



## EAA Course

### **Enterprise Risk Management (ERM)**

#### Part III: Risk Mitigation and Risk Optimization

June 14<sup>th</sup> to 16<sup>th</sup>, 2010 | Frankfurt/Main / Germany

#### Part IV: Risk Management Concept & Tools

June 17<sup>th</sup> to 19<sup>th</sup>, 2010 | Frankfurt/Main / Germany

organised by the European Actuarial Academy GmbH (EAA) with support from the Hessian Ministry of Economics, Transport, Urban and Regional Development

#### **1. Introduction**

Enterprise Risk Management has become more and more important in the financial market. Actuarial education is already offering basic knowledge in risk management. This knowledge should be extended to a comprehensive risk management that integrates the economic background as well as the principal techniques used in risk management.

In some jurisdictions special credentials have been defined to reflect the actuary's evolution from understanding risk to active risk management in a broader sense. Due to the initiative of the Society of Actuaries (USA), the Chartered Enterprise Risk Analyst (CERA) designation is now applicable for actuaries all over the world. In order to foster this idea, fourteen Actuarial Associations recently signed a Global Recognition Treaty for CERA credentials responding to new defined international standards for ERM.

Participants who attend all four seminars and pass the following examination will get an EAA Certificate for successful participation. In designing these seminars, the EAA made every effort to adhere to the standards of the Global ERM Designation Recognition Treaty (CERA-Treaty). Nevertheless the EAA wants to point out that the EAA Certificate is not a CERA-Designation and the EAA curriculum for ERM has not been reviewed and formally approved by the CERA Treaty Board.

This EAA Course on ERM is offered for the first time in 2010 and focuses on practical knowledge needed in managing a comprehensive risk management.

## 2. Participants

Actuaries working in Europe who are interested in ERM skills are invited to attend the seminars.

## 3. Purpose and Nature

The seminars are suited for actuaries or actuarial trainees that are directly or indirectly involved in issues with regard to financial risk management within insurance and pension companies.

EAA education for ERM consists of four seminars. The different seminars can be booked individually as CPD-seminars. An exam will be offered for the participants after the completion of the four seminars.

Participants who attend all four seminars and pass the following examination will get an EAA Certificate for successful participation. In designing these seminars, the EAA made every effort to adhere to the standards of the Global ERM Designation Recognition Treaty (CERA-Treaty). Nevertheless the EAA wants to point out that the EAA Certificate is not a CERA-Designation and the EAA curriculum for ERM has not been reviewed and formally approved by the CERA Treaty Board.

## 4. Lecturers

### Seminar 3

Jeffrey A. Courchene, FCAS, MAAA, Principal, Senior Consultant, Milliman GmbH, Germany, is an actuary and leads the Non-Life (Property and Casualty) practice in the Munich office of Milliman. Jeff's area of expertise is international property and casualty insurance, particularly reserving, reinsurance analysis, mergers and acquisitions (M&A) activity, advanced pricing techniques, and dynamic financial modeling. Jeff has extensive experience in matters related to both personal and commercial lines of business in the United States, United Kingdom, and continental Europe.

Dr. Andre van Vliet, Managing Director, Insurance Risk Management, Ortec, the Netherlands, studied econometrics at Erasmus University Rotterdam. In 1995 he received a PhD degree in Operations Research for his research on the performance analysis of optimization algorithms. During this PhD period he taught as an assistant professor at the Econometric Institute in Rotterdam and published in several academic journals. Parallel with his academic work, he started his professional career at ORTEC on logistic optimization in 1988. In 2000 he changed his working environment from logistics to finance. At Ortec Finance he headed consulting units on ALM, risk management, performance management and financial engineering. Since 2006 he is head of the business unit Insurance Risk Management.

Henny Verheugen AAG, Consulting Actuary, Milliman, The Netherlands, is a principal in the Amsterdam office of Milliman and joined the firm in 2006. He and his team carry out consulting missions in the Netherlands and Belgium. Prior to this, he worked three years for Delta Lloyd (part of Aviva) as manager of the Group Actuarial and Risk Management department, six years for Ernst & Young Actuaries as senior manager, and 13 years for Fortis. Henny has performed a wide range of actuarial consulting missions for a variety of

clients, mainly major European insurers. He advises clients in the areas of statutory reserving, including liability adequacy testing, valuations (IFRS, Belgium GAAP, Dutch GAAP, etc), value-based management, and risk management.

