

CZECH FOCUS

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in the Czech Republic



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Chikahito Harada,
Ambassador of Japan in the Czech Republic

The year 2009, the 20th anniversary of the Velvet Revolution, was an epoch-making year for both Japan and the Czech Republic. Ever since 1989, the Czech Republic has been successfully integrating itself into the European Union, which culminated in its presiding over the EU during the first half of 2009. Last May, when the Czech Republic held the rotating presidency of the EU, the Japanese Prime Minister visited Prague to attend the Japan-Czech Summit as well as the Japan-EU Summit. At the Japan-Czech Summit, the leaders of both nations reconfirmed the excellent relations between our two countries.

Currently over 1,500 Japanese citizens reside in the Czech Republic, and about 240 Japanese companies are in operation here. In addition, more than 120,000 Japanese tourists visit the Czech Republic annually. The Czech Republic is one of the most well-known and attractive destinations for Japanese. These closer relations – as the figures indicate – are further expanding and deepening.

With regard to economic relations, bilateral business has been significantly strengthened in recent years. According to CzechInvest's statistics, Japan is the second largest greenfield investor, with a total of USD 3.2 billion invested so far. A recent JETRO report indicates that, for Japanese investors, the Czech Republic is the fourth most popular investment location within the EU member states (the top three investment locations for Japanese investors in European countries are Great Britain, France and Germany) and it is the most popular location among the Central and Eastern European countries.

The economic crisis that began in autumn 2008 had a worldwide impact, which included the Czech Republic. Despite this crisis, the good economic relations between the two countries have been barely affected. Most Japanese companies are making considerable efforts to continue their operations here in the Czech Republic. Further-

more, some new Japanese companies have come to the Czech Republic to invest in high value-added areas during the crisis. This fact indicates that the superior infrastructure and conditions for investors have been maintained in the Czech Republic and that Japanese companies have made further contributions to the Czech economy even during the economic crisis.

Japanese investments in the Czech Republic are, above all, concentrated in the automobile and electronic sectors. Recently, this trend has been changing. New cooperation between Japan and the Czech Republic has been launched in the area of research and development. Japanese companies have established technology centres as well as manufacturing plants. Last year, a few Japanese medical companies launched technology centres in the Czech Republic. This is a new and welcome trend in the relations between the two countries. Many Japanese investors have come to recognize that the Czech Republic has a high degree of potential in the technology sector. In my view, there is much more potential for both countries to cooperate in R&D.

In this context, one of the most useful events is the Japan-Czech Technology Days, which have been held on a regular basis since 2005. The fifth Japan-Czech Technology Days event is scheduled to be held in Tokyo from 25 to 27 May 2010. It is a first-rate opportunity for the scientists and investors of both countries to share the latest information on research and development. I believe that this will be a very fruitful and successful event to initiate further cooperation between our two countries.

Chikahito Harada,
Ambassador of Japan in the Czech Republic

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Headline news

Beginning immediately in January, the Czech Republic will face a number of important issues and changes in 2010.

- The event of the year will be the parliamentary elections in May. The current favourite is the Czech Social Democratic Party (ČSSD) led by Jiří Paroubek. Senate and municipal elections will be held in October.

- A literal revolution occurred in the field of criminal law in January. Murderers will face stiffer sentencing. Conversely, those guilty of involuntary manslaughter will be able to serve their sentences under house arrest.

- Consumption tax increased in January. Due to the economic crisis, the state levied an additional one-crown tax per litre of beer, petrol and diesel. A pack of cigarettes is now CZK 2.50 more expensive and the price of a litre of hard alcohol increased by CZK 5.

- For the same reason, the state raised the VAT rates from 9% to 10% and from 19% to 20%. However, the corporate income-tax rate fell by once percentage point to 19%.

- The state is increasing caps on social insurance contributions. People with a monthly gross income over CZK 98,000 will pay more.

- The price of road-tax stamps and highway tolls have also risen. The government increased tolls on Fridays in order to reduce the number of trucks on Czech highways on that day of the week.

- Regulated rents will increase by an average of 17%, though Czechs will spend a few hundred crowns less for electricity and gas. However, the price of water will rise in some cities.

Politics and Legislation

■ October 2009

Czech Parliament approved a law that will accelerate the construction of transportation infrastructure. This would be originally to quicken the pace of construction

of the R35 expressway. It will now be possible to begin construction without the state having to gain land-ownership rights, which will become rights of the user.

- **December 2009** Czech Parliament approved the budget for 2010. It includes income totalling roughly CZK 10.22 trillion and spending totalling CZK 1.185 trillion, resulting

in a deficit totalling CZK 163 billion. The deficit as a percentage of GDP will reach 5.7%.

In the final phase of budget negotiations the deficit increased by CZK 12 billion as a result of amendments proposed by Social Democratic and Communist MPs; the Civic Democrats did not take part in the vote.

■ December 2009

Domestic sole traders' entry into European Union markets was simplified on 28 December 2009.

Now a trade license in the Czech Republic should suffice for negotiating orders abroad. This is pursuant to the Act on Free Movement of Services, which had recently come into effect. The Czech Republic thus became bound by the European Union directive enabling liberalisation of the services sector in the union, which represents up to 70% of the EU27 economy.

Economy

- **December 2009** According to Eurostat, the Czech Republic's 2008 GDP per capita calculated according to purchasing power parity was 20 percentage points lower than the EU average. Luxembourg was the best off, with GDP per capita more than 2.5 times higher than the EU average. The situation was worst in Bulgaria and Romania, where GDP per capita did not even total half of the EU average.

■ December 2009

In its latest report, the international rating agency Standard & Poor's confirmed

the Czech Republic's debt rating of A/A+ with a stable outlook. In its commentary, the agency stated that "the Czech Republic's rating is supported by the diversification and competitiveness of its economy, despite the rising yet acceptable level of national debt".

- **January 2010** According to Saxo Bank, the Czech economy should grow by 1.35%

y/y in 2010. The result should be even better in 2011, when growth of 2.65% is expected.

However, unemployment should continue to increase.

■ January 2010

Czech automakers produced a record number of vehicles last year. Automobile production increased by 2.85% to 975,111 units.

■ January 2010

The Czech Republic's foreign-trade balance showed a record surplus for 2009. Accord-

ing to analysts' estimates, the surplus increased to CZK 150 billion from CZK 68 billion in the previous year.

■ January 2010

The number of new joint-stock companies and limited liability companies established in the Czech Republic grew last year, continuing a trend that began in 2007. A total of 25,837 such companies were formed. The financial crisis had only a minimal effect on the rate of company establishment, according to Josef Jaroš of Smart Companies.

Business

- **October 2009** Based on a recommendation by Finance Minister Eduard Janota, the government decided that it would not sell Czech Airlines (CSA) to the Unimex-Travel Service consortium. This put an end to the privatisation of CSA and almost 92% of the airline's shares thus remained in the hands of the state. According to Janota, the offered price was not the only criterion affecting the government's decision.

■ November 2009

The Japanese company Olympus opened a new technology centre in Přerov on 24 November. The new building will be used for the production of medical devices based on electrical impulses. The firm invested CZK 140 million in the construction of the new facility. The centre currently has 28 employees. This number should gradually increase to 150 by 2011.

■ November 2009

The Litomeřice-based company Hennlich Industrietechnik, which supplies components and entire systems for the production of steel, energy, investment aggregates and hydraulics, announced plans to invest more than CZK 100 million in a new research and development centre. The money will be invested in environmental protection



Czech automakers produced a record number of vehicles last year.



The Czech Republic placed tenth in the ranking of countries with the fastest internet speed.

products and renewable energy sources, an area in which the company has long been involved.

■ **November 2009** Inter Ikea Centre Group, which builds and operates Avion Shopping Park retail centres, announced plans to invest EUR 300 million (roughly CZK 7.8 billion) in the Czech Republic and Slovakia within three years. The company set aside EUR 200 million (CZK 5.2 billion) for projects in the Czech Republic.

■ **December 2009** Benteler Aluminium Systems Czech started manufacturing aluminium car bumpers in Ostrov, near Tachov. The company hired 30 employees for its trial operation. Benteler invested tens of millions of crowns in the new factory facility.

■ **December 2009** Car-parts manufacturer Donghee Czech was been granted permission from the Czech Ministry of the Environment to expand its production of chassis parts and fuel tanks for automobiles in the Cesky Tesin plant. Thanks to the expansion, the company will boost its current annual capacity from 25,000 to 300,000 units and offer 180 new jobs.

■ **December 2009** Medis International has opened a generic-drug packaging plant at Bolaticene near Opava, having spent CZK 200 million on this greenfield investment. The plant is equipped with state-of-the-art technology.

■ **January 2010** In abridged EIA proceedings, the Olomouc Regional Office approved the expansion of the aviation-component production facility in Hlubocky near Olomouc. Honeywell Aerospace Olomouc will hire 191 new employees thanks to the expansion. The new premises will be used for the production and repairs of aircraft turbine-engine

components. Honeywell currently employs 879 people at the plant.

■ **January 2010** Tesco Stores Czech Republic will start providing the Tesco Mobile service here, through which it will provide services to mobile operator services. The company also plans to open 30 new stores in the Czech Republic this year, thus creating will thus create roughly 1,000 new jobs.

Miscellaneous

■ **November 2009** The Czech Republic ranks third among the 12 European Union member states that joined the Union between 2004 and 2007 in terms of its success in drawing EU funds. The most successful new member states when in terms of drawing funds are Estonia and Cyprus. Lithuania is second, followed by the Czech Republic. Slovakia is at the other end of the scale, as it currently ranks as the least successful country.

■ **November 2009** Transferring from one bank to another become substantially easier for individuals who are clients of Czech banks when the Czech Banking Association Code relating to client mobility came into effect. It now suffices for clients to visit the bank at which they have decided to open a new account. The new bank then handles all necessary matters for clients at their original financial institution, including the transfer

of standing payment orders and account termination if required.

■ **December 2009** According to a survey conducted by Deloitte, 43% of the biggest Czech firms anticipated an improvement in economic conditions in the coming six months. In a similar survey carried out in September, this figure was only 13%. In comparison with other monitored countries, the Czech Republic showed the biggest growth in optimism.



Medis International has opened a generic-drug packaging plant at Bolaticene near Opava.

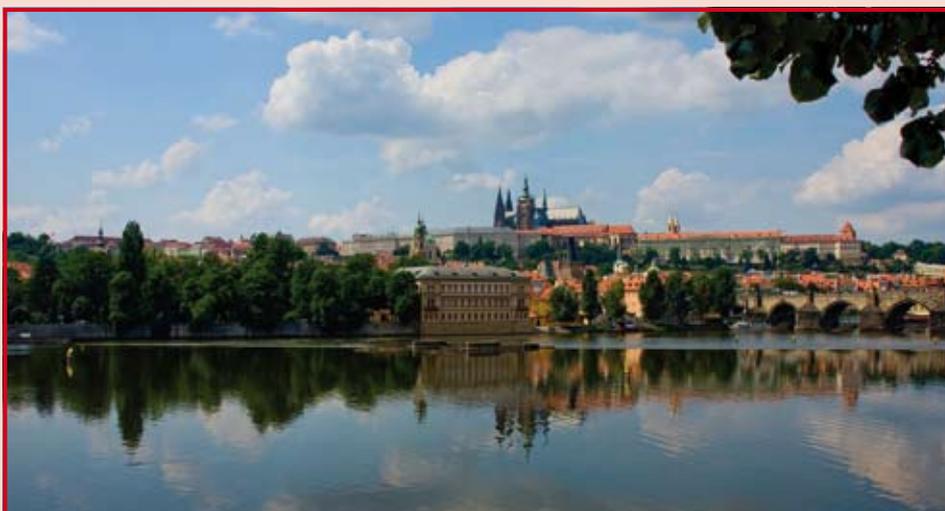
■ **January 2010** According to the internet server internationalliving.com, which focuses on quality of life in vari-

ous countries, the Czech Republic is the 24th best country in which to live, overshadowing even Great Britain. The ranking covered 194 countries.

■ **January 2010** According to the Automobile Importers Association, the best selling model on the Czech market last year was the Škoda Octavia. Drivers registered 21,923 such vehicles. The second most popular vehicle was the Škoda Fabia with 17,175 registrations.

■ **January 2010** As of 1 April, four Czech companies will spend at least one quarter of the year in America's Silicon Valley thanks to the CzechInvest's new CzechAccelerator program.

■ **January 2010** The Czech Republic placed tenth in the ranking of countries with the fastest internet speed in the third quarter of 2009, according to data from the American network Akamai. The results of the ranking showed that the average data download speed in the Czech Republic is 4.8 Mb/s, up 23% y/y. South Korea led the ranking with 14.6 Mb/s. The United States came in 18th with an average speed of 3.9 Mb/s.



The Czech Republic is the 24th best country in which to live.

Sources:
Czech Information Agency, Czech Press Office, MF Dnes, Právo, Lidové noviny, Hospodářské noviny, E15, Profit, Euro, Czech Business Weekly, iHNed.cz, Aktualne.cz, Novinky.cz, iDnes.cz, MediaFax, Revers, OECD, Czech Statistical Office, Ministries of the Czech Republic

Czech M&A in 2009 and outlook for 2010

Top 10 CEE Deals from 01 November 2009 to 20 January 2010

Announcement Date	Status	Target Company	Bidder Company	Seller Company	Deal Value (€ m)
5. I 10	C	NK Russneft OAO	Mikhail Gutseriyev (private investor)	En+ Group Ltd	4595
20. XI 09	P	United Aircraft Corporation (32.67% stake)	The Federal Agency for Federal Property Management; and Vnesheconombank		1054
5. XII 09	C	Gostinichnaya Kompania (51% stake)	Russia Real Estate Fund LP	The Moscow City Government	705
8. I 10	C	Industrial Union of Donbass Corporation (50% stake)	Investment group led by Alexander Katunin; and Vnesheconombank	Vitaly Gayduk (private investor)	694
13. I 10	P	Volzhskaya TGK OAO (62.43% stake)	Integrated Energy Systems		595
12. XI 09	P	ArcelorMittal Ostrava as (13.88% stake)	ArcelorMittal	PPF Group NV	269
20. I 10	P	Central European Media Enterprises Ltd (Ukrainian Operations)	Harley Trading Limited	Central European Media Enterprises Ltd	213
9. XI 09	P	Dalkia Usti nad Labem as (85% stake)	CEZ as	Dalkia Ceska republika as	208
4. XII 09	C	LEO LT AB (38.30% stake)	Government of Lithuania	UAB NDX Energija	197
10. XII 09	P	BPS-Bank (Belpromstroibank) JSC (93.27% stake)	Sberbank	Government of Belarus	191

Notes:

Based on announced deals, including lapsed and withdrawn bids. Based on dominant geography of the target being CEE.

Activities excluded from table include property transactions and restructurings where the ultimate shareholders' interests are not changed.

