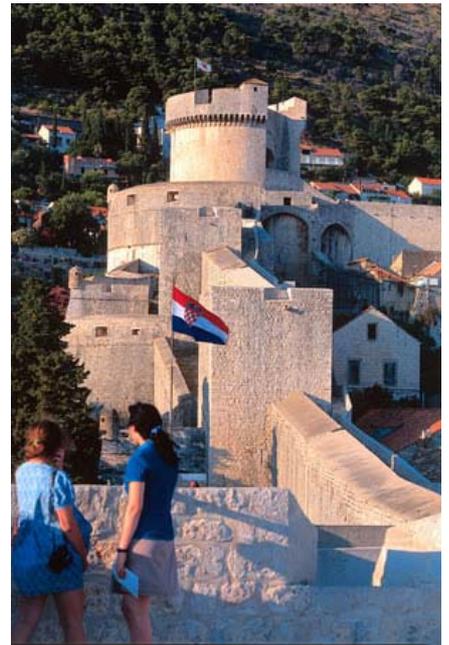
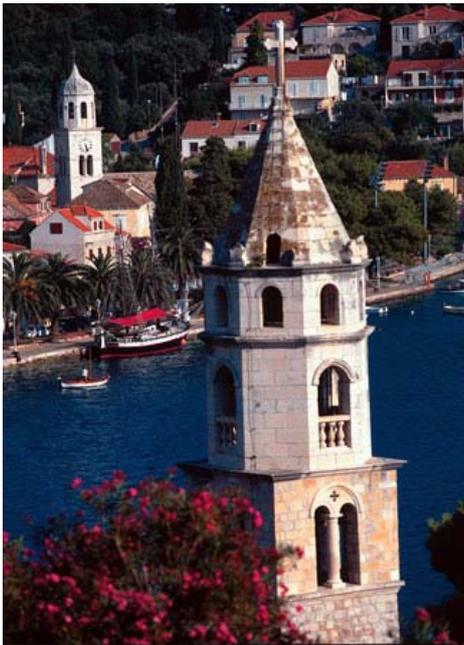


Preliminary Invitation and Call for Papers
Joint IABSE-fib Conference on

CODES IN STRUCTURAL ENGINEERING

Developments and Needs for International Practice



Cavtat, Dubrovnik-Neretva County, Croatia

May 3-5, 2010

Organised by



Croatian Group of
IABSE
-represented by
CSSE



Croatian Member
Group

in association with



SECON - CSSE
Structural
Engineering
Conferences



Civil
Engineering
Institute of
Croatia



University of Zagreb
Faculty of Civil
Engineering

CONTENTS

SCIENTIFIC COMMITTEE.....	3
ORGANISING COMMITTEE.....	3
INTRODUCTION	4
THEMES AND TOPICS	5
CALL FOR PAPERS.....	5
PUBLICATION	6
YOUNG ENGINEERS PROGRAMME.....	6
TIME SCHEDULE.....	6
CONFERENCE FORMAT	7
LANGUAGE	7
PARTICIPANTS.....	7
PRE-REGISTRATION.....	7
COMMERCIAL EXHIBITION	7
DATE AND VENUE	7
TECHNICAL VISITS	8
SOCIAL PROGRAMME.....	8
PRE- AND POST-CONFERENCE TOURS	8
DUBROVNIK, CROATIA.....	8
LOCAL ORGANISERS	9
ABOUT IABSE	10
ABOUT FIB.....	10
FURTHER INFORMATION.....	10
USEFUL LINKS	10

CONFERENCE SECRETARIAT

Croatian Society of Structural Engineers
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10 000 Zagreb
Croatia

