

Dobré Jitro !



*A Brief Review of
Environment, Health &
Safety Management*

Czech
Republic



A Little History...

- The Czech Republic was the western part of the Czech and Slovak Federal Republic.
- Formed into a common state after World War I (October 28, 1918), the Czechs, Moravians, and Slovaks remained united for almost 75 years. (Think <*thank*> USSR...)
- On January 1, 1993, the two republics split to form two separate states.

The Fall of the Wall...

- *"My daughter, who's 15, may grow up to feel more European than Czech. But most of all, she'll feel free. Her's is the first free generation".*
 - Jire Pehe, director of NY Univ in Prague.
 - He had fled communist Czechoslovakia in the trunk of a car in the 80's and returned after the wall came down.

European Union

- Founded in '51 as a Trade Union of 6 countries
- Grew to 15 in 1995
- Added 10 (May-04) for 25 total now
- Destined for growth...
 - EU, 455 Million with GDP of \$10 trillion
 - US, 293 Million with GDP of \$10.98 trillion



Size & Situation



Area total:

78,866 sq km land: - slightly smaller than South Carolina

Note: landlocked; strategically located astride some of oldest and most significant land routes in Europe; Moravian Gate is a traditional military corridor between the North European Plain and the Danube in central Europe

EU & Czech Republic

- Had to adopt 80,000 pages of new regulations
 - Legal & financial systems for trade, banking, business law, environment, minority rights, etc, etc
- Now subject to EU dues
- But most of the new members will receive more than they pay for first 3 years.
 - EU pledged \$28 billion to improve infrastructure
- “EU membership will draw a clean line between our future and our past.” *-economics graduate student from Slovakia*

Czech Republic

- 10,211,000 people
- One of the richest former eastern-bloc nations
 - GDP per capita \$8000
 - 4 of 5 Czechs have cell phones vs. 2 of 5 Poles vs. 3 cell phones for every Swede...
- Focused upon:
 - Technology
 - Export manufacturing

Source: CIA Factbook

- Czech Republic has been recovering from recession since mid-1999.
- Growth in 2000-03 was supported by exports to the EU, primarily to Germany, and a near doubling of foreign direct investment.
- Domestic demand is playing an ever more important role in underpinning growth as interest rates drop and the availability of credit cards and mortgages increases.
- Inflation is under control.

Government Structure

- Government type:
 - Parliamentary Democracy
- Capital
 - Prague
- EU Member Since May-2004
 - **Czech Republic**, Estonia, Latvia, Lithuania, Poland, Slovakia, Hungary, Slovenia, Cyprus & Malta

■ Executive branch

- Chief of state: President, Prime Minister, Deputy Prime Ministers, Cabinet appointed by the president on the recommendation of the prime minister elections,

■ Legislative branch

- Senat (81 seats; members are elected by popular vote to serve staggered two-, four-, and six-year terms)
- Chamber of Deputies or Poslanecka Snemovna (200 seats; members are elected by popular vote to serve four-year terms)

■ Judicial branch:

- Supreme Court, chairman and deputy chairmen are appointed by the president for life;
- Constitutional Court, chairman and deputy chairmen are appointed by the president for life

Environmental Commitments & Complexities

- EU directives, international agreements: Air Pollution, Air Pollution-Nitrogen Oxides, Air Pollution-Sulphur 85, Air Pollution-Sulphur 94, Air Pollution-Volatile Organic Compounds, Antarctic Treaty, Biodiversity, Climate Change, Endangered Species, Environmental Modification, Hazardous Wastes, Law of the Sea, Nuclear Test Ban, Ozone Layer Protection, Ship Pollution, Wetlands signed, but not ratified: Air Pollution-Persistent Organic Pollutants, Antarctic-Environmental Protocol, Climate Change-Kyoto Protocol

