



# 20<sup>th</sup> EUROPEAN REGIONAL EARTHQUAKE ENGINEERING SEMINAR

# Seismic assessment and upgrading of existing structures

Organised by

European Association for Earthquake Engineering & Swiss Society for Earthquake Engineering and Structural Dynamics

September 3 - 7, 2001

Institut Universitaire Kurt Bösch, Sion, Switzerland

## 1<sup>st</sup> Circular, February 2001







Bundesamt für Wasser und Geologie BWG
Office fédéral des eaux et de la géologie OFEG
Ufficio federale delle acque e della geologia UFAEG
Uffizi federal per aua e geologia UFAEG
Federal Office for Water and Geology FOWG

#### ORGANISING AND SCIENTIFIC COMMITTEE

Dr Olivier LATELTIN - Chairman Federal Office for Water and Geology Bienne

Prof. Atilla M. ANSAL Secretary - General EAEE, Istanbul Technical University, Turkey

> Prof. Marc BADOUX Swiss Federal Institute of Technology Lausanne

Philippe BISCH President EAEE, Séchaud et Metz, France

Jean-Daniel ROUILLER Cantonal Geologist, Director of Crealp Sion

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#### SPONSORING ORGANISATIONS

Swiss Society for Earthquake Engineering and Structural Dynamics SGEB

Federal Office for Water and Geology FOWG

Etat du Valais

#### Purpose:

The majority of structures situated in seismic zones have not been designed and built for seismic loading. The recent earthquakes of El Savaldor and India should remind us that engineering knowledge exists and there are seismic building codes that could prevent most buildings from collapse. Many seismically vulnerable buildings, bridges and other structures must be identified and upgraded. This task has tremendous socio-economic implications and constitutes a direct and worldwide challenge to the earthquake engineering community. Answering this challenge includes the need for research to improve available assessment methods and upgrading techniques.

The 20<sup>th</sup> regional seminar is mainly organised to inform young researchers, practising engineers and scientists about new developments in the field of seismic assessment and upgrading of existing structures. The seminar will combine contributions from young researchers and engineers with keynote lectures by leading earthquake engineers. The lectures will present state-of-the-art lectures on the seismic assessment and upgrading of buildings and bridges.

#### Seminar themes:

The Program will address the seven major themes indicated below and will be conducted in a General Session. There will be no concurrent sessions and two major themes will be addressed each day and will include Keynote Speakers, contributions from young researchers or engineers and panel discussions. The Organisation Committee invites participants to submit an abstract electronically to <a href="mailto:olivier.lateltin@bww.admin.ch">olivier.lateltin@bww.admin.ch</a> until May 15, 2001, on one of the following topics:

- 1. Assessment criteria and acceptable vulnerability of structures
- 2. Seismic screening and rapid assessment methods (building and infrastructures)
- 3. Detailed assessment methods
- 4. Upgrading techniques for buildings and bridges
- 5. Upgrading strategies and design
- 6. Analyses of upgraded structures
- 7. Case studies

Contributions on the assessment and upgrading of a broad range of structures, including non-engineered and historic structures, lifelines and utilities, industrial structures, etc. will be welcome. In addition, there will be a half-day technical field trip, an Ice Breaker reception at the beginning, five buffet lunches and an evening banquet. The seminar language will be english, no translations will be provided.

#### Keynote speakers:

Prof. Atilla M. ANSAL

Istanbul Technical University, Civil Engineering Faculty, Istanbul, Turkey

"Geotechnical aspects of seismic assessment and retrofit"

Prof. Hugo BACHMANN

Institute of Structural Engineering, ETH-Zürich, Switzerland

"Softening as upgrading strategy - a case study"

Philippe BISCH

President EAEE, Sechaud et Metz, Fontenay-aux-Roses, France

"Role of buildings codes in seismic assessment and upgrading of structures: EC 8 as an example"

Prof. Gian Michele CALVI

Dipartimento di Meccanica Strutturale, Università degli Studi di Pavia, Italy

"Seismic assessment and retrofit of bridges"

Prof. Michael N. FARDIS

University of Patras, Dept. Of Civil Engineering, Patras, Greece

"Seismic assessment procedures: a review"

