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Number 1/2009



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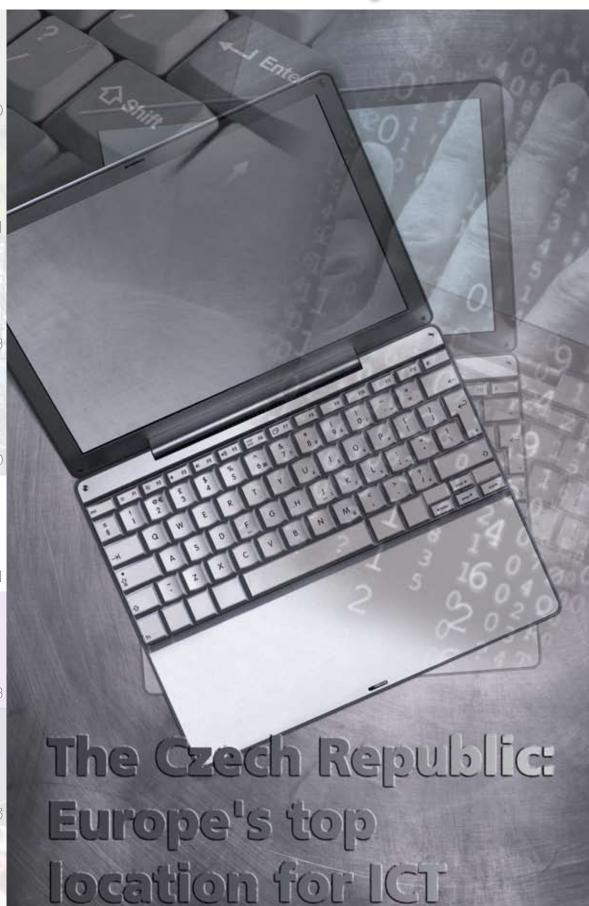
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Association for Foreign Investment



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Your roadmap to quality services in the Czech Republic





"The Association for Foreign Investment (AFI) represents a group of renowned companies operating the Czech market that support the entry of foreign investors into the Czech Republic by providing them with a broad range of professional services. The AFI's primary purpose is to make the entry of new investors into the Czech Republic as fast and easy as possible. Consultants from the AFI's ranks are experts in the areas of legal and advisory services, consulting, engineering, project management and other services.

During its more than ten years in existence, the AFI has assisted its members in preparing a range of significant projects of foreign investors in the Czech Republic.

Thanks to their experience, the AFI's members are the ideal bridge between local conditions and the expectations of foreign investors."

> Jan Bobek Chairman of the Steering Committee, AFI

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> INVESTOR'S CALENDAR

May - July 2009

May

5. - 7.5. Czech Open Days
in Luxembourg 2009
Luxembourg, Luxembourg
Conference

18. - 21.5. BIO 2009 Atlanta, Georgia, USA Conference

19. - 20.5. Neue F\u00f6rdergelder f\u00fcr nvestitionen in CEE/SEE Vienna, Austria Seminar

June

2. - 4.6. Czech-Finnish Technology
Days 2009
Helsinki, Finland
Seminar

9.6. Investieren in TschechienBremen, GermanySeminar

15. - 16.6. Gartner Outsourcing & IT Services Summit London, UK Conference

15. - 21.6. Le Bourget Paris, France Trade fair

25.6. Swissmem – Industrietag Zurich, Switzerland Seminar

July

1. - 3.7. Bio Expo Japan Tokyo, Japan Trade fair

Czech Republic

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Tomáš Sedláček Member of the National Economic Council and Chief Macroeconomic Strategist, ČSOB

Dear Reader,

The Czech economy is feeling the impact of the global economic crisis. The prognoses for when it might end are mostly only prophecies taken from a crystal ball, but it can basically be said that when we bounce back from the depths of this crisis does not depend only on us, but mainly on surrounding countries.

The market economy grows in cycles. When the economic downturn began in 2007, it appeared in the housing bubble underpinned by the American sub-prime mortgage sector. We hoped that the bubble would simply deflate as had been the case in many previous instances. Instead, it burst and brought on the greatest economic crisis since the 1930s.

The current crisis differs from past recessions in several respects. Primarily, it is global and thus no country can fully escape it. Secondly, it has adversely affected the absolute majority of sectors. Thirdly, the massive sale of state-owned shares in banks will take much longer than expected.

The financial crisis did not affect the Czech Republic until autumn last year. In an international comparison, our banks were in much better condition than other banks to the west of us. We are one of a few OECD countries where the government did not have to rescue the banks.

We have always emphasised that we could not realistically avoid the economic crisis. Because we have a small, open economy dependent on exports, the crisis in surrounding countries is impacting the Czech Republic.

At the beginning of January, Prime Minister Mirek Topolánek introduced the National Economic Council (NEC), of which I am a member. Most of us are at the disposal of the republic, not only of the government, though the government assured us that our work has a purpose and that our results are useful.

At its second meeting, the NEC trimmed down more than 250 original proposals on the most fundamental areas and the result was a 26-point revitalisation programme.

It was important that we not do things that we would regret later. Therefore, we always asked whether the steps that we are taking would be reasonable in times of normality.

The measures are focused primarily on the transparency of credit mechanisms, promotion of employment and support for the business environment. We are also promoting the flexibility of the labour market and reduction of social-security contributions, which has long been discussed in professional circles.

From the beginning we wanted to formulate strong fiscal-stimulus packages, though conversely the aim was to provide relief for entrepreneurs and firms during this difficult time. Acceleration of depreciation is an important proposal that will not overburden the state budget.

The result of the first phase of our work was a package, a combination of the supply and demand sides of the economy, that would not significantly encumber the Czech national budget. The resulting NEC package is a compromise of people with differing opinions but also with mutual respect.

From the beginning, it was clear that we would not be able to avoid foreign-policy themes and international economic policy. Not only is it necessary to take into consideration the aims of the anti-crisis plans in the surrounding countries and other significant world economies, but we must also keep the European agenda in mind. In no case we wish to end up in the role of freeloaders who are only along for the ride. Nevertheless, just as our economy has its own specific nature, so must our anti-crisis measures.

At the beginning of April the successful G20 summit was held in London and the NEC had specific recommendations for the approach of the Czech government representing the European Union.

We still have a lot of work to do. Companies will continue to lay off workers; industry will be restructured. In spite of this, however, I remain optimistic. My ideal consists in active and responsible people. Being unemployed is unpleasant for anyone and particularly for the poor. I believe, however, that many of those who lose their jobs will find the courage to start their own businesses. Thus it is necessary for our country to have an open and favourable business environment. I believe that many of the NEC's proposals will contribute to achieving this goal.

It is of fundamental importance that the economic crisis does not become a social crisis. I am firmly convinced that this will not happen in the Czech Republic.

Headline news

- February 2009 Last year the Czech Republic attracted 213 investment projects worth CZK 30 billion with the assistance of Czechlnvest. Investors undertook to create 14,606 new jobs. The most frequent investors were domestic companies, followed by German, Dutch, and South Korean companies. More information on investments in 2008 is available in the Hot Topic section of this issue of Czech Focus.
- April 2009 The Czech government led by Mirek Topolánek lost a no-confidence vote at the end of March. Ninety-seven of the 197 members of parliament present voted against the measure. The government subsequently resigned and in April the coalition agreed on the formation of a new caretaker government led by Jan Fisher, chairman of the Czech Statistical Office. A new cabinet should be named by the beginning of May and will function until early elections planned for autumn.
- April 2009 At the beginning of April American President Barack Obama visited the Czech Republic. To an enthusiastic crowd at Prague's Hradčanské náměstí, he delivered a speech emphasising liberty and nuclear disarmament, and later participated in the EU-US security summit.

Politics and Legislation

- February 2009 The government adopted the National Anti-Crisis Plan presented by the National Economic Council. The main goal of the plan is to temper the increase in unemployment and to sustain the stability of public finances. For example, the government has approved a reduction of social-security contributions and faster property depreciation, and has also pushed for the development of science and research and support for residential construction.
- March 2009 The European Commission has approved three support programmes to acquire and refurbish rail cars, municipal transport vehicles, and regional transport vehicles in the Czech Republic. Subsidies, which will take the form of direct investment contributions, will go to companies created by public bodies and companies that provide public transport services.

■ March 2009

The Ministry of Industry and Trade has issued a second call for investment-aid applications as part of the Operational Programme Enterprise and Innovation. Investment aid in this case involves the provision of favourable loans, which can total up to CZK 20 million, though no more than 75% of the expected project expenditures.

April 2009 The Czech Republic suspended issuance of work and business visas in Moldova, Mongolia, Thailand, Ukraine and Vietnam. The Czech authorities decided to implement this measure, which will last several weeks but will not affect tourist visas, due to the impacts of the economic crisis.

Economy

- February 2009 The international ratings agency Standard & Poor's states in its latest report that the Czech Republic will most likely deal with the crisis better than most Eastern European countries. Resilient consumer demand and relatively strong economic foundations will supposedly help. Conversely, according to a survey conducted by the Czech Chamber of Commerce, nearly 50% of domestic companies have laid off or will lay off some of their employees.
- March 2009 Robert Holman, director and board member of the Czech National Bank, stated that the central bank will negatively adjust its forecast of the decline in the

country's gross domestic product. The bank has predicted GDP to total 0.3%. Holman estimates that GDP will fall by one to two percent.

- April 2009 According to an analysis conducted by investment bank Goldman Sachs (GS), the Czech crown will be the strongest currency in Eastern Europe in the coming 12 months. After a brief drop in the coming three months it should, according to GS, remain at CZK 25.50 to the euro.
- April 2009 The average unemployment rate in the Czech Republic rose to 7.7% (from 7.4% in February). According to the Ministry of Labour and Social Affairs, 448,912 people are currently jobles.
- April 2009 According to a study conducted by the consulting company DTZ, there is currently 555,000 m² of available industrial space in the Czech Republic. More than half of all industrial projects are located near the capital (roughly 1.5 million m²). A total of 72,700 m² were rented out in the first quarter of this year, down 40% on the preceding quarter. In a y/y comparison, this represents a drop of 60%.

Business

■ February 2009

Magna International of Canada, the third biggest global producer of automotive components, is entering the Czech Republic. The company is purchasing the Liberec-based firm Cadence Innovation, a manufacturer of plastic



At the beginning of April US President Barack Obama visited the Czech Republic.

parts, with three factories in the Czech Republic and one in Hungary.

- February 2009 From August this year reagents for biotechnology research will be produced by A2Z Bio, the Czech subsidiary of the British firm Yorkshire Bioscience, at the ČKD Prague Technological Innovation Centre. The company will invest EUR 100,000 in the first phase of the project.
- February 2009 Brose CZ is planning to build a factory in Trutnov to produce components for the automotive industry.
- February 2009 Elmarco, a global manufacturer of machines for producing nanofibres, has opened a new centre for research, development and production. The facility covers 3,000 m2 and is the only one of its kind in the world. The costs of constructing and equipping this unique centre of nanofibre technology amounted to CZK 190 million.
- February 2009 The holding company Less has built in Čáslav the largest European plant for processing the most massive parts of trees at a cost of CZK 1.8 billion, making it the biggest investment in this sector to date.
- February 2009 The domestic banking sector recorded a net profit of CZK 45.7 billion for 2008. Česká spořitelna had the highest profit (CZK 15.8 billion), followed by Komerční banka (CZK 13.2 billion).

- February 2009 Microsoft is planning to open its second Microsoft Innovation Centre in the Czech Republic. The centre, which should be established in Hradec Králové, will have the purpose of assisting start-up computer firms.
- February 2009 The restaurant chain Hooters of America announced plans to enter the Czech market through franchising.
- February 2009 The transportation company Student Agency will expand its cooperation with the French company Keolis and enter into regional train transport as well as express-train routes. The Liberec region will be the first to benefit from the expanded services.
- March 2009 This year Pardubice-based Synpo will begin operating a new research and development centre, at which it will produce nanoparticles for use in paint systems in the automotive, construction, and defence industries.
- March 2009 Thanks to a subsidy from the European Union, a specialized centre focusing on researching the use of geothermal energy to produce electricity and heat in the Czech Republic will be established in North Bohemia. The entire project will cost EUR 78 million (roughly CZK 2.1 billion), which will be covered by the Operational Programme R&D for Innovation.

■ March 2009

According to a survey conducted by Incoma Research, there were 246 hypermarkets with a sales area of 1.16 million m2 in operation in the Czech Republic at the beginning of 2009. The turnover of all stores of this format exceeded CZK 141 billion last year.

■ March 2009

It was announced that the brewery Starobrno will merge with Královský Pivovar Krušovice, which is currently its sole shareholder. The sole shareholder of the successor company, Královský

Pivovar Krušovice, is Austrian Brau Union. Strarobrno has been part of Heineken since 2003.

■ *March* 2009 According to the Czech Chamber of Commerce, 46.3% of companies and en-

trepreneurs are at this time interested in fixing electricity prices for next year. According to the

chamber, companies should accept the current offer being made by the ČEZ group, which is offering a 15% reduction of the price of baseload electricity starting in January 2010.

■ March 2009

Plasma TV manufacturer Hitachi has announced the closure of its plant located in the Triangle Industrial Zone near Žatec. This is primarily due to a global reduction in interest in plasma televisions and the resulting decline in sales earnings.



The government adopted the National Anti-Crisis Plan presented by the National Economic Council.

■ April 2009 In February exports of road vehicles and components from the Czech Repub-

lic fell 29% to CZK 27.35 billion. Exports of cars from the Czech Republic were affected by the introduction of so-called liquidation subsidies in EU countries.

Miscellaneous February 2009

The Czech Republic hosted the 2009 Nordic World Ski Championship, which took place in the second half of February in the Liberec region of northern Bohemia. The total cost of organising the championship amounted to CZK 2 billion.

■ April 2009

Donghee Czech is planning to expand production of chassis parts and fuel tanks for the automobile industry in Český Těšín. The company wants to implement this plan

in June and to increase its staff by 120 to 300 and introduce a second shift.

■ April 2009

The Czech software company Bohemia Interactransferred tive its development team from Australia back Prague. The team is responsible for developing the next generation of the company's military training simulator Virtual Battlespace.

■ Abril 2009

The Czech company Alta and representatives

of Magnitogorskij Metalurgickij Kombinat (MMK) have signed a contract for the refurbishment of equipment and construction of a rolling mill at a cost of USD 440 million (CZK 8.7 billion).

- March 2009 According to the World Peace Index compiled by the organisation Vision of Humanity and covering 140 nations, the Czech Republic is the world's seventeenth safest country. Iceland, Denmark and Norway top the index, while the lowest ranking include Iraq, Somalia, Sudan and Afghanistan.
- March 2009 Last year the Czech Republic ranked as the fourth largest exporter of electricity among the states of the European common market. Net exports of electricity from the Czech Republic totalled 11.5 billion kWh. The largest exporter was France.
- March 2009 The Czech Republic is the clear leader among the 12 new EU member states when it comes to the use of solar energy. At the end of 2008 photovoltaic plants with an output of 62.2 MW were in operation in the region; the Czech Republic accounted for 88% (54.7 MW) of this total.
- April 2009 Czech Airlines has been named the Best Airline in Central Europe in the agency Skytrax's World Airline Awards for the third time in a row. Within the awards survey, the services of individual airlines from around the world are assessed by passengers.