#### **Seminar 4**

##### Dr. Dorothea Diers, Risk Management, Provinzial NordWest, Germany

Dr. Dorothea Diers studied mathematics and computer science at University of Münster graduating in pure mathematics. Later she achieved the certificate „Financial Risk Management“ of Ulm University. Dorothea Diers works for Provinzial NordWest Holding AG at Münster where she is responsible for development and integration of the group-wide internal risk models and risk management processes. In addition she is lecturer at Ulm University in actuarial studies. Subjects of her research: dynamic financial analysis, asset/liability management, risk management, value and risk based management, Solvency II. She is the author of many papers of these topics. Dorothea Diers is a fully qualified actuary and a member of the German Actuarial Association (DAV) and of several actuarial working groups of DAV.

Dr. Knut Schaefer, Managing Director EMB, Germany, graduated in 1992 from Cologne University in Applied Mathematics. After that he became teaching and research assistant at Cologne University and he became a doctor of mathematics in 1996. In 1996 he joined a UK based actuarial consultancy company and spent his first year in the UK. After his return he built up the non-life practice in Germany. In 2001 Knut co-founded EMB Deutschland and became one of the managing directors. Knut has vast experience in Solvency II and ERM processes, mainly in the design of internal risk models, in reserving matters, in the valuation of insurance companies in Mergers & Acquisitions, in reinsurance commutations, in the design of optimal reinsurance programs for primary insurers and of optimal insurance programs for industrial companies and in pricing for small and medium companies. Knut is active in the European Actuarial Academy and gives courses at Universities for Applied Science in Germany and for external seminar organisers. Also, he is the external appointed actuary of a Swiss reinsurance company and a German primary insurer.

## **5. Language**

The language of the seminar will be English.

## **6. Programme**

### **Seminar 3: Risk mitigation and risk optimization**

Monday, 14<sup>th</sup> June 2010

09:00 – 10:00 Risk Treatment and appropriate choice for different risks: Avoiding, limiting, transferring or accepting

10:00 – 11:00 Risk financing

11:00 – 11:15 Break

11:15 – 12:45 Risk transfer to a third party and reinsurance methods

12:45 – 13:45 Lunch

13:45 – 14:45 Risk reducing methods (without transferring risk)

14:45 – 15:45 Managing risk and selecting the adequate degree of hedging of risk

15:45 – 16:00 Break

- 16:00 – 17:00 Risk optimisation and its impact on the company's value of an ERM strategy
- 17:00 – 18:00 Choosing an adequate hedging strategy (reinsurance, derivatives, financial contracting, etc.)

Tuesday, 15<sup>th</sup> June 2010

- 09:00 – 11:00 Replicating portfolio techniques
- 11:00 – 11:15 Break
- 11:15 – 11:45 Practicalities of hedging market risk (including dynamic hedging)
- 11:45 – 12:15 Credit risk
- 12:15 – 12:45 Influence of derivatives to risk potential
- 12:45 – 13:45 Lunch
- 13:45 – 14:45 ALM: Concept, requirements and methods
- 14:45 – 15:45 ALM: Issues and challenges in development, implementation and use
- 15:45 – 16:00 Break
- 16:00 – 16:45 ALM: Benefits; how and where can value be created?
- 16:45 – 17:15 ALM: Application of principles to the establishment of investment policy and strategic asset allocation
- 17:15 – 18:15 ALM: Integration into management, controlling and reporting / Regulatory requirements

Wednesday, 16<sup>th</sup> June 2010

- 09:00 – 11:00 Case studies and workshops
  - ALM
  - Asset allocation
  - Hedging
- 11:00 – 11:15 Break
- 11:15 – 12:45 Case studies and workshops (continued)
- 12:45 – 13:45 Lunch
- 13.45 – 16.00 Assignments