Prof. Domenico GIARDINI

Director of the Swiss Seismological Service, ETH-Zürich, Switzerland

"Seismicity in Europe and hazard mapping"

Dr. Rui PINHO

Department of Civil and Environmental Engineering, Imperial College, London, United Kingdom "Seismic assessment and upgrading of reinforced concrete buildings"

Prof. Miha TOMAZEVIC

Slovenian National Building and Civil Engineering Institut, Ljubljana, Slovenia

"Seismic assessment and retrofit of masonry structures"

#### General Information:

Questions regarding registration, abstracts or other nontechnical aspects of the Regional Seminar should be adressed to:

Federal Office for Water and Geology

Dr. Olivier Lateltin

Ländtestrasse 20

CH-2503 Biel, Switzerland

Telephone: +41 32 328 87 59

Fax: +41 32 328 87 12

e-mail: <u>olivier.lateltin@bww.admin.ch</u>

#### Abstract and publication:

The abstracts (one to two pages, including figures) will be prepared according to the guidelines (Abstract20RS.rtf) and send to <u>olivier.lateltin@bww.admin.ch</u> until 15<sup>th</sup> of May. The Abstracts as well as the contribution of the keynote speakers will be published in the Proceedings of the 20<sup>th</sup> European Regional Earthquake Engineering Seminar.

#### **Accommodation:**

30 rooms will be reserved for young researchers at the Institut Universitaire Kurt Boesch, at Sion. Each EAEE Member Society will nominate one young researcher (age below 35 years) that can submit abstracts and take part in the Regional Seminar free of charge.

Other participant can send an abstract but are expected to pay a registration fee. Some rooms have been reserved at the Hotel Ibis, av. Gramp Champsec in Sion (Tel. +41 27 203 81 91 Fax +41 27 203 13 20). The number of participants for the Regional Seminar is limited. More information will be send with the second circular (Prices for room with breakfast: 100 sfr/day single bed; 130 sfr/day double bed).

#### Conference center:

The Regional Seminar will take place at the Institut Universitaire Kurt Boesch, located in the surroundings of Sion (Tel +41 27 203 73 83 Fax +41 27 203 73 84; e-mail: institut@iukb.ch).

For more information, please visit <a href="www.ikb.vsnet.ch">www.ikb.vsnet.ch</a>.

Bus transportation will be organised between the Hotel Ibis and the Institut Universitaire Kurt Boesch, twice a day.

#### **Transportation to Sion:**

The nearest international airports will be Geneva or Zürich-Kloten. Sion can be reached directly by train from these two airports. The journey takes about 2 to 3 hours.

#### Conference fee:

The conference fee will include registration, conference publication, five lunch buffets, ice-breaker reception and evening banquet. The conference fee <u>will not</u> include accommodation. More information will be given in the second circular.

#### Important deadlines:

- May 15, 2001: abstract submission, with approval of EAEE Member Society
- May 15, 2001: pre-registration form/request for next mailing
- June 15, 2001: paper submission (camera-ready) for keynote speakers

EAEE 20<sup>th</sup> European Regional Earthquake Engineering Seminar Institut Universitaire Kurt Boesch, Sion Switzerland, September 3 - 7, 2001

# PRE-REGISTRATION FORM REQUEST FOR NEXT MAILING

Name:	Mr., Ms, Dr., Prof.		
	(circle one)	First name	Last name/surname
Job titl	le:		

Organisati	on or company				_			
Mailing ad	dress							
City	State or Provir	nce	Postal or	Zip Code	Country			
Phone	Fax	E-mail_						
l am	an invited keynote s	speaker						
I will submitted an abstract electronically before May 15, 2001								
I am selected by my EAEE national Member Society for free attendance								
l ne	ed hotel accommoda	ition in Sior	nsingle	oed ord	ouble bed			

### Please, send your filled form before May 15, 2001

To: Federal Office for Water and Geology FOWG Attn. Dr. Olivier LATELTIN Ländtestrasse 20, CH-2503 Biel, Switzerland Phone: +41 32 328 87 59; Fax: +41 32 328 87 12

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