Source: mergermarket

CEE Quarterly Activity

Period	Value (€m)	Volume
Q1 2003	9 539	63
Q2 2003	18 168	70
Q3 2003	8 590	94
Q4 2003	3 785	83
Q1 2004	3 410	89
Q2 2004	5 074	144
Q3 2004	10 625	149
Q4 2004	17 914	190
Q1 2005	11 144	153
Q2 2005	22 919	176
Q3 2005	18 651	193
Q4 2005	18 655	215
Q1 2006	9 825	174
Q2 2006	31 147	193
Q3 2006	17 978	188
Q4 2006	27 150	235
Q1 2007	17 675	226
Q2 2007	38 754	219
Q3 2007	22 943	216
Q4 2007	35 951	261
Q1 2008	24 048	240
Q2 2008	26 934	253
Q3 2008	8 189	160
Q4 2008	6 011	140
Q1 2009	6 519	109
Q2 2009	9 596	119
Q3 2009	7 393	114
Q4 2009	11 381	117

Notes:

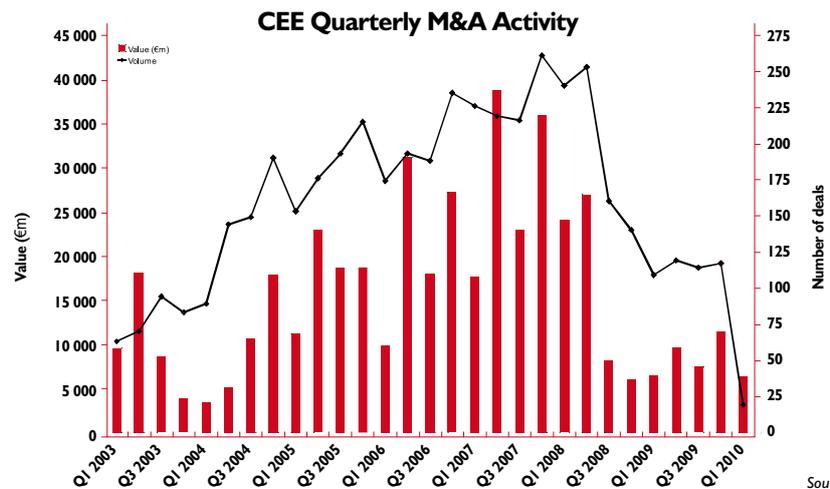
Based on announced deals, including lapsed and withdrawn bids.

Based on target dominant geography being CEE.

*Q1 2010 is from 01 January 2010 to 20 January 2010

Includes all deals valued over USD 5m. Where deal value not disclosed, deal has been entered based on turnover of target exceeding USD 10m. Activities excluded from table include property transactions and restructurings where the ultimate shareholders' interests are not changed

Source: mergermarket



Source: mergermarket

Activity Table of Private Equity Firms on CEE Buyouts - 01 November 2009 to 20 January 2010

Rank	House	Value (€m)	Deal Count
1	Swedfund International	118	1
2	Advent International	78	1
3	Enterprise Investors	66	2
4	CAPPA Fund Management	66	1
5	AnaCap Financial Partners	47	1

Rank	House	Value (€m)	Deal Count
1	Enterprise Investors	66	2
2	Swedfund International	118	1
3	Advent International	78	1
4	CAPPA Fund Management	66	1
5	AnaCap Financial Partners	47	1

Notes:

Based on announced deals, excluding lapsed and withdrawn bids.

Based on private equity firms advising the bidder on buyout deals where the dominant geography of the target company is CEE. Includes all deals valued over USD 5m. Where deal value not disclosed, deal has been entered based on turnover of target exceeding USD 10m. Activities excluded from table include property transactions and restructurings where the ultimate shareholders' interests are not changed

Source: mergermarket

Activity Table of Private Equity Firms on CEE Buyouts - 2009

Rank	House	Value (€m)	Deal Count
1	CVC Capital Partners	1 493	1
2	Mid Europa Partners	857	3
3	EQT Partners	237	3
4	TA Associates	137	1
5	Advent International Corporation	119	2
6	Swedfund International	118	1
7	TPG Capital	77	1
8	Baring Private Equity Partners	69	2
9	Tiger Global Management	69	1
10	CAPPA Fund Management	66	1
10	Enterprise Investors	66	1

Rank	House	Value (€m)	Deal Count
1	Mid Europa Partners	857	3
2	EQT Partners	237	3
3	Advent International	119	2
4	Baring Private Equity Partners	69	2
5	Penta Investments	27	2
6	GED Iberian Private Equity	21	2
7	CVC Capital Partners	1 493	1
8	TA Associates	137	21
9	Swedfund International	118	1
10	TPG Capital	77	1

The Czech Republic witnessed a dramatic drop in M&A activity last year. The 70% decline in deals seen in 2010 was mainly down to the macroeconomic situation, valuation gaps and lack of funding for potential buyers.

The widely varying price expectations of buyers and sellers hampered many deals. Despite a large number of M&A mandates, a large portion of deals did not close. Despite the overall slowdown, there were some significant deals nevertheless. One of the largest was Czech energy company CEZ's purchase of a 85% share in heating company Dalkia Usti nad Labem, with an option for the remaining 15 per cent share, and a 15 % stake in Dalkia Czech Republic, which could be worth almost CZK 10 bn in total.

Other significant deals last year include the acquisition by global private equity firm CVC Capital Partners of Anheuser-Busch InBev's central European brewing operations for an enterprise value of approximately USD 2,231 million and additional rights to a future payment estimated to be as much as USD 800 million contingent on CVC's return on its initial investment. These assets included Staropramen, the second largest Czech brewery.

Another large deal involved Nowaco Central Europe, a distributor and producer of chilled and frozen foods based in the Czech Republic, which was acquired by Bidvest for an enterprise value consideration of EUR 250m cash.

Despite all the doom and gloom of the past 12 months, volume and possibly also value of transactions are expected to pick up next year, judging by current deal flow and M&A reports. And the market is already picking up.

Industry sources say that much of the activity in 2010 will focus on the energy, chemicals, natural resources, health and food sectors. Consolidation in the alternative energy sector is also likely to occur this year.

Companies operating in the solar power sector are currently actively seeking photovoltaic acquisition targets before attractive guaranteed feed-in tariffs are cut next year. State subsidies have favoured the construction of solar panel plants across the Czech Republic, explains Pavel Marc, partner at the Prague office of law firm Wolf Theiss. "Now the subsidies have been cut, it makes more financial sense to own ten plants than just one," he notes.

After a slowdown for much of 2009, the volume of deals began to pick up at the end of last year, says Jon Mortimer, a partner at the department of transactions and restructuring with KPMG Czech Republic.

One key factor in the slowdown was the discrepancy in valuations between sellers and buyers, with many sellers still seeking valuations of two years earlier, says Mortimer.

"We are seeing a change in expectations and some convergence and sellers are accepting slightly lower valuations," says Mortimer.

Mortimer predicts that deal volume will increase in 2010. "I think we will see M&A activity picking up but it won't be a spectacular reawakening," Mortimer says.

Much of the M&A activity seen in 2009 involved distressed sales. Investment bankers predict there could be even more distressed sales in 2010. Until now a number of companies have struggled on by tightening their belts and banks have been quite slow to take action, Mortimer adds.

Mortimer predicts that much of the activity regarding distressed sales could particularly be seen among the real estate, construction, chemical and automotive sectors, all sectors which have been badly hit by the global crisis.

Across all sectors, the Czech Republic is likely to see numerous distressed opportunities. "It will be a buyer's market in 2010," asserts Petr Formanek, executive director at Patria Corporate Finance, who foresees no big change in terms of pricing. "In particular, banks will put struggling portfolios assets on the market in 2010," he adds.

The economic decline has put pressure on the sectors such as automobile, retail, betting and healthcare to consolidate further. "Pharmacies and diagnostic laboratories are so far behind the US, they need to combine to fend off competition," Marc maintains. The Czech Ministry of Finance is lowering prescription prices by 7% in its 2010 budget, paving the way for more M&A opportunities, highlights Martin Kúšik, partner at Czech-Slovak private equity group Penta Investments.

The IT and Telecoms sectors will see also fresh activity, with deals already initiated this year that set to complete in 2010, according to Formanek, who points to activity in the mobile industry. He also considers 2010 will see more CEE portfolio divestures from large multinational players, following on

from Anheuser-Busch InBev's \$2.2bn sale of its brewing assets across Eastern Europe to CVC Capital last year.

The real estate sector will continue to suffer from the shortage of funding, with some of the weaker players still trying to restructure their debt. Marc agrees that short term prospects look dim for investments in real estate, despite his firm recently advising on Sparkassen Immobilien's recent EUR 110m sale of a Prague office building; said to be one of the most significant real estate deals in CEE in 2009.

Still, Mortimer predicts that while M&A activity will pick up, it won't be a spectacular reawakening. Private equity players are keen to do deals and we could see some significant acquisitions by private equity players this year, predicts Miroslav Bratrych, a partner with the transaction advisory department at PricewaterhouseCoopers in Prague. A number of family-owned businesses are looking to sell although owners of good solid companies are more likely to wait than sell for lower valuations, says Bratrych.

Another growing trend that Bratrych predicts is a rise in proprietary deals where owners are looking to raise cash for expansion by selling either the business or non-core activities, but directly to one party rather than going through a sale tender and inviting bids.

Privatisation also ground to a halt in 2009. The sale of state-owned Czech Airlines (CSA) was cancelled after only one bidder, a consortium of Travel Service and Unimex, remained in the final round of the process and its bid for CSA was deemed too low. At the same time, the much-anticipated sale of Prague Airport, which could potentially raise EUR 4bn, was also put on hold due to the political situation and it remains to be seen what a new government will do. The Social Democrats, who are leading polls ahead of this year's general election, have vowed not to privatise such assets.

CEZ, the listed state-controlled energy group, is set to continue being the most active Czech company acquiring abroad as it seeks to further strengthen its position across central and south eastern Europe.

After a dearth of Initial Public Offerings (IPOs) on Prague Stock Exchange (PSE) and the delisting of Czech pharmaceutical company Zentiva last year following its acquisition by Sanofi-Aventis, the IPO market looks like hotting up in 2010. At the end of January KIT digital, the IP video technology company, listed on Prague Stock Exchange, becoming the first technology company to be traded in Prague.

Further potential IPO candidates who have signalled their intention to list in 2010 include Ceskoslovenska obchodni banka (CSOB), the subsidiary of banking group KBC Group, and betting chain Fortuna which is owned by private equity firm Penta.

"Even with just these three new listings 2010 could be the best year that Prague has had for new offerings. It looks like the other two listings could happen sooner rather than later," said Petr Kobic, CEO of Prague Stock Exchange. Kobic believes more companies could turn to a listing on the stock exchange as a way of raising financing for further acquisitions, just as KIT digital did. Other potential IPO candidates include AVG software house and logistics company CS Cargo.

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The future of electric vehicles in the Czech Republic

History of electric vehicles in the Czech Republic

Electric vehicles have a long tradition in the Czech and Slovak lands. In fact, the world's first electric vehicle was built by Štefan Anián Jedlík around 1828 in an area of Hungary which is now part of Slovakia. This was the first use of an electric motor with an electromagnet and mercury commutator. Jedlík was also the first to use line electrodes in his galvanised cells and accumulators. His first battery-powered electric tramway preceded the first electric rail vehicle offered by Siemens.

In 1895 the Czech engineer František Křížík gradually constructed several practically usable electric vehicles with 3.5 kW motors located directly in the rear wheels. Křížík's third electric vehicle was a plug-in hybrid with a small internal-combustion engine to increase acceleration. František Křížík thus preceded Thomas Edison, who presented an electric vehicle in 1913.

During the first world war, the Škoda factories in Plzeň turned out several electric-powered freight vehicles for the city's breweries. In the 1930s, Josef Sousedik, owner of an electrical-engineering plant, built an electric vehicle, again with the motors placed directly in the wheels. Sousedik drove his electric automobile daily to work and on excursions.

Beginning in 1934, engineer Hynek Fügner conducted extensive trials with an electric-powered bicycle. Fügner's work was continued by Josef Kolínek, who became a contemporary proponent of electric vehicles and, along with Jiří Janda, was a founding member of the current Elektromobily civic association.

In 1970 the Brno-based VÚES, in cooperation with the Brno University of Technology constructed two functional prototypes of the EMA1 compact city car and a year later two prototypes of the EMA2 utility vehicle on Barkas chassis. One of the EMA1 models is now on display at the Brno Technical Museum.

In 1979, Jasoň Hampl of the Institute of Highway and Municipal Transportation was the leader of the F127 conversion project, in which components from the aforementioned EMA2 were used. The interesting Kujebák vehicle which was created in the apprentice workshops of Karosa Vysoké Mýto was equipped with an electric motor designed by Břetislav Sřířlek of Opava. The Plzeň-based designer Vladimír Mužík later modified a Škoda 1000MB sedan with an electric engine using an energy-accumulating flywheel. An auxiliary power unit based on a Babetta moped engine was used here for generating electric current. Other endeavours in this area included the conversion of a Trabant, (Miroslav Novák, Egon Sedláček), Favorit Bela Elektro (Miloslav Bělonový jr. and Miloslav Bělonový sr.) and Prinz NSU (Jindřich Burián). These vehicles were successfully registered for highway operation.

Dozens of such conversions were carried out at the beginning of the 1990s. One of the first of these was the Škoda ELTRA built on the Škoda Favorit platform in Ejpovice from 1991 to 1993.

Visualisation of the Czech Egg Intuo electric car by Jaroslav Větvička



Electric-vehicle production in the Czech Republic

Despite the fascinating history of electric vehicles in the Czech Republic, no such automobiles are currently in series production here. However, the company AVIA is preparing chassis for electric cars produced by the English company Smith and could also assemble electric engines in future. The Obama administration ordered these electric cars built on Czech AVIA chassis for use by American government bureaus. They are currently also used by DHL, for example. Also, several projects for converting vehicles with internal-combustion engines to run on electricity were commenced in 2009.

Within the www.Superbel.cz project the Brno University of Technology, Elektromobily association and the company EVC Group are undertaking the conversion of a Škoda Superb sedan. The car will be equipped with 96 LiFeYPO₄ ThunderSky batteries, which will be controlled by a battery management system (BMS) from the Czech manufacturer MGM-Compro. The fast yet small 40kW charger is being manufactured by the Institute of Power Electrical Engineering and Electronics of the Faculty of Electrical Engineering and Communication Technology at Brno University of Technology. Charging speed is 300km/h, i.e. 18 minutes of charging is required for 100 km of travel.

Six students from three BUT faculties are participating in the project. Škoda Auto will probably test its own interface between the vehicle's standard control unit and the electric engine. The total weight of the prototype including the battery will be roughly 30 kg greater than a Superb with a combustion engine. The engine will be tuned for performance, giving the car a top speed of over 130 km/h. The car's city range is expected to be around 250 kilometres. The prototype will

Several hundred of these cars were built, and some of them are still in use in various countries around the world. The company Elis Plzeň converted an Opel Corsa, and Belcanto, a firm owned by Luboš Zahradník of Prague, modified a Mazda pickup and several Multicar M24 utility vehicles, which have been in service since 1991. The following year, the Czech automaker LIAZ built the maquette of its clean electric-powered 01.02 XGJ. This was followed in 1994 by the PROTOEL2 prototype from the company TES. Today electric buses built in cooperation with the Faculty of Electrical Engineering at the Brno University of Technology (BUT) are a common sight on the streets of Znojmo.

Elektromobily association

In the 1980s, the Elektromobily association organised nationwide design competitions and exhibitions whose winners represented the country at the international Formula E races in Switzerland, eventually taking first place in 1989. Today the association annually or-

ganises numerous workshops, presentations, exhibitions, electric-vehicle rallies and events focused on popularising science. The largest exhibition to date was held thanks to assistance from BVV, organiser of Autosalon 2009 in Brno, where 35 electric vehicles, numerous electric motors, quadbikes, scooters, electric bicycles and wheelchairs were exhibited in two pavilions. Electric cars from Peugeot, Citroen, Škoda and Volkswagen were test-driven by 920 visitors of the exhibition. In 2009 the association was featured in eight television programmes and with Czech Television recorded two episodes of the popular-science programmes *Port* and *Zašlapané projekty*.