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SCIENTIFIC COMMITTEE

Manfred A. Hirt, Switzerland
Chair

Joost Walraven, Netherlands
Co-Chair

Danijel Močibob, Croatia
Scientific Secretary

More members will be added
for the Review Process

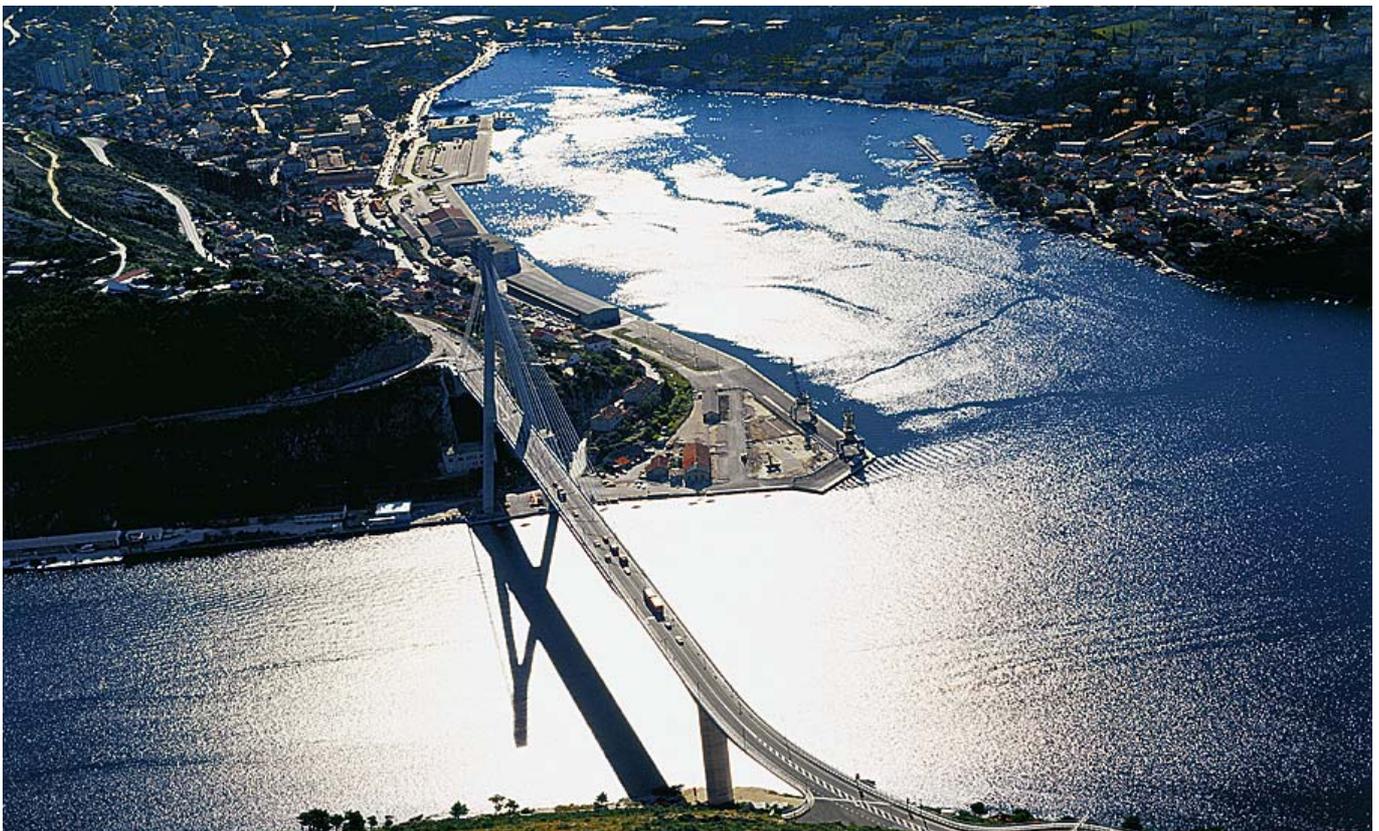
Alok Bhowmick, India
Michael Fardis, Greece
Andrea Frangi, Switzerland
Xi-Lin Lu, China
Giuseppe Mancini, Italy
Ante Mihanović, Croatia
Hugo Corres Peiretti, Spain
Jure Radić, Croatia
Fathy Saad, Egypt
Zlatko Šavor, Croatia
Luc Taerwe, Belgium
Tsuyoshi Takada, Japan
Roland Von Woelfel, Germany
Jan Wium, RSA

