



BPO in the CEE region



Executive Summary

- The Central & Eastern Europe (CEE) region has emerged as a worldwide force in the Business Process Outsourcing (BPO) sector.
- BPO in the form of multinationals' in-house European Service Centres and 3rd-party BPO service providers began to take off in Poland, the Czech Republic and Hungary from 1998-1999 driven primarily by the improving investment climates, the low cost labour supplies and the development of modern office markets in those countries. Other locations such as Slovakia, Romania, and Bulgaria have since successfully competed for BPO investment.
- Despite being a higher cost location than India, CEE has proved to be a competent BPO destination due to the following
 factors: low labour costs relative to Western Europe and the US; availability of skills; quality education structures; healthy
 work cultures; flexible labour markets; favourable investment climates; solid infrastructures; close cultural ties; strong language skills; proximity to western markets; and availability of suitable cheap modern office accommodation.
- Higher value "knowledge-driven" business functions such as IT tasks and Research & Development departments are now being outsourced or offshored to CEE.
- The differential between wage levels between Western and Eastern Europe has narrowed but only slightly. CEE will remain a low cost location relative to Western Europe and the US for at least the medium-term.
- Wage inflation is beginning to blunt the cost-competitiveness of BPO hotspots like Prague, Budapest, Warsaw, Wrocław
 and Kraków relative to cheaper locations within the CEE region and locations further east. Regional cities throughout the
 region can expect more interest from outsourcers.
- Dwindling labour supply in the CEE capital cities as well as some regional cities due to falling unemployment and high levels
 of emigration from some countries is an emerging constraint on BPO growth.
- The quality of education and ability in European languages are key drivers of BPO into CEE. Continuing investment into and reform of the education systems is essential to ensure a continuing flow of qualified workers and maintain CEE's competitive advantage.
- Lack of office supply has been a constraint for Prague in 2006 as well as some regional CEE cities. The capital cities however are all currently seeing a wave of development of office space suitable for BPO operations, although lack of office space in many of the smaller regional CEE cities will continue to be a brake on BPO growth.
- Leading BPO and Service Centre magnets during the first wave of investment in 1998-2006 have been Budapest, Prague,
 Warsaw, Kraków and Wrocław. These cities are well positioned to further develop as IT Outsourcing and Research &
 Development hubs. Some companies are widening the coverage of their CEE Service Centres in these cities to support not
 just European client and employee networks but global networks as well.
- DTZ expects Łódź, Poznań, Lublin, Brno, Ostrava, Plzeň and other relatively untapped Polish and Czech regional cities to see increased BPO investment. Bucharest and Sofia are forecast to emerge as new BPO hotspots in the next 2-3 years.
- Due to structural constraints such as weaker investment climates and high property costs, Russia and Ukraine are unlikely to see significant BPO activity in the short-term but have much potential in the medium to long term.



"The quest for competitive advantage is intense and global... BPO offers hope of sustained advantage."

Source: "BPO - Source of Competitive Advantage?" DTZ Research, 2003

Introduction

Business Process Outsourcing (BPO) is a process involving the re-engineering and relocation of corporate functions and processes to either self-owned or third-party service providers, typically in low-cost locations.

"The continuing pressure to cut costs has coincided with technological advances to facilitate the outsourcing of a wider range of corporate functions and business processes. Possibly of greater significance however, is the change in the way technology has allowed corporates to manage the level of risk associated with remote working together with a general change in attitude on where work can be carried out."

Source: "BPO – Source of Competitive Advantage?" DTZ Research, 2003

Since the 1980s, companies have been attempting to overhaul their internal operations such as accounting or HR,

or to upgrade their technology by signing megadeals with global outsourcing companies such as EDS or Genpact or setting up their own Innovation Centres, Call Centres or Shared Service Centres in locations as far afield as Bangalore and Mexico.

The major aim of all the versions of BPO is to lower cost, improve service and build, or retain, competitive advantage.

Theoretically, by cutting costs through outsourcing, companies should be able to reorientate their organisations and free up talent at home to come up with new higher value products and services, customer segments and solutions. EDS puts cost savings for its BPO clients at between 10-35%.

So the theory goes, for every dollar or euro saved in outsourcing, the outsourcer can invest more than \$1 or €1 into new business and new Research & Development.

In the last ten years the Central & Eastern Europe (CEE) region has emerged as a serious player in the competition for a slice of the growing BPO cake. In this Research Alert, DTZ examines the phenomonen of BPO in the CEE region and the prospects for continued growth of the sector.

BPO Definitions

Outshoring or outsourcing

The delegation of non-core operations or jobs from internal production within a business to an external entity (such as a subcontractor) that specialises in that operation.

Offshoring*

Relocation of business processes from one country to another. This includes any business process such as production, manufacturing, or services.

Nearshoring, nearsourcing or nearshore outsourcing

The delegation of non-core operations or jobs from internal production within a business to an external entity (such as a subcontractor) that specialises in that operation.

ITO (IT outsourcing)

Using outside vendors to create, maintain, or reengineer IT architectures and systems.

KPO (Knowledge process outsourcing)

Outsourcing for high-end knowledge work.

^{*}Offshoring is similar to outsourcing when companies hire overseas subcontractors, but differs when companies transfer work to the same company in another country



The Core of the Matter

The parts/sections or branches of organisations most detachable from the mother company have traditionally been (i) Back office or "Non-Core" functions, (ii) Customer Support or "Call Centres", and (iii) IT functions (ITO). A growing trend worldwide is that of companies outsourcing or offshoring knowledge-driven functions.



		Typical BPO Tasks		
Back Office or "N F&A	on-Core" Functions HR	Call Centres	IT Outsourcing (ITO)	Knowledge Process Outsourcing (KPO)
Accounts payable	Payroll adminstration	Technical Support	Software application development	Analytics
Accounts receivable	Benefits administration	Customer Help-desks	Hardware development	Diagnostics
Fixed assets	Employee services - healthcare, insurance	Telemarketing	Remote infrastructure administration	Legal
Travel & entertainment	Employee insurance	Telesales	Help desk	Risk management
General accounting		Reservations	Consulting work	Underwriting
Cost accounting				Medical
Credit and collection				Pharmaceutical research
Cash management				
External reporting				
Freight payment				

Source: DTZ Research

O for Outsourcing — With a Little Help from Our Friends...

Parellel to the global race among top companies to cut costs by pooling support services making operations more efficient, BPO providers have strived to grab a share of the lucrative market. Leading companies are shown in the table below.

O for Offshoring — Keeping it in the Family...

Instead of outsourcing to BPO sub-contractors in remote locations, many companies choose to cut costs by offshoring overlapping BPO-type tasks in-house in consolidated or "Shared" Service Centres.