At the end of 2009, the association became a member of the European AVERE federation, which joins together European associations engaged in the area of electromobility. The association held a General Meeting in 2009, during which it approved new statutes that define the association's future role as a bearer of the European technology platform for electromobility.

Electric car on the Škoda Superb platform



also be equipped with a photovoltaic roof, air-conditioning and electric heating. The project is being financed from partners' private resources, though sponsors and future investors are being sought.

In addition to this project, EVC Group presented at Autoshow Praha 2009 other prototypes of electric cars on the Škoda Roomster, Smart and Toyota Prius plug-in hybrid platforms with a range of 90 km in full-electric mode. A similar project is Jaromír Vegr (EKOLO) and Robert Kopriva conversion of a CI compact car produced at the TCPA plant in the Czech Republic.

Clearly the most interesting project involving a future Czech electric car is the Egg Intuo designed by Jaroslav Větvíčka. The Egg represents a completely new generation of clean hypercar for general use, which fills the gap between quadbikes and cars. Weighing approximately 500 kg, the Egg should achieve city speeds while carrying two to three people. Thanks to its low weight and highly aerodynamic design, the vehicle's range will be over 50, 100 or 150 kilometres in the city depending on the number of batteries it carries with energy costs under CZK 0.20/km. Investors are currently being sought for the project.

Other interesting projects of Czech electric vehicles surely emerge from the Future Age

competition. The best works will be announced at the Motor Show in Brno in 10 June 2010.

Recharging infrastructure

The Elektromobily association is actively building a network of freely available recharging points in the Czech Republic. At the end of 2009, there were 136 points in the network. The energy company ČEZ has publicly declared its intention to create a professional recharging infrastructure. A similar project in the south of the country is being considered by the firm E.ON Česká Republika. The Czech companies Energy21 and El-Insta have expressed interest in setting up recharging points directly at solar power-stations, while three filling-station chains in the Czech Republic, with a total of nearly 200 stations and experience with alternative fuels, are also looking into the possibility of operating recharging points.

The technology of recharging stations has been greatly simplified particularly thanks to efficient chargers installed directly in cars, which must be integrated with a BMS. A typical recharging station contains an electricity meter, contactor, connector and payment devices.

Recharging stations use three payment methods: Czech and euro coins (being developed by the Elektromobily association), chip cards and integration with a standard check-out counter, for example at filling stations or at shopping cen-

tres (being developed by Ph-GIA). Other payment methods such as SMS or bank cards are not economically feasible due to the small number of electric vehicles.

Sharp decline in battery prices

The battery is the most important part of an electric vehicle, and in the past was also the most expensive part despite having a short service life. Today this is not the case, thanks to the advent of large-volume production of lithium batteries for notebooks and mobile telephones. The significant extension of the lifespan and greater safety of lithium batteries have enabled innovation, particularly in electronics. Batteries put into use in recent months have achieved lifespans of 400,000 km before their capacity deteriorated to 80% of the original state. The price has also fallen in the past year, from CZK 10,000 per kWh of stored energy to the current CZK 6,300 per kWh. Thus, the battery price has declined roughly to under CZK 1,000 per one kilometre of a mid-size car's range. Thanks to the lower maintenance costs of electric vehicles, the overall ownership and operation costs are now lower than those of an ordinary combustion-engine or hybrid vehicle.

The future belongs to electric cars

Most automakers should begin production of electric vehicles in 2012. Plans for clean electric cars have already been presented by a number of major manufacturers, including Renault jointly with Nissan, PSA (Peugeot and Citroen) together with Mitsubishi, Mercedes, Toyota, Subaru, Volkswagen with its eUP series, GM and Opel, Fiat with Micro-Vett and Pininfarina Bluecar. Škoda Auto of the Czech Republic is one of the few remaining automakers that have not made public its plans for electric cars.

The aim of the Elektromobily association is to encourage the interest of Czech consumers and the preparedness of manufacturers for this new, innovative market so that the electric train does not leave the station without the Czech Republic.

Jaromír Marušinec

Jaromír Vegr

Czech EV Association Elektromobily.org



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The Moravian-Silesian Automotive Cluster: “To be means to be seen”

The development of the automotive industry is undoubtedly connected with the development of its supplier base as well as that of firms and organisations that cooperate with this sector. The project to develop this initiative, which was commenced in 2006 and led to the establishment of an association with 22 members, has evolved successfully and today the cluster represents 51 entities including mainly production enterprise as well as research and educational organisations and regional institutions.

The Moravia-Silesia Automotive Cluster (MAK) was established for the purpose of supporting innovation and increasing the competitiveness and export capabilities of the involved firms, entrepreneurs and institutions operating in the Moravia-Silesia region. The common goal is to develop mutual cooperation based on the members' activities, thus bringing forth positive effects including an increase of the cluster's prestige in regional structures. The primary mission is to develop the automotive industry in the region in order to ensure, through a strong sectoral grouping of industrial firms, universities, science and research institutes and other entities in the public and private sectors, the long-term competitiveness of regional automotive-industry suppliers in the Czech Republic and abroad and the creation of conditions making it possible and fully use and to raise the quality of local personnel and technical capacities and to strengthen the image of Moravia-Silesia as a promising region for living as well as for business.

Within its activities, the cluster focuses on three crucial sectors:

- The **Information** sector involves primarily the rapid and precise sharing of information on happenings in the automotive industry.
- The **Cooperation** sector is built on the activities of three working teams:
 - Human Resources Development Team,
 - Development and Laboratory Team,
 - Commercial Cooperation Team.
- Activities in the **Joint Projects** sector have led to the approval and implementation of 12 projects, of which the following have the greatest potential for utilisation in practice:
 - Laboratory Project,
 - Supplier-Base Development Project,
 - Supplier Development Project.

The Laboratory Project has two results:

The **Noise Laboratory**, which enables development and testing of the noise parameters of facilities up to the size of approximately 1m³ and, in the mobile version, measurement of noise in open spaces.

The **Heat Systems Laboratory**, a unique facility in the Czech Republic, serves for testing heat

systems such as automotive air-conditioning units as well as stationary air-conditioning equipment and heat pumps. Both laboratories are located at the Centre for Advanced Innovative Technologies at the Technical University of Ostrava.

Through the implementation of this project, the Moravia-Silesia Automotive Cluster has become an important partner in the establishment of new, much deeper cooperation between universities and industry. It has been shown that the cluster's activities can play an important and indispensable role in the creation of conditions for new, extensive projects in which cooperation with industry, particularly small and medium-size enterprises, is one of the basic conditions for the implementation of such projects.

In accordance with the long-term strategy of the automotive cluster's development, a portfolio of new projects for 2008-2013 was designed on the basis of members' needs.

The **MAK Innovation Potential Development Project** enhances cooperation between automotive components manufacturers and entities in the area of research and development. The project serves to improve the quality of infrastructure for industrial research, technological development and innovation while improving the use of human potential in the automotive industry and the business infrastructure in this sector.

The key elements of the project are:

- Development of research-based innovation activities and the related necessary infrastructure consisting in:
 - Expansion of the noise and heat laboratories
 - Building of development and testing capacities for pulsation systems
 - Development and testing of plastic products
 - Development and verification of new technologies for coating of metals
- Construction of a shared-services centre containing the following:
 - Purchasing Centre
 - Experts Centre
 - Ergonomics Centre
- Automotive Academy for enterprises

The aim of the Automotive Academy is to improve the conditions for instruction in technical fields, including increasing students' motivation to study in these fields.

Through four instructional modules, the Automotive Academy will develop key competencies of students at professional learning centres and secondary professional schools so that their integration into work processes will be as easy as possible, without prolonged learning and training processes.

This will enhance the employability of graduates and strengthen the competitiveness of manufacturing firms in the automotive industry.

The key areas of education are:

Lean manufacturing processes **LeanL**
Project management
Logistics
Leadership

Modules are formulated by top experts on the basis of requirements derived from experience. Pilot verification of these modules is taking place at the Higher Professional School, Kopřivnice Secondary Professional School and the Jablunkov Secondary Profession School of Business and Services during the 2009/2010 academic year. The instruction of teachers who will subsequently create materials for their students is also being undertaken within the project.

The **Laboratory Project**, which is already underway, involves the continuation of building supplementary laboratories for the cluster and its membership base in close and active cooperation with the Technical University of Ostrava (TUO) and its Centre for Advanced Innovative Technologies.

The Shared-Services Centre will have sections:

Knowledge Centre in the form of a virtual network of experts from among the cluster's members in crucial fields.

Services Centre, which will use the knowledge base of the cluster's members and synergistic effects that the cluster brings to its members particularly in the area of purchasing.

Ergonomics Centre, which will help members to improve or build new workplaces in order to reduce work-related fatigue and prevent occupational illness.

However, the absolutely necessary local links between firms, universities and other institutes are lacking in the modern development of cooperation and use of knowledge potential in particular. Therefore MAK, together with TUO, is actively involved in the international CERADA project covering the European region of eastern Moravia, north-west Slovakia and southern Poland and dealing with the use of knowledge potential in this area.

MAK is thus gradually becoming an association of firms that are interested in active international cooperation and in offering their knowledge and, in return, gaining a broad range of opportunities and real savings from the use of results gained from joint projects.



Visualisation of CEZ's charging point

ČEZ Group's Electromobility Project

One of the characteristics of the future transformation of the energy sector will be the electrification of automotive transportation. A necessary prerequisite for this is the implementation of research and development, and the transfer of the results thereof into practice in many areas, from the development of efficient, affordable and practical batteries to secure means of charging and communication tools. Electromobility represents a major challenge for energy companies and offers a comprehensive solution for supporting electric-vehicle development including the necessary infrastructure.

The key players within this concept are battery producers, electric-vehicle manufacturers, users, the state and municipalities (providing advantages for the development of electric vehicles), and electricity distributors. It is necessary to find synergies among all of these entities that will help to establish the concept of electric vehicles in competition with standard cars.

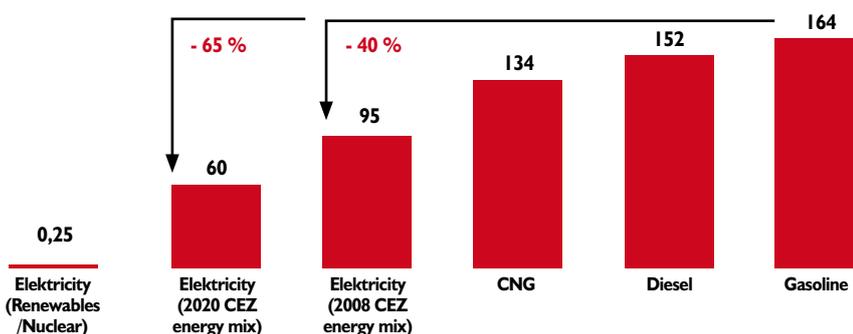
The electromobility concept is an enormous challenge for the ČEZ Group. Electricity represents a promising long-term solution for transportation issues. Producers and distributors of electricity are a natural part of this concept. The ČEZ Group firmly

believes that electromobility will become one of the main trends of the energy sector in the future. Therefore the Group is substantially involved in the development of electric mobility in the Czech Republic and Central and Eastern Europe.

The main pillar of any future expansion of the electromobility concept in the Czech Republic, as well as in other countries, is adequate infrastructure that enables hassle-free and convenient travel by electric car. In light of this, ČEZ accepted the challenges and decided to build a network of charging points in the Czech Republic.

Comparison of emissions from various [g CO₂/km]

- WTW (Well-to-Wheel)
- Skoda Fabia 1.4 63 kW (comparable cars), 2008



CEO Martin Roman introduced the concept of E-mobility to the press public



One of the electric cars, you can see in the streets of Prague

Within the project for supporting electric vehicles, ČEZ is preparing a network of public charging points and is undertaking in-depth analysis with the aim of understanding and learning how to manage the impact of electric-vehicle charging on electricity distribution. For this purpose, the ČEZ Group has entered a partnership with an electric-vehicle manufacturer that is conducting testing and pilot operation of such cars and related technologies. This project is part of the broader effort to make electric transportation a viable concept and, above all, available to the public.

Within the pilot project in Prague and Ostrava, the ČEZ Group's objective is to focus on building more than 200 public charging points. A tender is currently underway for several initial units, which will be placed mainly at ČEZ headquarters in Prague's Michle district. After these charging points have been built and put into operation, their charging efficiency and compatibility with electric vehicles will be tested and evaluated. The next phase of the plan is to build a wider network of charging points in Prague and Ostrava, which should be continuously monitored, evaluated and further expanded.

Construction of the required charging-point network will require a significant investment in the range of hundreds of millions of crowns. However, the cost of building charging points is not the only major outlay involved in this process. Another important element that will have to be monitored and assessed is the impact of electric-vehicle charging on the distribution network. This involves particularly bigger cities and their historical districts. It will be necessary to monitor these factors and, if necessary, to guard against negative impacts on electricity distribution and possible power outages.

Based on the continuous monitoring-evaluation approach, ČEZ believes that it will be able to help the electromobility concept to become a reality in the Czech Republic. On the other hand, careful monitoring will minimise any negative impacts on the distribution grid.

ČEZ has already launched its first harbingers of things to come in the form of two electric-vehicles lent to the Sue Ryder Home, a non-profit organisation operating a daily shuttle service for senior citizens. These electric vehicles are used daily for transporting persons and delivering food and goods around Prague, travelling roughly 100 km a day and then being recharged overnight. This small-scale project

has been a source of valuable information for future development.

The ČEZ Group is currently working on formulating and launching the Electromobility Project, which on a smaller scale will determine the steps that must be taken in individual phases of the long-term business model.

Discussions are currently underway with electric-vehicle manufactures, particularly in Western Europe, on possible cooperation leading to the introduction of such vehicles to the Czech market. These discussions are in various stages, though it seems that it will be possible to find common ground and within months carmakers will be able to deliver full-fledged electric vehicles for testing within the pilot project. Thus, it should be possible to more thoroughly and centrally test both the vehicles as well as the infrastructure.

The nature of personal transportation seems to be changing, with the likelihood that the future will "drive electric". Electric vehicles exhibit amazing characteristics when it comes to energy efficiency, as emissions are significantly lower and the overall operating costs of electric



Clean transportation is a priority for Prague's Mayor Pavel Bém

vehicles are up to 70% lower when compared to diesel-powered cars.

The ČEZ Group will contribute to expanding the use of electric cars by building advanced charging infrastructure. The group has already attracted several potential partners to join in reaching the common goal of clean transportation. And it is obvious that electric vehicles are interesting to the public as well.

With some additional research and development to be done by car producers, electromobility could become the primary means of transportation within several years, bringing clean, efficient and cheaper transportation to the majority of the public. And the ČEZ Group clearly does not want to miss this challenging opportunity.



Electromobility has immediately become an interest to the press as well as public

*Tomáš Chmelík,
Head of Clean Technologies Department,
E-mobility Project Manager, ČEZ Group*



CEZ GROUP

Ecologically responsible automotive industry



Plug-in Prius

Interview with Tsutomu Otsubo, president of Toyota Motor Czech.

What do you see as the most promising path of future power-train development?

The power-train is a matter of diversification; it offers the opportunity to use an alternative source of energy for cars and transportation. The process of diversification started about 100 years ago, and petrol was never the only one main source of energy. We should not rely on petrol alone.. We do not know yet what the future will bring, but we have to be ready for it and be ready to use the right technologies.

Why did Toyota decide to focus its development on hybrid cars?