#### **Seminar 4: Risk management concepts and tools**

Thursday, 17<sup>th</sup> June 2010

- 09:00 – 10:00 Economic measures of value and their use in corporate decision-making processes
- 10:00 – 11:00 Risk measures and their use in economic capital assessment
- 11:00 – 11:15 Break
- 11:15 – 12:45 Development of an economic capital model for a representative company
- 12:45 – 13:45 Lunch
- 13:45 – 14:45 Approaches and concepts for a value and risk based management – Benefits and requirements
- 14:45 – 15:45 Dynamic financial analysis: Functionality and choice of appropriate methods
- 15:45 – 16:00 Break
- 16:00 – 17:00 Integration into management, controlling and reporting / Regulatory requirements
- 17:00 – 17:30 Required data, IT systems

Friday, 18<sup>th</sup> June 2010

09:00 – 11:00 Embedded Value: Definition and its variations (EV, EEV, MCEV)

- Guidelines of the CRO-Forum
- Calculation

11:00 – 11:15 Break

11:15 – 11:45 Benefits and impact, advantages and disadvantages of the concept

11:45 – 12:45 Integration into management / Regulatory requirements

12:45 – 13:45 Lunch

13:45 – 14:45 Internal Models: Concept, structure and requirements

14:45 – 15:45 Adequate methods and modelling approaches

15:45 – 16:00 Break

16:00 – 16:45 Benefits of internal models / Integration into management

16:45 – 17:15 Required controls and audit, controlling and reporting

17:15 – 18:15 Regulatory Requirements: Solvency II

Saturday, 19<sup>th</sup> June 2010

09:00 – 11:00 Case studies and workshops

- Internal models and their use in practice
- Applications of internal models

11:00 – 11:15 Break

11:15 – 12:45 Case studies and workshops

12:45 – 13:45 Lunch

13.45 – 16.00 Assignments

## 7. Fees & Registration

Please register as soon as possible because of the expected demand. The seminars can be booked as a whole series or individually. An exam will be offered for the participants after the completion of the four seminars. The seminars are limited to 25 participants. If there are more persons interested than places available, we will give priority to the registrations having been first to arrive. Please send your registration as soon as possible by using our online registration form ([www.actuarial-academy.com](http://www.actuarial-academy.com)).

Your registration is binding. Cancellation is only possibly up to 4 weeks before the first day of event. If you cancel at a later date, the full seminar is due. You may appoint someone who takes your place, but must notify us in advance. EAA has the right to cancel the event if the minimum number of participants is not reached.

Please always give your invoice number when you effect payment. Bank charges are to be borne by the participant. We will send you an invoice, please allow a few days for handling.

The seminar fees are as following:

**Part III: Risk Mitigation and Risk Optimization – early-bird ends on 14<sup>th</sup> April 2010**

**Part IV: Risk Management Concept & Tools – early-bird ends on 17<sup>th</sup> April 2010**

Seminar: fee early-bird: € 750.00 plus 19 % VAT (€ 142.50) = € 892.50

Seminar: regular fee: € 800.00 plus 19 % VAT (€ 152.00) = € 952.00

The seminar fee includes participation, seminar material, coffee breaks and lunches. Accommodation, breakfast and dinner are not included.

The examination fee and other exam regulations will be determined later.

## **8. Accommodation**

Part III: Risk Mitigation and Risk Optimization

Part IV: Risk Management Concept & Tools

The seminars will take place at the Holiday Inn Frankfurt City South Conference Centre, Mailänder Str. 1, 60598 Frankfurt/Main, Germany.

Tel. +49/(0)69-6802-0, [reservation.hi-frankfurt-hotel@ggdhotels.de](mailto:reservation.hi-frankfurt-hotel@ggdhotels.de)

single room: 89 € per night incl. breakfast

This price is valid for bookings out of our allotment up to 14 May 2010. Please book your accommodation directly with the hotel and note the hotel's cancellation policy. The reference is "EAA seminar", the number of rooms is limited.

## **9. Accreditation for CPD Points**

The following CPD points or hours are granted by the individual actuarial associations:

Austria: seminar 1: 17 points, seminars 2-4: 18 points

Croatia: 15 CPD hours per seminar

Germany: seminar 1: 17 hours, seminars 2-4: 18 hours

Netherlands: for the full series: 84 PE-points

Switzerland: 20 CPs per seminar

No responsibility is taken for the correctness of this information.