Sources:

Czech Information Agency, Česká tisková kancelář, MF Dnes, Právo, Lidové noviny, Hospodářské noviny, E15, Profit, Euro, Czech Business Weekly, iHNed.cz, Aktualne.cz , Novinky.cz , iDnes.cz , MediaFax, Revers.



The international ratings agency Standard & Poor's states in its latest report that the Czech Republic will most likely deal with the crisis better than most Eastern European countries.



In today's society modern Information and Communication Technologies (ICT) are considered to be a decisive factor in economic and social development. This is in large part due to the fact that such technologies make it possible to overcome the obstacles of distance and unfavourable geographical location. The dynamism of development and the scope of operation show that they play an indispensable role in society.

The Czech Republic has emerged as Europe's top location for offshoring and outsourcing of IT services. Repeatedly recognized by various researchers, this fact is confirmed by the strong inflow of high-value-added projects of the world's top IT companies and is fuelled by the country's tradition of excellence in technical fields.

In 2006 and 2007, new projects of Microsoft (Development Centre for Mobile Technologies), Skype (Application Development Centre, the first outside the company's home country), CSC (IT Centre for Euro-

pean Clients), Deutsche Börse and RedHat (Software Development Centres) were added to the list of already successfully established centres in the country. Also, companies such as Sun Microsystems, Monster Technologies, Acision and Infosys have officially announced expansions based on the success of their operations in the country.

Last year Czechlnvest, the Investment and Business Development Agency of the Czech Republic, helped mediate 43 new IT investments for the Czech Republic. "Today IT comprises one of the key

components of the Czech economy – last year ICT companies prepared the largest number of new investments in which Czechlnvest participated, surpassing even the traditional champions – the automotive and engineering industries," says Alexandra Rudysarova, CEO of Czechlnvest.

Many interesting projects were launched in 2008 and the plans of companies (either newcomers or already established players expanding their activities) are promising. Such plans involve, for example, the Ex-



pert and Solution Centre of Suse Linux, which focuses on providing specialist support for installation and use of Novell software products, HSBC Bank's new project involving the establishment of an Applications and Software Development Centre within its existing shared-services centre in Ostrava, and the Software-Development Centre of Solarwinds Software Europe Limited in Brno. The Czech Republic's advantages in the IT field also prompted the American software giant IBM to choose Prague as the location for its regional headquarters, from which it will direct its activities in Central and Eastern Europe.

IT companies are becoming increasingly interested in the Czech Republic. "The trend is obvious – the number of companies that approach us asking for more

information about the Czech Republic is growing year by year," stresses Rudysarová. "Interestingly, we can actually benefit from the current economic downturn as companies are forced to seek the most cost-effective solutions and the Czech Republic, with its great location in the middle of Europe coupled with talented programmers and wages that are still considerably lower compared to most old EU countries, is the country of choice for many." According to the Czech Statistical Office there are currently about 100,000 Czechs employed in IT, making the sector one of the largest employers in the country.

Furthermore, IT companies with Czech origins are renowned worldwide for their products, such as antivirus software from AVG Technologies and Alwil (Avast!) protecting millions of computers worldwide, integrated security solutions from Kerio, advanced communication systems from 2N Telekomunikace, consulting and technology services provided by Logos (acquired by Ness Technologies in June 2008) and comprehensive services and solutions in development and implementation of enterprise applications and information systems provided by Unicorn, the biggest Czech software company, whose chairman, Vladimír Kovář, won the prestigious title Entrepreneur of the Year 2008 in the Czech Republic. Despite being one of the most mature IT markets in the region, the Czech Republic still offers plenty of growth potential and Czechlnvest is ready to provide potential investors with comprehensive support, during the entire investment decision-making and implementation process, in order to reduce the burden on their management resources, especially in matters such as location selection, information support, matchmaking, supplier identification and so on.

Ideal location for company headquarters

Many organizations that choose to move IT services to lower-cost countries are daunted by the task of determining which country would best host their operations. Thanks to its location in the centre of Europe, the Czech Republic is a gateway to both eastern and western markets. The Czech Republic is less than two hours by air from most European destinations.

The Czech Republic fares well against other Eastern European countries as a suitable site for offshore outsourcing. The country's well-developed education system can serve as a basis for future skills development and produces a very capable workforce while contributing to the

growing maturity of advanced industrial sectors. The country's cultural compatibility also plays an important role.

Another positive aspect of the Czech Republic is its high living standard, thanks to which it is not difficult for investors to persuade key employees to relocate to the country, where they will find an extensive and safe transportation network and will not have a problem communicating with the locals in at least one world language. This is one of the reasons that firms such as IBM, Adobe and DHL run their Central European operations from Prague.

"The Czech Republic is a suitable site for offshore outsourcing; it is highly rated in terms of political and economic stability, cultural compatibility and security."

Gartner Analysis of the Czech Republic as an Offshore Services Location, (2008).

ICT-related Education – The Basis of Future Skills Development

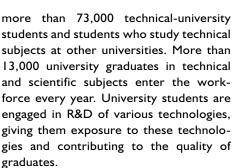
The Czech Republic combines an outstanding level of general education with strong science and engineering disciplines. For generations the Czech education system has generated high-level technical problem-solving skills in environments where standard solutions are inadequate.

The Czech education system has a very strong position in upper secondary education, which serves as the foundation for advanced learning and training opportunities, as well as preparation for direct entry into the labour market.

An abundant supply of university graduates assures continuous replenishment of the country's available labour pool. Public universities offer programmes ranging from ICT and electronics to life sciences and humanities, while a number of private institutions offer mainly business administration or economics studies. University education is generally focused to meet the needs of a competitive economy and the cooperation between universities and the corporate sector has been expanding in recent years. Overall, there are nearly 350,000 students at 25 public and 39 private universities and colleges in the Czech Republic.

The Czech Republic offers a large number of skilled technical workers. The country has traditionally been very strong in technical fields and approximately onethird of all university graduates have a technical degree. There are currently





Workforce – Skills are the critical factor for success in this sector

Costs play a substantial role in deciding where to locate and operate a business. The continuing growth of the Czech economy and investment by companies and state institutions in information technology has spurred an ever increasing demand for experienced IT specialists. For the third

consecutive year this demand is growing markedly faster than the number of specialists seeking jobs in the IT sector.

The result of this is that the IT sector has highest average level of wages among all professions in the Czech Republic. The highest wage growth in 2007 was primarily among graduates and specialists with up to three years' experience, who were most in demand in the IT market.

The wage amount always depends on the level of education, specialization and length of experience, as well as on the size of the given company. Bonuses commonly comprise a significant wage component in sales and project-management positions, as well as in the majority of management positions.

Nevertheless, one of the main attractions of the Czech economy remains its skilled and well-educated workers available at a "frac-



tion of the cost" of those in other western economies. The table shows (page 8) a comparison of salaries of IT specialists in the United States in 2007 and the salaries paid for the same positions in the Czech Republic.

The Czech property market is increasingly attractive for foreign investors

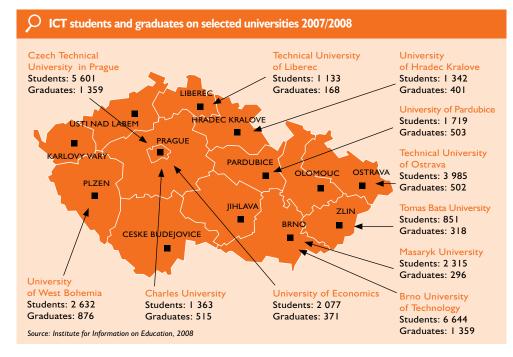
The amount of office space in the Czech Republic is growing steadily while the availability of space for production facilities has been boosted by a major government programme designed to support the construction and development of industrial zones, brownfield regeneration and development of speculative buildings, and premises for R&D and shared-services centres. An increasing number of large international and Czech property developers are actively seeking sites for new industrial, lo-

gistics and business parks.

Science and Technology Parks

Science and technology parks facilitate cooperation between universities, research institutes and innovative firms and thus act as a bridge between the science and business spheres. Thanks to the involvement of universities and research institutes, a science and technology park can offer firms specialized advisory and consulting services, mediate valuable contacts and offer custom research services. Firms can use the park's office equipment, meeting and conference spaces, laboratories and workshops. The key benefit of science and technology parks is the presence of advanced companies that are able to help other firms grow and prosper.

Thanks to the Prosperity Programme, the Czech Republic is now home to an



expansive network of facilities providing topquality infrastructure for modern innovative companies involved primarily in research and development.

In comparison with other regions of the Czech Republic, incubation activities in South Moravia are above average. Moravia is known for its universities, experienced certified suppliers, quality workforce and extensive opportunities for investors. Science and technology parks that have recently opened outside the South Moravia region include the Hradec Králové Science and Technology Park, whose purpose is to provide quality facilities for developing the region's commercial activities. Another is the Mstětice Science and Technology Park, which will offer facilities for developers, scientists and start-up firms in

the area of transportation technologies and related fields.

ICT in the Regions

The most important regions in the Czech Republic from the ICT point of view are certainly Prague, South Moravia and Moravia-Silesia. Many IT companies have already exploited the ideal conditions to set up software development centres or regional headquarters for CEE operations. The biggest impact that this has had is on the labour market, which is almost saturated in these areas, thus making it difficult to find workers. However, the effects of the financial crisis have recently brought about a slight improvement in the situation. In the aforementioned regions there has been a huge transfer of knowledge in the past cou-

ple of years and nowadays many professionally trained and highly skilled engineers and managers are working on different projects. There are many emerging regions suitable for new ICT projects in the Czech Republic, mainly Plzen, Liberec, Hradec Králové, Pardubice and Zlín, whose local universities have a long tradition of technical education. In recent years, numerous science and technology parks have been established near universities, small and medium-sized ICT companies have joined clusters and large international and domestic companies shown increasing interest in exploiting the opportunities related to these developments.

Jan Fried, Czechlnvest

P Main specifics and wage trends in individual IT fields and professions in the Czech Republic

Companies' investments in information technologies have been rising since 2005 and last year was no exception. This has led to relatively high demand for IT specialists, particularly programmers, analysts, project managers, salespeople and consultants. In 2008 we recorded a slight decline in wages among graduates and, conversely, wage growth among experienced workers, which is the result of an effort to preclude the exit of these specialists. At the end of 2008 there was a slight yet notable decrease of investments and thus a decline in demand for new employees on the part of ICT companies. Below we present the main specifics and wage trends in individual IT fields and professions:

SOFTWARE DEVELOPMENT

The most highly demanded specialisations remain JAVA, C#/L net and C++L. Monthly salaries among junior employees are in the range of CZK 25,000, i.e. CZK 5,000 less than in the previous year. Conversely, the salaries of experienced senior programmers/system architects at the upper wage limit increased by at least CZK 10,000.

In the case of junior web programmers (HTML, JavaScript, PHP, etc.) wages did not increase last year, but rather declined on average to CZK 22,000. PHP remains among the most in-demand technologies. Senior web programmers' top-scale salaries increased by roughly 20%.

Other technologies (Visual basic, Delphi and ABAP) recorded a slight decline, as there is minimum demand for them, with corresponding wage rates for specialists in these technologies.

The percentage of companies that require active knowledge of English in addition to technical knowledge is increasing.

The salaries of development-team leaders with up to three years' experience barely increased, by approximately CZK 3,000 -5,000 monthly. Specialists with longer experience (five or more years) did not see any wage increase.

SYSTEM ADMINISTRATORS

Companies' demand for UNIX system administrators increased with corresponding growth in wages for these positions of CZK 2,000-5,000 per month on average.

The position of MS administrator requires at least one year of experience in the field, though most companies prefer more experience. However, this no long applies in the case of UNIX system administrators, in which case fresh graduates are offered job opportunities. Among junior employees in Helpdesk/HW-technician positions (secondary-school graduates without experience, university students), we continue to see monthly salaries under CZK 20,000. Wages of experienced workers increased by 10% on average. These employees advance to administrator positions after five years at the latest.

TELECOMMUNICATIONS AND NETWORKS

Demand for university graduates gradually declined in 2008. Wages for these positions decreased by an average of 20%.

Specialists focused on network technologies with certification (CCNA, CCNP, CCIE) continue to be better compensated for their work.

MANAGEMET

Project managers continue to be the most in-demand employees in this category. Unlike in previous years, supply and demand were balanced in 2008, resulting in a negligible wage increase of CZK 5,000 on average. In comparison with previous years, we again noticed a trend of reduced average wages among inexperienced specialists.

CONSULTANTS AND ANALYSTS

Among junior analysts, there was notable growth in top-scale wages. Conversely, the upper limit of salaries among senior analysts decreased by CZK 6,000. These positions require certification and training focused on Microsoft, SAP, Siebel and ITIL.

Tester jobs remain entry-level positions for secondary-school graduates or university students and graduates.