Leading Global BPO Providers					
Company	Nationality	Services			
Accenture	US	Software development, Network support, F+A, HR, Procurement, Insurance, general banking			
Cap Gemini	FRA	Software development			
Client Logic	US	Call Centres			
Convergys	US	Call Centres			
CSC	US	Software development, Insurance, Demand Management			
EDS	US	Software development, Network support, F+A, HR, Payroll, Demand Management, Procurement, Insurance,			
		General banking, Telecoms, Transportation, Health care operations			
Genpact	IND	F&A, Customer Service, IT services, Sales & Marketing Analytics, Supply Chain & Procurement			
Hewitt Associates	US	HR, Payroll, Procurement			
Infosys Technologies	IND	Software development, NW support, Banking, Mortgage processing			
TCS	IND	Software development, R+D/Engineering, F+A, Telecom, Transportation, Hospitality operations			
Transcom	SWE	Call Centres, CRM services			
Satyam	IND	Software development, Network support, R+D/Engineering			
SITEL	US	Call Centres			
Stream	US	Call Centres			
Sykes	US	Call Centres			
Wipro	IND	Software development, R+D/Engineering, Demand Management, Mortgage processing, Transportation,			
		Healthcare operations, Banking			



Shared Service Centres are a relatively new concept in international business. They started in the USA in the 1980s and spread through Europe throughout the mid-1990s. Multinationals aim to focus on their core business in a given geographical area whilst back office services are efficiently run with standardised and automated processes in either a network of several virtual hubs or one major business services centre. This form of BPO particularly suits companies with unique in-house financial or technical systems requiring regular staff training or who work closely with customer databases.

Indian Summer

In the race to attract BPO to its shores, India established a dominant position as the outsourcing brand leader. As the advent of the internet and broadband connectivity led to tumbling information and communication costs, many English-language customer support calls starting getting routed via toll-free service lines to India. Wage levels in India are a small fraction of Western levels. The tech sector boomed in India in the 1990s, while the large workforce were generally highly skilled, motivated and English-speaking. Outsourcers also valued the equidistant timezone between the US and Europe as well as investment-friendly government policies.

Since the 1990s, hundreds of thousands of mainly IT services and Call Centre jobs have been off-shored to the Sub-Continent. Pioneering Indian BPO companies such as Genpact, Tata Consultancy Services (TCS), Satyam, Infosys and Wipro grew to meet the demand and have since developed into global BPO superpowers with branches worldwide including CEE.

The Outsourcing Rule of Thumb

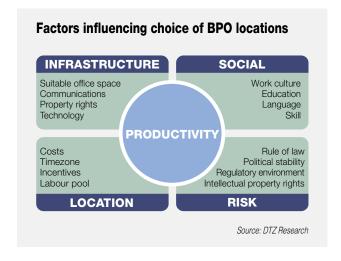
"70% of GE's work is outsourced. Of this amount 70% is done in offshore development centres, and of this amount, about 70% is done in India".

Jack Welch CEO of General Electric

BPO Goes Global

Inevitably the BPO phenomenon in India led to staff attrition in a limited labour pool, even one as large as India's which impacted on customer relationships. In addition, rising salaries began to cut into BPO margins.

India remains the market leader in terms of BPO and ITO export revenues but its dominance of the global BPO market is now challenged by new competitors around the world. Major US and Western Europe companies have looked to benefit from the cost and skill advantages in their own backyards. The term "nearshore" entered the vocabulary of outsourcers seeking to find the "right shore" or optimal balance of cost, time zone, and language among other factors.



BPO jobs are increasingly shared around locations in multiple regions worldwide. Latin America, China, the Philipines, Singapore, Dubai, Canada as well as CEE are pitching themselves as the ideal nearshore locations with the most cost-effective combination business conditions.





BPO arrives in CEE						
Country	Year	Company	Nationality	Location	Operation	
Czech Republic	1998	EDS	US	Prague	BPO Service Centre	
Poland	1998	Motorola	SWE	Kraków	R&D function	
Hungary	1999	Sykes	US	Budapest	Call Centre	
Poland	1999	Intel	US	Gdańsk	R&D function	
Poland	2000	Siemens	DE	Wrocław	R&D function	
Slovakia	2000	IBM	US	Bratislava	Shared Service Centre	
Hungary	2001	Diageo	UK	Budapest	Shared Service Centre	
Czech Republic	2001	DHL	DE	Prague	Shared Service Centre	
Poland	2002	TNT Express	NL	Warsaw	Call Centre	
Czech Republic	2002	Hewlett Packard	US	Prague	IT Service Centre	
Czech Republic	2002	Philips	NL	Prague	IT Service Centre	

Source: DTZ Research

The First BPO Wave into CEE - 1998-2002

While KPMG, IBM, Sun Microsystems had established Service Centres in Budapest, Kraków, and Prague respectively in the early 1990s, these were exceptions.

EU accession was still more than a decade away, the business and political environments were generally considered as still immature and broadband connectivity had yet to emerge.

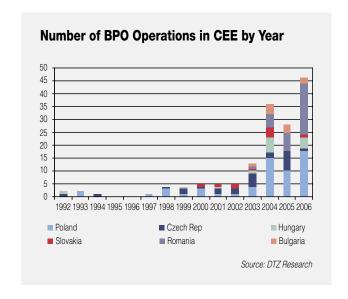
The BPO wave began to take off in Poland, the Czech Republic and Hungary from 1998-1999 as the first movers decided the available cost-saving opportunities made the risk of taking the plunge in CEE worthwhile.

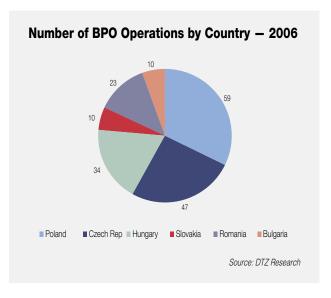
The Wave Becomes a Flood – 2003-2006

By end-2006, DTZ had recorded a total of 183 BPO operations across CEE. Poland has been the leading destination, although per capita the Czech Republic is out in front.

The three core countries of Poland, the Czech Republic and Hungary account for 77% of total BPO into CEE.

Romania is emerging as a BPO destination, attracting over 30% of total BPO in the region in 2006.







BPO Superpowers Discover CEE

As demand for BPO went global, so the major BPO players entered the CEE markets. CEE is now a key hub servicing European client bases. BPO giant Accenture handles Finance & Accounting (F&A) outsourcing work through 21 delivery centres in the US, Ireland, Spain, India, China and now Poland, Slovakia, the Czech Republic and Hungary. Accenture's branch in Prague employs 700 people speaking 23 languages and is their largest in Europe.

The world's largest BPO service-provider EDS's "best shore" strategy rotates IT services, payroll and financial operations services for the same clients around the world (India, New Zealand, South Africa, Canada, several locations in Latin America as well as Hungary and Poland) so that the outsourced function is available 24/7. Other BPO companies have opted to build up one major

business services centre. Convergys, for example, service clients in 15 countries in ten European languages from a headquarters in Budapest which it expanded to around 4000 sqm in 2006.

From 2004, the Indian BPO superpowers seized the opportunity to establish or grow their presence in the EU and rapidly expanded throughout the CEE region. For European clients previously supported from India, the Sub-Continent now can seem too remote. In addition, finding staff with knowledge of German or French is considerably easier in Prague or Warsaw than Mumbai or Delhi.

Tata Consultancy Services (TCS) chose Hungary as its base from where it serves clients such as Ericsson, Nokia, AXA Sunlife and Deutsche Bank, all previously serviced from India. TCS has also moved into Poland, Romania and Russia.