Toyota decided to focus on development of hybrid cars because they offer a realistic solution given the currently available technology. Such cars have the advantage of combining electricity and petrol. Electricity supports the drive and also results in energy and cost savings, not to mention the positive impact on the environment. The main benefits of hybrid cars are thus cost reduction and the environmental aspects.

Toyota started with its first hybrid cars in 1997 and since that time has taken a big step forward and greatly improved its product. Toyota realized that you have to find an ecological automotive solution. There is no question that the ultimate goal is zero emissions.

Does Toyota have plans to set up production of hybrid power-trains in and for Europe?

Yes, we will do so this year, in 2010. Produc-

tion of new Auris Hybrid will be located at our TMUK production plant, which produces cars for the whole of Europe.

What impact will the current global economic crisis have on research and development of future power-trains?

It is the responsibility of the automotive industry to reduce emissions and behave in an ecologically responsible manner. One of the most important factors influencing R&D of power trains is that we have to be wise in allocating available resources.



Tsutomu Otsubo, president of Toyota Motor Czech

Is Toyota preparing purely electric cars or is it focusing only on plug-in hybrid cars with a long range in purely electric mode?

Our current focus is on Prius Plug-in Hybrid, which in my opinion is next realistic solution. Our initial plan is to produce 600 cars globally, almost 200 of which will come to Europe. This

limited production will be used mainly for testing purposes. The Prius Plug-in Hybrid's lithium-ion battery pack has about twice the capacity of the third generation Prius' battery, giving the vehicle a maximum speed of 100 km/h when driven in EV mode. Recharge takes about 90 minutes. With battery fully charged, the Toyota PHV's EV mode range has been increased to approximately 20 km.

But for near future Toyota has continued with the development of short range pure EVs for commercialization. At last year's Tokyo Motorshow, the company unveiled its FT-EVII concept, a small commuter EV with a top-speed of 100km/h and a driving range of over 90km. Toyota plans to launch a lithium-ion battery equipped EV in the United States in 2012.

What kind of battery has the brightest future in the automotive industry?

I am sure that Lithium-ion battery is the way for future. The advantages of Li-ion batteries are reduction in battery pack size, weight and cost, yet improved efficiency. However, challenges still remain. For instance, the cost of lithium-ion batteries needs to be reduced significantly, or a more affordable alternative should be found.

What is the range of battery-powered vehicles of batteries today and what will it be in, say, two years?

As I mentioned earlier, it is currently around twenty kilometres, but we project it to be more than ninety kilometres in 2012 when we plan to introduce a small full electric car for urban traffic.

Is there any possibility of future cooperation between Czech academic R&D centres and Toyota in the field of ecological power-trains?

Maybe. We are currently cooperating closely with the Czech Technical University, especially in the field of hybrid technology and we are very happy with our cooperation.

Will the plug-in Prius model be available in the European market in 2010? What kind of battery is installed in it and what is its range?

We are working on it. The number of cars to be delivered may be limited, but we are going to negotiate with our European headquarters to deliver these in 2010 to the Czech Republic. We expect about 200 plug-in hybrid cars to be available for rent in Europe within this year.

What is your favorite car and what kind of car do you drive?

My favorite car is the Prius. Especially the third generation is a fantastic car. For my personal purposes I generally prefer using hybrid cars; I like also Lexus hybrid models. Right now I drive model LS 600h.

How do you foresee the automotive industry in the near and distant future (for example in 2015 and 2025)?

I foresee that the future of the automotive industry will be driven by the growth of China and India. The number of cars to be produced and sold will increase. Mature markets (including Europe, the United States and Japan) will remain stable but overall global growth will be covered by new and developing markets.

In your opinion, what are the risks and limitations of future developments in the automotive industry?

In my opinion, the number of globally produced and sold units will increase, but all players in the automotive industry should be very cautious and take into consideration the environmental and safety aspects of their activities and production. The automotive industry in general should behave responsibly with regard to its activities and invest in the development of environmentally friendly cars.

How will the global economic crisis impact the automotive sector overall?

Outside of the previously mentioned environmental issues, I believe that the hottest issue will be simply surviving in the market (for all big and small brands concerned; see the cases of GM and other companies struggling with the crisis). Therefore, there will be a significant impact on employment in the sector. Companies need to have an effective business model, which is the key issue. I also think that

right now one has not only to compete with other producers and other brands, but most of all to compete internally in order to improve efficiency.

How is Toyota handling the changes in customer demand?

Toyota is very well aware of the importance of reflecting customer demand in its products. Our sales and marketing operations to some extent play the role of “antenna” for the market because demand differs from country to country, especially in such a diverse region as Europe. Toyota’s key focus is and always has been on the customer and how to satisfy the customer’s needs and desires. We provide product adjustments based on specific research conducted country by country. Our competitors in the Czech and Slovak markets are very strong, which makes it difficult to make products more affordable while maintaining maximum quality.

What is the Toyota’s strategy for European markets?

The overall strategy for European markets is actually the most difficult and challenging for Toyota, due to by the natural diversity of nationalities and the variety of specifics and habits in Europe. Competition on local markets has historically been very strong and European customers are very demanding. You can say that European customers take a very hard look at cars, are very critical and have very good knowledge of cars and very specific requirements in mind.

One of the very interesting differences is, for example, the speed limits and the way end-users approach driving. Speed limits, or rather the habit of driving faster, play a big role in defining cars for the European markets as oppose to the American and Asia markets.

What are the main differences in Toyota’s respective approaches to the American, Asian and European markets?

Toyota’s main goal and focus is to fulfil the desires of local people region by region in order to be able to offer competitive products while also having carefully chosen the proper range of features in the cars. Toyota’s overall policy is to produce cars based on demand. Currently, Toyota has factories the United Kingdom, the Czech Republic, France and Turkey. We also have an engine-production plant in Poland. The product line for these markets includes Yaris, Auris, Avensis, Verso and Aygo models.

About 70% of our sales in Europe are also realised locally. Of course, Japan is different and there nearly 100% of our sales are produced locally. But still, I believe 70% for European



The heart of hybrid car

markets is one of the highest rates among non-European carmakers here.

Toyota’s share of the European market is significantly low compared to its share in the United States and Asia. What is Toyota’s strategy to increase its European market share?

We have a roughly 5% market share in Europe, but in light of the strong domestic competition we consider this a very good number. Overall 5% to 6% market share is good in my view.

Of course our goal is to steadily increase our market share. And how are we planning to achieve this? By differentiating ourselves and presenting hybrid technology to the people. We believe that this is our key competitive advantage. We are planning to offer hybrid engines in all of our car models distributed in Europe in early 2020’s.

The hybrid concept and overall future vision is currently on display at all major motor shows throughout Europe. Toyota has a long track record of hybrid production and that gives us a key competitive advantage.

Toyota first introduced the hybrid concept back in 1977 and thus has over thirty years of experience and research in the field.

What potential does Central Europe hold for Toyota?

Central Europe’s potential lies in its expected economic growth. As opposed to other western countries, the number of cars per capita in Central Europe is still lower and therefore we see potential to increase the size of the market in the future, and this will also allow us to improve our market share.

Are your products doing well in the Central European market?

Compared with Poland and Hungary, the Czech Republic is definitely a more difficult market because of the strong domestic competitors here. Toyota needs to study local customer needs and adapt its car models accordingly in order to best fit the Czech automotive market.

Tomáš Hanáček, CzechInvest
Olesya Epps, CzechInvest

Gateway to prosperity

The Japanese Chamber of Commerce and Industry in the Czech Republic



Meeting of Japanese Chamber of Commerce and Industry in the Czech Republic

The inflow of foreign direct investment (FDI) from Japan to the Czech Republic has flourished since the Velvet Revolution of 1989. Before, only a few Japanese trading companies had been involved in export, mainly of hops for beer and Bohemian glass, while importing machine tools and similar technologies from Japan.

After the revolution, companies trading in Japanese cameras, bicycles, home electronics and other consumer goods expanded to the Czech Republic one after another. Televisions bearing the "Made in Japan" label became popular and several manufacturing companies involved in the production of flat glass, bicy-

cle components, household electrical devices and electronics filled the Czech market every year. In 1997, Panasonic made a big investment television plant in Plzen, thus becoming one of the 81 Japanese companies that entered the Czech Republic by the year 2000 (of which 31 were manufacturing companies and 50 trading companies).

A second wave of Japanese investments began in 2001. In addition to automotive-component makers who had expanded to the Czech Republic in order to find a sales outlet in Europe, the TPCA project in 2002 attracted companies operating in the automotive industry. Meanwhile, makers of electrical devices,

air-conditioning equipment manufacturers and related companies entered the market and triggered an expansion of construction firms, transport companies, banks and other supporting industries that raised the number of Japanese manufacturing companies operating here to 87 and trading companies to 150, bringing the total to 237 by 2009. Japanese companies in the Czech Republic have created more than 44,000 jobs to date.

As the number of Japanese companies increased, the Japanese Chamber of Commerce broadened its activities focusing on collaboration with the Embassy of Japan, JETRO (Japan External Trade Organisation) and CzechInvest. By the end of 2009, the chamber had 130 members.

The Japanese Chamber of Commerce and Industry in the Czech Republic started its activities in Prague in 1994, when most of its members were trading companies. A representative of a trading company always serves as chairman of the organization. Among its main activities, the chamber acts to promote a good environment enabling the effective operations of Japanese legal entities involved in economic activities in the Czech Republic. At the same time, it aims to contribute to positive bilateral economic relations between both countries by interfacing with the Czech business world, as well as through cooperation and information exchange with the cham-



*Chikahito Harada,
Ambassador of Japan in the Czech Republic*

Selected Japanese investors in the Czech Republic



Meeting of Japanese Chamber of Commerce and Industry in the Czech Republic

bers of commerce of other countries. A key aspect of its activities is its interaction with the Czech government aiming at supporting its own member companies.

At the chamber's monthly meetings, members share know-how necessary for operations in the Czech Republic and cooperate on mutual enhancement of their businesses. The chamber has resolved several pressing matters, such as the short-term visa issue, driving-licences for Japanese nationals, early conclusion of a social security agreement, etc.

Recently, the Czech government has been focusing on attracting investment in IT, R&D and shared services. However, continued focus on supporting existing companies is expected as well. Directly listening to the opinions of existing companies will certainly contribute to their willingness to expand further.

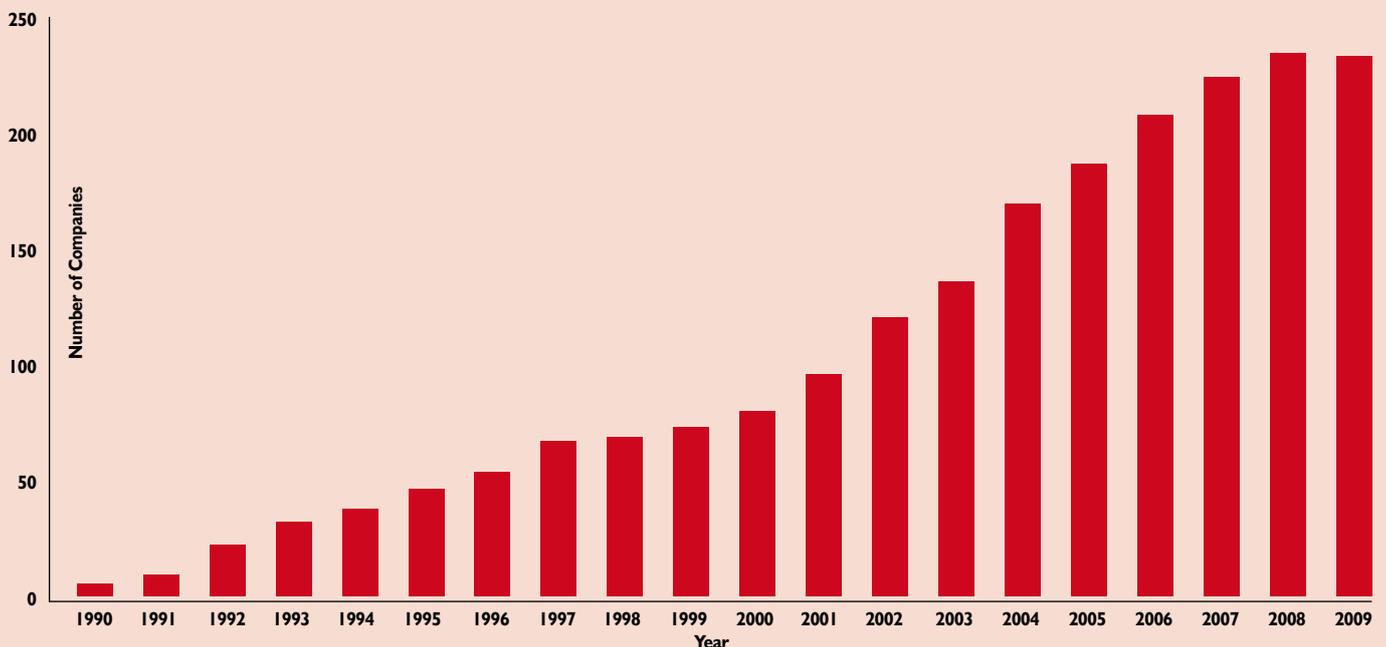
It is our aim to further contribute to the economic development of both countries by supporting Japanese companies in the Czech Republic and cooperation between Japanese companies and their Czech counterparts.

*Seiji Nakagoshi, Executive Director
Japanese Chamber of Commerce
and Industry in the Czech Republic*



Meeting of Japanese Chamber of Commerce and Industry in the Czech Republic

Rise of Japanese Companies in the Czech Republic



Certification for importing machinery in the EU



Illustrative photo

Free movement of goods is one of the fundamental pillars of the European Union and is also one of the reasons behind the EU's establishment. The same is true for machinery, which is regarded as a very important part of the mechanical-engineering industry and comprises one of the main strengths of the Community's economy. Of course, the high social costs arising due to the large number of injuries directly involving the use of machines led to the introduction of Directives with the aim of reducing the number of such injuries through the design of safe machinery, proper installation and maintenance.

Until recently, the introduction of machinery to the market was governed by Directive 98/37/EC, which on 29 December 2009 was superseded by Directive 2006/42/EC of the European Parliament and of the Council

of 17 May 2006 on machinery and amending Directive 95/16/EC (recast). This Directive is binding for all EU member countries as well as for countries of the European Economic Area (EEA) that are not members of the EU (i.e. Norway, Iceland and Lichtenstein).

According to free-market concepts, no member country can prohibit, restrict or hinder the introduction to the market or operation of any machinery that was approved pursuant to Directive 2006/42/EC by any other member country.

This Directive concerns not only machinery, but also detachable add-on devices, safety components, hoist accessories, chains, cables and harnesses, detachable mechanical transmission equipment and partial machines (exact definitions are set forth in the text of the Directive). Conversely, the Directive does not

relate to safety components that must be used as replacement parts, to special devices that are intended for use at fairground or amusement parks, or to machinery designed or operated for the purpose of nuclear power generation whose failure could result in a leakage of radioactivity. Furthermore, the Directive does not relate to motor vehicles with speeds over 25 kilometres per hour or vehicles intended for air, water or rail transport. Nor does it relate to sea vessels, machinery for military or police purposes, research equipment for temporary use in laboratories or mining equipment. Common electrical and electronic products and certain types of high-voltage electrical devices are also not covered by the Directive.

In Annex IV the Directive defines a special category of machines in the case of which there are limited possibilities for assessing

compatibility with regard to their potential dangerousness. Such machines include saws and equipment for processing wood and similar materials, manual-feed presses, injection moulds for plastic or rubber, etc.