				EI	

Position	0-I year xperience	I-3 years experience	3-5 years experience	5 or more years experience
Director, CEO	-	-	-	100 000-250 000
IT manager, CIO	-	-	50 000-100 000	80 000-150 000
Project manager	-	40 000-60 000	50 000-85 000	70 000-140 000
Security manager, CSO	-	-	-	70 000-130 000

SOFTWARE DEVELOPMENT

Position	0-1 year experience	I-3 years experience	3-5 years experience	5 or more years experience
Team leader	-	45 000-55 000	50 000-70 000	60 000-90 000
Programmer C++	25 000-30 000	30 000-45 000	40 000-60 000	50 000-70 000
Programmer JAVA, J2EE	25 000-30 000	35 000-48 000	45 000-60 000	53 000-90 000
Programmer C#, .net	25 000-30 000	32 000-48 000	43 000-60 000	50 000-80 000
Programmer HTML, PHP	22 000-28 000	25 000-40 000	35 000-50 000	40 000-60 000
Programmer VB, Delphi	25 000-30 000	30 000-40 000	35 000-45 000	40 000-50 000
Programmer PL/SQL	25 000-30 000	32 000-45 000	40 000-55 000	50 000-70 000
Programmer ABAP	25 000-30 000	30 000-45 000	45 000-55 000	50 000-60 000

SYSTEM ADMINISTRATOR

Position	0-I year experience	1-3 years experience	3-5 years experience	5 or more years experience
Administrator MS	-	25 000-43 000	35 000-50 000	45 000-65 000
Administrator UNIX	23 000-28 000	30 000-45 000	45 000-55 000	50 000-75 000
Application administrator/ERP	22 000-25 000	25 000-45 000	45 000-50 000	50 000-65 000
Database administrator	25 000-28 000	30 000-40 000	40 000-50 000	50 000-60 000
Helpdesk / HW technician	18 000-25 000	25 000-30 000	30 000-35 000	_

TELECOMMUNICATION AND NETWORK

Position	0-I year experience	I-3 years experience	3-5 years experience	5 or more years experience
Telecommuni-cations specialist	20 000-25 000	30 000-45 000	35 000-52 000	45 000-65 000
Administrator LAN/WAN	22 000-28 000	25 000-40 000	30 000-45 000	35 000-50 000
Network consultant	-	30 000-40 000	40 000-55 000	50 000-75 000

CONSULTANTS

Position	0-I year experience	I-3 years experience	3-5 years experience	5 or more years experience
Analyst	25 000-32 000	30 000-43 000	40 000-62 000	40 000-74 000
Tester / Quality engineer	22 000-28 000	30 000-44 000	35 000-55 000	50 000-65 000
System consultant (MS, UNIX)	-	30 000-45 000	40 000-55 000	55 000-65 000
Consultant ERP, CRM, MIS, DMS, ITIL	-	30 000-50 000	40 000-80 000	60 000-100 000
Safety consultant	-	30 000-45 000	40 000-75 000	60 000-90 000
Technical writer	20 000-25 000	25 000-30 000	30 000-40 000	40 000-50 000

Source: Salary & Benefits Guide 2008/2009, Robert Half International

WAGE COMPARISON, CR-USA

Position	CR min. CZK/month	USA min. CZK/month	CR max. CZK/month	USA max. CZK/month
Programmer JAVA	25 000	117 000	90 000	182 000
Team leader	45 000	147 000	90 000	200 000
Administrator MS	25 000	92 000	65 000	144 000
IT manager	50 000	230 000	150 000	378 000
Project manager	40 000	137 000	140 000	200 000
Quality engineer	22 000	98 000	65 000	142 000
Helpdesk	18 000	65 000	35 000	85 000
Analyst	25 000	118 000	74 000	163 000
Project manager Quality engineer Helpdesk	40 000 22 000 18 000 25 000	137 000 98 000 65 000	140 000 65 000 35 000	200 000 142 000 85 000

Source: Salary & Benefits Guide 2008/2009, Robert Half International

Czech software engineers in demand

What do Hewlett-Packard. IBM. CA. RedHat. Novell. or Sun Microsystems have in common? Among many other things, they are involved in significant enterprise software-product research and development (R&D) in the Czech Republic. Why? Cheap labor? Routine tasks such as software testing or debugging? Actually, the situation is quite the opposite. HP Software conducts strategic R&D for its SOA products. Sun Microsystem's Czech branch has grown into an operation employing several hundred en-



Radovan Janeček, Chief Architect, BTO, HP Software R&D

gineers and has become one of the few global R&D sites of the company that created to Java. CA has established a large R&D team to bring its mainframe technologies into the future. Novell's grand plans with SUSE Linux have relied on Prague's R&D team since the very beginning.

Other "new" international firms linked to the era of internet startups, such as eBay and Skype, have established their R&D centers here when seeking out new engineering talent. Google employs Czech engineers in Krakow and Zurich. We must also mention original Czech startups like Grisoft (recently renamed AVG technologies) of the famous AVG anti-virus software and Compelson Labs, the maker of the hugely successful MobilEdit software for cell phones. Systinet is a startup that delivered the first commercial web services toolkit and was acquired by Mercury Interactive. Illusion Softworks has created a brand known to everybody who plays computer games. Prague-based JetBrains has started a new era of software refactoring. Good Data is bringing a completely new approach to the business intelligence market. In addition, the Czech Republic is among the top ten countries contributing to Linux Kernel development. This is just to name few Czech firms selling software worldwide.

Nevertheless, this picture is incomplete. We cannot forget the very dynamic market of software solutions and consulting, whether these are outsourced from abroad, as in the case of LogicaCMG, or provided by original Czech companies such as Unicorn, which has revenues exceeding CZK I billion. These two giants are accompanied by numerous smaller consulting firms that are also doing quite well on the market.

Another important market segment for software engineers is driven by large international corporations establishing IT centres here. DHL, Deutsche Börse, and CSC Corporation together employ hundreds of engineers in the Czech Republic. Of no less importance, the Czech Internet community is extremely vital. The list of successful Internet startups in the Czech Republic is very long, as an example we can take the highly successful Seznam.cz, which is the country's leading search engine, even outstripping Google in terms of popularity on the local market.

In summary, the Czech software-development market is a mature environment offering many opportunities ranging from the adventure of establishing a software startup to working on enterprise software products having a global impact.

The roots of this healthy environment lie in the Czech Republic's high-quality education system, which provides the heterogeneous skill sets of the country's software engineers. The Faculty of Mathematics and Physics at Charles University is geared more toward math and computer science. Technical universities in Prague and Brno turn out developers with extensive knowledge of hardware or specific areas such as telecommunications or computer graphics. The country's economic universities provide project management-oriented education focusing on the economic, social, and process aspects of software development. The Czech Academy of Sciences offers yet another avenue of learning for students interested in technical fields. Courses led by the Academy's scientists have traditionally been seen as the nation's finest study opportunities. Finally, in the Internet age, anybody can have access to all needed information beyond what any university can offer in its curriculum.

Although collaboration between academia and industry has not been a strength of our education system, the situation has improved significantly in the past decade, especially since the Czech Republic entered the European Union. In any case, good developers usually exit universities with two or three years of experience working in commercial companies in parallel with their studies, which gives them a very important head start.

How can we characterize the Czech software engineer? Based on my experience working with international teams from China to the Bay Area I can say that Czech software engineers are as good as their western counterparts, regardless of whether we look at innovation, efficiency, discipline, or experience, and they usually work harder.

There are many first-class Czech developers and architects working at Google and Microsoft, establishing their own successful start-ups, selling programming books on Amazon, or contributing to open source. Also, you can find many "old-fashioned" developers that are less visible but deliver the best code you will ever see.

The difference lies in how these engineers are allocated on the market. Compared to the hot markets in the US, Israel, and India, it is still very possible to attract first-class talent to work for large international companies while not paying a fortune for it. Moreover, the top talented engineers tend to be very loyal employees. They usually do not shop for opportunities as long as the work they do is interesting and challenging. You don't normally find the most talented people in the consultancy business. In the Czech Republic you do. And this "anomaly" is not going to disappear any time soon.



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Professional and modern solutions for placement and administration of servers, data fields and other elements of ICT infrastructure

Introduction

The global economic downturn and lack of energy sources are impacting development in many sectors, including data centres. This situation can be addressed by focusing development in the ICT field on environmentally friendly technologies and energy-efficient solutions. Investments in green energy should contribute to lower costs, greater effectiveness and higher energy efficiency.

DC technology infrastructure

In a data centre (DC) and data halls, servers are placed in rack cabinets. These are connected to the network's physical infrastructure (support systems), which ensure their power supply, cooling, etc. The data halls have technology rooms that house, for example, distribution switchboards, backup UPS sources and batteries, a motorgenerator room, an air-conditioning room and cooling chambers. The chillers and transformer stations are located outside the building.

The entire data centre is secured physically and against fire. Gas and water-mist fire suppression systems are used in the data halls. Walls, ceilings and doors must provide sufficient protection against unauthorised access and against external fires. The entire building is monitored and is physically guarded continually in 24/7 mode in order to eliminate possible risks such as fire, power outages, overheating, malfunctions, unauthorised access, etc., thus ensuring maximum availability of data and physical security.

Classification of data centres

The first data centres were built at the beginning of the 1960s and with the advancement of technological development began to be classified in four categories, which are designated as Tier I to Tier IV. The simplest is a Tier I data centre, which is basically a computer room, following

basic guidelines for the installation of computer systems. The most stringent level is a Tier 4 data centre, which is designed to host mission-critical computer systems, with fully redundant subsystems and compartmentalised security zones controlled using biometric access-control methods. Another consideration is the placement of the data centre in a subterranean context to ensure data security as well as environmental considerations, such as cooling requirements. In the Czech Republic there are data centres categorised as Tier III+, which are mostly situated in Prague and its surrounding areas. In past few years, DCs have been built outside of expansive built-up areas; it is sometimes required that data centres to be located at least eighty kilometres from city centres. The main purpose of this is to limit the risk of attack and breaches of security. Blackouts are another significant risk for data centres. Thanks to its good infrastructure, however, the Czech Republic is not prone to blackouts.

Data centres market in the Czech Republic

In the Czech market, primarily telecommunications companies own and operate data centres. The total area covered by servers in the Czech Republic is approximately 10,000 m². Turnover on one square metre amounts to roughly EUR 600-700 per month. Multinational companies operating in our region generally build and manage corporate DCs intended for their own use. As such, they use their own hardware, on which they operate all company applications. With growing pressure to reduce company costs, there is a continually growing need to outsource not only this administration but the hardware itself. It can be said that natural development, not only in the Czech market, is trending toward consolidation of corporate data centres.

Currently, most data centres are operating at nearly full capacity. In the Czech market there are several dozen firms, each offering somewhat different services and focusing on different types of customers. For the sake of simplification, these companies can be divided into two groups. The first group comprises operators and owners of data centres that own the building and perhaps even the IT hardware, and ensure cooling, power, connectivity, etc. The second group comprises DC renters, i.e. providers of hosting servers that rent data halls equipped with hardware (or without it) and manage the operation of servers, which they further rent to their clients. In some cases, these two groups variously overlap or diverge in terms of business relations (B2B and B2C).

Data centres in the Czech Republic

Telefonica O2

approx. 6,000 $\,m^2$, Tier 3+, 50% for corporate use, 50% for commercial use

DHL

approx. 2,500 $\,\mathrm{m^2},\,$ Tier 3++, corporate use only

Vodafone

approx. $1,000 \text{ m}^2$, Tier 3+, corporate use only

Other low-cost DCs (commercial use)

GTS Novera, Sitel, TTC Telekomunikace, Vegacom, T-Systems, Master, Casablanca

Other corporate DCs

ČEZ, Česká Spořitelna – Erste Group DC pro CEE (approx. 2,000 m²), T-Mobile and System (1,500 m²)

Green IT

"Green IT" is a relatively new expression that is again gaining prominence due to the oft-discussed topics of climate change and rising energy costs. Data centres contribute to CO,

emissions, and thus the greenhouse effect, accounting for up to 2% of total emissions. Since 2000 the amount of energy consumed by data centres has more than doubled as a result of not only a greater number of data centres and servers in operation, but also due to the larger share of so-called "volume servers" (low-cost servers) with relatively high average consumption of electricity. In the case of these servers, ever-increasing energy consumption is expected due to rising performance and more complex configurations. Monthly payments for energy currently comprise the most sharply rising operating cost, amounting to as much as 35% of ICT firms' overall budget. With rising energy costs, investments in more efficient and ecologically friendly hardware appear to be unavoidable. Application of green policies could be a way to change the direction of current development.

Green policies

The operation and cooling of computer units requires more and more energy. One of the strategies for improving the energy efficiency of data centres is virtualisation, which separates the server and rack environments for several applications operating on a single physical servers. This optimises usage of the infrastructure, reduces energy consumption and lowers the costs of hardware and management.

Return on investment is often realised in the medium to long term in the case of exchanging inefficient equipment for new, economical hardware and more efficient cooling units. However, such investment does not only improve the environment, but also saves money. According to a study conducted by the consulting firm Gartner, 35% to 50% of energy consumed by data cen-

tres is used for cooling systems, whereas in companies that apply a green policy cooling systems account for only 15% of energy consumption. In addition, purchasing efficient hardware has a synergistic effect, because the less energy consumed, the less heat is produced; and the less heat produced, the less energy is required for cooling the systems. Green IT products have reduced levels of cadmium, lead and mercury, which means they are healthier to use and less taxing on the environment. They are also more energy efficient and easier to upgrade and recycle. As an example of efficient hardware, we can cite the first 0-Watt PC, an environmentally conscious server that does not use any energy when in stand-by mode or hibernation.

Green IT requires regular measurement of the energy efficiency of data centres so that potential problems can be identified and improvements can be quantified. Energy efficiency and economical operation in the area of power supply and cooling of data centres' IT equipment are measured according to metrics developed by a consortium of The Green Grid, Uptime Institute, etc. The PUE ratio (Power Usage Effectiveness) calculates a data centre's total facility power and divides it by the IT equipment power, i.e. the load associated with all the IT equipment in use there. For example, a data centre with a PUE value of 3.0 consumes three times as much energy as the equipment in operation there would actually need, indicating poor energy efficiency. Welldesigned, environmentally-friendly DCs achieve a PUE value of 1.7, a very high level of energy efficiency by comparison.

Better organisation of the data hall contributes to the improved use of electricity and higher efficiency of cooling. A data hall that is divided into upper and lower aisles (Hot and Cold Aisle approach) allows cooling of individual areas. According to the PUE value, systems can be arranged in order to create separate cooling zones. Hot air in a space does not mix with cold air. By shortening the distance between the heat source and its point of removal, cooling of the space is more focused and more efficient.

Outside-the-box thinking

We can cite several endeavours to find a solution to problems connected with DC cooling. For example, Microsoft planned the construction of a DC in Siberia and Sun Microsystems planned to set up subterranean DCs in abandoned coal mines, using groundwater as a coolant. However, the most surprising solution is Google's "computer navy" on the open ocean, which would use waves to generate energy and for cooling while saving money on property taxes.

Terminology

- Data centre (colocation centre/telehouse)
- central workplace for depositing, storage and management of data using IT infrastructure.
- Server Housing (server hosting/colocation) of customer servers includes rental of spaces for the customer's servers and uninterrupted high-speed internet connection; the customer is responsible for server administration.
- **Dedicated servers** rental of a physical server to one customer; the customer is responsible for server administration.
- Managed servers rental of a server including its administration and data backup.

Eliška Pazdziorová, Czechlnvest

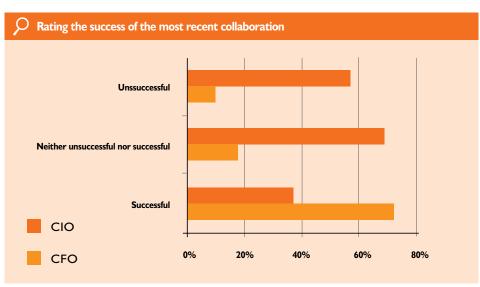
Tier I – Basic: 99.671% availability	Tier II – Redundant components: 99.741% availability	Tier III – Concurrently maintainable: 99.982% availability	Tier IV – Fault Tolerant: 99.995% availability
Susceptible to disruptions from both planned and unplanned activity Single path for power and cool-	Less susceptible to disruption from both planned and unplanned activity Single path for power and cooling	Enables planned activity without disrupting computer hardware operation, but unplanned events will still cause disruption	Planned activity does not disrupt critical load and the data centre can sustain at least one worst-case unplanned event with no critical load impact
ing distribution, no redundant components (N)	distribution, includes redundant components (N+1)	Multiple power and cooling distribution paths but with only one path active, includes redundant	Multiple active power and cooling distribution paths, includes
May or may not have a raised floor, UPS, or generator	Includes a raised floor, UPS and generator	components (N+1) Takes 15 to 20 months to	redundant components (2 (N+1), i.e. 2 UPS each with N+1 redundancy)
Takes 3 months to implement	Takes 3 to 6 months to implement	implement	Takes 15 to 20 months to
Annual downtime of 28.8 hours	Annual downtime of 22.0 hours	Annual downtime of 1.6 hours	implement
Must be shut down completely for performance of preventive maintenance	Maintenance of power path and other parts of the infrastructure require a processing shutdown	Includes a raised floor and sufficient capacity and distribution to carry load on one path while performing maintenance on the other.	Annual downtime of 0.4 hours



The report is based on an online survey between 53 senior IT executives and 80 senior finance executives from all across Europe (i.e. from Ba´a, Vodafone, Swiss Life, Barentz, and Beherman). The following paragraphs elaborate on the most important research findings and perspectives for the way forward.