	Major 3rd party BPO service providers in CEE						
Year	Country	Company	Nationality	Location			
2002	Slovakia	Accenture	US	Bratislava			
2003	Czech Republic	Accenture	US	Prague			
2003	Czech Republic	Europ Assistance	FRA	Prague			
2003	Czech Republic	Icon	UK	Prague			
2003	Czech Republic	Siemens Shared	DE	Prague			
2003	Poland	Transcom	SWE	Olsztyn			
2004	Hungary	Tata	IND	Budapest			
2004	Hungary	EDS	US	Budapest			
2004	Hungary	Satyam	IND	Budapest			
2004	Czech Republic	Symbol Technologies	US	Brno / Hodonin			
2004	Czech Republic	Lion Teleservices	FRA	Pardubice / Hradec Králové			
2004	Poland	Arvato Services	DE	Poznań			
2004	Poland	Cap Gemini	FRA	Katowice			
2004	Poland	Cap Gemini	FRA	Wrocław			
2004	Poland	Sitel	US	Warsaw			
2005	Czech Republic	Acer	TAI	Brno			
2005	Czech Republic	Giga Byte Technologies	TAI	Brno			
2005	Czech Republic	Incline	UK	Prague			
2005	Czech Republic	SAP	DE	Prague			
2005	Poland	Communication Factory	DE	Kraków			
2005	Romania	Genpact	IND	Bucharest			
2006	Hungary	Convergys	US	Budapest			
2006	Hungary	Genpact	IND	Budapest			
2006	Czech Republic	Transcom	SWE	Prague			
2006	Poland	Accenture	US	Warsaw			
2006	Poland	ACN	US	Wrocław			
2006	Poland	EDS	US	Wrocław			
2006	Poland	GE Money Bank	US	Wrocław			
2006	Poland	Genpact	IND	Wrocław			
2006	Poland	KPIT Cummins	IND	Wrocław			
2006	Poland	ZenSar	IND	Gdańsk / Wrocław / Kraków			
2006	Romania	Wipro	IND	Bucharest			
2006	Romania	Accenture	US	Bucharest			



Within a few years over 1000 staff are to be employed at its Kraków location. Genpact employ 700 people in Budapest and opened branches in Bucharest and Wrocław in 2005 and 2006 respectively. Satyam and Infosys have chosen Budapest and Prague respectively as their European headquarters. Wipro opened a 100-headcount operation in Bucharest in 2006.

The standardisation of Customer Service systems gave birth to the growth of commercial Call Centres which are tailor-made for BPO. CEE became a magnet for 3rd party Call Centre operators, which appeal to outsourcers who wish to avoid the expense of renting office space, setting up telecom systems and training operators. While back-office and Call Centre functions have been the bedrock of BPO to date, different and higher skilled F&A jobs e.g. market analysis work are making their way offshore.

At Your Service

The table below shows the scale of the influx of in-house European Business Services or Support Centres into CEE over the last four years.

Major Service Centres* established in CEE — 2003-2006						
Year	Country	Company	Nationality	Location	Sector**	
2003	Poland	Lufthansa	DE	Kraków	BS	
2003	Hungary	Alcoa	US	Székesfehérvár	IM	
2003	Hungary	General Motors	US	Budapest	IM	
2004	Poland	Gallup	UK	Ruda Âlàska	BS	
2004	Hungary	Vodafone	UK	Budapest	ICT	
2004	Hungary	Exxon Mobil	US	Budapest	IM	
2004	Poland	Bayer	DE	Kraków	IM	
2004	Poland	Cap Gemini	FRA	Kraków	BS	
2004	Poland	Citibank	US	Olsztyn	FS	
2004	Poland	Philips	US	Łódź	ICT	
2004	Slovakia	IBM	US	Bratislava	ICT	
2004	Hungary	Avis	US	Budapest	BS	
2005	Hungary	Cemex	MEX	Budapest	IM	
2005	Czech Rep.	Lufthansa	DE	Brno	BS	
2005	Czech Rep.	Progeon	IND	Brno	BS	
2005	Czech Rep.	Exxon Mobil	US	Prague	FS	
2005	Poland	ABN Amro	NL	Warsaw	FS	
2005	Poland	Ahold	NL	Kraków	RTL	
2005	Poland	DHL Logistics	DE	Dabrowa Górnicza	BS	
2005	Poland	Electrolux	SWE	Kraków	IM	
2005	Poland	Fiat/Business Solutions	ITA	Bielsko-Biała	IM	
2005	Poland	Volvo	SWE	Wrocław	IM	
2005	Romania	EFG Banc Post	GRE	Bucharest	FS	
2005	Romania	Orange		Bucharest	ICT	
2005	Slovakia	Dell	US	Bratislava	ICT	
2006	Czech Rep.	Inbev	BEL	Prague	IM	
2006	Hungary	GE	USA	Békescsaba	IM / FS	
2006	Hungary	Erste Bank	AUT	Budapest	FS	
2006	Hungary	Corning	US	Budapest	IM	
2006	Hungary	Inbev	BEL	Budapest	IM	
2006	Hungary	Roche	SWI	Budapest	IM	
2006	Poland	Hewlett Packard	US	Wrocław	IM	
2006	Hungary	Morgan Stanley	US	Budapest	FS	
2006	Poland	Phillip Morris	US	Kraków	IM	
2006	Poland	Rockwell Automation	US	Katowice	IM	
2006	Poland	Shell	UK/NL	Kraków	IM	
2006	Poland	Carlsberg	DK	Poznań	IM	
2006	Slovakia	Lennovo	CHN	Bratislava	ICT	
2006	Bulgaria	Hewlett Packard	USA	Sofia	ICT	

^{*} Some of these operations also include local country services, i.e. are not pure BPO operations

^{**}IM = Industrial/Manufacturing, ICT = Information & Communications Technology, FS = Financial Services, BS = Business Services, RTL = Retail



Landmark investments include DHL's Services Centre in Prague which tracks customer shipments around Europe as well as handling billing. The base employs around 1000 Czechs.

In Poland, HP opened a 1000-employee Services Centre in Wrocław in 2006. Philips developed a 500-strong facility in Łódż to handle its European finance activities. UPS are rolling out a new F&A computer system across Europe in 2007 and have decided that Wrocław is the best location for its administration. IBM, GE, Motorola are other bighitters in Poland.

Diageo's long-running Business Services Centre in Budapest was voted best new Shared Service organisation in Europe in 2004. Hungary is also home to GE's EMEAI headquarters (EMEA plus India!) as well as large regional Service Centres for Avis and Exxon Mobil. And they keep coming. In 2006, Morgan Stanley chose Budapest as the location for its new Support Centre (mortgage financing, financial controls and IT tasks) for its London and New York businesses. Mexican cement giant Cemex opened a 5200 sqm Service Centre in Budapest in 2005.