ORGANISING COMMITTEE

Jure Radić, Croatia
Chair
Croatian Society of Structural Engineers

Ana Mandić, Croatia
Conference Secretary

György L. Balázs, Hungary
Jelena Bleiziffer, Croatia
Alex Kindij, Croatia
Marija Kušter, Croatia
Vlatka Rajčić, Croatia
Krešo Šaravanja, Bosnia
and Herzegovina
Damir Tkalčić, Croatia
Roko Žarnić, Slovenia
Željko Žderić, Croatia
Darija Živni, Croatia



Dubrovnik bridge – single pylon cable stayed bridge

INTRODUCTION

The IABSE Conference held in Davos in 1992 (originally planned to be held in then Yugoslavia) covered the philosophy, the conceptual background and the basic elements of the Eurocodes, under development at that time. The conference in Davos addressed all those working towards unified codes in structural engineering in Europe, as well as those who wished to be informed on the ongoing development.

Since then, much progress has been achieved and most parts of the Eurocodes have been finalized. During the same time, national codes in many countries have been revised or are undergoing revision. Major codes exist or are under revision for example in the USA, Canada, Japan, India, China, and Australia. Many countries face the dilemma of choosing between parts from one or more of these codes while using existing national codes in parallel.

In the light of the globalisation of the construction market as well as of code writing, research and education, the joint IABSE-*fib* Conference addresses all persons worldwide interested to learn from each other, to exchange feedback from practical experience and to contribute to future harmonization of structural codes. Nevertheless, differences in geographical, climatic, environmental and social conditions as well as different safety or serviceability standards have to be considered.

The main objective of this IABSE-*fib* Conference 2010 in Cavtat is to obtain an overview of the present state of codes worldwide including the underlying legal and economical aspects. Based on feedback from practical applications and using the results of theoretical and experimental research, conclusions should be drawn for the development of future codes, striving for international harmonization in the ever more globalised market.

In addition to traditional topics related to safety and serviceability, new and special topics have emerged concerning for example robustness, assessment of existing structures, sustainability, aesthetics or the extensive use of information technology in the design process. Finally, the transition between codes and practice is made possible by adequate teaching of the fundamentals underlying the codes.

The Organising and Scientific Committees invite you to attend and exchange your views with people from all over the World.

Manfred A. Hirt



Chair of the
Scientific Committee

Joost Walraven



Co-Chair of the
Scientific Committee

Jure Radić



Chair of the
Organising Committee

THEMES AND TOPICS

Codes in Structural Engineering - Developments and Needs for International Practice.

The main **Objectives of the Conference** are to provide:

- An overview of the present state of codes worldwide
- Comparisons of major codes
- Feedback from practical applications
- Incentives for harmonization and
- Development of future codes

Papers have to contribute to the overall objectives of this Conference and consider the **Themes and Topics** defined below.

1. Objectives and Comparison of Codes

- Objectives: public procurement, international market, cost effectiveness, sustainability, energy efficiency, safety, comfort, ...
- Comparison between major structural codes in the World, benchmarking

2. Format of Codes

- Format: user friendly, liberal or prescriptive, commentary, ...



Rector's Palace portico, Dubrovnik

- Basis of design: deterministic, probabilistic, performance-based, ...
- Actions: permanent, time dependant, live loads, accidental, ...
- Materials based or structures orientated

3. Lessons from Application in Practice

- Buildings, bridges, sign structures, silos, tanks, ...
- Disaster reduction: earthquake, tsunami, avalanche, ...

4. Additions to Future Codes

- Robustness, sustainability, aesthetics, ...
- Structural glass, composites, ...
- Existing structures: assessment, evaluation, maintenance, rehabilitation, strengthening, upgrading, remaining service life, inspection and inspection intervals, ...
- Life cycle costing, quality management, maintenance, ...