Water

- Floods of Aug-02
- Continuing increase of public sewer systems and municipal drinking water supplies
 - 491 WWTP built between 1990-2002
- POTW - 74.9 % in 2001 – (BUT that means 1 in 4 does not – and for them nitrates & bacteria pollution is a problem....)
- Drinking water to 87.5% in 2001
- Several reservoirs endangered by eutrophication

Air

- “Stabilized” Decreased level of air pollution for SO_x, NO_x, Pb, CO, organics
 - Fleet improvements, modern vehicles, movement to unleaded gas, etc.
- Increases in particulate matter levels
- Acid rain is damaging forests

Wastes & Packaging

- 57% of the country participates in waste separation
- Packaging recycling attained 31% in 2002
- Landfilling is the most common means of waste disposal

Energy

- Fossil Fuel: 76.1%
 - (very minor oil reserves in CR)
- Hydro: 2.9%
- Thermo 1%
- Nuclear: 20%
 - (2 plants & 6 reactors of Soviet design w/ western tech by Westinghouse)
 - high priority on nuclear which is an issue of concern to neighboring countries

Noise

- High fraction of the population is exposed to excessive noise.
- 19 cities experience unacceptable noise levels
 - 75 dB day and 70 dB at night instead of 55 dB and 45 dB.

Illicit Drugs

- Major trans-shipment point for Southwest Asian heroin and minor transit point for Latin American cocaine to Western Europe
- Domestic consumption - especially of locally produced synthetic drugs - on the rise
- Susceptible to money laundering related to drug trafficking, organized crime

Risk Factors

- There continues to be a large (& increasing) number of:
 - Fires, forest fires and in developed areas
 - Technical accidents
 - Traffic accidents
 - Haz-mat
- 31% increase in public safety responses between 2002 and 2001

Czech Regulatory Climate

- EHS legislation existed before 1990
- Not comprehensive nor unified under one ministry...
 - Many areas incomplete
 - Some ignored, (waste management)
- Legislation focused on economic aspects
- Enforcement was rare and ineffective

Czech Regulatory Climate

- First two years of independence saw much activity
 - Lots of new laws
 - Working to conform to western influences
- But lots of inconsistencies and oversights
 - Example: Waste Act (No. 238/1991) restricted waste export & import excessively – inhibited growth industry potentials
 - Waste categorization and cataloging need to be rewritten to match EU expectations

Czech Enforcement

- Has become more stringent over the last couple of years
- But still lags behind legislation
- Czech legislation, basically, mimics the German and Austrian models
 - In fact, Czechs say they are ahead of the other 10 new entries because 60 – 70 % of their legislation is already EU-complaint.

Czech Legislation

- Three Main Challenges in Harmonizing Czech to EU:
 - Finding Capable lawyers (oxy-moron?)
 - Obtaining all sections of EU legislation
 - Keeping up with ongoing development in new EU regulations

Electricity Usage

- Energy Audits required
 - Government approved auditors
 - Required of all gov facilities, national and local - 1500 gigajoules / year
 - The size of most schools and large buildings
 - Non-Gov users too
 - 35,000 gigajoules / yr
 - Middle size industries & larger
 - Encourage
 - energy conservation
 - Outside investment by energy services companies

Major EHS Programs: Safety Results

- 2002 Working Population 2,040,000 Ees
 - 208 Fatalities
 - Fatality Rate 101.9 per MM workers
 - EU average 32.6
 - 107,000 Incidents of 3-Day Absences
 - LWIR 52.48 per Thous Workers
 - EU Average 13.11

Major EHS Regulatory Authorities

- Env Authority
 - Ministry of the Environment,
 - Czech Environmental Inspectorate
 - & Regional Authorities
- OHS Authority
 - Ministry of Health
 - Ministry of Labor & Social Affairs
 - Czeck Office of Labor Safety
 - & regional Authorities

Major EHS Mgt System Programs

- EMAS & ISO-14001 seem to be of value...
- EMAS had been promoted in '98 by government resolution
 - 10 companies located in Czech republic EMAS certified
- 611 companies certified in Czech Republic to ISO 14001 (Apr-04)
- OHSAS 18001 is being implemented by the Czech Accreditation Institute.