Percentage gap

Take just two examples where views diverge: when it comes to the most recent collaboration, 72% of CFOs surveyed believe their last project involving IT was successful, compared with 37% of CIOs. And when asked to rate each other on leadership skills, the ability to





collaborate and longterm strategic thinking and planning, 98% of CIOs say CFOs were good or excellent leaders, while only 42% of CFOs believe the same about their CIOs. This suggests that CIOs have a higher opinion of their CFOs than vice versa.

The research found that while CFOs and CIOs generally expressed high mutual regard for each other, CFOs believed that IT lacked understanding of their company's business strategy and financial reality, while CIOs said that the finance department failed to communicate goals effectively.

Collaboration is key

To bridge the gap, collaboration between the IT and finance departments is crucial for the success of their projects and their subsequent impact on earnings. Today, when a company's success, even its viability, depends on the integrity of its financial data and timeliness of transmission, CFOs and CIOs must make sure they communicate regular-

ly, resolve their natural differences in a rational manner and regularly review the process to ensure that it is working.

The quality of collaboration between the finance and IT departments needs to be evaluated and measured, for example,

by establishing new metrics that will show how technology can drive productivity in other parts of the business and demonstrate the returns on IT investments. The finance and IT departments should work together to identify the measures that matter to the business and mechanisms ensuring that they can be successfully implemented and communicated. Evaluation of this information could be done by an established steering committee, which would include members from the operational, IT and finance departments, who meet regularly. The emphasis placed on communication would then extend from the board level to cross-functional teams and to the shop floor, thus getting "results for the business".

Sharing knowledge and experience is key. A oft-cited problem is that CFOs and CIOs in a meeting room always speak different languages. One of the research participants, for example, implemented regular job rotations, moving promising IT managers into the business section for a period of time and giving people from the business side a chance to work in the IT department. This should help the IT staff to understand business priorities and those in finance to be aware of underlying technology problems so that everyone is on the same page. Other companies emphasised the need for more business education for IT leaders as a way to bridge the gap between the functions and achieve better understanding.

The mutual expectations of CIOs from CFOs and vice versa are stated in the table below.

The IT function must have a voice

Research respondents were in near universal agreement that the IT department needs to have a voice at the highest level of the company, regardless of whether this means that the CIO reports directly to the board or to the CFO. What is crucial is that the IT function's role and contribution should be understood and that it should be able to align itself with achieving strategic goals and

driving value. By their very nature, CFOs and CIOs often compete for attention, resources and authority, but the success of their projects – and the company's overall performance – is dependant on their ability to cooperate. The CFO and CIO relationship needs to be built on trust and mutual confidence to become a partnership and, even though it is very difficult to achieve a perfect level of communication, it will eventually pay off. The fresh ideas resulting from genuine collaboration can save a lot of resources from being wasted on mistakes.

What is the way forward?

The model for the future is based on ambitious CFOs and CIOs who drive business change, speak the same language and share common goals. The relationship between the CIO and the CFO will still be very important, because it has the potential to impede or accelerate overall business performance. Accepting the status quo looks like a sure-fire route to a marriage of convenience rather than a beautiful friendship. The in-depth interviews indicated that many companies have made progress by understanding the fundamental differences and bridging the gaps. The research results show that understanding how to dismantle barriers between the IT function and finance today and then building a platform for collaboration will be the key to their mutual success.





Jiří Halouzka

Ladislav Juza

Advisory Services,
PricewaterhouseCoopers Czech Republic

What CIOs want from CFOs	What CFOs want from CIOs
"More communication"	"Working more closely together"
"Talking to each other"	"CIO reports to the CFO"
"More written communication"	"Finance courses for the IT people"
"More forced communication"	"Mutual understanding of business strategy"
"Better communication"	"IT should deliver more value"
"More flexibility"	"Clarify the IT strategy"

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KPMG's Global M&A Predictor:

Global deal activity set to hit bottom in Q2/Q3, with gradual recovery from late 2009



KPMG Corporate Finance's Global M&A Predictor – a forward-looking survey of 1,000 leading companies' estimated ratios of net debt-to-EBITDA and prospective price/earnings ratios – forecasts that 2009 will see a continued fall in global mergers and acquisitions (M&A) but that deal activity should slowly rebound late in the year as liquidity improves and attractive value is recognised in certain sectors.

The Predictor reveals a significant fall in I2-month forward corporate valuations and therefore also in the appetite to make deals (down globally 22.2% from I5.3x at the end May 2008 to II.9x at the end of November 2008). Forecasted net debt-to-EBITDA ratios have moved from 0.93 times to I.06 times, a I3.5% decline signaling a decreasing capacity to make deals.

These findings confirm our view that

2009 will be a bad year for M&A activity. We expect global deal volumes to continue to fall through Q3. With less liquidity in the market and reduced availability of credit, the appetite and capacity for making deals will continue to decline.

However, our analysis leads us to believe that the corner may well be turned late in the second half of this year. Those who ended 2008 feeling tired and disappointed from endless bad news have started 2009 with a desire to kick-start the deals market. This will be facilitated by opportunities that will inevitably emerge for value investors in certain regions and sectors.

The market players to watch will be those able to execute cash deals, such as companies that have preserved cash funds, some sovereign wealth funds, and private family businesses. Within 12



months, we will start to see some clear signs of a slow, yet strong, recovery in the M&A transactions marketplace. A reliable indicator that this time has arrived will be when quality assets come on the market and go for reasonable, rather than firesale, prices.

The latest Predictor indicates that by Q2/Q3 2009 the point will come when the appetite for making deals will improve as cash-rich investors find it hard to resist the very low valuations in the market. This forecasted pick-up in M&A activity may provide one of the positive indicators needed by economic commentators to signal an upturn in the broader economy.

Czech Republic and CEE

The Czech Republic and CEE will see a similar dramatic fall in deal activity. In the last three months of 2008 we saw several nearly finalised deals fall through at the last moment. This was due to a combination of factors. On the one hand, it was very difficult to obtain bank financing for acquisitions and, on the other hand, potential buyers were waiting for prices to come down further.

In terms of bank financing, the situation has been extremely difficult in the past few months and this is expected to continue. If banks are willing to provide financing in this market, they will do so only at significantly increased interest margins (by several hundred basis points) and at extremely low leverage. Though it may seem a paradox, this shortage in credit availability is also likely to lead to new deal activity. Companies that currently have short-term financing and need to refinance or companies that may be in breach of credit-agreement covenants as a result of the economic crisis may be forced to sell assets. This will provide good opportunities for cash-rich investors.

The impact of all this will very likely also be seen in the privatisation of Czech Airlines and Prague Airport. Even such strong assets will likely attract fewer potential buyers and will be sold for less than normally would have been the case.

Forecasted M&A Activity by World Region

For the first time, the Predictor indicates a declining valuation trend in all regions of the world, demonstrating the global decline in M&A activity. As previously, the region which had the biggest drop in valuation was Africa and the Middle East (PEs down 31.6%, from 13.3x to 9.1x). Latin America had the second biggest fall (28.7%, from 16.1x to 11.5x), followed by North America (24.6%, down from 15.9x to 12.0). In contrast to the last Predictor, in which Europe experienced the second biggest decline, six months on Europe saw the second smallest fall (21%, from 13.5x to 10.7x) behind Asia Pacific, which declined 19.9%, from 17.0x to 13.6x.

Although the capacity to make deals has decreased with the global forecasted net debt-to-EBITDA ratio moving from 0.93 times to 1.06 times, some regions have seen an improvement in their balance sheets.

Latin America and Africa and the Middle East bucked the trend and both regions saw improvements of 3.2% and 35.7%, respectively, with Africa and the Middle East's ratio of 0.33 times being the most modest of all. Europe maintains its position as having the highest regional ratio of 1.15, having moved from 0.97 times, a decline of 19.0%.

While the Americas and Europe have all witnessed significant falls in forward PE ratios, balance sheets remain robust in North America and Latin America, suggesting that some corporations will remain in a strong position should value-enhancing acquisition opportunities arise. Within Europe, however, balance sheets have deteriorated by 19%, implying that these companies are increasingly less likely to execute deals in the near term.

Forecasted M&A Activity by Global Sector

The Predictor has shown a decline in forward PE valuation across all sectors, with technology (18.4x to 12.6x), basic materials (13.8x to 9.6x) and industrials (15.5x to 11.1x) registering the most significant deterioration. Unlike the results shown in the previous edition of the Predictor, oil and gas fell significantly (11.8x to 8.6x) along with telecommunications (14.1x to 10.8x), consumer services (17.0x to 13.5x) and healthcare (15.5x to 12.5x). The smallest decline was in the consumer goods sector (16.2x to 14.6x).

Utilities and industrials continue to maintain the highest debt ratios, with net debt-to-EBITDA at 2.68 times and 2.27 times, respectively. The technology sector continues to show net cash, which reflects a traditional balance sheet structure for this peer group, though healthcare has moved from a net cash position to one of net debt.







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Legal framework of Public Private Partnerships in the Czech Republic



What is a public-private partnership?

At present, there is no all-encompassing definition of a public-private partnership (PPP). A partnership between the public and private sectors is one of the means of ensuring the availability of public services and related infrastructure. This generally involves a long-term (e.g. 25-30 years) contractually governed relationship between a public entity, such as a local administrative unit or the state represented by a ministry or the government, and a private company or consortium. Within such a relationship company, as a private partner, takes on the traditional role of the state as the caretaker and provider of a public service. The private partner bears the immediate acquisition costs of infrastructure/facilities, though for a contractually stipulated period payments for accessibility are paid either by the public partner or through direct collection of fees from the endusers of the infrastructure or service. The extent of the private partner's involvement may vary. In a typical PPP project, the private partner designs and builds facilities that it manages and operates for

PPPs in Europe

Since the beginning of the 1990s, more than 625 projects valued at GBP 58 billion have been implemented in Great Britain alone. In other European countries, 200 PPP projects were implemented between 2001 and 2007 at a cost of over EUR 31.6 billion.

a stipulated period of time. The private partner should thus motivated use the most effecsolutions and processes not only in construction, but also in selecting the technology when equipping the facilities, in to minimise future operating costs and increase its profit. Unlike in standard public tenders, in PPP projects the public entity sets forth only the general entry criteria and leaves the manner of their fulfilment to the private partner, which

chooses the most suitable solution. Another difference between public tenders and PPP projects is the distribution of risks and the transfer thereof to the partner that can better offset such risks with lower costs. The private partner generally takes on the risks associated with project documentation, design/construction, construction-cost overruns, defective technology, technological deficiencies, lack of human resources, human error, etc.

There is a full range of projects in which PPP methodology is used – this most commonly involves projects in the transportation sector (motorways, railways, airports, tunnels, bridges, parking facilities), healthcare (hospitals), water management (sewerage, water-treatment plants), and waste management (pressing stations, recycling facilities), though we can also find projects involving housing facilities (prisons, care homes, residential buildings with rental flats) and recreation facilities (sports stadiums).

Legal regulation

Pursuant to the Concession Act?

Due to a lack of legal regulations that would comprehensively govern concession contracts concluded within PPP projects, Act No. 139/2006 Coll., on Concession Contracts and Concession Procedures (the Concession Act) was passed in 2006.

Pursuant to the Concession Act, this involves socalled public contracting authorities, i.e. the Czech Republic, state contributory organisations (e.g. the Road and Motorway Directorate), territorial administrative units (TAUs), and contributory organisations governed by TAUs. However, a public contracting authority may also be another legal entity if it was established for the purpose of serving the public interest, does not have an industrial or commercial character, and is financed or controlled by another contracting authority or another contracting authority appoints or selects more than half of the members of its statutory, management, supervisory and auditing bodies.

Prior to the commencement of the concession procedure, the public contracting authority must ensure the formulation of a concession project, which should contain the basic definition of the concession activity, economic conditions and legal regulationships ensuing from the implementation of the concession contract and economic assessment of the suitability of ensuring the concession activity in the form of a concession contract. Prior to commencement of the concession procedure, a concession project of the Czech Republic or a state contributory organisation must be approved by the government of the Czech Republic. If this concerns a concession project of a TAU, it must thus also be approved by the relevant regional or municipal council. The public contracting authority can then publish an announcement on the commencement of the concession procedure. If this involves, for example, a concession contract on construction work with the planned value of the subject thereof greater than CZK 146,447,000, the announcement on the commencement of the concession procedure is published simultaneously in the public-procurement information system and in the Official Journal of the EU. Other announcements are published only in the public-procurement information

The Concession Act recognises a single method of selecting suppliers/concessionaires, which is the concession dialogue, whereas this refers in detail to the provisions of the Act on Public Procurement relating to competition dialogue. Within competition dialogue, the public contracting authority engages in negotiations with the interested party on all aspects of the project and, jointly with the partner, endeavours to find the most suitable solutions that would fulfil the partners' needs and requirements. The contracting authority selects one or more proposed solutions and subsequently submits to the interested party its offers, from which an assessment committee selects the one that was judged the most economically favourable.

The contracting authority then concludes a concession contract with the chosen interested party, i.e. the concessionaire. The law expressly stipulates that such a contract can be concluded only for a de-

fined period, must contain the reasons for premature termination of the contract and a definition of the legal relationships of the contracting authority and concessionaire to the asset that is the subject of the contract, including regulations pertaining to its settlement if the contract is terminated prematurely, and must fulfil the stipulated formal requirements – the contract must be in written form with the signatures of the contracting parties. In addition, the concession contract must be approved similarly as in the case of a concession project.

Pursuant to the Public Procurement Act?

However in some cases, Act No. 137/2006 Coll., on Public Procurement (the Public Procurement Act), is also applied during the implementation of a PPP project. Application of this act does not depend on the will of the public entity (contracting authority), but rather on whether the private partner as the supplier will take the benefits ensuing from the provision of services or from the use of the produced good. Interpretation regulations of the European Commission on concessions pursuant to EC law expressly state that "a project is considered a public tender for construction work in the terms of Community law if construction costs are covered primarily by the public contracting authority and the supplier does not receive remuneration from fees paid directly by those who use the structure." The same opinion is held by the Ministry for Regional Development of the Czech Republic, where it is expressly stipulated in the Concession Act methodology that "if the entire payment for the subject of fulfilment is provided to the supplier by the contracting authority, this by definition involves public procurement."