5. Speciality Topics

- Action dependant structural resistance: fire, earthquake, stability, fatigue, impact, explosion, ...
- Safety concepts adapted to FE analysis: interaction formulas, nonlinear analysis, ..
- High performance materials
- Bridge equipment: bearings and expansion joints

6. Codes and Teaching

- Scientific and technical background of codes, experimental results, commentary, textbooks, certification, ...

CALL FOR PAPERS

Participants wishing to present a paper in accordance with the Themes and Topics are invited to submit a maximum 300 word abstract in English. Abstracts have to be submitted on-line using the web-based abstract submission system operated by the Conference Secretariat. Please note that hard copies, e-mails or fax submissions will not be accepted.

To submit an abstract, please visit the Conference homepage at www.iabse.org/dubrovnik2010

Instructions on submitting a paper are available at this site.

The Abstract should clearly indicate the specific relevance to the main Objectives of the Conference, introduce the proposed paper's subject, summarise its contents, explain unique aspects and give pertinent conclusions. Do not include photographs or figures in the abstract.

Abstracts should be submitted before **February 28, 2009**.

Information on the acceptance of abstracts and for the preparation of full papers will be given by May 15, 2009. Also, guidelines for paper formatting will be given at that time.

Full papers should be submitted before **August 15, 2009**.

In addition to the full paper (max 8 pages), a short version (max 2 pages) will have to be submitted.

The Scientific Committee will review the papers submitted for acceptance as either oral or poster presentations.

Authors will be notified on the acceptance of their papers by **October 15, 2009**.

Authors of accepted papers are expected to attend and present their papers at the Conference.

PUBLICATION

All papers accepted by the Scientific Committee for oral or poster presentation will be available on the Conference CD-ROM. The short version of the papers will be published in the Conference Report.

YOUNG ENGINEERS PROGRAMME

All participants born in or after 1975 will benefit from a substantial reduction of their registration fee. An independent jury will judge the contributions by young authors' oral and poster presentations. Two prizes will be awarded at the Closing Ceremony of the Conference.



Cavtat, the largest and the only urban centre in Konavle region

TIME SCHEDULE

Important dates for the organisation of the 2010 Conference:

Deadline for receipt of abstracts:	Feb. 28, 2009
Notification of acceptance of abstracts:	May 15, 2009
Deadline for receipt of full papers:	Aug. 15, 2009
Notification of acceptance of papers:	Oct. 15, 2009
Final Invitation:	Nov. 11, 2009
Conference dates:	May 3-5, 2010

CONFERENCE FORMAT

The Scientific Programme includes Plenary, Concurrent, Poster and possibly workshop Sessions over three days. Specially selected Keynote Speakers will address the conference participants in the plenary sessions.

Oral presentations of the papers will be in one of maximum three concurrent sessions. Poster sessions will be structured such as to enable contact with the authors.

LANGUAGE

The official language is English. Presenters must be able to answer questions in English.

PARTICIPANTS

The Conference is intended for all persons interested in codes in structural engineering, their applications and consequences. Participants will include designers, researchers, code writers, consultants, owners, contractors, operators, suppliers and representatives of authorities from around the globe.

PRE-REGISTRATION

For those interested in participating in this Conference please send an email with your contact information to the Conference secretariat at: Dubrovnik-2010@grad.hr. The Final Invitation providing registration details will be available in November 2009.

COMMERCIAL EXHIBITION

A commercial exhibition for companies to display their projects, products and services will be hosted during the conference. Companies interested in exhibiting are invited to contact:

Ms Ana Mandić, Conference Secretary
Phone: +385 1 46 39 424
Email: Dubrovnik-2010@grad.hr

