## **Preface**

"Tunnel dream: Undersea project would link Alaska, Russia" reads the headline of an article which was recently communicated by CNN.com. The proposed 68-mile tunnel under the Bering Strait would be the largest in the world. "The feasibility study alone would cost \$ 120 million and would take two years to complete", the proponents of this megaproject said.

Whether or not it will be realized in the near future, tunneling will remain to be an important high-tech branch of civil engineering. Tunnels contribute to increasing the mobility and, thus, to enhance the quality of life. For a country like Austria, Alpine transversales play a great role. Connecting Southern Germany with Northern Italy, these roads contain several long and many shorter tunnels. The design of these structures has been and will be a great challenge.

The advent of computational methods has had a great impact on the design of tunnels. This was the motivation to organize EURO:TUN 2007, intended to be a forum for scientists, developers and engineers to review and discuss novel research findings and to assess suitability and robustness of advanced computational methods and models for the design and construction of tunnels.

EURO:TUN 2007 represents a so-called Thematic Conference of the European Community on Computational Methods in Applied Sciences, abbreviated as ECCOMAS. Such conferences, which are focused on state-of-the-art topics, complement the ECCOMAS Conferences on Computational Solid and Structural Mechanics and on Fluid Dynamics, respectively, and the ECCOMAS Congresses representing the flagship of this organization which consists of 25 national or regional associations.

The Conference Programme includes five Plenary Lectures which will be given by distinguished researchers in the field. The number of expected participants is 123. They come from 27 countries. The following table shows the geographical distribution of the participants.

## Geographical distribution of the participants of EURO:TUN 2007

Algeria	1	France	3	Serbia	2
Austria	19	Germany	21	Slovenia	1
Belgium	1	Greece	2	Spain	16
Brazil	8	Iran	2	Switzerland	1
Canada	1	Italy	6	The Netherlands	4
China	3	Japan	6	Ukraine	2
Czech Republic	2	Mexico	2	United Kingdom	4
Denmark	1	Poland	4	United States	2
Egypt	2	Portugal	5	Uzbekistan	2

We would like to express our sincere thanks to the members of the Scientific Advisory Committee and the Industrial Advisory Committee as well as to all supporting organisations for helpful suggestions concerning the Conference Programme. Special thanks are due to Ms. Martina Pöll, Secretary General of EURO:TUN 2007, for her great and competent efforts in the preparatory phase of the conference.

Last, but not least, we thank all participants of EURO:TUN 2007. Their papers and/or their contributions to the discussions of the lectures are the basis of the success of EURO:TUN 2007, we are hoping for.

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