Major EHS Programs

- General Environment
 - ISO-14001 or EMAS certificate
 - Env impact assessment (EIA)
 - Operating permits
 - Integrated Pollution Prevention Permit (IPPC)
 - Emission report of IPPC installations

Major EHS Programs

- Air

- Air emission measurements
- Inspection of boilers and central air conditioning systems
- Energy certificates of buildings

- Water

- Wastewater discharge permit
- Wastewater discharge measurements

Major EHS Programs

- Waste
 - Waste permit
 - Waste records & waste consignment notes
 - Waste records of establishment producing, collection, &/or disposing of waste oils
 - Certificates of destruction
 - Notification and authorizations for transborder waste shipments
 - Financial guarantee for transborder waste shipments

Major EHS Programs

- Chemicals
 - Notification of new chemical substances
- Hazardous Materials Management
 - Material Safety Data Sheets (MSDS)
 - Transport documents for transport of dangerous goods by road
 - Appointment of Safety Advisors for dangerous goods transport

Major EHS Programs

- Safety Management
 - Appointment of workers to assist in H&S matters protection
 - Appointment of external H&S services
 - Risk assessments
 - Training records management
 - Construction site H&S coordinator
 - Large construction project notifications

Major EHS Programs

- Process Safety
 - CE-marking of machinery
 - Declaration of conformity for machinery
 - Self assessment of minimum requirements of work equipment
 - Inspection records of work equipment
 - Explosion proof standards

Major EHS Programs

- Emergency Preparedness
 - Notification of major incidents
 - Incident prevention policies and plans
 - Safety report of major incident facility
 - Internal emergency plans for major incidents

Major EHS Programs

- Occupational Health
 - Proof of medical surveillance of workers
 - Proof of training of first aiders
 - Occupational incident reports
 - Risk assessments
 - Prior notification of use for 1st time of certain biological agents
 - Informing of authorities in case of incident involving biological agents
 - Working instructions for ionizing radiation

Major EHS Programs

- Product Management
 - Energy efficiency labels and energy consumption for certain products
 - CE-marking of products and conformity declarations
 - Labeling of dangerous goods & user information
 - Eco-labels and explanatory notes

Some Informal Observations

- Strong educational systems & Spirit of Optimism
- Rate of Change in Czech Republic is Huge!
- With solid guidance, the Czech have done very well
 - (Some personnel respond – others do not)
 - SOPs, Guidance, Training, Standardization
 - Creativity needs to be developed
- (A couple of multinationals have set up operations with German &/or Austrian workers – then slowly replaced with Czech personnel.)

