

Advanced Risk Management, s.r.o., a consulting company from the Czech Republic, specialized in financial risk management, invites you to the seminar:

# OPERATIONAL RISK

**WHO SHOULD ATTEND:** risk managers responsible for operational risk, experts responsible for the implementation of Basel II, especially for operational risk requirements, Basel II leaders, internal auditors, compliance officers.

The seminar is led by experts in operational risk and Basel II:  
Mr. Jiří Kliment, Mr. Tomáš Němeček and Mr. Václav Novotný



**Ing. Jiří Kliment**

Mr. Jiří Kliment is a Head of Operational Risk Department in Česká spořitelna. He manages a team responsible for implementation of Operational Risk Framework, including Business Continuity Management, Fraud Management and Operational Risk Insurance. Mr. Kliment has been working in banking industry since 1991 in Česká spořitelna and former Erste Bank branch in Czech Republic in various department including Capital Markets and Market Risk Management. He moved to Operational Risk department shortly after privatization of Česká spořitelna in 2000. Mr. Kliment holds a master degree from Faculty of Civil Engineering at Czech Technical University in Prague.



**Mgr. Tomáš Němeček**

Mr. Tomáš Němeček is a senior analyst of Advanced Risk Management. He is responsible especially for the development of statistical models (including Advanced Measurement Approaches) and theoretical parts of seminars on Credit Risk, Operational Risk and Economic Capital. He is frequently invited as a lecturer to professional conferences and seminars, e.g. Institute for International Research. Mr. Němeček holds a master degree at Faculty of Mathematics and Physics at Charles University in Prague and studied at Humboldt University in Berlin.



**Mgr. Ing. Václav Novotný**

Mr. Václav Novotný is a Managing Director of Advanced Risk Management. He has been focusing on advisory and training in the area of identification, measurement and management of financial risks for the last 15 years. His career started at the investment department of the largest Czech insurance company Česká pojišťovna in 1994. Mr. Novotný is a founding member and Chairman of the Board of Risk Management Club and is frequently invited as a lecturer to professional conferences and seminars. Mr. Novotný holds a master degree from Faculty of Mathematics and Physics at Charles University in Prague and from the Faculty of Finance and Accounting at Prague School of Economics.

Business Park Košíře, Jinonická 80, Prague 5, Czech Republic

**May 19 - 22, 2009**

### DAY 1:

#### INTRODUCTION TO OPERATIONAL RISK

##### INTRODUCTION

- Definition of risk
- Objectives of risk management
- Risk management process
- Classification of financial risks
- Sources - literature
- Acronyms and terminology

##### MATHEMATIC AND STATISTIC MINIMUM

- Mathematic terms and symbols
- Derivation and integral
- Random variable
- Distribution function
- Mean value
- Dispersion and standard deviation
- Covariance and correlation
- Independence of random variables
- Discrete random variable
- Continuous random variable
- Estimation of distribution parameters using the maximum likelihood method
- Fundamentals of Monte Carlo simulation

##### OPERATIONAL RISK

- Definition of operational risk
- Objectives of operational risk management
- Process of operational risk management
  - Operational risk in a company vs. in a bank
  - Expected vs. unexpected loss
  - VaR for operational risk
- Relationship between operational risk and other risks

##### OPERATIONAL RISK IN BASEL II

- History of banking regulation and Basel II
- Definition of operational risk in Basel II
- Business Lines and Loss Event Types
- Methods of measuring operational risk and calculation of capital requirement
  - Basic Indicator Approach (BIA)
  - Standardized Approach (TSA) and criteria for its use
  - Alternative Standardized Approach (ASA)
  - Advanced Measurement Approach (AMA)
- Operational risk management pursuant to recommendation of BIS
  - (Sound Practices for the Management and Supervision of Operational Risk)

### DAY 2:

#### CAPITAL REQUIREMENT CALCULATION AND PRINCIPLES OF OPERATIONAL RISK MANAGEMENT

##### AMA: LOSS DISTRIBUTION APPROACH (LDA)

- Introduction into LDA method
- Data - losses caused by operational risk events
  - Data sources (internal data, external data, scenario analysis)
  - Data collected by BCBS
- Distribution of frequency of operational risk events
  - Model for frequency of operational risk events
  - Estimates of parameters of the frequency distribution
- Distribution of severity of losses
  - Model for the severity of losses
  - Extreme Value Theory (EVT)
  - Estimates of parameters of the severity distribution
  - Collection Threshold
- Simulation of the distribution of annual losses
- Calculation of capital requirement
  - VaR for operational risk
  - Impact of insurance
  - Capital requirement calculation
- Numerical example

##### CRITERIA FOR THE USE OF AMA APPROACH FOR THE CALCULATION OF CAPITAL REQUIREMENT

- Qualitative criteria
- Quantitative criteria

##### OPERATIONAL RISK MANAGEMENT FRAMEWORK

- Operational risk management process
- Role of common sense
- Overview of operational risk management tools:
  - Collection of operational risk events
  - Risk & Control Self Assessment (RCSA)
  - Role of internal regulations
  - Key Risk Indicators (KRI)
  - Business Continuity Management (BCM)
  - Insurance

## DAY 3:

### OPERATIONAL RISK IDENTIFICATION

#### OPERATIONAL RISK MANAGEMENT IN A REGULATED INDUSTRY

Does regulation actually decrease the risk exposure?  
Strategic and reputation risk excluded?  
Business incentives and risk incentives (volume-based against quality-based)  
Internal control environment

#### ASSESSMENT OF COMPANY'S EXPOSURE TO OPERATIONAL RISK

How to identify business threats before it is too late  
Internal data collection - how to set the process correctly  
External databases - pros and cons  
Expert risk assessment - do not forget human factor  
Risk scenarios  
Key Risk Indicators