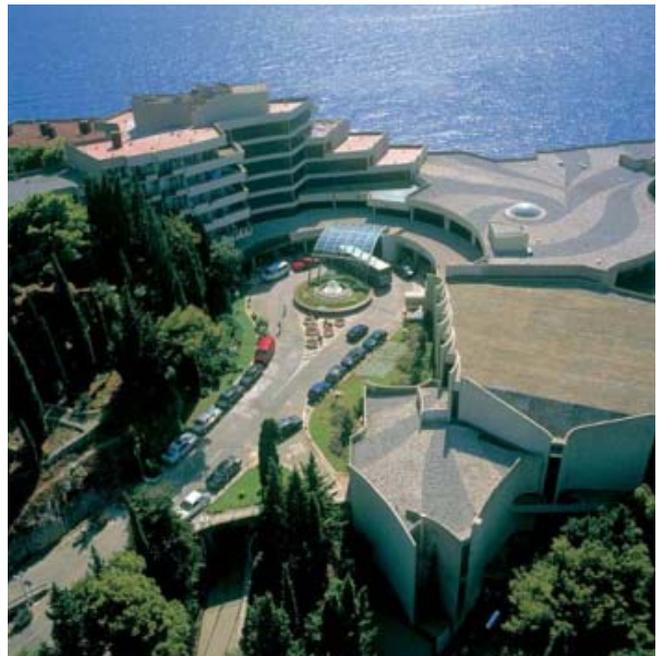
DATE AND VENUE

The Conference will take place from Monday to Wednesday, May 3-5, 2010. The Hotel Croatia in Cavtat will serve as the Conference venue and hotel. Cavtat is near Dubrovnik Airport, about 20 km south of Dubrovnik City.

Special hotel rates have been arranged for those attending the Conference. Please reserve directly with the Hotel Croatia quoting the IABSE *fib* Conference 2010.

Phone: +385 20 475 555, +385 20 478 055
Fax: +385 20 478 213
Email: info@hoteli-croatia.hr
Website : www.hoteli-croatia.hr

There may be additional events and tours before and after the Conference.



Hotel "Croatia", Cavtat, Dubrovnik-Neretva County



Conference hall Ragusa, Hotel "Croatia"

TECHNICAL VISITS

A half-day technical visit is organised for Thursday, May 6, 2010, the day after the technical presentations. This visit is open to both participants and accompanying persons. Details will be provided in the Final Invitation.

SOCIAL PROGRAMME

The Social Programme for participants and accompanying persons includes welcome reception, conference dinner and tours. Details will be provided in the Final Invitation.

PRE- AND POST- CONFERENCE TOURS

There will be a selection of tours to places of historic and cultural interest in Dubrovnik and vicinity, offered to both participants and accompanying persons. Detailed information will be provided in the Final Invitation.

DUBROVNIK, CROATIA

The most beautiful jewel of Croatia's cultural heritage, the old city of Dubrovnik, is located in the southernmost part of the sunniest Croatian tourist region of all: the Dalmatia. Dubrovnik area comprises one county, the County of Dubrovnik-Neretva, which extends almost entirely along the shore. Within it is Dubrovnik, the most beautiful and the most important, but by no means the only, cultural gem.

Also in this part of Croatia is the island of Korčula - the home of Marco Polo - the green islands of Mljet, Lastovo and the Elafiti with their picturesque settlements; the Pelješac peninsula, with its vineyards and the especially fine houses built by sea captains; the magical Konavle valley; the fertile River Neretva delta. The area of Dubrovnik underwent a quite distinct historical development, for it was here, in the period between the 13th and 18th centuries, that Croatian culture and art flourished, while the

remainder of Dalmatia was under foreign rule. It reached its zenith in the 16th century, when the power of the famous Dubrovnik Republic was at its mightiest.

The vista of the old city of Dubrovnik, approached from the direction of Dubrovnik airport, is one of the best known panoramas of Croatia and of the whole of the Mediterranean area. Indeed, the first sentence of the description of Dubrovnik in the UNESCO List of World Cultural Heritage begins with the words: "Pearl of the Adriatic on the Dalmatian coast...", for few are the cities which enjoy such a wonderful position on a rocky shoreline above the sea, and few are the places where medieval stone walls and fortresses are so well preserved.

Dubrovnik is famous for its museums too, attracting close to half a million visitors each year. Alongside the most popular, in the Rector's Palace, there is the Maritime Museum where one can learn everything about the maritime history of Dubrovnik, from the Middle Ages to the 20th century.