The Public Procurement Act governs six types of award procedures, of which only two will pertain to most PPP projects – a negotiation procedure with publication and competition dialogue. Both forms of award procedures allow negotiation on the conditions of the project and the requirements and needs of the contracting authorities' entities. The methodology of the Ministry for Regional Development recommends competition dialogue, "with regard to the fact that [...] it enables the applicant to specify the parameters of the project so that it will maximally correspond to the needs of the contracting authority."

Or something from everyone?

However, PPP projects differ from standard public orders, particularly by the long duration of the contractual relationship between the private and public partners and distribution of risks. In the case of so-called above-limit public tenders, where the contract should be concluded for a period of at least five years and the supplier bears some of the economic risks connected with the realisation of the public order that would normally be borne by the public contracting authority, the Public Procurement Act expressly stipulates that certain provisions of the Concession Act shall be

applied. Thus arises a special public tender with concession elements, i.e. a quasi-concession. The contract, on the basis of which such a public tender is realised, can be concluded only for a finite period and must contain the provisions required for a concession contract. Unlike standard public tenders, in the case of a quasi-concession the contracting authority is obligated to ensure, prior to commencement of the award procedure, the formulation of a concession project that, like an actual concession contract, is subject to approval by the government or relevant councils. Unlike the Public Procurement Act, however, the Concession Act contains provisions that allow, if the defined conditions are fulfilled, conclusion of a concession contract instead with a selected supplier, even a legal entity, that did not participate in the concession procedure. In PPP projects the Act thus takes into account the commonly used institution of special, independent commercial firms established for the purpose of implementing the project (Special Purpose Vehicle – SPV), whose shares are owned by private companies that were selected as suppliers for the project. The involvement of an SPV simplifies the web of mutual contractual relationships, which brings benefits particular to the public entity, which thus deals with only one private entity. In the case of a PPP project to which the Public Procurement Act will be applied, it is necessary for such a firm to be established prior to commencement of the award procedure, as the Act on Public Procurement allows the conclusion of a contract only with an applicant that participated in the procedure.

Who can be a supplier/concessionaire?

A supplier, as well as a concessionaire, must fulfil basic professional and technical qualification requirements. The basic qualification requirements include, among other things, probity and nonexistence of unpaid tax liabilities and contributions for medical insurance, social security and the state employment policy. Fulfilment of these qualification requirements is demonstrated with an extract from the Register of Criminal Records and a confirmation from the relevant tax authority and insurance administration offices that the entity is not in arrears. In the case that the supplier or concessionaire is a foreign legal entity, it must demonstrate that all members of its statutory body are not in arrears both in the country in which the entity is registered and in the Czech Republic. Documents confirming that the concerned parties are not in arrears may not be older than 90 days, must be submitted to the contracting authority in their original form or notarised copies thereof together with a notarised translation into the Czech language. Generally, it will also be necessary to furnish these documents with an apostille. With regard to the relatively short period of validity of the documents and time-consuming nature of acquiring them, including apostilles, from abroad, the law offers the possibility to register in a list of qualified suppliers. An extract from this list serves as confirmation of fulfilment of

the basic qualification requirements. Fulfilment of the professional qualification requirements is demonstrated by a trade licence, a document issued by a professional organisation if membership in such an organisation is required for fulfilment of public contracts, or a document verifying the professional competence of the supplier. Fulfilment of the technical qualification requirements is demonstrated by a list of realised deliveries, technicians, the technical equipment and facilities that the supplier or concessionaire will have at its disposal, etc.

Current PPP projects in the Czech Republic

Currently the first domestic PPP projects are being implemented in the Czech Republic with a total value of more than CZK 188 billion. The Ministry of Transportation is preparing two projects - AirCon, which will link Prague-Ruzyně Airport to the centre of Prague, including operation and maintenance, at an estimated cost of CZK 25 billion; and a project involving the construction and financing of sections of the D3 motorway and R3 expressway at an expected cost of more than CZK 59 billion. The Ministry of Justice is planning to use a PPP variant for construction and operation of a prison in Rapotice u Brna and construction of a court complex in Ústí nad Labem. The combined cost of both projects will be nearly CZK 7 billion. The largest amount, nearly CZK 100 billion, will be invested by the Ministry of Finance in a project to eliminate certain ecological burdens that arose before privatisation. Concession projects have been approved in all cases, with the exception of the AirCon project. Award procedures will follow.



Marta Drbohlavová, advokátní koncipientka



llona Šrollová, advokátka

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The American economy is still not in the best shape. Unemployment increased to 8.1% in February, the highest rate since 1983. This is higher than in some European countries, that generally had higher unemployment than the United States. The recovery has not come yet and it is unclear, how long it will take. This situation can influence global investment overall, either positively or negatively for different economies.

Some big, diversified multinational American companies are not in such bad shape as the overall economy and some sectors. Companies continue to invest at home and abroad and Czechlnvest is still busy with new American projects. We are still receiving some manufacturing inquiries, though we would increasingly prefer to concentrate on projects in sectors such as IT, software development, shared services, business support services, life sciences, biotechnology, aerospace, and other interesting areas, including various research and innovation activities, cooperation among business, government and academic entities, joint ventures and higher-value-added sourcing of products from the Czech Republic, mainly to the strong EU market by American multi-European operations. The United States is

still one of the most important players in the world in terms of foreign direct investment. Overall, the country is both one of the biggest recipients and one of the biggest providers of capital and projects. The US also historically ranks at the top in innovation and R&D activities in almost all sectors, together with Germany, Japan and some other countries. This fact is also reflected in Czechlnvest's marketing and project strategy in the territory (US and Canada). As mentioned above, in 2008 and 2009 we are focusing mainly on the following high-value-added sectors to attract new investment:

IT and software development Shared services and business services Life sciences and biotechnology Aerospace

American corporations made their way to the top through global investment, products and services, and globally recognised brands. In the early 1990s, some American companies entered the Czech and other Eastern European markets mainly through product penetration, acquisitions and modernisation of Czech companies. One of the best examples of these early projects is that of the company Procter & Gamble and its growth in Rakovnik. Even when some companies followed, such as Honeywell and Ingersoll Rand, foreign direct investment in the Czech Republic was not so significant in the beginning. Countries like Poland and Hungary received many more projects from the United States, Japan and Germany. In the late 1990s, the Czech government decided to implement

Oracle in the Czech Republic

various kinds of investment incentives to help boost foreign direct investment in the country, and we could see some positive results of this effort later, especially from 2000 to 2006. Incentives were first approved for the manufacturing industry and later applied to business support services and technology centres. These measures also helped to increase the number of American projects for which Czechlnvest provides assistance. Although incentives are usually not the most decisive factor in new investment location (these are usually labour availability, infrastructure, the product and market), the welcoming approach of the Czech government could have a significant positive influence on investors.

American companies in the Czech Republic are now leaders in new projects in sectors like information technology, software development, shared services and business services centres, as well as in expansion of existing operations and business activities.

Honeywell and Ingersoll Rand provide some of the best examples of the continuing expansions of multi-investment American projects in the Czech Republic. These corporations have all kinds of business activities in our country, from several manufacturing plants to several innovation and services centres in various Czech cities. Another outstanding recent example is Microsoft's growing number of innovation centres and business activities in the Czech Republic. All of these companies and many others continue to enjoy access to skilled Czech labour and the stable and favourable business environment of the Czech Republic, where from they can serve the powerful EU market.

As for projects involving business services and development centres, until relatively recently Prague was the most popular location, with investments from, among others, Computer Associates, Microsoft, Exxon Mobil, Sun Microsystems and ADP (see our updated maps of American companies in the Czech Republic). But lately, however, many companies have discovered the advantages of university cities like Brno, Ostrava, Plzen and Olomouc and a growing number of new projects are being directed to these new locations, which is very important for the overall development of the Czech economy. Honeywell, IBM, Red Hat, Schneider Logistics, Roper, Solectron and SRA are only a few of the companies that have set up operations outside the capital. Brno in particular, with its talented and skilled university-educated workforce is now being viewed in the United

States as the new star in Central Europe. In the North American market this year, Czechlnyest is focusing almost exclusively on sophisticated investments and projects with higher added value. In the first half of the 1990s the agency worked mainly on manufacturing projects and following 2002 the number of production-oriented projects was equalled by services and technology centres. American projects substantially transformed the nature of FDI in the Czech Republic, helping to push non-manufacturing projects to the fore. Of course, this is due to the high degree of development of American investments on a global scale. GE Aviation's acquisition of Walter, an aircraft-engine manufacturer, and its preparations to build a large technology unit in new and modernised spaces based on the existing production operations provide a good example of such an investment implemented in the Czech Republic in past year. The same can be said for Concur's project to open a software centre in Prague. IT projects comprise a big part of new activities originating in the United States. Perhaps even more important than new projects are those involving the continuing expansion of American firms that are further developing their existing operations in the Czech Republic (e.g. Honeywell, Ingersoll Rand, IBM, Visteon, Microsoft, Meopta, Computer Associates, etc.). Projects related to healthcare and medical research and development are also of great importance. For example, in Brno the International Clinical Research Centre, in which the renowned Mayo Clinic is participating, is one of the best representations of advanced medical investments in the Czech Republic. Thanks to this, other giants in the healthcare industry, such as GE Healthcare and Cleveland Clinic, and pharmaceuticals and biotechnology firms like Wyeth, Abbott, Amgen, Genentech or Genzyme have shown interest in establishing a presence here.

Successful expansions provide a guarantee of long-term operation in the territory, though of course in the competitive environment and constantly changing global economy it is necessary to be prepared for all possible contingencies. In the United States, for example, it is not unusual for a previously successful firm to restrict or even discontinue operations in a given region due to changing market conditions. Conversely, a region, city or country that possesses quality infrastructure and an educated, flexible workforce could expect to retain such operations, though perhaps under a different owner.

As always, the most important factor is a helpful approach to investors and business activities, which provides a clear signal that they are welcome in the Czech Republic. An important part of this approach is to point out that the extent of incentives, whether in the form of subsidies, tax relief or other benefits, can – but may not necessarily – change on a case-by-case basis. In the United States, governors of individual states and mayors of cities compete intensely for investors, and the fight for investments is probably even more intense than that between European nations.

Czechlnvest and CzechTrade currently operate a joint office in Chicago, synergistically covering priority activities by attracting high-quality investors to the Czech Republic and supporting small and medium-sized enterprises' exports to the American market. The agencies' joint events help to enhance the Czech Republic's image among all concerned business entities. In addition, the office collaborates with the economic section of the Czech embassy in Washington and consulates in New York, Chicago and Los Angeles. Czechlnvest has decided to reopen its office on the west coast of the United States this year in order to better serve this important and expansive territory. Czechlnyest is now in the process of selecting the location of the new office and exploring ways to best exploit synergies between both of its American offices and for the whole region, including some projects, seminars and business exhibitions in Canada. Czechlnvest will continue to concentrate on the higher-value-added projects and bringing new, high-quality American investments to the Czech Republic. Even during the economic crisis, or perhaps because of it, American companies are still very actively searching for new markets and investment locations in order to diversify their global business portfolios.

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Investment in the Czech Republic in 2008: services surpass manufacturing for the first time



Nearly two out of three new investment projects gained by Czechlnvest in 2008 involved research and development or business support services.

Last year investments in research and development and business support services in the Czech Republic outweighed those in manufacturing projects for the first time. This is according to statistics from Czechlnvest, which helps domestic and foreign investors to implement their business plans in the Czech Republic. With Czechlnvest's assistance, a total of 213 new investment projects are to be implemented; 76 of these are focused on research and development, 58 on services and 79 on production. These projects will create jobs for 14,606 people, including nearly 4,000 university graduates. The total value of the new investments is CZK 30 billion.

"There was a fundamental change in the nature of new investments in 2008. It was the first time ever that services, including research and development, comprised the majority of new projects," says Alexandra Rudyšarová, acting CEO of Czechlnvest. "On one hand, this is a natural development — the Czech Republic is literally in the centre of Europe and if companies want to succeed here, they have only one option, which is to invest in state-of-theart technologies and in research so that they can offer customers the highest possible quality. On the other hand, Czechlnvest has been able to accelerate this development thanks to support from national and European sources."

IBM provides an outstanding example from the past year. The company has focused on software development in the Czech Republic since the 1990s. Its excellent experience with Czech programmers and the overall business environment in the Czech Republic played a significant role in the company's decision last year to relocate the management of the entire IBM group for Central and Eastern Europe from Vienna to Prague.

The list of new investors from last year includes, for example, **eBay**, which opened its marketing and analysis centre for Europe in Prague. **Regus**, which leases out office spaces including all related services in 70 countries, is gradually concentrating the complete administration of its finances and other shared services in Prague.

Last year's most significant expansions included a billion-crown investment by the Israeli company **Teva** in pharmaceutical production at its IVAX subsidiary in Opava. **EXBIO** and **CPN**, for example, are preparing centres for research in the areas of pharmacy and biotechnology, while the Zlínbased company **Rokospol**, which produces paint containing nanoparticles, is also establishing a technology centre.

"Last year Czechlnvest also helped Czech firms to obtain orders in the value of CZK 930 million from significant foreign companies," adds Rudyšarová, commenting on the agency's other important services for domestic companies. "The Czech Republic has clearly entered the next phase of attracting new investments and building a knowledge-based economy, as investments in services have begun to flow into the country on a large scale following the previous dominance of manufacturing investments," says macroeconomist Tomáš Sedláček, commenting on the statistics. "In past years, a range of truly big investors have been attracted to regions with high unemployment. Having had positive initial experience with production here, many of these investors have entrusted original research and development to their Czech branches. However, we mustn't forget that a large proportion of these investments would not have been possible or have been made so soon if the Czech Republic had not first proven itself worthy in the area of production."

Software developers in the forefront

Software developers are behind the greatest number of new investments, accounting for 21% of the total number of new projects. Forty-three new software-development centres are being established with Czechlnvest's assistance. These centres will employ 3,000 people, two-thirds of whom will be university graduates. Engineering, with 37 projects, was the second strongest sector last year in terms of new investments. The country's traditional champion, the automotive industry, fell to third place with 28 investments.

"AVG in Brno, TeLogic in Liberec and IT Systems in České Budějovice are just a few names on a long list of new and expanding software-development companies in the Czech Republic. The dominant share of such companies in the total number of new projects is further evidence of how the composition of investments is changing dramatically," says Rudyšarová. "Only a few years ago the automotive industry was undeniably dominant; today sectors involving services rather than manufacturing are of comparable importance."

Comparison with 2007

According to precise statistics for 2007, Czechlnvest assisted in gaining 201 investment projects for the Czech Republic that year in the total value of CZK 71 billion. "Whereas in 2007 research and development or services comprised only 32% of all investment projects, this year that figure is 63%. Top-quality equipment for software developers is generally less expensive

than construction of a new manufacturing plant. In addition, most companies that are investing in services lease facilities and equipment, so according to our statistics their initial investment is lower," says Rudyšarová.

