



# Catastrophic Risk Theory and Practice for Energy, Leisure and Transportation

**25-26 April 2018**

**Dubai, United Arab Emirates**

Energy, leisure and transportation sectors are critical to the productivity of nations in the region. A course on catastrophic risk theory and practical work with case studies is offered to CISOs, CEOs, CSOs, COOs, finance managers, Board Directors, auditors, City Planners and policy experts, intelligence experts, big data analysts, financial technology developers, mobile data and financial services, team leaders and senior managers and first responders to incidents.

Catastrophic risk methodology delivers high value through integrated risk assessments which reduces costs.

The course applies an 'all-risks' approach that adds value to commercial and government operations. Through an all-risks approach, business operations can be sustained in many new ways. This novel approach will give course participants an opportunity to be innovative with solutions to prevent and respond to extreme threats.

The two-day catastrophic risk course covers methodology to quantify risks that threaten critical operations of energy, leisure and transportation infrastructure. The course takes participants beyond general risk frameworks they are already using to understand the value of adding procedures to sustain their operations when catastrophic events threaten the survival of the organisation, services or people. Dependence on interconnected activities using cyber platforms which might be private networks, cloud, web based services, mobile devices, as brought a new threat of catastrophic failures.



There are also insider risks that may breach defences and geopolitical threats and consequences from world- wide events such as nuclear instability in DPRK which are covered in case study briefings in this course. The world-wide risks to the region's supply chains, energy security, transportation and important leisure industry will be discussed in the course.

Successful application of catastrophic risk methods can grow the business by increasing the risk appetite for innovative and transformative projects. Entry into new markets and applications of new technology are challenges that may be made easier with the benefit of catastrophic risk knowledge.

## Course Modules

### **Module 1: Catastrophic case studies and *Exercise Degradation***

- Catastrophic risk – scope of the course
- Peer-to peer discussion on experiences with catastrophic risk
- Energy distribution, transportation vulnerabilities, leisure market factors
- Developing a Catastrophic Risk Index (CRI) for an industry
- Cost benefits of Health and Safety integration with Risk Management
- Cyber and physical security risks
- Pre-defining catastrophic risk to innovation teams in the business
- Unusual threats to the Built Environment: hotels and offices transport control rooms, energy infrastructure and including renewables.
- Scenario on energy sector and terrorism- *Exercise Degradation*
- Principles for senior personnel when facing uncertainty in daily risk management



## **Module 2: Risk matrix building and *Exercise Hotel Attack***

- Building a multidimensional matrix for catastrophic risk
- Using the Catastrophic Risk Index in the matrix
- Calculating consequences to quantify for the business
- Working on sustainability of critical processes and control of operations and services
- Identifying controllable and uncontrollable variables
- Scenario *Exercise Hotel Attack* cyber and physical threats and risk management processes
- Revisiting the catastrophic matrix design and adding dimensions
- Finding the residual risks in energy, transportation and leisure in well managed operations

## **Module 3: Business risk model and *Case Studies***

- Using case studies to test assumptions of a business risk models
  - Participant's choice of case studies
  - Analysis of critical factors and risk management
  - Identification of fast track ways to save the business or operation or workforce
  - Communication to stakeholders – techniques and assessing stakeholder response
- Participant's presentations of case studies

## **Module 4: Risk intelligence and *Exercise Aviation and Port Attacks***

- Quantification of catastrophic risk – testing the matrix
- Quantification of residual risk – testing cost effective controls
- Identifying threat intelligence for energy, transportation and leisure industries
- Controlling insider threats when the insider is not identified
- Scenario Exercise *Coordinated Aviation and Port Attacks* to test catastrophic risk theory and practice
- How to design, document and apply brief exercises to test sustainability of operations
- Evaluating other forms of testing risk measures for sustainability of business operation
- Course presentations by volunteers of novel solutions to catastrophic risk management that will grow the business

***\*Individuals complete personal review of skills development***

***\*Course summary and take-aways***



## About the Instructor

**Dr. Sally Leivesley PhD Lond., MSPD, BA(Hons) Qld., FICPEM, FRSA, MACE, MIABTI, Director, Newrisk Limited and TEG7 LLP**

Sally has a UK Home Office background and trained as a Scientific Advisor to respond to all aspects of nuclear attack and chemical, biological and radiological events. She plans, directs and participates in major exercises concerning critical components of industry and specialises in testing catastrophic threat impacts on critical functions of business. She has experience in all phases of risk assessment, planning, crisis management and post-loss recovery including psychological interventions in communities, post-disaster. Sally is a respected media adviser on public protection and is a member of the Register for Security Engineers and Specialists (RSES).



## Key information and registration

**Course name:** Catastrophic Risk Theory and Practice for Energy, Leisure and Transportation

**Date:** 25-26 April 2018

**Location:** Dubai, United Arab Emirates

**Course length:** Two days

**Price:** £1,500

### **Register for this course:**

To register or find out more about this course please

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