Pursuant to the Directive, only manufacturers based in the European Union can introduce machinery to the EU market. A manufacturer can be either an individual or legal entity that designs and/or produces machines to which the Directive relates and is responsible for such machines' compliance with the Directive under its own name or brand or for its own use. If manufacturers thus defined do not exist, every individual or legal entity that introduces a given product to the market is considered as a manufacturer.

Manufacturers outside of the European Union employ the services of an authorised representative, which can be either an individual or legal entity based in the EU that has received from the manufacturer written authorisation to act on the manufacturer's behalf in the area of fulfilling the responsibilities and requirements connected with the Directive.

So-called "notified bodies" are entrusted with assessing the compliance of machinery with the Directive. Such bodies are those appointed by individual member countries for conducting procedures for introducing machines to the market. These bodies are regularly monitored and inspected in order to ensure that they fulfil the necessary criteria for this activity.

The process by which notified bodies assess compliance is commonly referred to as product certification.

There are two important criteria for selecting the compliance-assessment process – whether the manufacturer is from an EU member country and whether the introduced product is listed in Annex IV of Directive 2006/42/EC, whereas a manufacturer from an EU member country can use all means of compliance assessment. Conversely, a manufacturer based outside of the EU must proceed via a notified body or use an authorised representative.

In the case that a manufacturer uses a notified body for assessment of compliance this body takes on responsibility for the possible consequences of unauthorised introduction of machinery to the market. Sanctions ensuing from this are not born by the manufacture, but rather by the notified body that issued the certificate for the given product. Under the law, the notified body must have insurance for such cases. For this reason, firms use the services of notified bodies even for cases when they could conduct compliance assessment through their own internal production-management process.

For products not listed in Annex IV of the Directive, manufacturers based in the EU (or

those based outside the EU with an authorised representative in the EU) need only to fulfil the conditions of internal production management or, as the case may be, products can voluntarily be subjected to EC type examination. However, for products listed in Annex IV it is necessary to subject the products to EC type examination or to comprehensive quality assurance.

Manufacturers outside of the EU that do not have an authorised representative may introduce products to the EU market through certification by a notified body.

Illustration of the procedure:

When assessing compliance through INTERNAL PRODUCTION MANAGEMENT, the manufacturer formulates detailed TECHNICAL DOCUMENTATION in the scope set forth in Annex VII of Part A of Directive 2006/42/EC. The manufacturer must concurrently adopt all necessary measures so that the production process ensures the compliance of manufactured machinery with the technical documentation and the requirements of the Directive.

TECHNICAL DOCUMENTATION must include the design, production and function of the machinery in the scope required for assessment. It must also be prepared in one or more official languages of the Community.

Technical documentation includes an overall description and complete drawing of the machinery and schematic of control elements and relevant descriptions; documentation on risk assessment; utilised standards and other technical specifications; all technical reports with test results (the manufacturer is obliged to conduct the required evaluations and tests of components and accessories or of the whole machine which are necessary for determining whether it can be safely installed and operated as it is designed and built); printed instructions for using the machine; and a copy of the EC declaration of compliance. It is necessary to have the technical documentation available for a period of ten years.

EC TYPE EXAMINATION is the process by which a notified body determines and verifies that a machine fulfils the requirements of the Directive. The manufacturer (or its authorised representative) formulates technical documentation for each type and then submits an application for examination of the type by a notified body of its own choosing. This application must contain the name and address of the manufacturer (or authorised representative), a written declaration that the application was not submitted by another notified body and the technical documentation. In addition, the manufacturer must also submit a sample of the type. The notified body then examines the technical documentation, verifies whether the product is in accordance with the technical

documentation, and performs the necessary inspections, measurements and tests in order to determine whether the adopted solution fulfils the basic requirements for protection of health and safety set forth in the Directive. If the type is in compliance with the provisions of the Directive, the notified body issues an EC type-examination certificate. The manufacturer and notified body must keep a copy of this certificate for a period of 15 years.

COMPREHENSIVE QUALITY ASSURANCE is an extension of the EC type-examination process where the notified body additionally assess the quality-assurance system with the aim of determining whether all requirements of the Directive have been fulfilled.

Once the machine is approved, it is given the CE label, which confirms that the given product is in compliance with EU regulations. The CE label can be reduced or enlarged, but the prescribed proportions must always be maintained. This label must also be presented in the immediate vicinity of the name of the manufacturer or its authorised representative. It is also prohibited to attach to the machine a label that could mislead third parties if this involves the meaning or shape of the CE label or both. All other labels can be attached to the machine, though only on the condition that they will not reduce the visibility, readability or meaning of the CE label.



The company is a member of the Association for Foreign Investment (AFI). More information is available at www.afi.cz.



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A year of challenges: Restructuring measures for the automotive industry

The year 2009 will long be remembered as a year of overwhelming turbulence and challenges in the area of automotive production. Besides the enormous shock brought about by the extraordinarily rapid and extensive changes in demand for passenger cars and freight vehicles, the events of 2009 also illustrated in stark detail the close relationship between the condition of national economies and the performance of the automotive industry. During a recession, this is a very sensitive and important indicator of the economic situation.

National governments embarked on the implementation of unprecedented and often

unsystematic measures to support the automotive industry in an effort to prevent the crisis from causing further problems in this key sector. In many EU countries scrappage programmes were introduced, temporarily halting the decline in demand with a short-term positive effect. For example, up to October 2009 the number of passenger-car registrations increased, in comparison with the same period of 2008, by 26% in Germany and 4% in France. Even though a scrappage scheme was not introduced in the Czech Republic, the country's high dependency on car and automotive-component exports brought about a revitalisation of this industrial sec-

tor here. Scrappage programmes spurred a significant change in the tastes of consumers, who tended toward small, fuel-efficient vehicles, in the case of which state subsidies accounted for a greater proportion of the total purchase price. However, we see that the gradual termination of subsidies is causing the return, and possible prolongation, of the automotive industry's problems.

Only a few companies operate in the automotive industry on a global scale. A total of ten main original equipment manufacturers (OEMs) control approximately 85% of the market. This represents 580 manufacturing plants in 55 countries producing 321

What can be expected in the automotive industry and how can it respond to the current situation?

The anticipated changes in the automotive industry will be as severe and unprecedented as the onset of the crisis. It will not affect everyone in the same way – entities with a strong position will grow yet stronger, whereas marginal market participants will suffer from their inadequate capital strength and inability to finance the restructuring process.

Automobile manufacturers must primarily adjust their product portfolios and focus on making the distribution chain more effective. Improvement and proper configuration of dealer networks will also be necessary. Cost-cutting programmes will bring the greatest benefits if they are part of the overall strategy. Other participants in carmakers' supply chains must undertake aggressive measures:

1. reassess their investment plans and either carry out acquisitions of competitors and ensure effective use of production capacities, or initiate divestment and drastically restrict fixed costs
2. simplify the corporate structure and business model, and in connection with this achieve tax optimisation
3. conduct thorough financial restructuring and regain lost capital equilibrium
4. strengthen customer-supplier relationships and fundamentally reassess the complexity, efficiency and added value of individual links in the chain
5. begin establishing purchasing alliances and sharing services, information and other resources
6. cleanse production portfolios of unprofitable customers and products
7. focus on products with higher added value or with an added service that distinguishes them from the competition

The year 2010 is marked as the dawn of a new decade for the automotive industry. The entire sector will undergo a dramatic transformation involving changes in the ownership structures of companies, consolidation and restructuring of the market. The entry of investors from China, governments' increasing regulatory demands and other measures can contribute to the stagnation of the sector. Change is never easy. The successful implementation of any change, or even all of those mentioned above, represents a fundamental challenge and opportunity for those who want to emerge from the crisis prepared for the future development of the market.

platforms for 55 million vehicles with planned investments of EUR 900 million in development of new vehicle models in the coming years. Vehicle manufacturing has one of the most complicated supply chains from the supplier to the producer. Its complexity is amplified by the strengthening of regulatory measures in the area of lowering emissions limits and REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals), which place greater cost burdens on manufacturers. Relations within the supply chain are organised, at the cost of large investments, so that they bring maximum production efficiency, high-quality final products and

the ability to flexibly react to the behaviour of end-consumers. During the time of crisis, however, the flexible supply chain functioned as a high-capacity medium for transferring problems from car manufacturers to suppliers of primary raw materials. This process was further accelerated by the very strong position of carmakers.

Problems in the first phase appeared in companies' income statements. In most cases firms responded with measures having a one-off or short-term effect, mainly in the area of optimising financial flows and adjusting the cost structure, most common in the area of personnel costs related to

primary production workers. Restructuring of operations or changes of strategy occurred only rarely, however. Neither the size of the sector, pressure on cash-flow, nor support for optimisation of working capital and adjustment of the cost structure averted the shifting of problems to companies' balance sheets, in many cases leading to an unstable capital structure. Unreasonable expectations of future growth and investments in expansion of production capacity, implemented on the basis of such expectations and often advocated by the OEMs, turned out to be a massive burden for everyone that took this path and was then not able to respond to the crisis. It can be said that the optimistic expectations of growth and the subsequent abrupt decline resulted in a surplus of production capacities, which saddled companies with an enormous fixed-cost burden that could not be optimised in the short-term horizon. Even though today the situation has partially stabilised, many – especially smaller – companies are financially exhausted. The unsuitable capital structure and related instability are the causes of the rising pressure from creditors and the growing number of forced financial restructurings. In a period of strict regulations for obtaining external sources of financing, these companies may have problems with financing the production cycle in the next upswing, which will happen sooner or later.



The company is a member of the Association for Foreign Investment (AFI). More information is available at www.afi.cz.

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The changing dynamics of the Czech labour market



Illustrative photo

The global economic crisis has understandably had a significant impact on the labour market, and in the past year we have witnessed a fundamental reversal of trends on the market. Prior to the crisis, we were intensely occupied with a lack of available workers, rapid wage growth and the impacts of demographic development. At the centre of attention were employees who firms wanted to retain and job applicants that firms needed to attract. The employee/candidate held the advantage and, it could be said, determined the development of HR strategies.

However, the effects of the crisis very quickly became apparent. Within a few months the situation changed. Numerous firms found themselves in difficult straits, orders fell off and layoffs began. The unemployment rate began rising rapidly as many people suddenly found themselves without work. Job worries mounted as there was now far greater competition for each available position. The focus shifted to employers, who decide whether to open, maintain or eliminate jobs. When selecting employees, they now have the possibility to choose from a greater number of candidates, while wage growth has slowed considerably.

Grafton Recruitment, an Ireland-based personnel and consulting firm, began operating on the Czech market in 1994 and focuses particularly on recruiting new talents for local and international companies. For us, being a high-quality supplier of personnel services means, among other things, monitoring

the situation and developments on the labour market and keeping our clients abreast of our findings. We have nearly 200,000 candidates in our database in the Czech Republic and on our website we offer all potential candidates an online application called My Grafton Account, which automatically informs them of new job opportunities. The application currently has more than 30,000 registered users, including not only unemployed workers, but also employees who use it for monitoring job offers in their sector. This often involves potential candidates who are not completely satisfied with their current situation and are beginning to seek out new employment offers.

Taking into account that this concerns an active sample of the population on the Czech labour market, we asked these users for their thoughts and opinions during the difficult year of 2009. Their answers are helping us to monitor trends on the labour market and can be of assistance to human resources specialists and managers in defining their HR strategies for the coming year.

The sample of respondents is in essence precisely divided between men and women. More than two-thirds of respondents range in age from 20 to 40 years; roughly 20% are 41 or older. An interesting aspect is that approximately 60% are currently employed, while the rest are jobless. In terms of education, 45% are secondary-school graduates and roughly 40% have achieved higher levels of education; one-quarter of respondents hold university degrees.

🔍 Would you be willing to relocate for a new job (this concerns relocation, not commuting)?

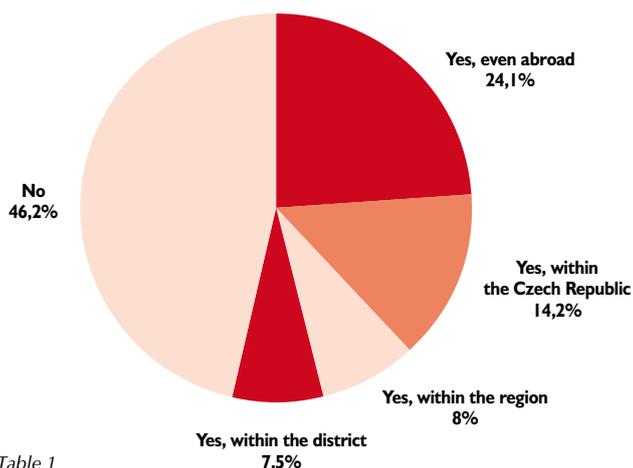


Table 1

🔍 Which of the following factors is most important for you when seeking employment?

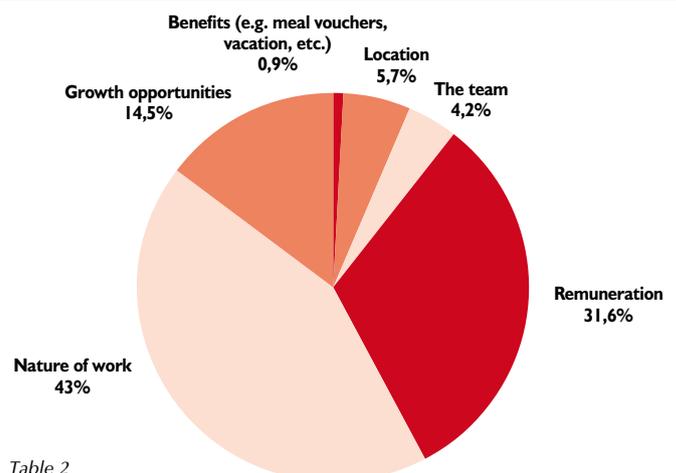


Table 2

Which quality do you most value in your superior?

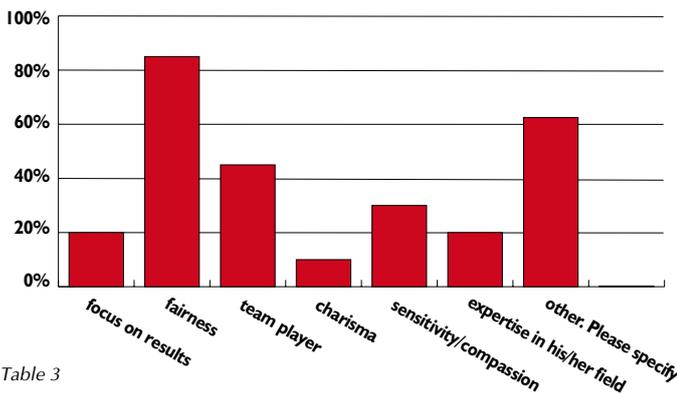


Table 3

Besides questions about me, in a job interview with a future employer I expect to learn the following – please select by order of importance (1 – most important, 5 least important)

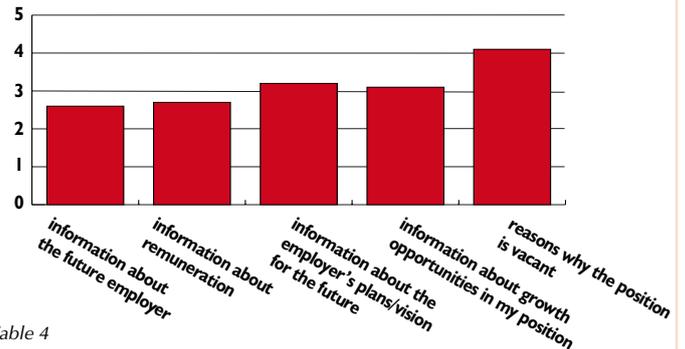


Table 4

Effects of the crisis on candidates' reasoning

We have repeatedly determined a greater willingness to accept fixed-term employment contracts, even though 40% of respondents state that this is only because of the current economic crisis. In comparison with the results of past research, the willingness to relocate for a job has not changed; more the 40% of people still refuse to pull up stakes for a new opportunity. I sincerely expected that this attitude would have changed in light of the rising unemployment rate.

