with faculties of Mechanics and Machine Buildings and 22 schools with Transportation faculties.

Also, Poland has become the new "Silicon Valley" in the world of IT and high-tech. Warsaw University has been ranked #1 in the world for coder events. In the four southern oblasts, Krakow, Katowice, Opole and Wroclaw, where IT is most concentrated, one third of the Polish student population, some 600,000 people, study in universities and around 40,000 of these are doctoral students. As a result this has attracted large IT and high-tech companies such as Nokia, IBM, Microsoft and Intel. Not only has Poland proven to have the human capital but it has also proven its worth on the international scene. Polish companies such as ComArch and Logotech have been recognized as leading innovative companies in the world. Companies such as ABD, Young Digital, Softsystem and Vector have increasingly become international players.

Technology parks, which are seen as key factors in promoting innovation and economic growth, have been emerging all across Poland. Technology parks such as the Warsaw Technology Park, the Krakow Technology Park and the Nickel Technology Park are seen as key factors for innovation and economic growth as they promote the cooperation between business and science by acting as a link between the two. Many of these parks also behave as technological incubators which help increase innovation and competitiveness by providing the resources, advise and schooling necessary for new companies to succeed. Both technology parks and technology incubators are entitled to several measures of financial support that are part of the EU Structural Funds. These measures are intended to help stimulate the creation and such intuitions to further innovation and growth in Poland.

About Frost & Sullivan

Frost & Sullivan, a global growth consulting company, has been partnering with clients to support the development of innovative strategies for more than 40 years. The company's industry expertise integrates growth consulting, growth partnership services and corporate management training to identify and develop opportunities. Frost & Sullivan serves an extensive clientele that includes Global 1000 companies, emerging companies and the investment community by providing comprehensive industry coverage that reflects a unique global perspective and combines ongoing analysis of markets, technologies, econometrics and demographics. For more information, visit <http://www.frost.com>.

About PAiIZ

The Polish information and Foreign Investment Agency (PAiIZ) has been serving investors for 15 years. Its mission is to increase Foreign Direct Investment (FDI) by encouraging international companies to invest in Poland. It guides investors through all the necessary administrative and legal procedures along the way to setting up their business in Poland.

PAiIZ offers investors:

quick access to comprehensive information about the economic and legal environment, assistance in finding appropriate partners and investment locations and support at every phase of the investment process.

Another one of **PAiIZ's** roles is the creation of positive image of Poland and the promotion of Polish products and services abroad by organizing conferences, visits for foreign journalists and trade missions. **PAiIZ** also promotes Poland's regions. It has established a network of *Regional Investor Assistance Centres* throughout Poland. Their goal is to improve the quality of regional services for investors and to provide access to the most up-to-date information, such as the latest investment offers and regional microeconomic data. These specialized offices are staffed by **PAiIZ** trained employees and financed from local funds.

In order to help support and encourage FDI, the Polish government has passed many new resolutions this year. 90 billion Euro of EU funds has been allocated to Poland for the years 2007-2013. There has never been a better time to invest in Poland.

Come and see for yourselves. We are here to help you!

Contact us to learn more about how your company can profit from the unique business potential of Poland.

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