Chinese PC maker Lenovo chose Bratislava in 2006 for its new EMEA Support Centre joining IBM in the Slovak capital's small but growing Service Centre sector. In a sign of increasing investor confidence in Bulgaria as it prepares to join the EU in 2007, Sofia was chosen by Hewlett Packard in 2006 as its European Customer Service Centre. Mobile phone firm Orange opened Customer Service Centres in Bucharest, Cluj and Timisoara in 2005.

Climbing the BPO Food Chain

Two emerging segments of BPO in CEE further up the industrial food chain from back-office administration are the IT Outsourcing and Offshoring (ITO) and Research & Development (R&D) sectors. From IT technical support to software development, telecoms to cars, diagnostics to pharmaceuticals, CEE is increasingly attracting research-based jobs in knowledge-driven industries. According to IBM, Hungary, the Czech Republic and Poland ranked among the top 10 global destinations for IT R&D jobs in 2005.

Poland has been enjoying an ITO bonanza. In 2005, IBM built a new software development laboratory in Kraków where engineers develop security and systems-management tools and that will eventually employ 200 Poles. IBM plan to build the facility to 200 staff in 2006-2008.

Hewlett Packard's six-year-old ITO Centre in Warsaw employs 1000 people and was joined in 2006 by the new HP Service Centre in Wrocław employing another 1000 people. Microsoft have established an Innovation Centre in Poznań. Siemens has expanded its Wrocław R&D Centre by 40%. Internet firms are also coming to CEE. Job-finding site Monster.com opened a Technical Support Centre in Kraków in 2005.

In 2004, Microsoft picked Hungary as the site for a new Software Development Centre which will correct software bugs and weaknesses and employ 300 people within 3 years. At Alcoa's European Data Centre plant in Székesfehérvár in western Hungary, 70 employees create computer applications and maintain an IT network serving 10 000 staff in 14 countries across Europe.

2006 saw Citibank add Hungary to Poland (and Spain, Mexico, Singapore and India) in its group of IT Global Service Centres providing technology infrastructure support related services to global clients. Also in 2006, Servier and Comgenix set up pharmaceutical research facilities in Budapest.

In 2001, DHL created its third global information technology service centre in Prague. It employs more than 900 qualified employees in high skilled jobs. The final headcount will be approximately 1500 people working in 15 000 sqm of modern office space. It is the largest such IT centre in DHL's global network. In 2006, Microsoft opened a mobiletechnology support centre in Prague. The centre, supports the European expansion of the Windows Mobile operating system, providing services to mobile operators, their customers, and mobile-device manufacturers. Honeywell chose Brno in 2003 for the location of its technology centre and key manufacturing base in CEE. Honeywell had established its first offshore R&D centre in Prague as early as 2003, cooperating with scientists from the Czech Academy of Sciences and the Czech Technology University. The Global Design Centre in Brno provides engineering



support to Automotive and Control solutions and Aerospace Electronic Systems divisions. The centre focuses on developing comfort control products.

The ITO wave has been spreading beyond the big 3 of Poland, Czech Republic and Hungary. BPO service-provider Siemens Business Services has been picking up local IT specialists in Romania, Slovakia, and Serbia. In 2004, Oracle opened their largest European Call Centre operation in downtown Bucharest. Oracle has been in Romania since 1992 when it bought a local database distributor and has since developed a

network of more than 100 local partners and thousands of certified Oracle technicians who install and support the company's software. Opening a Support Centre in Romania was a logical progression. 300 multilingual workers telemarket training programs to distributors and take inbound calls from Oracle customers around Europe.

German business software developer SAP now handles its Java software development, critical for its worldwide production line, at its 270-employee base in Sofia (as well as in Germany) rather than at their larger Indian operation.

	Major existing and planned ITO Functions in CEE					
Year	Country	Company	Nationality	Location	Operation	
2000	Czech Republic	IBM	USA	Brno	ITO	
2001	Czech Republic	DHL	DE	Prague	IT support	
2002	Hungary	IBM	US	Budapest	IT support	
2003	Hungary	Alcoa	US	Székesfehérvár	Network administration, IT support	
2004	Poland	Atos Orgin	FRA	Bydgoszcz	IT support	
2004	Poland	IBM	US	Warsaw	IT support	
2004	Hungary	Microsoft	US	Budapest	Software development	
2004	Hungary	Getronix	NL	Global IT	F&A Center	
2005	Romania	Hewlett Packard	US	Bucharest	Software & hardware	
					development, Tech support	
2005	Romania	Alcatel	FRA	Timisoara	Software development	
2005	Poland	IBM	US	Kraków	Software development	
2005	Bulgaria	SAP	DE	Sofia	Software development	
2005	Czech Republic	SAP	DE	Prague	IT support	
2006	Czech Republic	Microsoft	US	Prague	IT support	
2006	Poland	ACS	US	Kraków	IT support	
2005	Poland	Monster.com	US	Kraków	IT support	
2006	Romania	IBM	US	Bucharest	Software development	
2006	Romania	Oracle	US	Bucharest	Software development	
2006	Poland	Microsoft	US	Warsaw	Software development	
2006	Hungary	Citibank	US	Budapest	Global IT Service Centre	
2006	Romania	Infineon	DE	Bucharest	Semiconductor research	

Source: DTZ Research

	Major existing R&D BPO Functions in CEE						
Year	Country	Company	Nationality	Location	Sector*	Operation	
1998	Hungary	Nokia	FIN	Budapest	ICT	R&D / software development	
2000	Poland	Delphi	USA	Kraków	IM	R&D / automotive	
2001-03	Czech Republic	Panasonic	JAP	Plzeň	IM	R&D / software development	
2002	Hungary	Zenon					
2003	Poland	Oracle	USA	Warsaw	ICT	Software developers	
2003	Czech Republic	Honeywell	USA	Brno	IM	Design and Technology Centre	
2004	Czech Republic	Bosch	DE	České Budějovice	IM	Development and Innovation centre	
2005	Hungary	SAP	DE	Budapest	ICT	Software developers	
2005	Poland	Avon	USA	Warsaw	IM	Cosmetic research	
2005	Romania	Alcatel	FRA	Timisoara	ICT	Services centre	
2006	Poland	Reuters	UK	Gdańsk	BS	Data processing centre	
2006	Hungary	Servier	FRA	Budapest	Pharma	Drug research	
2006	Hungary	Comgenix		Budapest	Pharma	Molecule research	

*IM = Industrial/Manufacturing, ICT = Information & Communications Technology, BS = Business Services, Pharma = Pharmaceutical

It is cheaper to carry out BPO work in India. Genpact pay their staff in Budapest between €1000 - €1500 gross wages per month, roughly four times what their Indian workers earn. According to drinks giant Diageo, operating a centre in Budapest costs half as much as in Dublin while Bangalore costs half again as Budapest (\$50 000 / \$23 000 / \$12 000 per employee in descending order).

Despite being more expensive than India, CEE has proved to be a competent and successful BPO location capable of winning a significant share of the BPO market. Successful BPO now requires more than low costs.