In our survey, we also focused on the reasons and criteria for choosing a new employer. We determined that when choosing a job, the first priority is the nature of the work, followed by payment conditions. When selecting an employer, candidates clearly consider the most important criteria to be the employer's stability and effective communication within the company. The survey confirms that a particularly sensitive issue is the employer's communication toward the employees during a time of crisis. After these criteria, candidates value opportunities for growth and training.

We also asked the respondents about what they look for in their future superiors. This is a fundamental issue in interviews with job candidates. If you truly want to hire a candidate, it is necessary for the superior, who should be an expert in his/her field, to manage and lead in a correct and fair manner. Together with the ability to work as part of the team, i.e. to be a team player, this is a valuable aspect among candidates.

Incidentally, the survey also highlighted the fact that people are interested in companies' social responsibility, which is an important aspect for personnel marketing, and firms' activities in this area should be visible. Respondents stated that they seek information about employers on the internet and in print media. High-quality information on the internet and the given company's public relations are basic factors in this regard. However, a well-informed consultant from a personnel agency can also be beneficial and all of this is reinforced by the experience and recommendations of acquaintances.

Information that candidates would like to gain in an interview is shown in Table 4. The most important information for candidates is the reason the position is vacant.

As we have started a new year and the conversation often turns to pay rises, the conclusion of our survey focuses on the flexibility of the issue of starting pay. In this respect, nearly 70% of respondents are more flexible now than in 2008.

The changing dynamics of the market became apparent in our survey, and it is necessary for firms to adjust their strategies at this difficult time. Even though the crisis is abating, it will still be necessary to work with motivated employees and to concentrate on the best candidates when recruiting. Based on our research, I would like to offer five tips for this new stage in the development of the labour market.

1. **Communicate** – the importance of the art of communication during the crisis will become apparent in the post-crisis period. People will remember how they were dealt with, and if we want to retain the best employees, we must properly communicate with them and inform them of the measures taken by the company at all levels of management.

2. It is time to **upgrade talent** – when selecting new employees, focus on key competencies, which will surely change during a difficult period. When struggling with a crisis, it is necessary to have the best fighters. Do not compromise when hiring.

3. The recruitment process must be structured; **the interviewer must be a trained professional**. In order to get the best employees, it is necessary to show them the quality of the process and a high-quality recruiter or manager will be of key importance in the candidate's decision-making. Do not forget that your competitors are also recruiting.

4. Do not rely solely on job servers. In the past year our agency has found the best candidates through active **networking**. In short, use not only job servers.

5. Work with **flexible commitments**. It is obvious that the required number of full-time employees can change over time. More than in the past, people are evidently now more willing to accept shorter or fixed-term commitments. More candidates are interested in one-off contracts. Women on maternity leave and employees entering retirement can be ideal contractors.

The complete survey is available at www.grafton.cz



The company is a member of the Association for Foreign Investment (AFI). More information is available at www.afi.cz.



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Hope for young start-ups: the Czech Technology Accelerator in Silicon Valley

The purpose of the Czech Technology Accelerator (CzechAccelerator) project is to help small and medium-sized Czech firms that have commercially interesting, highly innovative and competitive products and at the same time are looking for an investor or other strategic partner to aid their further development. CzechInvest will offer selected firms selected facilities and supporting services, including the provision of training in the Czech Republic prior to travelling to Silicon Valley and on-site consulting assistance focused on communication with American partners.

Four companies from the ICT and biotechnology sectors will be selected to travel to the United States in the first round of the project. The project's trial operation will run from April 2010 to April 2011. For the purposes of the project, CzechInvest has set up a website at www.czechaccelerator.cz, where interested parties can find detailed information about the project, including registration forms and participation criteria.

The technology accelerator will be located in the successful Plug and Play Tech Center, which is home to more than 250 start-up companies operating particularly in the areas of internet, mobile and wireless technologies and social media. Since its establishment in 2006, the Plug and Play Tech Center has obtained more than USD 500 million in venture capital for members of its start-up community. More information on the Plug and Play Tech Center is available at www.plugandplaytechcenter.com.

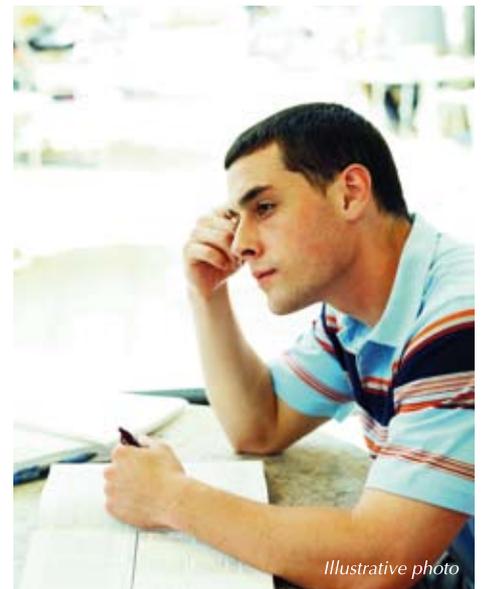
CzechInvest's decision to implement this project is grounded in growth over the past twenty years of small technology firms developing technologically highly competitive products in the Czech Republic. These firms (spin-offs and start-ups) are typically established as independent projects that are separated from the parent organisation, for example universities and colleges, science and research institutions, and multinational firms. People who establish such firms mostly bring from there previous workplace or university studies specific ideas about the product or service that they would like to develop in their new firm and then later sell. In the great majority of cases, this concerns innovative, technologically highly demanding products that have strong potential for finding uses in everyday life. The final aim of the given firm is to introduce products to the market and achieve high profits from sales, as well as to receive recognition from the expert and lay public. A full range of today's successful, world-famous firms, such as Microsoft, Google and PayPal, underwent a similar development process.

A common characteristic of young entrepreneurs is a high level of technical proficiency, though another common attribute is inexperience in the areas of formulating a business plan, establishing a company, introducing products to the market and obtaining new business contacts. Because of this, there is a high rate of failure among newly established firms and many promising projects falter before they can be presented to the broader public. Every investment in a start-up firm is therefore considered to be highly risky.

Most employees of start-ups are young people who mostly do not need large spaces for their activities and thus a new IT firm can be established in one or several smaller spaces equipped with a few computers and an internet connection. Newly established companies in the fields of biotechnology, clean technologies and nanotechnology generally need at least basic laboratory equipment and sufficient space in which to use it. Therefore, in the Czech Republic technology incubators have been established in order to provide start-ups with suitable conditions for implementing their projects.

The most important part of a start-up's development is obtaining financing. In most cases, young entrepreneurs start by requesting funding from family members or finance their firms from their own savings. In this phase, they can also turn to business angels, who invest in start-up firms in the earliest stages. If a firm survives the first phase and begins to create a product, it basically has two standard possibilities for financing. It can either apply for a bank loan or offer part of the company for sale to a venture capitalist, i.e. an investor who manages a venture-capital fund, which generally involves private capital and has the primary task of achieving a return on the committed resources. Venture capitalists' priorities include mainly achievement of at least a 20% annual return on investment. As this goal can be reached only by a successful, prosperous firm, a venture capitalist also commits his energy and efforts to management, marketing, human resources and similar types of consulting and assistance for the start-up firm in which he has invested. Hence, this does not concern only the provision of financial resources, but also of high-quality support for the direction and development of the firm.

CzechInvest wants to offer its assistance during this phase of a start-up's development. Therefore, in California on 1 April 2010 the agency will open the Czech Technology Accelerator, for which in the second round of the selection process it is planning to choose a



Illustrative photo

total of 16 Czech companies to participate in the first year. In the first round, the evaluation committee composed of representatives of the expert public will assess the technological quality of the submitted projects. Their primary task will be to determine whether the offered product is so exceptional and high-quality that it has a chance to succeed in North America or on other demanding world markets. The purpose of the second selection round is to determine whether the firm's management is able, in terms of professional, marketing and language skills, to deal with a potential venture-capital investor or other strategic partner. This part of the selection process will be of key importance. Experience has shown that the conditions for even requesting venture capital in the United States are very difficult. The entrepreneur must be prepared for the fact that a venture capitalist will not give him more than a few minutes to present the product and capture the investor's interest. Of course, this requires high-level language, professional and presentation skills. Representatives must have a prepared elevator pitch, i.e. a summary of information that in basic terms describes the product and can be presented in 120 seconds or less.

Upon completion of each selection round, the selected firms will receive pre-travel preparation involving training in the principles of negotiating with venture capitalists and other necessary skills that will help them achieve success. In cooperation with a professional training centre, CzechInvest will focus on finding the weaknesses in the firms' presentation and work to eliminate them during the training.

The Czech Technology Accelerator project is also open to firms that are not interested in obtaining only direct venture capital, but which are also endeavouring to find another type of strategic partner for their further development in the United States.

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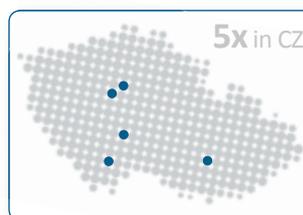
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The scan force document digitization service covers two types of documents – current documents being created directly in the institution or coming from nearby institutions, and archival documents stored in archives. Digitization is a technically challenging and time-consuming process that requires allocation of the necessary financial and human resources. It is, therefore, advantageous to find a contractor who will carry out the demanding digitization process for you. The scan force service was developed in response to the demand and need for the digitization of documents of commercial and government institutions. The service is provided by professional companies with extensive experience in document digitization associated under the umbrella name of SCAN FORCE Group.



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CzechInvest takes on Silicon Valley



Tomáš Hart (commercial counsellor NYC), Petr Darmovzal (commercial counsellor LA), Senta Čermáková (HP), Lenka Kučerová (CzechInvest), Tomáš Orlík (investor, Credo Ventures), Jupe Tan (Plug and Play international relations manager), Josef Dvořáček (commercial counsellor Washington DC), Jan Urban (CzechInvest), Alexandra Rudyšarová (CEO CzechInvest), Saeed Amidi (CEO Plug and Play)

What is Silicon Valley? The term was invented in 1971 by a journalist from Electronic News, Don Hoefler, and referred to the high concentration of companies in the semiconductor industry located in the San Francisco Bay Area, between Menlo Park and San Jose. This definition is, however, restrictive, for other cities in the area like Berkeley and San Francisco have clearly contributed to its economic as well as social development. Today, Silicon Valley is home to thousands of high-tech companies that provide over 380,000 high-tech jobs, making the Bay Area the largest high-tech centre in the United States. Most importantly, it is a unique entrepreneurial ecosystem which has given rise to some of the most innovative and disruptive ideas that are determining and driving the technological progress of today's world.

Silicon Valley Mix

What are the ingredients that make the Silicon Valley ecosystem so special? The first requirement is universities and research centres of a very high calibre. There are a number of prominent academic institutions in Silicon Valley with Stanford and Berkeley as distinctively the most outstanding. Their contribution to Silicon Valley lies, however, not only in their academic excellence but also in their efforts and initiatives to cultivate an environment conducive to technology transfer, commercialisation and the support of entrepreneurship among their students and academic staff. Professors actively participate in the establishment and development of university start-ups and spin-offs. Not only do they

provide technical expertise but many are successful entrepreneurs in their own right with managerial know-how and extensive connections to venture capital funds and other important parts of the high-tech ecosystem. For example, the Information Systems Laboratory at Stanford establishes roughly two start-ups per year and has raised more than USD 900 million in venture capital. One can ask a hypothetical question whether companies such as Google, Yahoo!, Sun Microsystems or Cisco Systems would have come into being had their founders not been exposed to a university system as progressive as Stanford.

Second, Silicon Valley is the Mecca of the venture capital industry with approximately 30% of all venture capital investments in the United States. From the very start, the venture capital industry has assisted companies in exploiting technology breakthroughs and has become almost synonymous with the financing of technology entrepreneurship. Quality venture capitalists work closely with their portfolio companies and see themselves as entrepreneurs too. They know how to build and recruit teams and can find people capable of transforming an idea or a technology into a product. Thanks to their contacts and experience, they are also knowledgeable in identifying needs and emerging markets. Quality venture capitalists are visionaries with intuition. Consequently, it comes as no surprise that many major Silicon Valley high-tech companies have been backed by venture capital funds such as Kleiner Perkins (Genentech, Compaq, Sun Microsystems, Amazon, AOL, Netscape, Google), Sequoia (Apple, Cisco, Oracle, Yahoo!, Google, YouTube), Accel (Facebook, BitTorrent) and Benchmark (eBay, Juniper, RedHat). Venture capital has always been very susceptible to economic downturns and the most recent one has been no exception. Venture capitalists invested \$17.7 billion in 2,795 deals in 2009, marking the lowest level of dollar investment since 1997, but the industry is already showing strong signs of recovery. In Silicon Valley, there will always be investors ready to back entrepreneurs capable of ushering in groundbreaking technologies.

The third element of the ecosystem is the supporting cast of lawyers, head-hunters, accountants, auditors, and marketing, public relations and other specialists. There are numerous sophisticated and specialised service providers in Silicon Valley that not only work with established companies but that also have processes and methods in place to cater to the needs of start-ups with limited resources.

Experienced professionals in the high-tech industry constitute the fourth component. With 285.9 out of every 1,000 private-sector workers, Silicon



Burton Lee (Stanford Engineering), Tomáš Sedláček (economist), Richard Pivnička (honorary consul)

Valley has the highest concentration of high-tech workers of any metropolitan area in the US. The region draws talent from throughout the US and from around the world. According to the Silicon Valley Index, 36% of its inhabitants were born abroad. Interesting job opportunities, open-mindedness of the local people, a pleasant climate and beautiful natural surroundings all serve as powerful magnets.

The critical factor that makes Silicon Valley a truly unique place is the ubiquitous pioneering spirit which encourages entrepreneurship. Silicon Valley is famous for open collaboration between firms, for its open-minded culture and exchange of ideas that drives innovation and for the mobility of employees from one company to another. It is an incubator in which an idea for a company might come from a casual conversation. With confidentiality and non-compete clauses that are much less restrictive than anywhere else, Silicon Valley has formal rules and habits that facilitate innovation. There are many excellent ideas around the world. The capability to develop them with a vision of products and their marketing and sales does not, however, exist in such a sophisticated



Rene Morkos (PhD student Stanford), Barbora Calabova (CzechInvest), Richard Calaba (SAP GRC Architect), Katerina Singh, Senta Cermakova (Industries Analyst, Public Relations Director HP), Radomir Mech (Research Manager, Adobe Systems)

manner anywhere else. Years of accumulated experience have created an environment optimised for efficient development of ideas by professionals driven by the desire to successfully commercialise them. Risk taking, uncertainty and permission to fail are essential values. The strength of Silicon Valley lies in its ability to renew itself. The region has experienced a few downturns but new industries have risen in the place of former ones, new companies have replaced or sometimes absorbed declining ones and Silicon Valley has maintained its status as the innovation haven of the world.