#### BUSINESS CONTINUITY MANAGEMENT 1 - FIND A „VILLAIN ROUND THE CORNER“

Specifics of BCM - its place in operational risk framework  
Business impact analysis  
Business critical services  
Simple equation: critical service + threat = troubles

#### IS/IT AND OPERATIONAL RISK

Data collection challenges  
HW/SW failures ... and human failures  
Business language and IT language = communication breakdown

#### DATA COLLECTION OUTPUT: RISK MAP

## DAY 4:

### OPERATIONAL RISK ACCEPTANCE AND MITIGATION

#### RISK ACCEPTANCE - SET THE PROCESS CORRECTLY

Efficient risk reporting  
Board of directors and top management  
Business management  
Risk management  
Short-term costs and long-term gains = difficult balance

#### BUSINESS CONTINUITY MANAGEMENT 2 - FIGHT A „VILLAIN ROUND THE CORNER“

Disaster recovery and business continuity plans  
Dangerous assumptions  
Testing and training

#### FRAUD MANAGEMENT

„Common“ frauds  
IT security Incidents  
Financial markets  
Financial intermediaries  
Enemy inside - internal frauds

#### OUTSOURCING

Transfer the risk to someone else!  
What you should know about a service provider  
IT services specifics  
Re-insourcing challenges

#### INSURANCE

Let them buy your risk  
Which risk and for what price?  
Savior of last resort  
The risk is still here

#### CONCLUSION

Importance of a common sense  
Operational risk as everyone's business

## BENEFIT FOR YOU/WHY TO ATTEND:

The seminar is based on the experience with implementation of operational risk framework in Central Europe. The seminar contains a unique know-how developed to cover problematics of Basel II regulations for operational risk. The seminar includes case studies and mathematical exercises helping to understand the theory and to get acquainted with the practice.

The practical implementation of Basel II rules for operational risk is lectured by the Head of Operational Risk in Česká spořitelna (member of Erste Group).

Unique opportunity to talk to other bankers from Central and Eastern Europe.

## SELECTED REFERENCES - SEMINARS:

ABN AMRO Bank N.V.

ČEZ, a.s.

Citibank, a.s.

Česká pojišťovna a.s.

Česká spořitelna, a.s. (Erste Bank Group)

Československá obchodní banka, a.s.

(KBC Group)

Dexia banka Slovensko a.s.

E.ON Česká Republika, s.r.o.

GE Money Bank, a.s.

Generali Pojišťovna a.s.

HVB Bank Czech Republic a.s.

HVB bank Slovakia, a.s.

Komerční banka, a.s.

(Société Générale Group)

Ministry of Finance of the Czech Republic

National Bank of Slovakia

Nova KBM d.d.

OTP Banka Slovensko a.s.

Slovenská sporiteľňa, a.s.

(Erste Bank Group)

Slovenská záručná a rozvojová

banka a.s.

Slovnaft, a.s. (MOL Group)

Transgas, a.s.

UniCredit Bank Czech Republic, a.s.

(UniCredit Group)

## SELECTED REFERENCES - PROJECTS:

Consulting on implementation of Pillar II provisions for OTP Banka Slovensko a.s.

Cooperation with Komerční banka, a.s. on IRB approach implementation (especially LGD and CCF) and consulting related to implementation of Basel II rules

Strengthening the Czech Banking Sector - Application of Basle II (EUROPEAID/Phare project)

Support to the Implementation of the Risk-Based Supervision in Slovak Republic (EUROPEAID/Phare project)

Validation of AMA approach of Česká spořitelna, a.s. used for the measurement of Capital Requirement to Operational Risk

Validation of one part of the IRB approach of Česká spořitelna, a.s. used for the measurement of Capital Requirement to Credit Risk (models for risk parameters PD, LGD and CCF)

Validation of VaR approach of Česká spořitelna, a.s. used for the measurement of Capital Requirement to Market Risk

## TERMS AND CONDITIONS:

Should you want to attend the seminar please fill in the application form below and send it back by fax to the number +420 257 290 473 or via e-mail to [arm@arm.cz](mailto:arm@arm.cz). After the receipt of the application form we will confirm your attendance and issue a pro-forma invoice. The advance payment is the 100 % of the fee. An invoice will be issued after payment.

The fee is 2,390 EUR + VAT (19 %). Two or more attendants from the same institution will be charged 2,190 EUR + VAT (19%) each. The fee involves handout materials and refreshment during the four days of seminar.

The seminar will be held on May 19 - 22, 2009 in Business Park Kosire, Jinonická 80, Prague 5, Czech Republic. The schedule is as follows: on the first day the seminar starts by the registration at 8:30 a.m. On the following days it starts at 9 a.m. The seminar lasts all three days to 5 p.m. with break at 10:30 a.m. and 3:15 p.m. and lunch break at 12:30 p.m. At the end of the first day of the seminar

there will be a cocktail giving you the opportunity for informal discussion.

Cancellation must be sent in writing. Cancellations three weeks before the seminar are subject to 10% cancellation fee. For cancellations delivered less than three weeks before the first day of the seminar the cancellation fee is 100%. Any attendant can be substituted by another employee (colleague) from the same institution.

Advanced Risk Management reserves the right to cancel the seminar and refund the fee. The institution is aware that by signing this application form it fully agrees with the above-mentioned conditions. The institution confirms the attendance of its employee on the seminar.

## APPLICATION FORM:

Name:

Position:

Company:

ID:

Address:

VAT No:

Phone:

Fax:

e-mail:

Signature and stamp