"BPO is not just about cutting costs, reducing staff or relocating to developing cheaper countries/markets. Any such advantages are at best temporary and do not lead to competitive advantages... those countries that currently stress the benefits of low cost locations will find their relative position being overtaken by other emerging countries"

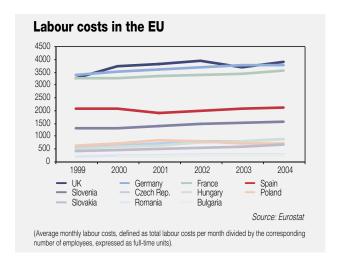
Source: "BPO - Source of Competitive Advantage?" DTZ Research 2003

The Unique Selling Point of the CEE region in the global BPO market is the availability of skills, quality education structures, healthy work cultures, flexibile labour markets, favourable investment climates and political stability, investment in infrastructure, and availability of suitable modern office accommodation found in the region. CEE's prospects for the future depend on the development of each of the above elements.

Labour Costs — More Bang For Your Buck in CEE

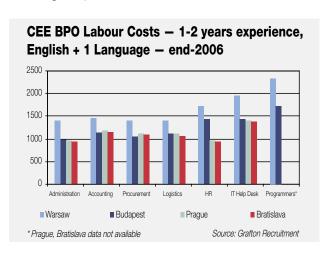
Attractively low labour costs relative to Western Europe and the US have been the key driver for the BPO invasion of CEE and will remain so for at least the short-medium term. At a typical labour-intensive back office facility, staff costs are normally the biggest chunk of a company's operating costs. Wages in the core CEE countries are roughly half typical levels in Western Europe, while in Romania and Bulgaria as low as a fifth of those in Germany.

As economic growth rates in CEE have topped those in the eurozone by 2-3% on average in the last five years, the differential between wage levels between Western and Eastern Europe has narrowed but only slightly. CEE will remain a low cost location relative to Western Europe and the US for the foreseeable future. According to the UNCTAD, by 2020 wages in most of CEE will still hover between one-third to half the EU average.

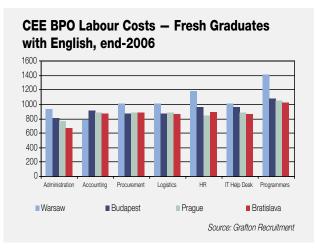


Rising Wages, Fewer Job Seekers

Wage inflation however, is beginning to blunt the competitiveness of the CEE BPO hotspots relative to cheaper locations within the region and further east e.g. the Ukraine. Just as happened in India, the increased demand for skilled and/or language-speaking staff in recent years in CEE has bid up BPO workers' salaries particularly in the capital city hotspots and to a lesser extent Wrocław and Kraków. As the supply of suitable workers tightens — unemployment in Prague is under 3% — the IBMs, Accentures and Oracles of the BPO world are tending to offer better salaries and benefits to stop professionals switching companies to advance their careers.







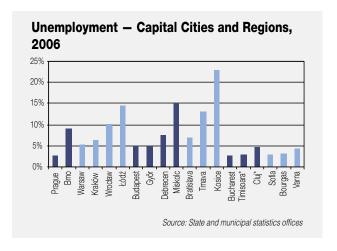
While secondary Polish cities such as Wrocław and Kraków have been attracting BPO investment from the late-1990s, BPO work has only recently found its way to the cheaper provincial locations in the Czech Republic and Hungary. Price-conscious Call Centres started migrating outwards from Prague from around 2003 to cheaper provincial Czech university towns where unemployment is higher and a ready supply of lower cost and often part-time flexible student labour exists. Call Centre operator Lion has 140 seats in the unversity towns of Pardubice and Hradec Králové. Lion recently opened a 40-seat facility in even cheaper Zilina in Slovakia. In 2004-2005, Brno succeeded in luring away from Prague BPO firms Symbol Technologies, Acer, Giga Byte Technologies as well as a Lufthansa call centre.

EDS and GE have set up Service Centres in Hungary's secondary cities like university seats Szeged and Miskolc. US Call Centre giant Sykes handles all new business won Europe-wide from its Budapest offices, but has moved its Hungarian client support operations to provincial Miskolc. Budapest had simply become too expensive. Genpact have two facilities in the Hungarian capital handling business processes such as accounts receivables for clients across Europe in 15 languages. While they expect the company's 700-strong Budapest workforce to remain stable, future expansion will be at their new operation in Romania to save on labour costs. Genpact expects eventually to employ 1000 people in Bucharest, up from 300 now.

Now even ultra-cheap Sofia's IT labour market is tightening, as companies like HP, Bull, Siemens Business Services, Ericsson and SAP compete for the right technical personnel. SAP, who recently recruited 270 developers,

have paid high-end wage rates squeezing the low-medium level segment of the programming market and leading to longer recruitment cycles.

Labour supply can be expected to tighten in regional cities too. In addition to workers being taken off the market by incoming BPO employers, certain parts of CEE outside the capital cities, regional Poland in particular, have seen large numbers of educated young people emigrate to the UK and Ireland since EU accession in 2004. Similarly, thousands of young skilled Romanians and Bulgarians are expected to seek higher paid work in southern European countries like Italy and Spain when their countries join the EU in 2007.

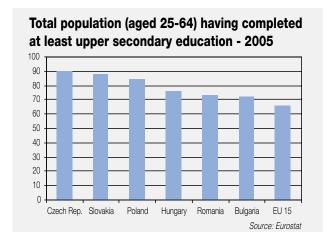


Knowledge Workers

After labour costs, CEE's large educated workforce is its second biggest draw. Across CEE, the tradtionally high value placed on technical education has meant schools and colleges churn out graduates in engineering, mathematics and computing with generally strong problem solving skills. According to Eurostat, Poland boasts one of the highest percentages of university graduates (as a share of the under 30 population) in the world and the highest in the EU. The country produces 460 000 new graduates each year. Overall, more people complete at least upper secondary education in CEE than in Western Europe.

While the region can boast a large quantity of qualified graduates, their quality can be an issue for insourcers. The degrees offered by many universities in CEE do not produce the same quality of graduate as those in the West e.g. some courses lack opportunities to gain practical experience, IT or language skills.





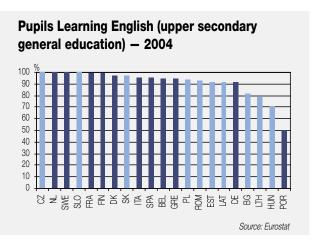
In addition, the standard of business management education in CEE trails that offered in the West. It can be difficult to find top level experienced managers in the region, meaning companies still tend to rely on expatriate management.

Parliamo Italiano. Jag talar svenska. Wir sprechen Deutsch.

While India is limited by its focus on English language work, university graduates in CEE typically speak at least one other European language aside from their mother tongue. Staff at the larger BPO Service Centres and Call Centres often speak two or even three extra European languages.

Within CEE, Poland and Slovakia score highest overall in language ability, while the Czech Republic has one of the highest percentage of pupils in the EU studying English. German skills are strong in countries bordering Germany. Romania enjoys a niche advantage within CEE thanks to its higher than average aptitude in Latin languages. Hewlett Packard have based their customer support function for Italy, Spain and France in Bucharest.