CzechInvest plugs and plays

CzechInvest decided to open its foreign office on the West Coast of the US in a place that aptly manages the mixing of the five ingredients of the Silicon Valley recipe. Plug and Play Tech Center, headquartered in Sunnyvale, California, is a microcosm of Silicon Valley that strives to be a window for promising high-tech companies to showcase their technologies and capabilities to the rest of the world. A community of almost 300 start-ups from all over the world receives access to over 40 venture capital firms, major technology companies, qualified service providers, domain experts and numerous networking events. The centre cooperates with local and international universities and is home to several foreign countries' technology acceleration initiatives. Companies at Plug and Play receive tremendous exposure to the inner workings of Silicon Valley and the opportunity to excel in the world's premier high-tech economy.

Grand Opening

The official opening of CzechInvest's office on the West Coast of the United States took place on 5 October 2009 at Plug and Play Tech Center in Sunnyvale. A Memorandum of Understanding between CzechInvest and Plug and Play signed by the CEO of CzechInvest, Alexandra Rudyšarová, and the CEO of Plug and Play, Saeed Amidi, on that day confirmed the continuous satisfactory working relationship between both parties and outlined spheres of cooperation regarding CzechAccelerator. The cocktail reception was attended by government representatives of the Czech Republic in the US, American companies operating in the Czech Republic, the Czech business community



Alexandra Rudyšarová (CEO CzechInvest) and Saeed Amidi (CEO Plug and Play)

in Silicon Valley, start-ups, venture capitalists, service providers and members of the academic community. The event started with four short speeches. Mrs. Rudyšarová talked about CzechInvest's commitment to continue and further its efforts to provide American companies with excellent service and investment opportunities and to provide Czech companies with exposure and experience in Silicon Valley. In his keynote speech "Leap of Wonder: 20 Years of Capitalism", prominent economist Tomáš Sedláček expounded on how 20 years after the end of central planning in the Czech Republic, Czech entrepreneurs were coming to Silicon Valley to learn and improve their business planning skills. Senta Čermaková, Director of Worldwide Technology Services and Industries Analyst and PR for Hewlett Packard, spoke about the superior quality of Czech engineers who greatly contribute to HP's worldwide operations and stressed the need for exposing Czechs to the genius loci of Silicon Valley in order for them to live their dreams. Investor Tomáš Orlík, representing the Czech venture capital community, spoke of his efforts to find promising Czech entrepreneurs and companies that could be implanted with the Silicon Valley DNA. Assisted by Californian wine, Czech beer and appetizers, the guests conversed, networked and socialized until the late – for Silicon Valley



Tomáš Sedláček (economist), Lenka Kučerová (CzechInvest), Jupe Tan (Plug and Play international relations manager)

–evening hours. The opening of CzechInvest office in Silicon Valley and the announcement of CzechAccelerator mark a new era of the agency's international activities – not only does the office serve its traditional purpose of presenting the Czech Republic as a suitable investment location to American companies, but it will also serve as a launch pad for select Czech companies into the US.

*Lenka Kučerová,
CzechInvest*

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AFI and CzechInvest recognise the best Czech business properties



Jan Bobek,
chairman of the Association for Foreign Investment

The global economic recession has naturally also affected the real estate market in the Czech Republic. There is no doubt that the significant decline in the number of transactions on the market a result of the crisis. While massive speculative construction in recent years created a record supply of new spaces, demand lagged far behind, which is now benefiting primarily tenants. Conversely, developers are finding it necessary to step back from previously common demands. In previous years it was not as easy to generate profits in the real estate market as it is now. The higher rental rates were perhaps indicative of this, though of course construction costs were also higher during the building boom. However, in the past two years banks have changed their approach and now require substantially greater financial participation on the part of developers in the financing of projects.

The Association for Foreign Investment and CzechInvest are very well aware of the difficult economic situation. Particularly at this time it is necessary to focus on supporting the commercial real estate market, as high-quality business properties comprise one of the key factors for attracting foreign investors to the Czech Republic. Prepared business properties with resolved permit processes and infrastructure contribute substantially to enhancing the competitiveness of the Czech Republic.

The celebratory event was dedicated to all owners and operators of business properties, developers, real estate consultants and especially those who in 2008 invested in the construction of rental facilities or preparation of industrial zones and industrial parks in the Czech Republic, as well as those who took part in mediating investments and thus contributed to the realisa-

“ It is very pleasing that in the current, complicated macroeconomic conditions the Czech Republic is able to flexibly respond to demand for spaces required for large industrial projects as well as service and R&D centres. Investors are less interested in greenfield investments and are rather looking for existing spaces that they can rent. ”

Jan Bobek, chairman of the Association for Foreign Investment.

2008 Business Property of the Year awards:

Industrial Zone with the Greatest Economic Benefit

1st place: Pod zelenou Industrial Zone, Český Těšín
2nd place: Černovická terasa Industrial Zone, Brno
3rd place: Frýdek-Místek – Chlebovice Industrial Zone

Brownfield of the Year

1st place: ZOK System, Havlíčkův Brod
2nd place: LAKOVNA HAJDÍK, Jablůnka, Vsetín region
3rd place: POINT CZ, Medlov, Brno region

Business Property with the Greatest Benefit for Innovation and Research

1st place: INBIT Biotechnology Incubator, Brno
2nd place: South Bohemian Science and Technology Park, České Budějovice
3rd place: CTPark Brno

Industrial Park with the Greatest Economic Benefit

1st place: Panattoni D5 Logistics Park, Stříbro, Plzeň region
2nd place: CTPark, Brno
3rd place: VGP Park, Liberec

Industrial Agent of the Year

1st place: Cushman & Wakefield
2nd place: CB Richard Ellis
3rd place: DTZ Czech Republic

Business-Property Manager of the Year

Věra Palkovská, mayor of Třinec and manager of the Třinec-Baliny Industrial Zone

tion of high-quality business projects. The awards ceremony was held on 19 November 2009 in the industrial environment of the **DOX Centre for Contemporary Art** in Prague's Holešovice district. Fittingly, the centre arose through the regeneration and conversion of a former factory into a modern exhibition, gallery and event space. More than three hundred people attended the ceremony, including members of parliament, senators, governors and other important guests.

The event's general partner was the energy company ČEZ, while the ČSOB financial group was its partner. The economic daily E15 and marketing weekly Strategie provided media support for the entire Business Property of the Year competition.

The location of the 2008 Business Property of the Year awards ceremony was more than symbolic. DOX is situated in facilities

which at the beginning of the twentieth century served the needs of locksmiths and plumbers, and later the *Závod umělecké kovovýroby* (Ornamental Iron Works). Following the Velvet Revolution in 1989, the building was abandoned and then finally revitalised at the beginning of the new millennium. Like many of the estimated ten thousand brownfield sites in the Czech Republic, the building's main advantage is that it lies in close proximity to the city centre and existing infrastructure. Perhaps because of this, the disused space was given a second chance by Leoš Válka, who decided to renovate this originally industrial site and dedicate it to contemporary art.

Awards were presented in five main categories and one special category. The **INBIT Biotechnology Incubator** was selected as the Business Property with the Greatest Benefit for Innovation and Research, the **Pod Zelenou Industrial Zone** in Český Těšín was named the Industrial Zone with the Greatest Economic Benefit and Panattoni's **D5 Logistics Park** near Stříbro in the Plzeň region was again recognised as the Industrial Park with the Greatest Economic Benefit. According to the expert jury of the Business Property of the Year competition, the above-mentioned properties made the greatest contribution to the development of business in the Czech Republic. The **Brownfield of the Year** award was presented to **ZOK System of Havlíčkov Brod**, while the brokerage firm **Cushman & Wakefield** won the prize for **Industrial Agent of the Year**, a newly added category in this year's competition. **Věra Palko-**



vská, mayor of Třinec and manager of the Třinec-Baliny industrial zone, was named **Business-Property Manager of the Year**.

"In order for the Czech Republic to attract new investors, it needs top-quality business properties. And today we are honouring such properties," says Alexandra Rudyšarová, acting CEO CzechInvest. "At the close of the year interest in new investments in the Czech Republic clearly revived despite the slump in the global economy. Thanks to high-quality business properties available throughout the Czech Republic, we will be able to satisfy this interest."

Thirty business properties located throughout the Czech Republic were entered in the latest edition of the competition. Their final ranking was determined by an expert committee composed of representatives of the Ministry of Industry and Trade of the Czech Republic, CzechInvest and previous winners. Eligible properties were those whose preparation was realised during the course of



2008 or for which in the same period an investment was announced by at least one investor in the area of manufacturing, business support services or research and development.

“ At the close of the year interest in new investments in the Czech Republic clearly revived despite the slump in the global economy. Thanks to high-quality business properties available throughout the Czech Republic, we will be able to satisfy this interest. ”

Alexandra Rudyšarová, acting CEO CzechInvest

Within the category **Industrial Zone with the Greatest Economic Benefit** the key evaluated criterion was the properties' overall economic benefit arising on the basis of the investment amount and the number of newly created jobs. Other assessed criteria included the overall benefit and sophistication of individual in-

vestments that were realised or at least announced in the course of 2008. Second and third place, behind the winning Pod zelenou Industrial Zone in Český Těšín, were awarded to Brno's Černovická terasa Industrial Zone and the Frýdek-Místek – Chlebovice Industrial Zone respectively.

The **Brownfield of the Year** category focuses on projects involving the regeneration and revitalisation disused sites for industrial production, trade and services. Within this category the expert committee evaluated implemented brownfield-regeneration projects for industry, research and development and business support services. Emphasis was placed on the quality of projects resulting in the regeneration of disused or neglected sites and their new uses, remedy of ecological damage and the projects' positive impact on the environment. The victorious ZOK System was followed by LAKOVNA HAJDÍK of Jablůnka in Vsetín region and the POINT CZ project in Medlov in the Brno region.



Petr Hájek (AFI), Zuzana Petrová (Černovická Terasa Industrial Zone), Milan Kratina (CzechInvest), Oliver Pospíšil (Černovická Terasa Industrial Zone)

"We are endeavouring to maximally promote interest in brownfields and their further intensive use," emphasises Alexandra Rudyšarová.

The category **Business Property with the Greatest Benefit for Innovation and Research** is intended for science and technology parks, business incubators, technology centres and innovation centres focused on the areas of science, technology, innovative business and professional training which regularly cooperate with universities, scientific laboratories and research institutions. The decisive criteria in this category are the size, engineering solution and technical equipment of the properties. Other evaluated factors include the level of cooperation with educational institutes and the general social benefit connected with the number of newly created specialised jobs.

The purpose of the INBIT Biotechnology Incubator is to concentrate in one place various instruments of support for start-up firms with innovative projects. Comprehensive services comprise the cornerstone of this support system. Participation in the incubator allows firms to save financial resources, which can then be directed toward product development, thus making it possible to complete development earlier than would otherwise be the case under normal conditions. Thanks to consulting provided by experts from the South Moravian Innovation Centre, incubated firms can substantially limit their business risks. The second- and third-place winners in this category were the South Bohemian Science and Technology Park in České Budějovice and CTPark Brno respectively.



Robert Szurman, Ministry of Industry and Trade,
Věra Palkovská, City of Třinec

"It is very pleasing that in the current, complicated macroeconomic conditions the Czech Republic is able to flexibly respond to demand for spaces required for large industrial projects as well as service and R&D centres. Investors are less interested in greenfield investments and are rather looking for existing spaces that they can rent," emphasises Jan Bobek, chairman of the Association for Foreign Investment.

The category **Industrial Park with the Greatest Economic Benefit** focuses on industrial parks intended for leasing in which investors either announced or implemented investments in 2008 in the areas of manufacturing, repair centres, shared-services centres or research and development. CTPark Brno and VGP Park Liberec took second and third place in this category behind Panattoni's D5 Logistics Park. The winning property had the greatest volume of



Reception after the
Business Property
of the Year 2008 ceremony

lease transactions with investors operating in the above-mentioned areas in the five period.

In the **Industrial Agent of the Year** category Cushman & Wakefield was followed by CB Richard Ellis and DTZ Czech Republic. This category is intended for individuals and employees of brokerage firms who in 2008 participated in the brokering of lease and acquisition transactions with investors in the areas of manufacturing, repair centres, shared-services centres or research and development.

Within the category **Business-Property Manager of the Year**, as in the previous year, the professionalism of industrial-zone managers was assessed along with their participation in the successful placement of investments in the given industrial zones. Their professional background and the specific results of their work were also assessed.

Thanks to its location in the heart of Europe, the Czech Republic holds a strategic position for foreign investors. The country is home to a range of universities with a strong technical focus and it is thus able to offer a high-quality, skilled and, in comparison with western Europe, relatively inexpensive workforce. The high standard of the Czech Republic's infrastructure and services and its long industrial tradition are among the essential factors that influence investors' decision-making. It is therefore necessary to maintain a sufficient supply of high-quality commercial spaces and to concurrently demonstrate to firms the possibility of further expansion.

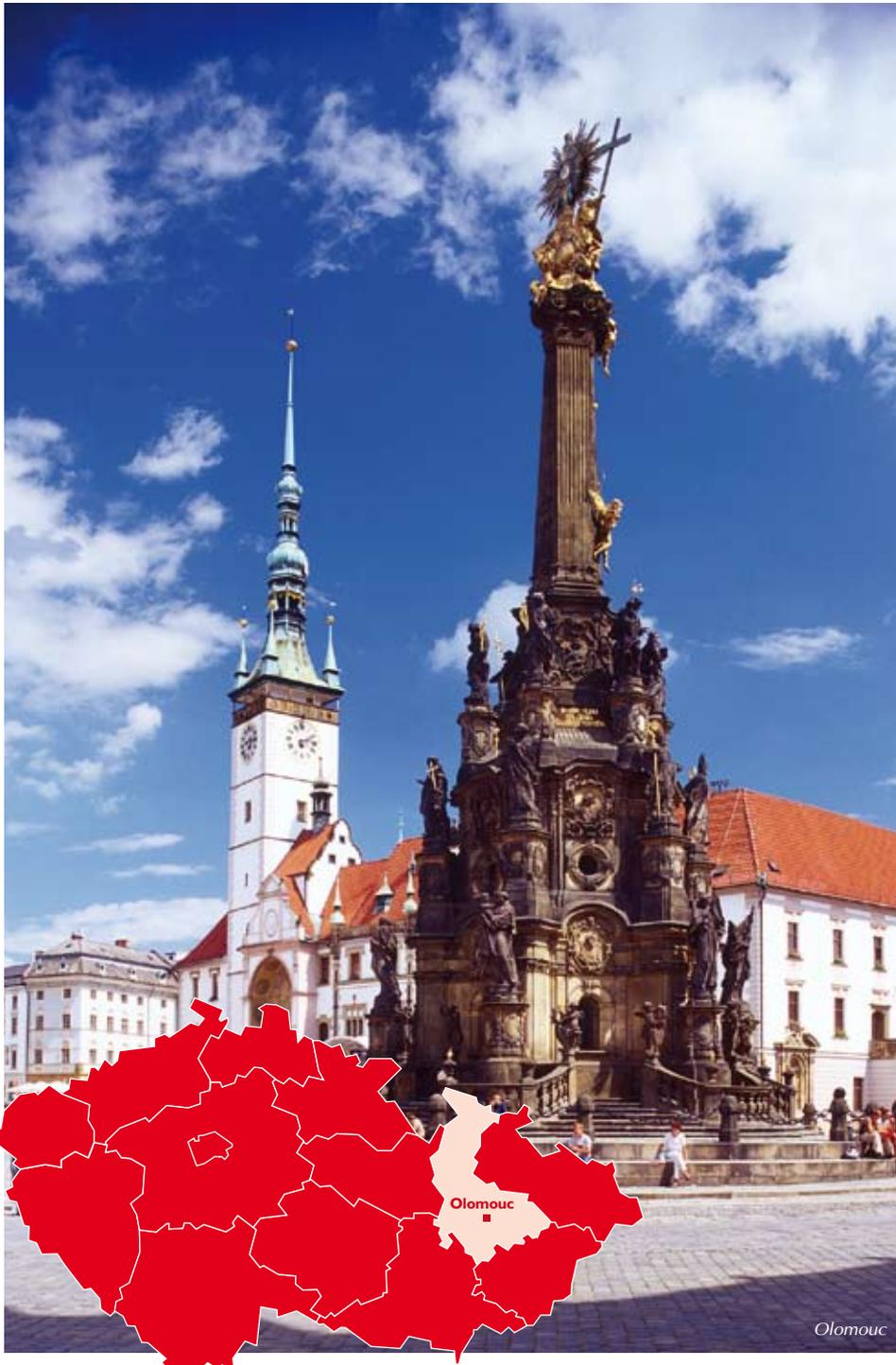
In order for us to support the inflow of foreign investments to the Czech Republic, developers must focus on quality. This means less emphasis on detail and more consideration of well-designed interior layouts, functionality and rationalisation of operating expenses, particularly energy costs.