"Attracting new investment projects to the country is not about the size of the initial investment. The important thing is the level of added value created by the investor's employees. In coming years we can expect that investment volumes will decline while added value in companies will grow," says Tomáš Sedláček.

Aid accelerates research

The possibility to receive support from the European Operational Programme Enterprise and Innovation was fully opened to companies that decided to invest in research and development in the Czech Republic in 2008. Seventy-five companies immediately made use of the Potential Programme, while another 25 firms decided for the ICT and Business Support Services Programme, which supports software development and the establishment of expert solution centres and high-tech service centres. In addition, state aid is being used to support the establishment of shared-services centres and one research and development centre.

"It is very important that we are able to offer tailored support to many types of companies. If we did not have this ability, a range of companies that we are talking about today would have set up their operations in neighbouring countries," adds Rudyšarová.

Two out three investors are based in the Czech Republic

"The greatest number of new investment projects in which CzechInvest took part last year have their origins in the Czech Republic," Rudyšarová emphasises. "Companies based in the Czech Republic prepared 127 new investments in the total value of nearly ten billion crowns. These investments will create 4,054 new jobs. In addition, every third newly created position in Czech companies will be occupied by a specialist with a university degree."

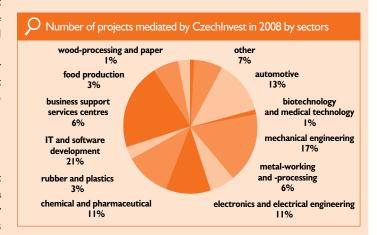
According to the statistics for 2008, investments undertaken directly by Czech companies rank first both in terms of the number of new projects as well as in total investment volume and the number of newly created jobs. "The statistics show that every second investment project on which we worked last year originated in the Czech Republic," adds Rudyšarová. According to the number of investment projects, investors from Germany, with 29 projects, placed second behind Czech companies, followed by companies from the United States in third place with 14 investments

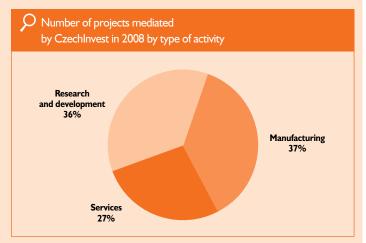
South Moravia leads the way, thanks to IT

As in 2007, the greatest number of new investments last year was in the South Moravia region, which was chosen by 35 companies, one-third of which operate in the areas of IT and software development. With 30 new projects, the second most popular region among investors was Moravia-Silesia, though the largest number of new jobs (2,912) will be created there. Central Bohemia finished 2008 in third place with 27 new investments.









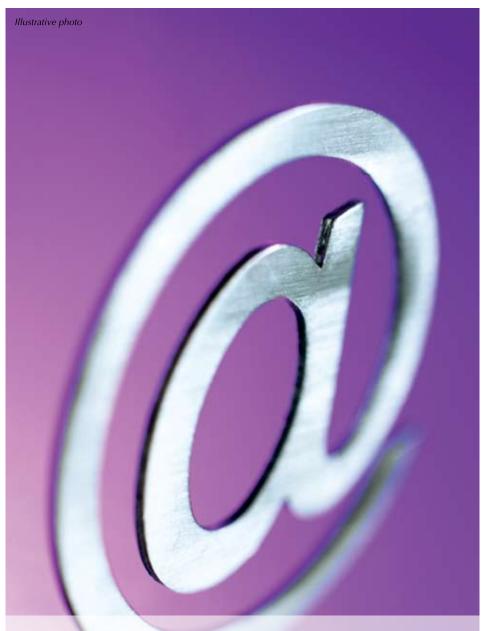
Czechlnvest: 17 years of supporting investment in the Czech Republic

Czechlnvest was established in 1992 and mediated its first investment project for the Czech Republic a year later. Since then, the agency has taken part in 1,193 investments in the value of CZK 647 billion. Projects mediated by Czechlnvest have directly resulted in the creation of 202,461 new jobs. Thousands more jobs have been created in connection with related investments.

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Welcome to the Czech e-Republic



A few years ago the following conversation could frequently be heard in Czech companies:
Business manager: "Do we need to complete any more materials before submitting our offer for the tender?"
Consultant: "I still have to request extracts from the Commercial Register and Register of Criminal Records."
With a power of attorney, the young consultant would then head to the relevant authorities, which were scattered around the city, and spend hours standing in a queue, only to find out later that the extract from the Commercial Register could not be issued on the spot.

Until the launch of the Czech POINT system, this was a typical situation. Thanks to this new system, however, today it is necessary only to find the nearest post office, where you can obtain a range of official extracts while you wait.

This year marks the twentieth anniversary of the Velvet Revolution. During the past two decades, the Czech Republic has transformed itself from a centrally planned to an export-oriented market economy. The country has substantially improved its

competitiveness and now plays a significant role in the CEE region.

If we leave aside a given country's strategic location and infrastructure, the education level of its inhabitants, its interest rates and basic macroeconomic indicators, on the basis of which a potential foreign investor may decide to invest in that country, an important criterion is indisputably the administrative burden faced by companies. Czech POINT, one of the component parts of the comprehensive eGON (eGovernment) system, is the most visible manifestation of the electronisation of public administration.

Czech POINT

Czech POINT is a project intended to reduce the excessive amount of red tape in public administration. Until the system was launched, a citizen or representative of a foreign investor had to visit several offices to resolve just one problem. Czech POINT serves as a location for performance of public administration, enabling communication with the state at a single, universal point of contact, which brings obvious benefits for everyone concerned. The goal was to create a comprehensive service for communication with the state via one universal office where it would be possible to obtain and verify data from public and non-public information systems, notarise documents, transfer printed documents into electronic form and vice versa, obtain information on the course of administrative procedures in relation to the citizen and to submit materials for commencement of administrative procedures. This involves the maximal use of information in the state's possession in order to minimise the requirements places on citizens.

The Czech POINT project significantly eases communication with the state. In some situations it will suffice to visit only one office. In the final phase of the project it will be possible to handle these matters via the internet from one's home or office.

What Czech POINT provides:

- Extracts from the Property Register
- Extracts from the Commercial Register
- Extracts from the Trades Register
- Extracts from the Register of Criminal Records
- Acceptance of submissions pursuant to the Trade Licensing Act (Section 72)
- Applications for extracts or transcripts from the Register of Criminal Records

pursuant to Act No. 124/2008 Coll.

- Extracts from the Register of Traffic Violations
- Issuance of verified data from the Listing of Qualified Suppliers
- Submissions to the register of participants in the operation of the ISOH wrecked-vehicles module
- Czech POINT E-SHOP extracts via post

On 16 February 2009 at 9:05:53 a.m. an extract with the curious number 1234567 was issued at a branch of the Czech Postal service. This was an extract from the Register of Traffic Violations, which is the third most commonly used by citizens, accounting for 14.02% of the overall number of issued extracts. The Register of Criminal Records leads with 44.68%, followed by the Property Register with 25.52% of issued extracts. Between the beginning of the year and 16 February 2009, 28,597 extracts from the Register of Traffic Violations were issued. In total, 1,417,978 extracts had been issued by 31 March 2009.

EGON

Greater demands are now being placed on existing information technologies and their further development within the state administration. This stems primarily from the requirements of building an e-state, i.e. electronisation of the agendas required for the proper running of the state, for which it no longer suffices to have individual information sources and individual provision of services. It is necessary to have overall mutual coordination of the development of information sources in order to fully facilitate the performance of users' necessary activities (either within the state administration or on the part of its clients - citizens) from a single location.

The brain of eGON comprises the basic registers of the public administration. These will serve as a source of the most frequently used information in the performance of public administration. In total, four basic registers will be established along with an information system ensuring the interface between these registers.

The inability to share data and to ensure the secure sharing of data by state administrative bodies is the biggest problem at this time. Therefore, the next step in the eGovernment project is to launch the project establishing the four basic registers – register of inhabitants (data on natural persons); register of entities (data on legal entities, natural persons conducting business, and bodies of public authori-

ties), register of territorial identification, addresses and property; and a register of rights and responsibilities.

The basic register of inhabitants contains information both on citizens of the Czech Republic and on foreigners residing here. Information on natural persons will be maintained on a smaller scale than is the case with records of inhabitants maintained in the information system, because the basic register should be accessible to a broader group of offices that do not need more detailed personal information for their everyday operation. In the register of inhabitants, information on natural persons will be maintain in the following scope: name, surname, residential address (in this case only a link to the basic register of territorial identification, addresses and property will be used so that if, in the given location, the name of a street changes, for example, the user will always be shown the current data with the correct name), date and place of birth and death (whereas in the case of place of birth there will again be only a link to the basic register of territorial identification, addresses and property).

Information on the territory of the Czech Republic is among the most frequently used in the public administration. This particularly concerns information on addresses that most public administrative bodies need when conducting their activities. However, a range of these bodies also use information that defines the location of a territory on the ground. The frequency of use or the non-existence of a single source of information, which should guarantee the correctness, precision and thoroughness of such information, led to the decision to create the basic register of territorial identification, addresses and property.

The basic register of entities (ROE) covers the creation of one reference source - a register of entities that will include all types of entities (economic units and entities) of a business as well as non-business character and integral linking of individual records (structure, classification, location and means of registration, communication interface, verification and inspection of data, updating and use of data). Among other things, this will make it possible for all public administrative bodies to have available a single source of uniform and verified data on entities maintained in the ROE. The reference data in the register of entities will concern entities within the Czech Republic.

Unlike the basic registers described above, the register of rights and respon-

sibilities is much more difficult to define. It comprises two main areas, the first of which is the competency of public administrative bodies (from the legislative perspective, offices do not have rights and responsibilities, as they only perform activities stipulated by legal regulations). The second area involves the rights and responsibilities of natural persons and legal entities. The purpose of this register is to create a space that will gradually be filled with information on the rights and responsibilities most frequently exercised on the part of the offices. The register of rights and responsibilities will contain an overview of the activities performed by public authorities, information on the offices that conduct the given activities and definition of the roles that are necessary in order to conduct these activities.

For a body to function properly, it needs not only a "brain" in the form of the basic registers, but also a "heart", which consists of an information system of data boxes. An act drafted by the Ministry of the Interior which came into force in September 2008 governs the area of data boxes as well as the conversion of documents from electronic to printed form and vice versa. For both individuals and firms, data boxes will simplify electronic communication with administrative offices while ensuring greater reliability than is the case with ordinary e-mail communication. When an individual or firm has a data box set up, the offices will deliver document primarily to the box. In two-way communication, public administrative bodies will have an obligation to use the electronic form of communication via data boxes. This will lead to lower costs and higher efficiency of the activities conducted by the public administrative bodies.

The electronisation of the state administration - eGovernment - will comprehensively facilitate communication between private entities and administrative offices. which will lead to the improved efficiency of processes on both sides, a reduction of costs associated with these activities and, primarily, to the greater attractiveness of the Czech business environment in the eyes of potential foreign investors. Thanks to this project, the Czech Republic will rank among those countries that apply modern information technologies not only for their own benefit, but mainly for that of business entities and their citizens in general.

> Martin Michalov, Association for Foreign Investment



In the past, Moravia-Silesia, in the northeast corner of the Czech Republic, was often neglected, overshadowed by more well-known regions of the country. In recent years, however, that has changed and Moravia-Silesia is now the fastest-developing region in the republic. This is thanks not only to the massive inflow of foreign investments, but also to the explosive development of the region's traditional producers, which through restructuring have become much more competitive and have thus established themselves on global markets.

Moravia-Silesia and its surroundings

The region is located in the north-eastern part of the country, more than 300 km from Prague, and borders the Žilina region of Slovakia to the east and Polish Opole voivodeship and heavily industrialised Silesian voivodeship to the north. Moravian-Silesian's neighbours to the south and west are the Czech Republic's Zlín and Olomouc regions, respectively. It is necessary to point out that the borders with Slovakia and Poland are not barriers as they were in the past. Following accession to the EU and Schengen area, new opportunities for cooperation have opened up in a range of fields (trade, education, travel, culture, etc.).

Diverse scenery and natural wealth

From the physical-geographical perspective, Moravia-Silesia is very diverse. The region's lowest point (at 195 metres above sea level) lies near the Odra River on the border with Poland. Fifty kilometres to the west, however, we come to the "the roof of Moravia" – Praděd, the highest point of the Hrubý Jeseník mountain range, at 1,492 meters above sea level. Praděd is well-known due to the presence of Central Europe's biggest snow cap. The western part of the region is fringed

by the Hrubý Jeseník, which gently gradates into rolling hills – Nízký Jeseník and Oderské vrchy.

The region's natural wealth consists of its highquality farmland in the Opavská nížina and Moravská brána areas and the large amount of mineral raw materials found here (black coal – Ostrava-Karvina Basin, limestone, gypsum, granite, slate, sand and gravel).

Industry and investment: history and present

Covering 5,427 km², Moravia-Silesia is the sixth biggest region in the Czech Republic in terms of land area, and is home to over 1.2 million people, which makes it the country's most densely populated region, though even in this respect there are enormous contrasts. While the Ostrava agglomeration (Ostrava, Havířov, Karvina, Orlova, Bohumín, etc.), has 1,000 residents per square kilometre, the Osoblaha and Rýmařov areas are practically devoid of human settlement and untouched by industry.

Black-coal mining in the Ostrava area dates back to the end of the 18th century, which also saw the establishment of the region's first steel mills and machine shops, which brought about explosive in-

dustrialisation and, therefore, the establishment and growth of new towns.

The region's most well-known genius loci in inarguably iron and steel (though Ostrava was long presented as the steel heart of the republic). The small town of Vítkovice on the Ostravice River had the best conditions for the establishment of the first smelter (at the Rudolf Ironworks in 1828) not only in the Czech lands but in the entire Habsburg Empire. The fast-flowing Ostravice River offered hydropower, nearby Silesian Ostrava provided the black coal, and iron ore was brought in from the Beskydy deposits.

In the 19th and 20th centuries coal mining was expanded to the entire Ostrava-Karvina Basin and more steel mills were established in Třinec (1839 – Třinecké železárny) and Ostrava-Kunčice (1949 – Nová Huť, now ArcelorMitall).

Unfortunately, reckless coal mining and the intense concentration of heavy industry had a very negative impact on the region's natural environment in the form of soil degradation, slag heaps and high concentrations of pollutants in the air, water and soil. After 1989, steps were taken to reverse this trend, often through closure of obsolete plants, and coal mining in Ostrava was halted in 1994. Devastated





locations were cleaned up and recultivated and one can again see fishermen and rowers on the Ostravice River in the centre of Ostrava.