Hungary, however, is bottom of the class in language ability. According to Eurostat, Hungary ranks next to last in the EU in language skills, ahead of only the UK, and bottom in CEE. The Hungarian government has responded to its language problem by creating optional intensive language tuition and even Call Centre training at some secondary schools. The program will take time to produce results however, time that might cost Hungary jobs in todays cut-throat competition for global investment.



Welcome to CEE

While not a factor which normally breaks a deal, state and/or regional incentives can be persuasive in terms of direction. All the governments in the region offer different combinations of low corporate tax rates (relative to Western Europe), job creation grants, capital grants/ subsidies, and tax breaks for incoming BPO investors. Inward Investment Promotion Agencies typically aim to direct investors outside the capital cities to provincial locations with larger - and cheaper - supplies of language-speaking students and graduates. In Poland, the local agency PAIIZ focus on high-tech and export-oriented industries. BPO has been selected by PAIIZ as one of four critical export industries. The Romanian and Hungarian Agencies however have received some criticism for not being as active as their Polish and Czech counterparts.

EU accession has been central to massaging investors' risk perceptions of CEE and will provide a boost to FDI for Romania and Bulgaria on their entry to the EU in January 2007.

As recent disturbances in Hungary and to a lesser extent the uncertain political environments in Poland, Slovakia and the Czech Republic in 2006 have shown however, political and economic instability is still an issue in Central Europe. None of the Visegrad 4 countries (Poland, Czech Republic, Slovakia, Hungary) are likely to join the eurozone before 2009. Of more significance to investors than protests on the streets of Budapest however, may be the Hungarian government's decision to place a 4% "solidarity" charge onto the existing corporate tax rate of 16%.



In Slovakia, the government is considering reforming its flat-tax structure including an increase in corporate tax from its current 19% level. Despite the problems however, FDI continues to flow into CEE in large quantities with the vast majority of investors believing the long-term fundamentals of the region to be sound.

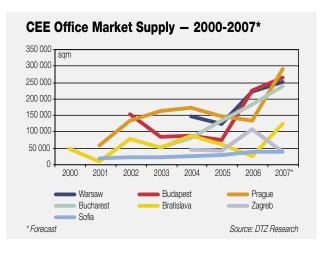
Next-door Neighbours

India's experience showed that communication can be hindered by time-zone differences, and lack of communication experience. Young people in CEE however have often worked in the West, are culturally closer to the West, and are more used to dealing with different European nationalities. In addition, longer distances can mean more management complexity. The cost of additional management is a hidden cost to a project not computed initially. Flight times from West to East in Europe on the other hand are not more than 2/3 hours. Transport connections between the "old" and "new" EU are continuously improving with a vastly increased number of flights available to not just the capital cities but regional locations as well. Hence a Western European manager can react quicker to any situations in a CEE-based Service Centre.

Locations such as Budapest, Prague and Kraków are beginning to attract foreign workers from elsewhere in the EU who no longer need work permits. It can be an attractive option for a young person in Amsterdam or Lisbon to spend a year or two as a customer service rep or consultant in a CEE city. For management staff the proliferation of regional airports and international schools for expatriates can make or break a BPO location decision. The under-development of certain regions of CEE, for example eastern parts of Hungary, Poland or Slovakia, can deter Western managers from deciding to locate a BPO plant there.

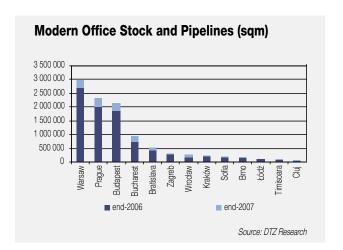
Cheap Modern Office Space For Hire – Perfect for BPO

Availability of suitable and acceptably-priced office space is a key factor in BPO locational choice as property costs comprise a sizeable slice of operating costs. Typically a BPO requirement will comprise a new Class A facility offering a large open-plan office space preferably with a raised floor so that cabling can be carried out easily. As BPO headcounts are usually large, the building should



be accessible by road and public transport and have an adequate parking ratio.

Call Centre functions generally require normal office space fitted out with terminals, phone lines, and a PBX system routing calls to available operators, again classic office space in cheaper suburban locations. Due to the larger space requirements, cheaper suburban office locations are most sought-after.



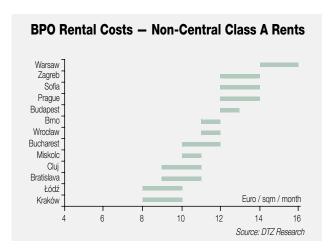
There is no shortage of quality office space in most of the CEE markets. Office supply is picking up again in CEE after a slowdown in 2003-2005. A wave of new supply is in the pipeline in the big four CEE capitals, with between 200-300 000 sqm on the way in Prague, Budapest, Warsaw and Bucharest. Significant development pipelines are in place in Bratislava and Zagreb. Office markets have grown in secondary Polish and Czech cities such as Kraków, Wrocław and Brno, while developers are beginning to bring modern office projects to Ostrava and Plzeň.

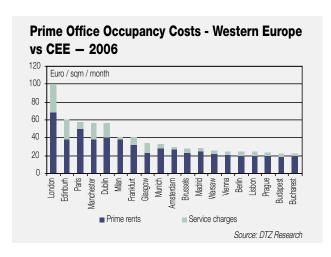


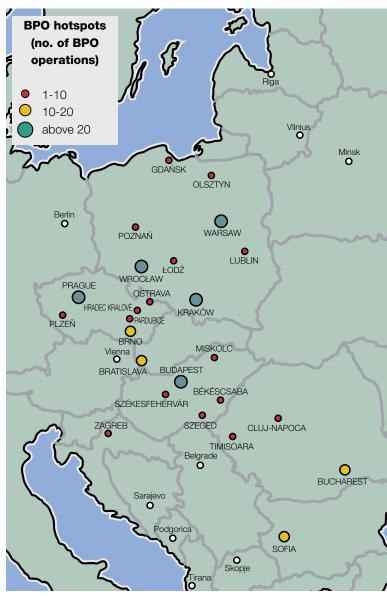
All these markets now, or soon will, offer similar quality office space to that available in Prague and Warsaw. More office space is under construction in Wrocław than in Bratislava for example.

As scale is important for a BPO operation to succeed, expansion options can be a deal-breaker for potential occupiers. A company will often take extra space e.g. 1000 sqm at lease renewal time to cater for potential future incoming BPO functions. BPO companies usually want their facilities to be operational within a short timescale, typically 6-9 months. Happily for such potential occupiers, CEE capital city office markets are not characterised by pre-leasing cultures. This means there is normally a sizeable supply of available speculatively developed buildings of adequate size ready for occupation within short time periods. Hence, the larger office markets in the big four capital cities are at advantage over smaller secondary markets in the CEE countryside cities. It can be difficult for smaller secondary office markets in say Miskolc or Timisoara to compete. Few developers can afford to build speculatively in such locations to cater for liquid and volatile BPO demand location-wise.

Price-wise, occupancy costs are considerably lower in CEE than in key outsourcing countries in western Europe e.g. the UK and Germany. Widespread rental incentives from landlords such as fit-out costs further boost CEE's price-competitiveness. In non-central office locations sought-after by BPO occupiers, there is little difference between rents in the big four CEE capitals, although Budapest and Bucharest are marginally cheaper. Bratislava however is €2-3 sqm month cheaper than any other CEE capital. There is only a marginal discount between the capital cities and the regional office markets, typically €1-3 sqm month.









