



LABORATÓRIO NACIONAL  
DE ENGENHARIA CIVIL

# Risk management in civil engineering advanced course

3<sup>rd</sup> announcement

November 17-22, 2008

## Fees

Fees include tuition material, participation certificate, lunches, coffee breaks, ice breaking reception, final dinner and a technical / tourist visit on Saturday, November 22.

	Early registration, before October 15, 2008	Late registration, after October 15, 2008
Participants	€ 1200	€ 1500
Students <sup>(1)</sup>	€ 750	€ 950

<sup>(1)</sup> Limited number of students discounts.

## Registration information

To register please fulfill the form below and send it by post, fax or e-mail to the secretariat address. The registration is valid after payment confirmation. Payment can be done at the secretariat, sending a cheque (only for Portugal) made payable to FUNDCCIC, or through bank transfer:

NIB: 0018 0365 00200010582 22  
IBAN: PT 50 0018 0365 00200010582 22  
Swift code of the Bank: TOTAPTPL  
Santander Bank Portugal  
LARGO FREI HEITOR PINTO 7-A/B  
P-1700-204 LISBON  
Account holder: FUNDCCIC

## Organizing Committee

Laura Caldeira  
Maria Alzira Santos  
Maria Luísa Sousa  
Teresa Fonseca  
Júlia Antunes

## Secretariat and information

LNEC | Apoio à Organização de Reuniões  
AV DO BRASIL 101 | P-1700-066 LISBOA  
phone: +351 21 844 34 83 | fax: +351 21 844 30 14  
formacao@lnec.pt | cursos@lnec.pt  
www.lnec-riskmanagement.org



Fundo para o Desenvolvimento  
das Ciências da Construção

Concepção gráfica: Helder David

## Risk management in civil engineering advanced course

title

name  first name

affiliation

address

city and zip code  state and country

phone  fax

## payment

### cheque (only for Portugal)

cheque number  name of bank

In the amount of €  payable to "FUNDCCIC"

### bank transfer

NIB: 0018 0365 00200010582 22

IBAN: PT 50 0018 0365 00200010582 22

Swift code of the Bank: TOTAPTPL

Account holder: FUNDCCIC

(a copy of the bank transfer should be attached to this form)

registration form

# Risk management in civil engineering advanced course

## Objectives

The main purpose of the Risk Management in Civil Engineering Advanced Course is to disseminate the knowledge on risk management applied to various fields of civil engineering, in order to promote the development of the Portuguese scientific and technologic research in the field.

The lecturers are renowned experts in different risk domains at the international level. The Course provides a forum for the academic and practice exchange of information and knowledge in civil engineering risk management.

The program focuses in three major areas:

1. Mathematical fundamentals of civil engineering risk management;
2. Risk management process applied to civil engineering, including risk identification, analysis, evaluation, perception and mitigation strategies;
3. Case studies on risk management applied to structures, transports, tunnels, coastal erosion and ports.

## Participants

The Course is wide open to scientific and technical community, especially to those who are involved in activities related to risk management applied to civil engineering field.

## Field training exercise

All lecturers and course participants are invited to participate, as observers, in the Live Exercise "PROCIV IV/2008" organized by the ANPC (Autoridade Nacional de Protecção Civil), the Portuguese National Authority for Civil Protection, on November 22th, Saturday.

This event is part of a three-day field training simulation of an earthquake affecting the Metropolitan Area of Lisbon (MAL).

The participation in this exercise, as observers, will be a great opportunity for those interested in emergency management.

## Sponsors

## Fundamentals

### Concepts

#### Risk management: an overview

*Carlos Matias Ramos – LNEC, Portugal*

#### Mathematical concepts applied to Civil Engineering risk management overview

*Alfredo Campos Costa – LNEC, Portugal*

### Models

#### Methodologies for risk analysis and management

*Desmond Hartford – British Columbia Hydropower Authority (BC Hydro), Canada*

## Risk management process

### Identification and risk analysis in Civil Engineering

#### Risks induced by natural hazards

##### Earthquake risks

##### Geotechnical risks

*Chris Clayton, Southampton University, UK*

##### Floods and droughts risks

*M. Michel Lang – Cemagref, Agricultural and environmental engineering research, France*

##### Environmental risks

##### Assessing the risk of oil spills impacts using transport and fate models

*Malcolm Spaulding – University of Rhode Island, USA*

##### Surface water and groundwater pollution risks

*Barry J. Lloyd – University of Surrey, UK*

##### Soil contamination, mining environmental impact and waste landfills risks

*Dominique Darmendrail – Bureau de Recherches Géologiques et Minières (BRGM), France*

##### Other risks

##### Risk of fire in buildings

*Robert W. Fitzgerald, Worcester – Polytechnic Institute, Massachusetts, USA*

##### Risk evaluation and perception

##### Risks and insurance policies

*José Luis Montull – Münchener Rück, Sucursal España y Portugal, S.A., Spain*

##### Risk management in water and wastewater utilities

*Simon Pollard – Cranfield University, UK*

##### Risk perception and acceptance criteria

*David S. Bowles – Utah State University, USA*

##### Acceptance criteria applied to dams

*David S. Bowles – Utah State University, USA*

## Risk management strategies

### Risk prevention

#### Structural measures

*Agostino Goretti – Protezione civile di Italia, Italy*

#### Non-structural measures

*Philip Berke – The University of North Carolina at Chapel Hill, USA*

### Emergency preparedness

#### Emergency preparedness

*Nazaré Albuquerque – United Nations, USA*

### Emergency management

#### Agent based simulation

*David Mendonça – New Jersey Technological Institute, USA*

#### Emergency management

*John Harrald – The George Washington University, USA*

## Case studies

### Structures

#### Structural risk, part I & II

*Michael Faber – Institute of Structural Engineering (IBK), ETH Zurich, Switzerland*

### Transportation

#### Transportation risks, part I & II

*José Manuel Vassallo – Universidad Politécnica de Madrid, Spain*

### Tunnels

#### Risks in tunnels, part I

#### Risks in tunnels, part II

### Coastal erosion

#### Coastal erosion risks – beaches

*Magnus Larson – Lund University, Sweden*

#### Coastal erosion risks – cliffs

*Mark Lee – UK*

### Ports

#### Risk assessment in ports

*Antonio Ruiz Mateo and M<sup>a</sup> Jesús Martín Soldevilla – Centro de Estudios y Experimentación de Obras Públicas (CEDEX), Spain*