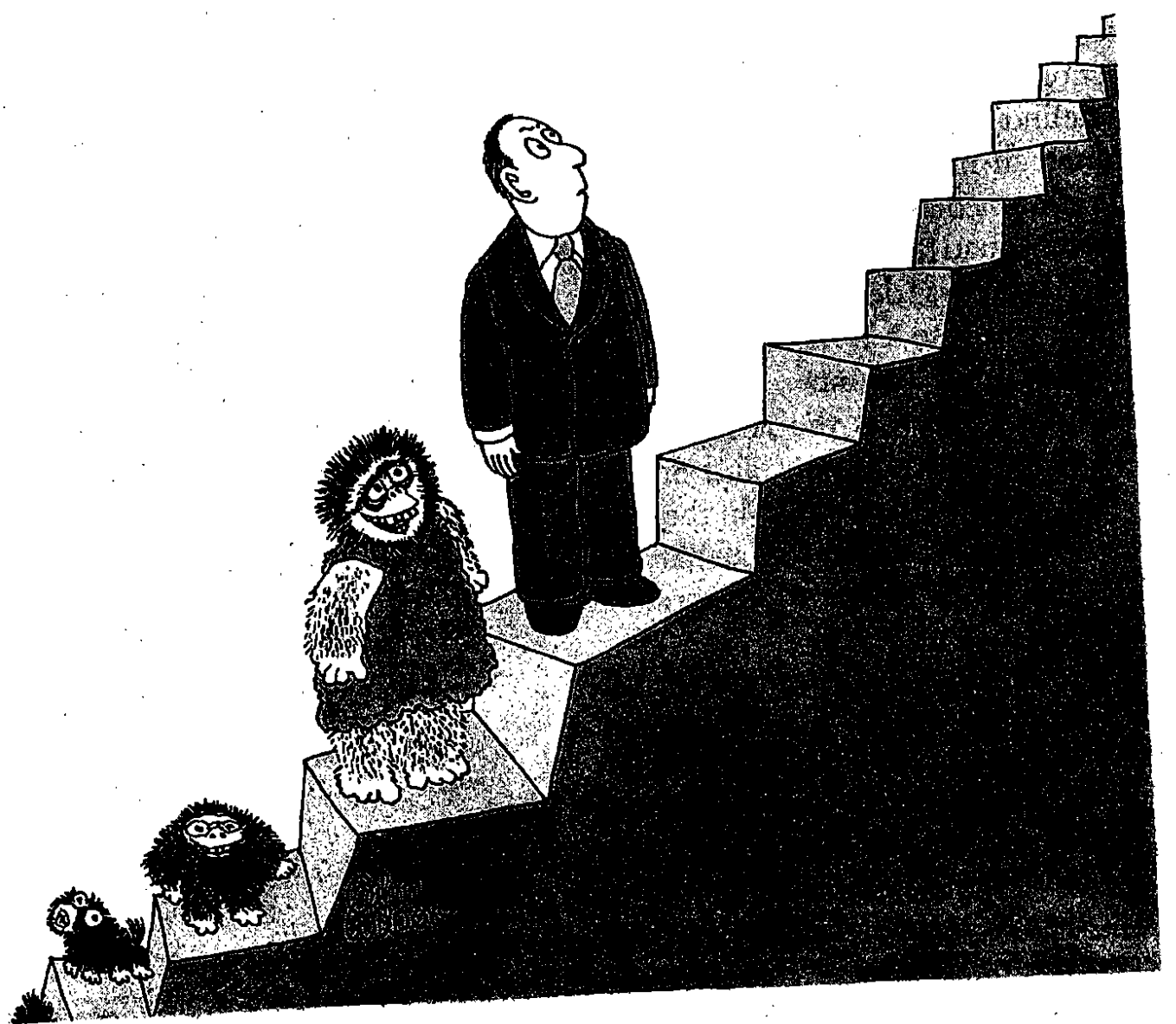


Baxter

BioScience

- **Roberto Piccioni**
- **Director, Environment, Health, Safety & Security**
- **Baxter Healthcare Corporation**
- **BioScience Division**
- **One Baxter Way**
- **Westlake Village, CA 91362**
- **805-372-3100**
- **roberto_piccioni@baxter.com**





"I was wondering when you'd notice there's lots more steps."

De'kuji!



- On November 17, 1989, the communist police violently broke up a peaceful pro-democracy demonstration, brutally beating many student participants.
- In the days which followed, Charter 77 and other groups united to become the Civic Forum, an umbrella group championing bureaucratic reform and civil liberties.
- Its leader was the dissident playwright Vaclav Havel. Intentionally eschewing the label "party," a word given a negative connotation during the previous regime, Civic Forum quickly gained the support of millions of Czechs, as did its Slovak counterpart, Public Against Violence.
- Faced with an overwhelming popular repudiation, the Communist Party all but collapsed. Its leaders, Husak and party chief Milos Jakes, resigned in December 1989, and Havel was elected President of Czechoslovakia on December 29.