Poland

Poland is the leading BPO destination in CEE. Prospects appear healthy with a large critical mass of BPO operations already established in hotspots such as Warsaw, Kraków and Wrocław. Kraków, for example, has attracted more BPO business than Slovakia's capital Bratislava.

Competitive advantages enjoyed by Poland include the largest skilled labour supply in CEE. While bottlenecks may emerge in particular popular locations, e.g. Kraków, BPO has options to locate find labour and suitable office space elsewhere in the country. Uniquely within CEE, companies considering a Polish location can tour sizeable office markets in several cities around the country.

Poland's technical reputation and strong language skills have driven the expanding ITO and R&D BPO sectors. The country also benefits from aggressive marketing of its BPO advanatages from state promotion agency PAIIZ. US companies appear to be particularly comfortable with Poland. The US management of UPS were more inclined to opt for Poland to locate its CEE BPO expansion strategy. Hungary or the Czech Republic were not even considered.

Czech Republic

The Czech Republic has been the regional leader in terms of both FDI per capita and BPO FDI per capita. According to the UNCTAD's report in 2006, the Czechs are the only CEE nation in the top twenty global FDI locations (measured by FDI per capita). The country is also ranked 10th best location worldwide and the leading CEE destination for R&D inward investment. Poland and Hungary come 23rd and 35th respectively.

The Prague BPO market has slowed down however in 2006. Most of the BPO take-up in 2006 has been expansions of existing operations rather than BPO newcomers. DTZ are aware of few BPO requirements currently on the market.

Office availability will be an issue in 2007, with local rival Budapest currently offering more BPO-suitable office availability and options. A large development pipeline is in place however for 2007-2008 which will put Prague back on the circuit for BPO consideration.

Two other constraints on BPO in Prague however are increasing difficulties in labour resourcing as well as relatively high labour and property costs. Unemployment in Prague is the lowest among CEE city locations at under 3%. BPO companies would struggle to resource 1000-3000 headcount operations.

Activity remains buoyant however in the secondary markets. Regional office markets like Brno and newcomers Ostrava and Plzeň are beginning to emerge as BPO hotspots.

Hungary

2006 has seen Budapest continue to ride high on the BPO wave with new entrants to the country driving the market rather than expansions at existing operations. The Hungarian capital won several large deals over rival CEE countries. Headline wins were Citibank's Global IT Support Centre, and newcomers to Hungary Morgan Stanley's 8000 sqm Business and IT Service Centre. Swiss pharmaceutical company Roche chose Budapest for a new 2500 sgm Service Centre, while Convergys are expanding their Budapest CEE HQ. US manufacturer Corning opened a European F&A Service Centre this year also in Budapest. SAP moved functions from Germany to Budapest. Microsoft are expanding by 6-7000 sqm at their R&D Centre although not all of the expansion is BPOrelated. BPO to Budapest looks set to continue into at least the short-medium term.

As in most spheres of economic activity in Hungary, Budapest dominates the BPO sector. Hungary has no equivalent of Wrocław, Kraków or even Brno's office markets. Companies do investigate countryside locations but invariably return to Budapest due to the lack of suitable office accommodation. Alternative options to Budapest





tend to be Bucharest or even Kyiv rather than Miskolc or Debrecen. While this limits options for potential BPO in Hungary, it has on the other hand helped to establish Budapest as a leading BPO hub in CEE.

Hungarian companies too are beginning to outsource functions. Sykes service clients such as the Hungarian Railways and Hungarian Gas Company from their new branch in Miskolc. EDS, who currently employ around 800 people in Hungary have several Service Centres nationwide including T-Com, and are looking to attract local clients.

Slovakia

BPO in Slovakia is constrained by the small size of the labour force and office market. Bratislava is one of the smallest CEE capitals and has a relatively low unemployment rate. The office market, while growing fast is also one of the smallest in the region.

Several big BPO functions however operate out of Bratislava. Shared Service Centres are run by IBM, Dell, and Hewlett Packard, while Accenture have a major BPO operation there.

In a boost for the BPO market in Bratislava, Lenovo, the third biggest PC and notebook dealer in the world following its recent purchase of IBM PC business, moved a technical-support function from Scotland to Bratislava in 2006. Lenovo are providing jobs for 340 Slovaks who will handle orders and supply chains, as well as providing financial and technical support in more than 28 foreign languages. 60% of the new jobs will be given to people with a university education.

Romania

Big names such as Siemens, Alcatel, and Motorola have already established BPO operations in Romania. Oracle's European Development and Call Centre in Bucharest provides support in 13 European languages. The country is developing a reputation for R&D outsourcing and mechanical engineering outsourcing. It has the second largest labour pool in CEE, still largely untapped by the major BPO players. The BPO sector in Romania gathered speed in 2006. Quality office stock is still small however, relative to the Big 3 office markets in CEE. Office development is accelerating rapidly

though, and will provide the infrastructure for the anticipated increase in BPO in the next 2-5 years.

As well as a large pool of labour, Romania offers competitive wage levels. Genpact shifted its CEE expansion plans from Budapest to Bucharest on grounds of staffing costs. Latin language skills are a niche competitive advantage of Romania. HP have set up southern European language customer support operations in Bucharest. Siemens opened a German-language Call Centre in the more Central-European oriented Cluj-Napoca. Ryanair also have a Call Centre in Cluj. Bucharest and the major regional cities Cluj and Timisoara are likely to grow into BPO hotspots in the short-medium term.

Bulgaria

Bulgaria's twin advantages are its competitive labour costs – the lowest in the CEE region at an average of \$200 per month – and its tradition as a producer of technical graduates. Bulgaria was one of the main suppliers of computer technology to the Soviet Bloc and still has a strong, although under-financed, network of technical schools. Hewlett Packard was a big win for Sofia, which came top of a selection process involving fourteen countries. Bulgaria still has weaknesses such as corruption and weak government although EU accession is expected to help tackle these problems.

Russia and Ukraine

The BPO sector is still at an early stage of development in both Russia and Ukraine. Few BPOs companies have ventured to Moscow or Kyiv. Moscow's appeal as a BPO location is held back due to its high property costs - the highest in the CEE region - and high wage levels for higherskilled labour. The political and business environment in both countries are not widely perceived yet as BPO-friendly. Some more years of improving investor-perception may be required, but BPO investors will be keeping watching briefs in the meantime. Many BPO leases in CEE have been signed for short terms of between 3-5 years. Termination of all those leases and shifts to lower cost locations on expiry are unlikely, but it is possible that some companies will decide to downscale part of their local operations in say Hungary or the Czech Republic and shift a function or part of a function further east.