A walk through Stradun - the most famous city street and favourite promenade in Dubrovnik, through narrow streets and small squares, monumental ramparts and fortresses, provides excellent opportunities to experience the millennial beauty of its shell-shaped urban core, centuries of building, stone-cutting, carving and engraving, the history of the Rector's Palace, libraries, the oldest pharmacy in the south of Europe, etc.

Dubrovnik offers individual choice among numerous museums and galleries, which contain the jewels of Croatian heritage.



The vista of the old city of Dubrovnik

LOCAL ORGANISERS

 **Croatian Group of IABSE represented by CSSE - Croatian Society of Structural Engineers.** CSSI is a professional association bringing together structural engineers and other civil engineers to promote the ethics of engineering vocation and advance the development of research in civil engineering. It will celebrate its 57th anniversary in 2010. Today the Society has approximately 1'000 members. More information about CSSE can be found at www.grad.hr/hdgk/.

 **IGH – Civil Engineering Institute of Croatia.** IGH was founded in 1949, and has grown from a simple civil engineering laboratory to the present-day public shareholding company for research and development in civil engineering. IGH is mainly involved with the design of motorways, bridges, tunnels and various purpose building structures, design control, site supervision, material testing and certification, structural load testing, research and consulting. It has 20 accredited laboratory facilities with a total of 350 test methods. Today the Institute has over 880 full time employees of which 456 are engineers. More information about Institute can be found at www.igh.hr.

 **SECON- Structural Engineering Conferences.** SECON was established under the auspices of the Croatian Society of Structural Engineers and has been responsible for the organisation of conferences, courses and workshops. Since the year 2005 SECON supports the Eurocode national implementation by organizing at least one main conference and a number of courses throughout Croatia dealing with topics of interest for structural engineers. Further information on SECON can be found at www.secon.hr.

 **University of Zagreb, Faculty of Civil Engineering.** The Technical College established in Zagreb in 1919 integrated with the University of Zagreb as the Technical Faculty in 1926. Today the Faculty consists of 9 departments: Geotechnical Engineering, Materials, Water Research, Structures, Mathematics, Construction Management, Transportation Engineering, Engineering Mechanics and Buildings. Scientific-research work is being carried out within the framework of numerous scientific projects. Most of them are financed by the Ministry of Science and Technology and the rest by public enterprises. More information about the Faculty can be found at www.grad.hr.



Simulation of the future Pelješac bridge in construction, with the main span of 568 m

ABOUT IABSE



The International Association for Bridge and Structural Engineering (IABSE) was founded in 1929. Today, IABSE has around 4000 members in over 100 countries. The mission of IABSE is to promote the exchange of knowledge and to advance the practice of structural engineering worldwide in the service of the profession and society. To accomplish its mission, IABSE organizes conferences and publishes the quarterly journal Structural Engineering International (SEI), as well as reports and other monographs. IABSE also presents annual awards for outstanding achievements in research and practice that advance the profession of structural engineering. Membership is open to individual engineers and organizations having technical or scientific interest related to Structural Engineering.

More information about IABSE can be found on www.iabse.org.

ABOUT FIB



The International Federation for Structural Concrete *fib* (fédération internationale du béton) was created in 1998 by the merger of the former CEB and FIP. Its mission is to promote, at the international level, the study of scientific and practical aspects related to concrete construction in order to advance its technical, economic, aesthetic and environmental performance. Membership is open to every engineer. *fib* publishes so-called "Bulletins", which continuously influence, in a pre-normative way, the development of national and regional codes, and also a scientific journal 'Structural Concrete'. Its national member groups organize every year international symposia and once every four years a comprehensive international congress covering all aspects of structural concrete.

Further information on *fib* can be found at www.fib-international.org.

FURTHER INFORMATION

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WELCOME TO DUBROVNIK AND CROATIA!



USEFUL LINKS

Conference website:

www.iabse.org/dubrovnik2010

IABSE website:

www.iabse.org

fib website:

www.fib-international.org

Conference city Cavtat:

www.tzcavtat-konavle.hr

Dubrovnik:

www.visitdubrovnik.hr

Croatia:

www.croatia.hr