The region's economy has never relied solely on heavy industry, as companies here represent a broad spectrum of sectors, including the automotive industry (Tatra Kopřivnice - freight vehicles, Autopal Nový Jičín – lighting technology, Continental Automotive Systems Frenštát pod Radhoštěm, Brano Hradec nad Moravicí – door systems, jacks), mechanical engineering (ŽDB Bohumín - steel cables, cords, heating technology; Bonatrans Bohumín - rail-vehicle axles, VOP Šenov - modernisation of tanks, MSA Dolní Benešov - armatures), mining technology (Ostroj Opava, Ferrit Frýdlant nad Ostravicí), the chemical industry (Ivax Pharmaceuticals Opava – drugs, Walmark Třinec – food supplements, BorsodChem MCHZ - aniline, Bochemie Bohumín - disinfectants), the food industry (Opavia Opava biscuits; Kofola Krnov - non-alcoholic beverages, Bivoj Opava - meat products, Nowaco Opava frozen foods), and breweries (Radegast Nošovice and Ostravar). The region's economy also features highly specialised companies such Rieger Kloss, a manufacturer of organs in Krnov, and TONAK Nový ličín, which produces felt hats and fezzes.

The decline of production in the 1990s and necessary restructuring resulted in massive layoffs, which culminated in 2004 when the region's unemployment rate reached 16%. Fortunately, this trend was reversed when new investments, particularly in the automotive industry, began flowing into the region, largely thanks to investment incentives and

well-prepared industrial zones. For example, Brose, Dura Automotive Systems, Erich Jaeger and Rieger, set up operations in the Kopřivnice industrial zone to supply for Volkswagen, Opel and a range of other European automotive firms. Following the decision of the Korean carmaker Hyundai to build its first European plant in Nošovice, several of the company's suppliers followed (Sungwoo Hitech, Dymos, Plakor, Hysco, Donghee, Sejong, PHA, Matador-Dongwon, Hanwha L&C). Production of the Hyundai i30 was officially launched at the end of 2008; an estate version will be introduced this year.

Other new investments in the region include those of Osram Bruntál (fine wire and spools, lighting components), Shimano Karvina (bicycle components), Mölnlycke Health Care (single-use surgical supplies), Central European Aircraft Maintenance Mošnov (aircraft repair centre – Boeing, Saab, etc.), Tieto Ostrava (software and applications development), Bang & Olufsen Kopřivnice (consumer electronics), ASUS Ostrava (production and assembly of computer components), HSBC Ostrava (business support services centre, software development) and GE Money Bank Ostrava (call-centre and business support services centre).

For new investors and established firms interested in expanding, Moravia-Silesia offers abundant industrial zones (Mošnov, Karvina, Krnov, Studénka, Rýmařov) and prepared rental facilities for production and logistics (CTP Park Ostrava, Nový Jičín, ProLogis Park Ostrava-Poruba, SEGRO Ostrava-Přívoz). For IT and BSS projects, a full range of modern office spaces is newly available (AXIS Park Ostrava-Hrabová, Orchard Ostrava, Nordica Ostrava) and other office projects are being implemented not only in Ostrava. Innovative companies that want to closely cooperate with the academic sphere can also find high-quality facilities in the newly established Business Incubator at the Technical University of Ostrava.

High-quality infrastructure and education

A key factor for the successful entry and effective operation of firms in the region is high-quality infrastructure and thus easy accessibility to suppliers. Until recently, Moravia-Silesia suffered from the lack of an highway linking it to the rest of the country and to neighbouring states. Today, the situation has improved somewhat with the opening of a section of the DI highway linking Ostrava to Brno, and thus to Prague, Vienna, and Bratislava (final completion is scheduled for the end of 2009). Another highway is under construction and will connect the region to the Polish road network (AI – Gliwice, Gdansk and A4 – Krakow, Wroclaw, Berlin). Of course, feeder roads, city bypasses and access roads to industrial zones are also being built.

A jewel of the region's transport infrastructure is the high-speed Pendolino rail service from Ostrava to Prague. Trains also run daily to other regional centres in the Czech Republic and there are direct lines to Warsaw, Krakow, Bratislava and Vienna.

Leoš Janáček International Airport in Mošnov (20 km from the centre of Ostrava) provides regularly

scheduled service to Prague and Vienna. The high quality of education in Moravia-Silesia constitutes another benefit for existing and newly incoming investors. Emphasis is placed on close cooperation between the manufacturing industry and tertiary educational institutes in order to produce highly qualified graduates. The region also offers a full range of secondary schools (high schools, business academies, language schools and technical schools providing education in various engineering disciplines) and four universities, the largest being the Technical University of Ostrava with 19,000 students receiving education in economics, electrical engineering and informatics, mechanical engineering, mining-geology and metallurgy and metals engineering. University of Ostrava educates students in the fields of natural sciences, philosophy, pedagogy, healthcare and social sciences, and a medical school is being established there. The other two universities in the region are Silesian University (Opava, Karvina) and Business School Ostrava plc.

With the Operational Programme Research and Development for Innovation, three of the local universities are preparing to establish a centre of excellence under the name IT4Innovations. This involves a unique super-computer centre that will be focused on modern fields of science including mechatronics, biomedicine, security engineering and nanotechnology. The project will lead to a significant concentration of research capacities in the IT and other innovative sectors in the region, thus contributing not only to economic development, but also to stronger links between business and academia, more effect transfer of technologies and the establishment of new spin-off firms.

Leisure activities

Beyond business, Moravia-Silesia offers an abundance of entertainment, sporting and cultural activities for spending one's leisure time. In winter downhill and cross-country skiing are easily available, while in summer a dense network of cycling and hiking trails give visitors and residents an opportunity to enjoy the region's natural beauty. Golf enthusiasts will find high-quality courses in Čeladná, Ostravice, Šilheřovice, Kravaře and Ropice u Třince.

Moravia-Silesia is well-known for the numerous cultural and sporting events that take place here. The region has hosted World Championships in ice hockey, floorball and volleyball and the European Championship in indoor football and other sports. Each year, more than 100 world-music artists and roughly 20,000 fans from around Central Europe come to the region for the Colours of Ostrava festival. Lovers of classical music particularly enjoy the Beethoven and Janáček festivals held in Hradec and Hukvaldy, respectively.

Ostrava's theatre scene is well-known thanks to the Moravian-Silesian National Theatre and Petr Bezruč Theatre.

> Filip Chlebiš, Czechlnvest



Reform of tertiary education in the Czech Republic sets a demanding task for the country's institutions of higher learning - conceptual establishment of modern third-generation universities. Universities serve as a source of highly skilled workers, whereas the investment of resources in higher education has far-reaching effects on society by directly influencing the quality of education, research and development, and services. In connection with the changing paradigms of the role of universities in society (Lisbon Process, ERA) and in accordance with the longterm focus of the Ministry of Education, Youth and Sport (MEYS) and reform of tertiary education, the importance of universities' third role is growing, particularly with regard to their competitiveness and development. In this respect, one of the key areas for creation of added value and development of universities' services for the broader public consists in the infrastructure for knowledge transfer, which is the basic element of support for innovation processes leading to effective application of research and development findings in the commercial sphere. From the state's perspective, importance is attached to new inventions and products resulting from the creative endeavours of universities. This concerns not only creation and publication, but also

protection of intellectual property and targeted development so that these results can be put into practice and become part of existing or newly established innovative firms within the processes of creating market value.

With roots dating back to 1716, the Technical University of Ostrava is one of the Czech Republic's leading universities. In 1849 the school received an imperial decree and this year is celebrating the 160th anniversary of its establishment. TUO has long been engaged in developing the necessary conditions for the effective practical application of research and development findings. An important part of the school was and still is the building of infrastructure for the development of cooperation with the commercial sphere. This infrastructure comprises the technology pavilions of the Centre for Advanced Innovation Technologies (CAIT). The CAIT-TLI applied-research laboratory and TUO's business incubator represent a unique infrastructure in the Czech Republic. For example, the business incubator was established within the Prosperity Programme (part of the Operational Programme Industry and Enterprise) at a cost of CZK 220 million; aid from the Ministry of Industry and Trade (MIT) amounted to CZK 148,790,000. The incubator, which is a key element of the

university's cooperation with companies and support for innovation, was completed in June 2008, when it began operation with a workshop titled Research and Development for Innovation, Innovation for Business. The business-incubator building had previously served for a presentation of the region in March, when we welcomed the European commissioner for regional development. Danuta Hübner.

The concept of the CAIT, an important part of the infrastructure for effective application of R&D results, was progressively promoted through CAIT workshops in cooperation with leading Czech and European specialists. The first workshop was conducted in February 2005 on the TUO campus under the auspices of Ing. Martin Jahn, deputy prime minister of the Czech Republic and chairman of the Government Council for Research and Development. The second annual workshop took place in February 2006 under the auspices of Linda Duffield, ambassador of Great Britain. The event featured the participation of Dr. Alex Smeets (director of St. John's Innovation Centre, Cambridge), Dr. Jon Cox (manager of the Oxfordshire Investment Opportunity Network, Oxford Innovation) and Dr. Geraldine Barry (director of the Technology Transfer and Scientific Cooperation Department, Brussels), as

well as representatives of companies, the MEYS, MIT, the Council for Research and Development, Czechlnvest and other organisations. The 2007 CAIT workshop, under the title Incubation of Companies and Support for the Development of Innovative Business, focused on the construction of the business incubator.

Within the Technical University of Ostrava, a unique infrastructure for connecting the academic and commercial spheres is being developed, thus

What is a supercomputer?

A supercomputer is generally consid-

ered to be a very high-performance

computer that has vastly higher com-

puting power than an ordinary com-

puters. Supercomputers are currently

used for solving the most difficult

research and development problems

through simulations, and their impor-

tance is continually growing. There-

fore, if the Czech Republic wants to

be competitive, it must ensure that

research workers and others have

access to a supercomputer, thus ena-

bling them to perform computation-

ally demanding tasks in various fields.

creating an important basis for effective use of ERDF (European Regional Development Fund) resources within the Operational Programmes Education for Competitiveness and Research and Development for Innovation (OPEC, OPRDI) in order to fulfil the convergence priorities of the European Union. The university is actively preparing projects in individual priority axes of the Operational Programmes focusing

on its strengths and competencies. Emphasis is placed on interdisciplinary research activities bringing forth unconventional new ideas that are necessary for the development of innovation.

One of the most prestigious OPRDI projects being prepared by TUO involves cooperation with Ostrava University, Silesian University in Opava and the Institute of Geonics of the Academy of Sciences of the Czech Republic. This unique project, called IT4INNOVATIONS, has the aim of building a national centre of outstanding research in the area of information technologies. This newly established centre will make it possible to concentrate a full range of scientific fields relating to information technologies and thus to enhance their development. Among other things, the project will involve the acquisition of a supercomputer that should be put into operation in 2013 and should rank among the world's 100 most powerful supercomputers (currently the Czech Republic does not have even one supercomputer in the world's top 500).

The IT4Innovations centre of excellence should function as a top research centre for academic purposes while also conducting research that is applicable in the commercial sphere. The basis of the planned centre will be **computing**, which is ranked ahead of other scientific disciplines and categorised in four mutually related key areas:

I. IT4People (Information Technology for People)

IT4People is focused on improving the general population's quality of life through modern

information technologies. Within this area, TUO has already realised initial successes with the FLOREON+ project, which involves a unique system that enables modelling and prediction of the development of flood scenarios. The results of flood prediction should be available to a broad spectrum of specialists (crisis-relief organisations, municipal authorities, etc.) that in the event of a crisis situation or threat thereof will be informed via advanced visual means. It should be possible

to display the provided information of any device, i.e. not only in a centre with stateof-the-art technology, but also on mobile telephones. Everyone who needs to be informed of a flood situation, for example, will be able to obtain maximum information and thus properly assess the situation. It is expected that FLORE-ON+ will be used throughout the Czech Republic and abroad, though the large vol-

ume of data processed during simulations places extreme demands on the computer equipment. Similar modelling and simulations, using the GSM network and GPS technology, are used for monitoring traffic in Ostrava. Simulations of pollution, fires and ecological hazards are also being developed.

2. SC4Simulations (Supercomputing for Simulations)

The second key area is focused on supercomputing - research and development of new methods and algorithms for computational mathematics. Supercomputing is an integral aspect of high-quality research and development in a wide range of fields, including medicine and biomechanics, in which supercomputing is used for optimising the design of rehabilitation aids. Due to economic reasons, in the mechanical-engineering and automotive industries supercomputing is increasingly being used for simulations in optimising the shapes of products, whereas the potential of algorithms in strength calculations is widely used. For example, a project implemented by research workers at TUO in cooperation with Stanford University resulted in the development of algorithms that enable optimised performance of engines used in Formula I cars.

3. EC4Innovations (Embedded Computing for Innovations)

IT4Innovations is not only about supercomputing, but also involves its connection with

small-scale computing. Research and development of sophisticated embedded systems applied in interdisciplinary solutions, e.g. in innovative medicine, is only a further extension of the use of these systems, which currently are a part of nearly all advanced devices commonly in use, such as mobile telephones, cars, aircraft and many others. Interdisciplinary research in the area of biomedicine in cooperation with the University Hospital is uncovering many nontraditional applications (photoelectrical plethysmography, nanopathology in connection with the Nanotechnology Centre, etc.).

4. Theory4IT (Theory for Information Technology)

Focused on basic research, Theory4IT is opening up the possibility of further development in the three previously mentioned areas. This involves new fields such as bioinformatics, soft computing, formal methods, etc. It is possible to document the applicability of formal methods in standard practice at crisis centres, where within emergency events these methods comprise a tool for resolving crisis situations, i.e. procedural processing of acquired information (e.g. telephone conversations) and transfer of responsibility to the exact algorithms that overcome the inadequacy of human reasoning in emergency situations

The benefit of the supercomputer centre can be seen in the possibility to perform extensive science-research calculations that increase the competitiveness of entities using the given infrastructure, for which it is currently necessary to go abroad. Potential users of the centre include industrial organisations such as Vítkovice, Saab Group, IVAX, the University Hospital in Ostrava and a range of others. For example, Olympus could use the data centre's infrastructure to handle tasks in the area of telepathology - scanning, evaluation and transfer of samples (one such sample can be 30 GB in size). Roughly 200 employees will work at the IT4INNOVATIONS centre of excellence, whereas in the course of its construction specialists from other areas of the country and from around the world will be hired. The costs of implementing the project in 2010-2015 are estimated at CZK 2 billion. Partners of the project will endeavour to obtain financing from EU structural funds, particularly from the Operational Programme Research and Development for Innovation. The project documentation is currently being prepared, and final approval of the project by the European Commission is expected in the first half of 2010.

> Vladimír Kebo, Vice-Rector for Cooperation with Industry

> > Ivo Vondrák, Dean of the Faculty of Electrical Engineering and Informatics

Cosmopolitan connections

An interview with Pascal Adam, Head of Transaction Services, DHL Information Services (Europe)

Why did your company decide to invest in the Czech Republic?

Prague became the location of choice after fulfilling several criteria including the availability of a skilled and flexible labour force, English in common use, well-established and reliable telecommunications networks, good air links with Europe and the rest of the world, the opportunity to reduce costs, and favourable investment incentives from the Czech government.