Summary SWOT Analysis of CEE Locations						
	Strengths	Weaknesses	Opportunities	Threats		
Poland	Warsaw, Kraków, Wrocław – established BPO hotspots Strong education levels and language skills Strong technical reputation Largest labour supply in CEE Strong marketing of BPO sector (PAIIZ) US companies comfortable with Poland	Wage inflation and labour supply issues in popular regional locations. Relatively expensive property costs in Warsaw	Develop higher-end R&D and ITO Łódź, Lublin and other markets look set for development Growing domestic market	BPO saturation point approaching in Kraków, Wrocław Increasing labour costs Talent absorbed by big players Some qualified labour moving abroad		
Czech Republic	Prague – established BPO hotspot Strong education levels and language skills Regional options in Brno, Ostrava, Plzeň etc	Prague - Highest wage levels in CEE Relatively high occupancy costs Labour supply in Prague	Develop higher-end R&D and ITO hub Growing domestic market	Low-cost BPO no longer considering Prague Regional markets too small Increasing labour costs Talent absorbed by big players		
Hungary	Budapest – established BPO hotspot Large office pipeline Relatively low property costs Reputation for strong technical / R&D skills Budapest can attract foreign BPO labour	Relatively poor language skills Labour supply Wage inflation in Budapest Limited options outside Budapest	Develop as CEE's leading Service Centre location Develop higher-end R&D and ITO business Develop as an EMEA hub Growing domestic market	May lose jobs requiring language skills Increasing labour costs Talent absorbed by big players Some qualified labour moving abroad		
Slovakia	Low occupancy costs Sizeable office pipeline Some critical mass - Lenovo a major boost for the BPO market Strong German language skills	Relatively small market Wage inflation and labour supply issues in Bratislava Change in investment climate	Occupancy cost competitiveness to continue	Change in corporate tax and incentives structure possible Some qualified labour moving abroad		
Romania	Large office pipeline Competive labour costs Second largest labour pool in CEE Latin language advantage Strong German language skills in Transylvania Regional options in Cluj, Timisoara Entrepreneur-friendly environment EU accession in 2007 to boost FDI	Relative lack of available Class A stock Poor marketing of BPO sector Relatively inflexible labour market More investment in physical and ICT infrastructure required	Can become a Latin language BPO / Service Centre hub Can emerge as a leading CEE BPO hub Emerging office markets outside Bucharest	Risk of low-cost only BPO moving further east Some qualified labour to move abroad from 2007 Risk of low-cost only BPO moving further east east The state of t		
Bulgaria	Lowest wages in CEE Sofia now a mini-ITO hub EU accession in 2007 to boost FDI	Small office market Low labour supply Weak government institutions	Develop as an ITO hub Emerging office markets outside Sofia	Labour supply bottlenecks in IT sector Some qualified labour to move abroad from 2007		
Croatia	Upcoming office supply in Zagreb. Strong education system. Strong German language skills	Small office market Small labour supply Inflexible labour market Little BPO to date Relatively high wages EU accession not likely before 2009 at least.	Office availability to remain high through 2007-2008	Will struggle to attract any BPO		
Russia	Vast supply of technically skilled labour, 40% more per capita than in Western Europe	High labour costs High property costs Investment climate poor Has missed out on first wave of BPO	• ITO outsourcing in medium-term	High labour, living and property costs to continue to deter BPO Qualified labour moving abroad Weak business education		
Ukraine	Low labour costs Large labour supply Technical skills high	No EU accession in short-medium term	• ITO outsourcing in medium-term	• First BPO wave has been missed		

Conclusions

Business Process Outsourcing and Offshoring to Central and Eastern Europe has proved to be a success story for both the outsourcing and offshoring companies in their quest for competitive advantage in the global market and for the CEE region at large. It has provided many thousands of jobs to young educated people in CEE, been a welcome boost to the region's office markets and helped to firmly establish CEE on the global business map.

The continuing flow of BPO to the region is evidenced by the stream of requirements in 2006 for office space to DTZ throughout its CEE network. 2006 saw many companies set up BPO operations in CEE for the first time, many of them helped by DTZ. There are still many multinational firms who haven't yet entered the CEE BPO market. New higher-value functions such as ITO and R&D are increasingly transferring to the region from the West, while new locations such as Romania and Bulgaria and regional cities throughout CEE are gradually emerging as magnets for BPO.

Cities which get the combination of locational choice factors right will be the winners in the future waves of BPO into CEE. Certain locations suffer from structural problems such as low labour supply, relatively high wages, lack of suitable office space or weaker technical or language skills, but BPO is more likely to choose another CEE location rather than leave the region altogether. The challenge for individual cities and countries within the region will be to build their competitiveness and attractiveness by investing in their education systems, communications infrastructure, and business environments.

While CEE's labour cost advantage over Western Europe and the US will be around for many years to come, DTZ's conclusion in its global BPO report in 2003 that "countries that currently stress the benefits of low cost locations will find their relative position being overtaken by other emerging countries" is still very much valid today for the countries of CEE at the end of 2006.





DTZ offers a comprehensive range of services and fully integrated property advice throughout the world. Its network provides an unrivalled depth of expertise in Europe the Middle East, Asia, Australasia and the Americas.

DTZ Regional Office

DTZ Regional Office

Bajcsy-Zsilinszky út 42-46.

1054 Budapest, Hungary

Tel: +36 1 269 6966

Fax: +36 1 269 6965

E-mail: johnny.dunford@dtz.com

Contact: Johnny Dunford

DTZ Hungary

Bajcsy Zsilinszky u. 42-46.

1054 Budapest, Hungary

Tel: +36 1 269 6999

Fax: +36 1 269 6987

F-mail: krisztian.hornok@dtz.com

Contact: Krisztián Hornok

DTZ Poland

Centrum Finansowe Puławska

Ul. Puławska 15

02-515 Warsaw, Poland

Tel: +48 22 521 5000

E-mail: alan.colquhoun@dtz.cor

DTZ Czech Republic

IBC Building, Pobrezni 3

18600 Prague 8, Czech Republic

Tei: +420 226 209 100 Fax: +420 222 322 134

E-mail: jaromir.smetana@dtz.con Contact: Jaromir Smetana

DTZ Romania

DTZ Echinox

Floreacea II Business Center

40-44 Banu Antonache St., 3rd floor.

Sector 1. Bucharest, Romania

Tel: (+40) 21 - 310 3100

Fax: (+40) 21 - 313 90 10 /1

E-mail: tim.wilkinson@dt

DTZ Moscow

Suite 360

7 Gasheka Ul

123056 Moscow Bussia

Геl: +7 495 748 1111

Fax: +7 495 787 8887

E-mail: david.ohara@dtz.com

Contact: David O'Hara

DTZ Ukraine

52 Bohdana Khmelnytskoho Str. 2nd floor

01030 Kyiv, Ukraine

Tel: +380 44 590 3060

Fax: +380 44 590 306⁻

E-mail: nick@dtz.kiev.u

Contact: Nick Cotton

DTZ Research Team in the BPO study

CEE: Peter Murphy, peter.murphy@dtz.con

Poland: Anna Staniszewska, anna.staniszewska@dtz.com

Ewa Derlatka, ewa.derlatka@dtz.com

łungary: Erzsébet Izsák, erzsebet.izsak@dtz.com

Czech Republic: Lenka Hartmanova, lenka.hartmanova@dtz.com