Two special working groups were established within the AFI last year. One handles the placement of investments on greenfields and brownfields, while the other is focused on the relocation of investments to the Czech Republic. The purpose of this is to formulate long-term, effective solutions for using existing strategic zones against the backdrop of fundamental changes in the investment environment, to set forth systemic measures for addressing the issue of brownfields and to create an institutional and legislative framework for supporting these areas.

Martin Michalov,
Association for Foreign Investment

For more information on this event please visit www.afi.cz.

Olomouc region: skilled workforce and long tradition in industrial production



in the Přerov district. This region is also known as Haná.

The region is composed of five districts: Jeseník, Šumperk, Olomouc, Prostějov and Přerov. Together with the Zlín region, the Olomouc region is part of the Central Moravia NUTS II region.

The region offers investors a skilled, flexible and available workforce with a strong background and long tradition in industrial production. The total number of economically active residents is 328,326. Average monthly income is CZK 19,615 – the fourth lowest in the Czech Republic. In recent years, the Olomouc region has ranked among the Czech Republic's regions with the highest unemployment. Overall unemployment reached 11.19% in Q3 2009.

Unemployment rate in %

Jeseník	12.11
Olomouc	10.54
Prostějov	8.47
Přerov	11.71
Šumperk	14.16

Source: Czech Statistical Office, Q3 2009

The most well-known symbol of the region is Olomouc tvarůžky, also known simply as "Olomouc cheese". It is a type of soft cheese curd with a strong aroma verging on the malodorous, yellow in colour and forming an essential component of Czech cuisine. Tvarůžky are made from non-renneted, sour curds without any preservatives other than salt. They were originally produced in towns around Olomouc until the 19th century, when they were called Silesian tvarůžky. They eventually took on the Olomouc name because they were sold in that city's markets. Production was later transferred to Loštice, where they are still made today.

Basic data

Area	5,267 km ²
Population	641,923
Population density (persons/km²)	122
Unemployment rate	11.19%
Regional capital	Olomouc

Source: Czech Statistical Office, Q3 2009

The Olomouc region lies in the northern part of central Moravia, extending from north to south along the Morava River and sharing a 104 km border with Poland. The centre of the Olomouc region is located 275 km from Prague. It is one of the Czech Republic's smaller regions, ranking eighth among the country's 14 regions. The region's tallest mountain is Praděd (1,492 metres above sea level) in the Jeseník district, while its lowest point is the surface of the Morava River

Palacký University Science and Technology Park

The Palacký University Science and Technology Park (VTPUP) provides rental of offices and production facilities, consulting services and use of instruments and know-how from Palacký

Examples of significant manufacturing firms with more than 200 employees

Olomouc district:

AŽD Praha
 FARMAK
 GEMO Olomouc
 GRANITOL
 JOHN CRANE SIGMA
 Miele technika
 MORA AEROSPACE – Honeywell
 MORA MORAVIA
 OLMA
 PANA V
 Pivovar Litovel
 UNEX

electrical engineering
 pharmaceuticals
 construction
 plastics
 mechanical engineering
 electrical engineering
 mechanical engineering
 mechanical engineering
 food
 automotive industry
 food
 mechanical engineering

Přerov district:

Meopta-optika
 Gambro-Meopta
 KAZETO
 Montáže Přerov
 PRECHEZA
 PSP Slévárna
 Pivovar Zubr

optics
 medical devices
 paper
 metalworking and construction
 chemicals
 metalworking
 food

Prostějov district:

Agrop Nova
 GALA
 Oděvní podnik
 AMF Reece CR

wood-processing
 manufacturing
 textiles and clothing
 mechanical engineering

Šumperk district:

FORTEX – AGS
 Slovácké strojírný
 Olšanské papírny
 OP papírna
 Pars nova
 Pramet Tools
 Siemens Elektromotory
 SULKO
 ZKL Hanušovice

construction
 mechanical engineering
 paper
 paper
 automotive industry
 metalworking
 electrical engineering
 construction, manufacturing
 mechanical engineering

Jeseník district:

STOMIX
 WAREX

construction
 metalworking

Source: CzechInvest

University under favourable conditions. With its Business Incubator, VTPUP helps beginning entrepreneurs launch new firms with original ideas and projects. The science and technology park has served as a bridge between the worlds of business and science since the year 2000. It is an accredited member of the Association of Science and Technology Parks in the Czech Republic, and in 2007 received the award for the best project of the year in the Czech Republic in the area of science and technology parks. VTPUP is an active part of the Olomouc region's innovation infrastructure. For more information, see www.vtpup.cz.

Core Innovation Centre of Olomouc

The Core Innovation Centre of Olomouc (JICOL) is a new project of TESCO SW a.s., whose purpose is to create a supportive environment for the establishment and development of innovative business entities and commercialisation of their research and development findings. A new science and technology park, business incubator and technology-transfer centre will be set up within the JICOL project. Start-up firms will be provided with favourable lease conditions and a comprehensive system of services in a range of areas including tax, legal and specialised consulting; profes-

sional consultation pertaining to patent issues and licensing of new technologies; public relations and marketing strategies. In later phases, successfully incubated firms can continue their development in the science and technology park. The technology-transfer centre will serve to bridge the results of the science-research work of partner institutions and client firms and the business environment. More information is available at www.icol.cz.

Olomouc as a centre of education

Olomouc has been an important centre of education and culture since the Middle Ages. **Palacký University in Olomouc** is the second-oldest university in the Czech Republic, having obtained all of the rights of other European universities in 1573. The university currently has eight faculties: Cyril and Methodius Faculty of Theology, Faculty of Medicine, Faculty of Philosophy, Faculty of Education, Faculty of Natural Sciences, Faculty of Physical Culture, Faculty of Law, and Faculty of Health Sciences. The university has more than 21,000 students and roughly 2,500 employees, of which 1,000 are academic workers.

Palacký University also hosts the University of the Third Age, which is attended by more than 400 students. See www.upol.cz for more information.

The Olomouc region supports the establishment of non-university institutions of higher learning as well as detached university facilities at secondary schools. Technically focused schools supplement the offer of education in the region, which due to Palacký University is focused predominantly on the humanities. Non-university education and bachelor-level study programmes have been expanded in the following detached facilities:

- **Moravian University, Olomouc**, www.mvso.cz
- **Mendel University of Agriculture and Forestry in Brno**, Hranice branch, Faculty of Forestry and Wood Sciences, www.mendelu.cz
- **Technical University of Liberec**, Prostějov branch, Faculty of Textile Engineering, Department of Technology and Management of Apparel Production, www.ft.tul.cz
- **University of Logistics, o.p.s. Přerov**, www.vslg.cz



Olomouc region - Praděd mountain

- **Tomáš Baťa University Zlín**, Přerov branch, Faculty of Applied Informatics, www.fai.utb.cz
- **Technical University of Ostrava**, Šumperk branch, Faculty of Mechanical Engineering, Faculty of Economics, www.vsb.cz
- **Technical University of Ostrava**, Zábřeh branch, Faculty of Mechanical Engineering

A total of 111 secondary schools operate in the Olomouc region. Bilingual sections – English, French and Spanish – have been established at three high schools.

Broad possibilities for using brownfields

The most common brownfield sites in the Olomouc region are abandoned farmsteads of up to two hectares in small villages. The Olomouc region has the Czech Republic’s largest concentration of brownfields located in small municipalities of up to two thousand residents. Brownfields in the Olomouc region are among the cleanest in the Czech Republic, as 78% of them do not have any apparent ecological burdens, which obviously helps to accelerate their regeneration.

For most brownfields in the Olomouc region, it is recommended that future investors return the sites to their original agricultural uses. However, roughly one-third of such sites in the region are better suited for industry.

The Research Study of Brownfields conducted by CzechInvest, in cooperation with individual regional offices, from 2005 to 2007 is a valuable source of information on abandoned and disused sites in the Czech Republic. The study identified 2,355 brownfield sites covering a total of more than 10,000 hectares. Of these, 206 are located in the Olomouc region. See www.brownfieldy.cz for more information.

Examples of brownfield regeneration projects in the Olomouc region

Olomouc Šantovka

The aim of the investors – ING Real Estate Development CR, s.r.o., Sekyra Group, a.s. and ZENMEX s.r.o. – is to build on the Olomouc Šantovka site a new shopping centre, commercial and administrative spaces, residential buildings and sport and relaxation facilities. The project is situated in the former Mila Olomouc complex, on a site near Polská Street and the site of the former gasworks. More than 200,000 m² of new above-ground spaces will be created, of which 40% will be intended for shopping and entertainment. Individual shopping and restaurant facilities will be located in other buildings within the Olomouc Šantovka project. Residential and administrative facili-



Olomouc Region - Javořice cave

Clusters

- Nanotechnology Cluster** – Project to Support the Research and Use of Nanotechnologies www.nanoklastr.cz
- MedChemBio** – support for research and entrepreneurship in the field of biologically active substances www.medchembio.cz
- ITEKO** – focused on the field of information technologies www.iteko.cz

ties, a pedestrian zone, bicycle path and park are being prepared in the remaining spaces.

In the first phase, which should be implemented in 2011, investors are focusing on the construction of a shopping and entertainment centre with all necessary infrastructure. Construction of residential and administrative buildings will begin in conjunction with commencement of the first-phase construction.

Sugar refinery in Nĕmčice nad Hanou

The sugar refinery was established in 1909. Since 1995 it has been a part of the Eastern Sugar Česká republika group, together with sugar refineries in Kojetín and Hrochův Týnec. Eastern Sugar was forced to restructure following

the amendment of quotas for sugar production in the European Union. Among other things, the company undertook to liquidate the sugar refinery in Nĕmčice nad Hanou.

The complex, including utilities networks, has been almost completely demolished; demolition will be completed at the end of the year and the complex awaits an investor to revitalise it. The site lies roughly 10 km from the D1 motorway, covers nearly 30 hectares and, according to the urban development plan, is intended for industrial or commercial use.

High quality of life

After Prague, the city of Olomouc is the second most important and expansive municipal protected-landmark area in the Czech Republic. The Olomouc region has a rich history, which is reflected in the large number of historical buildings and landmarks, as well as its cultural facilities. Significant cultural institutions include the Moravian Theatre in Olomouc, the Zoological Garden in Svatý Kopeček, and a large number of museums and galleries in various parts of the region. The National Science Library in Olomouc occupies an important position in the region.

The Olomouc region is important for the travel industry, as both domestic and foreign tourists are drawn to its exceptionally beautiful countryside, natural rock formations and historic landmarks. The region has a variety of landscapes including the Jeseníky and Rychleby mountains and the Javoříč, Mladeč and Zbrašov aragonite caverns, which have a particularly strong connection with the travel industry.

Historical buildings that are highly popular with visitors include a number of churches as well as castles and chateaux such as Bouzov, Velké Losiny, Jánský vrch, Helfštýn and Úsov. In 2001 the Column of the Holy Trinity in Olomouc was added to the UNESCO World Heritage List.

Cultural life in the region is characterised by a broad range of musical, theatrical, artistic and sporting activities. The International Organ Festival held at St. Morris’s Cathedral in Olomouc is just one example of the important cultural events that take place each year in the region. Traditional sporting events include the Ecce Homo races in Šternberk and the Author Šela Marathon in Lipník nad Bečvou.

The Olomouc region has a relatively dense network of bicycle trails. Local sports and relaxation centres offer squash, indoor and outdoor tennis courts, bowling, aerobics and swimming pools. Golfers will find high-quality courses in close proximity to the city of Olomouc, and the region offers several opportunities for equestrianism.



Olomouc region - golf resort

Lenka Gondová,
Director, Olomouc Regional Office, CzechInvest

Conditions of advertising in Czech Focus

Basic information about the magazine

Czech Focus is published by the Association for Foreign Investment as one of the AFI's tools for actively supporting the development of the Czech business environment and the competitiveness of the Czech Republic in the field of foreign investment. This publication provides its readers with an exceptional range of topics mapping the Czech investment environment and presenting the Czech Republic as an attrac-

tive location that offers outstanding conditions for doing business and a high quality of life. Under the auspices of the AFI, specialists from the Czech business, scientific and civil-service communities are invited to write authoritative articles for every issue of Czech Focus, thus making the magazine a unique and effective platform for communication and information. Czech Focus is published in the English language

every four months and is available free of charge at distribution points including a broad range of private companies, state organisations, consulates, embassies, associations and universities in the Czech Republic and abroad. The main target group comprises current and potential foreign investors, as well as everyone interested in the Czech investment environment.

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Prices and formats of advertisements

1/1

CZK 42,000

(inside)

CZK 60,000

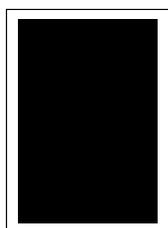
(inside front cover)

CZK 48,000

(inside back cover)

CZK 66,000

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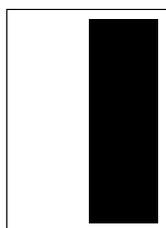


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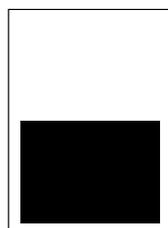
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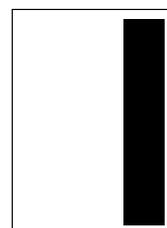
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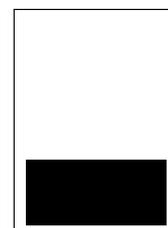
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ASSOCIATION FOR FOREIGN INVESTMENT



Partner



Partnership to Support Foreign Direct Investment in the Czech Republic

The Partnership to Support Foreign Direct Investment in the Czech Republic is a joint project of the Association for Foreign Investment and CzechInvest. Through their participation in the Partnership, companies display an active interest in the development of the Czech investment environment and the Czech Republic's competitiveness in the field of foreign investment, whereas one of the main objectives of the project is to create an effective environment for communication between foreign investors, the state administration and Czech companies. Within the Partnership, a number of prestigious events are organised every year, including the celebratory announcement of the Investor of the Year, Business Property of the Year and Business Project of the Year awards, as well as a range of significant joint activities of the AFI and CzechInvest. The Partnership to Support Foreign Direct Investment is open to all stable companies on the Czech market.

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