Are you happy with your Czech employees?

Yes, very much so. The specific skill sets required for our complex IT systems are becoming more generally available on the local labour market both as a result of increasing numbers of qualified graduates as well as Czech nationals returning home from foreign assignments.

Do you cooperate with any of the local secondary schools or universities to attract employees and ensure that they have the skills you require?

We cooperate regularly with the major Czech universities such as Czech Technical University and the University of Economics in their activities to attract new students in the IT area and to provide career opportunities for their graduates. We participate regularly in career fairs at the universities as part of our graduate recruitment program. We also occasionally offer part-time jobs to university students to enable them to augment their classroom-based knowledge with real-world experience.

Your centre covers all of the EMEA countries, so you presumably need people who speak many languages?

We require proficiency in English for all employees at DHL IT Services and have not faced any difficulties in finding qualified candidates with this knowledge on the local market. We require additional European languages, such as German and French, for our Service Desk, which responds to requests for assistance from the users of our services in Europe. Even for these languages we are able to find qualified candidates on the local market. I credit this to the Czech



Pascal Adam, Head of Transaction Services

Pascal Adam, a French national, moved to the Czech Republic in 2003 to oversee transaction services at the DHL Information Services centre for the Europe, Middle East and Africa region.

DHL IT Services (Europe) is one of the most important hubs within DHL IT Services worldwide. The company operates a state-of-the-art data centre housing hundreds of servers and processing millions of transactions per day.

Prague was selected as the location for the IT centre out of 60 potential locations all over Europe. The decision to locate the centre in Prague was announced in March 2003 and the centre began operations in 2004. It currently employs over 1,000 people representing over 60 nationalities.

Republic's membership of the European Union, the growing involvement of Czechs in international business, and Prague's increasingly cosmopolitan society which attracts citizens from across Europe.

You employ people of many nationalities. What attracted these people to the Czech Republic?

Our team in Prague consists of people from more than 60 different countries. In many cases this is due to requirements for very specific technical skills not available on the local market. There is also a benefit to having a culturally diverse workforce. It al-

lows us to approach problem-solving from a wide range of perspectives and better equips our organization to serve our global customers. You'd have to ask each of our foreign employees why they were attracted to the Czech Republic, but I believe the theme that would emerge would be the comfortable standard of living, the rich cultural heritage and social life, and Prague's convenient location at the heart of Europe.

Czech wages are going up. Is this a threat to your operations here?

So far this has not been an issue. Naturally we are always concerned with managing our costs; however, the recent global economic situation has led to a more stable environment. In addition, we are able to take advantage of improvements in computing technology, such as virtualization of the hardware environment, which continue to enable gains in productivity and counter any inflationary trends.

Is the current global economic downturn going to have any effect on companies like yours?

We believe it will strengthen functions like shared IT services that leverage economies of scale and centres of expertise to provide economic and competitive advantages. DHL IT Services, which specialises in managing information technology and the IT infrastructure, can demonstrate the ability to reduce costs while delivering improved service, benefits which are key to any company's success in the market place.

The Czech Republic has undergone massive changes in the last two decades. Nevertheless, is anything still missing?

Since DHL IT Services is in the business of providing reliable, predictable and cost-effective computing development and operations services to the Deutsche Post DHL group, we value stability and predictability in our working and operational environment. The Czech Republic has been able to provide this environment to date and we have every reason to be confident that this will continue to be the case in the future

DHL IT Systems – DHL – Deutsche Post World Net

DHL IT Services belongs to the Global Business Services division of Deutsche Post World Net. The GBS division bundles all common and non-business-specific services and provides them at cost and at world-class service levels to the entire DPWN group.

DHL IT Services delivers end-to-end IT solutions and support for the company's IT infrastructure consisting of networks, hardware, operating systems and applications. The company's operations are divided into three geographical regions:

- IT Services Europe (offices in Prague, Czech Republic and Bonn, Germany)
- IT Services Americas (offices in Scottsdale, Arizona, USA)
- IT Services Asia-Pacific (offices in Kuala Lumpur, Malaysia)

DHL is a wholly owned subsidiary of Deutsche Post World Net (DPWN), the world's leading logistics group. Its integrated companies – Deutsche Post, DHL and Postbank – employ over 500,000 full time employees worldwide.



What advice would you give to foreigners who are sent by their employer to the Czech Republic?

Well, I think that for an expatriate it is important to learn about the country and not try to replicate their previous life. The history and mentality are different, but the Czech Republic is really in the centre of Europe so it is easy to travel back if you are missing your home country. But I promise this will happen less and less if you discover the Czech lifestyle.

What is your favourite place in the Czech Republic?

I have a particular affinity for Vyšehrad in Prague; walking there at the weekend is very relaxing. Also, of course, Český Krumlov outside the tourist season. But definitely my preferred place is my apartment with my family. It is now our second home and even from time to time our main one as we spend more time here than in the south of France.



CeBIT 2009:

the global economic crisis leaves its mark





CeBIT, the international ICT industry's leading event, took place in Hannover, Germany from 3 to 8 March 2009. As with other big trade fairs, CeBIT saw a decline in attendance this year. Fewer exhibitors (4,300, roughly 25% fewer than in 2008) and visitors showed that the world economic crisis has left its mark on the ICT sector too. Cuts in marketing budgets have particularly affected small and medium-sized Asian companies. "Given the depth of the global economic crisis, the number of exhibitors is a success. In view of the overall business environment, we are extremely satisfied," said Ernst Raue, member of the board of directors at Deutche Messe. "Companies exhibiting at CeBIT are demonstrating that they are in good shape and want to put the recession behind them quickly. At CeBIT 2009 the goal is – now more than ever – to develop new business and act boldly vis-à-vis the future."

The key focus this year was on "green IT", i.e. energy-efficient IT solutions, as well as on the continued development of the internet, as epitomized by the buzzword "Webciety". CeBIT also featured all aspects of business IT solutions, including risk-management and business-intelligence applications and safety aspects of the IT world.

CeBIT is not only an event where you can find plenty of new ICT technologies and solutions. It is businesses and investors from around the globe that are looking for new opportunities. The importance of this event was demonstrated by the attendance of German Chancellor Angela Merkel, who opened this year's exhibition and Californian Governor Arnold Schwarzenegger. California became a partner of CeBIT this year, representing more than 100 companies mainly from Silicon Valley.

The Czech Republic left its mark on CeBIT as well. More than 15 ICT companies presented their innovations and ideas. Czechlnvest sent its representatives to keep tabs on new trends in the ICT sector as well as to find new potential investors. They noticed the increasing interest of investors from the ICT industry in learning more about the business environment and potential of the Czech Republic. Last year alone, Czechlnvest attracted 43 new investment projects focused on software development or IT services and this year it would like to increase this number. In terms of the number of investment projects attracted to the country, ICT surpassed traditional sectors like the automotive industry and mechanical engineering in 2008.

Here are only a few innovations that were introduced in CeBIT 2009:

Car radios presented by Blaupunkt can receive hundreds of thousands of stations worldwide through the internet. All these unique devices need to get online is a Bluetoothenabled mobile phone.

Vodafone presented its Google G2 mobile phone with the Android operating system.

Laptops are getting smaller and smaller, but they are packed full of technology. Acer presented its first teninch notebook fitted with Intel's new 1.66 GHz processor which can be equipped with 2GB of RAM.

Microsoft released a test version of the successor to Vista: Windows 7. The highlight features of the new operating system are billed as simplicity, reliability and speed. Critics are unanimous in saying that the new operating system runs like a dream. Installation is fast, memory requirements are lower, and it consumes less energy than its predecessor.

The fact that computers in stand-by mode continue using electricity unless you actually unplug them is a long-standing problem. Fujitsu Siemens demonstrated a solution to this problem with a world premiere of 0-watt computer, which uses no power in standby mode.

Intel presented a new generation of processors based on the new Intel Core microarchitecture. The particularly powerful Core i7 965 Extreme Edition (3.2 GHz) improves performance by up to 40% without increasing power consumption.



After a record 2008, when the sumptuous MIPIM enticed exhibitors and visitors with luxury, the 2009 event was marked by a certain disenchantment. A small yet very revealing detail – while the modest heliport at the end of the pier strained under constant take-offs and landings of helicopters last year, the distinctive sound of rotors was heard only a few times a day this year. The number of yachts anchored nearby also declined somewhat. And the number of visitors – 18,000 from eighty countries – was less than two-thirds of last year's total.

In spite of the lower number of visitors, both Czech segments featured numerous municipal, regional and private development projects and a range of important meetings. The relative lack of visitors paradoxically resulted in higher quality and intensity of individual meetings. Representatives of Czechlnvest were thus in a favourable position when after a slight collapse of investments focused purely on Eastern Europe, i.e. mainly Ukraine and Russia, many investors began inquiring about the Czech Republic due to its stability in the CEE region.

The most numerous visitors included representatives of investors, banks and funds that have money today and see an outstanding opportunity to grab a big piece of the market and increase their profits. As opposed to last year, on the other hand, there were fewer expansion-minded developers of business properties; in spite of this, however, there was a range of meetings focused mainly on construction of industrial and office spaces in the regions. Thus, there is a chance that class-A offices may arise in the regions in mixed projects also involving retail and residential spaces. If individual projects can be combined with regeneration of municipal brownfields, we must consider this as a great success. Among architects and designers there was also a large number of parties interested in extending their services to the Czech Republic, which they increasingly perceive as a part

of Western Europe with its business regulations. Another important part of the trade fair consisted in meetings with existing clients and partners and strengthening of cooperation between our respective organisations.

Each year MIPIM traditionally concludes with the MIPIM Awards for the world's best projects of the past year in five categories: administrative centres, renovated office buildings, projects for the hotel and tourism industries, residential projects and "green buildings" for environmentally friendly projects. A point of interest is that the Czech architect and former politician Jan Kasl is a traditional member of the jury. This year's overall winner was the conversion of the former Highbury stadium into the Highbury Square residential area.

MIPIM is one of the world's biggest and most important trade fairs focused on real estate and investment in this segment. It is thus an ideal opportunity for presenting projects from the private and public sectors across the real estate market, from construction of hotels and golf courses, through regeneration of old industrial complexes and construction of new industrial properties and office buildings, to regeneration of entire city districts and visionary projects involving the construction of valleys of skyscrapers beyond the Urals according to the designs of Norman Foster. For visitors, the trade fair offers the possibility to gather information, form opinions on the current situation during the many discussions with specialists and, mainly, to find suitable opportunities for entering the market and investing. At MIPIM one can meet with representatives of municipalities, major consulting firms, banks, development companies, architects, designers and other entities that operate on the real estate market.

Czech cuisine: an exceptional mix of tastes

There is no such thing as Czech cuisine. If you ask ten Czechs about their national food, you will get eleven different answers. Located in the heart of Europe, the Czech Republic is a culinary melting pot of influences from Germany, Austria, Hungary and practically everywhere else. The result is an interesting mix of tastes even though it is true that the country's cuisine mostly consists of heavy, rich foods, but only if you know how to make them properly.



Statistics convincingly show that in the kitchen most Czechs give priority to one of the following: pork with dumplings and cabbage, beef in cream sauce or goulash. These are the most popular foods for eight out of ten Czechs. And the drink of choice is, of course, beer. In fact, Pilsner takes its name from the West Bohemian city of Plzen, where this type of beer was first brewed.

Regional specialities

If the Czech Republic does not have one specific national cuisine, it does have a lot of local specialities, including several protected by the European Union, such as Horice Rolls in east-central Bohemia, Karlovy Vary waffles in the northwest, Olomouc curd cheese in central Moravia and many more.

The most widespread regional speciality is freshwater fish. Czechs have a long tradition of fishfarming, particularly in southern Bohemia, where one will find a network of interlinked artificial ponds and canals in which fish are raised, primarily carp (another great side-dish for beer) as well as many other types.

Whereas in many other places in Europe people look down a bit on commercially raised fish, thanks to their centuries-old tradition of fish-farming Czechs tend to view harvested wild fish with suspicion. Incidentally, fried carp with potato salad (and beer) is the traditional Czech Christmas dinner. Regional traditions mean that carp from restaurants in

the fish-farming town of Třebon is loved by those who otherwise simply cannot stand fish.

Michelin Morning-star

The biggest problem with Czech food is the fact that nobody knows how to cook it. That is, they don't know how to cook it in restaurants. Home-cooked pork with dumplings and cabbage is a delicacy. During four decades of communist rule, training programmes

for cooks and waiters were the last resort for young people that could not get into other schools. This was quite a paradox, as under central planning star chefs had incomes well above the average.

Fortunately, this situation now belongs to the past. Last year Prague celebrated the awarding of the first Michelin star for a local restaurant, Allegro at the Four Seasons hotel with its Italian chef. This illustrates that Czech gastronomy as a whole has decidedly taken a turn for the better in the past two or three years.

Another Michelin star was awarded to the restaurant Maze at the Hilton Old Prague hotel. Maze was established by the gastronomical celebrity Gordon Ramsey and thus attracted Michelin's attention to Prague. Six month later, however, Ramsey sold Maze, along with a number of his other restaurants around the world. Prague lost a good restaurant but there are certainly plenty more pleasant eateries that deserve the attention of the French producers of the Michelin catalogue.

Where to eat well

On one hand, there are the aforementioned regional specialities that are best served at home in their respective birthplaces – fish in southern Bohemia, waffles in the northwest, wine in the southeast. On the other hand, there are restaurants. Here, unfortunately, it still applies that it is not a problem to wander into a smoky pub where the height of culinary art is dry chicken with peaches and cheese

served with a lot of stale garnish. Nevertheless, these establishments are slowly but surely raising their game and putting pressure on restaurants where the cooks actually know how to cook. More than anywhere else, in the Czech Republic a basic rule is that if a menu has more than two or three pages, the best option is simply to run away.

Perhaps the most expansive, reliable guide to restaurants in the Czech Republic can be found at www.grand-restaurant.com. But if you do not have access to the internet, this simple bit of advice may help: a typical Czech food is Hungarian goulash. There isn't much to it, so it's hard to ruin it and it is available in most restaurants. And if it's already a day old when you eat it, that's when it's the best.

Jiri Sochor, Czechlnvest

Goulash for four people



Ingredients:

400g pork shoulder, 3 onions, 2 spoons of sweet pepper, pinch of hot paprika, 2 cloves of garlic, strained tomatoes, (ground) cloves, (ground) cumin, bay leaves, allspice, marjoram, pepper, salt

Slice the onions into a large pot and lightly fry them in oil. Quickly brown the cubed pork on the onions and add spices and garlic to taste. Fry for a maximum of one minute so that the paprika does not become bitter. Add a little water and let it simmer (approx. 60 minutes). Add tomatoes, more water and spice to taste, and thicken with flower dissolved in water in a separate cup. Let simmer for approx. 20 minutes. Goulash is best served with dark bread or bread dumplings.

Partnership to Support Foreign Direct Investment in the CR





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