ECCOMAS

ECCOMAS 2006 Conferences

Funding: European (6th RTD Framework Programme)
Duration: Mar 2006 - Apr 2007
Status: Complete with results
Total project cost: €45,000
EU contribution: €45,000

Call for proposal: FP6-2002-AERO-2
CORDIS RCN: 81251

Background & policy context:

ECCOMAS is an organisation grouping European Associations with interests in the development and applications of computational methods in science and technology.

ECCOMAS was created in 1993 with the aim of fostering basic and applied research and dissemination of activities in Europe in the field of Computational Methods in Applied Sciences.

ECCOMAS Council is formed by official representatives of National or Regional Scientific Societies or Organisations covering most of the European countries. Its main mission is to favour the exchange of information, and to promote the transfer between Research and Industry at the European scale. Its fields of interest are the applications of Mathematical and Computational Methods and Modelling to major areas such as Fluid Dynamics, Structural Mechanics, Semi-conductor Modelling or Electromagnetics. Multidisciplinary applications of these fields to critical societal and technological problems encountered in sectors like Aerospace, Car and Ship Industry, Electronics, Energy, Finance, Chemistry, Medicine, Biosciences, Environmental sciences are of particular interest.

The main event organised by ECCOMAS is a large European conference which takes place every four years and addresses scientists and engineers both in and outside Europe. The main objective of these conferences is to provide a forum for presentation and discussion of state-of-the-art in scientific computing applied to engineering sciences. Equal emphasis is given to basic methodologies, scientific development and industrial applications.

Objectives:

The project goal was to provide support to ECCOMAS 2006 Conferences:

- ECCOMAS ECCM Conference in Lisbon, Portugal;
  
  ECCM-2006 was a continuation of the very successful Conferences held in Munich, Germany (1999) and Cracow, Poland (2001) and it was organized by the European Committee of Computational Solid and Structural Mechanics (ECCSM) of the European Community on Computational Methods in Applied Science (ECCOMAS) in collaboration with the Portuguese Association of Theoretical, Applied and Computational Mechanics (APTMTAC), the Technical University of Lisbon and the National Laboratory of Civil Engineering.

- ECCOMAS CFD Conference in Egmond aan Zee, Netherlands;
  
  The goal of the ECCOMAS CFD conferences was to bring together researchers, industrialists and students working in the fields of the science of Computational Fluid Dynamics (CFD). The fields of interest were the applications of mathematical and computational methods and the modelling of different areas: CFD, computational acoustics, computational magnetohydrodynamics (MHD), computational mathematics and numerical methods, optimization and control, computational methods in life sciences and industrial applications.

Methodology:

The work under this support action included all activities required such events to be organized and
The work under this support action included all activities required such events to be organized and conducted: establishment of organizing committee and management bodies, conference websites launch, registrations – incl. on-line registration, call for papers, lecturers invitations, materials (papers, flyers, books, etc.) publishing and distribution, plenary sessions, workshops and symposiums organization, contribution for participation fees for early stage researchers; support for participation of Eastern European scientists, etc.

**Parent Programmes:**
FP6-AEROSPACE - Aeronautics and Space - Priority Thematic Area 4 (PTA4)

**Institute type:** Public institution

**Institute name:** European Commission

**Funding type:** Public (EU)

**Lead Organisation:**

**Partner Organisations:**

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<tr>
<th>Associação Portuguesa De Mecânica Teórica Aplicada E Computacional</th>
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<tr>
<td><strong>Address:</strong></td>
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<tr>
<td>Av. do Brasil, 101</td>
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<tr>
<td>LISBOA</td>
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<td>Portugal</td>
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<td><strong>Organisation Website:</strong></td>
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<td><a href="http://www-ext.lnece.pt/apmtac/">http://www-ext.lnece.pt/apmtac/</a></td>
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<td><strong>EU Contribution:</strong> €0</td>
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**Key Results:**

The conferences were successfully held as follows:

- ECCOMAS ECCM Conference in Laboratório Nacional de Engenharia Civil (LNEC) in Lisbon, Portugal, on June 5 - 8, 2006, Portugal;

ECM-2006 was attended by about 1000 participants from 70 countries. More than 1300 Abstracts were submitted to ECCM-2006. Altogether, 6 plenary lectures, 35 keynote lectures and 800 papers were presented in 58 organised symposia. A companion book, containing the edited version of the majority of Plenary and Keynote Lectures, entitled Computational Mechanics: Solids, Structures and Coupled Problems in Engineering was also published by Springer 2006.

The Proceedings of the Conference could not be possible without the sponsorship and financial support of: European Community on Computational Methods in Applied Science (ECCOMAS); European Committee of Computational Solid and Structural Mechanics (ECCSM); International Association of Computational Mechanics (IACM); Portuguese Association of Theoretical, Applied and Computational Mechanics (APMTAC); Foundation of Science and Technology (Portugal); Calouste Gulbenkian Foundation (Portugal); Technical University of Lisbon (Portugal); National Laboratory of Civil Engineering (Portugal); Instituto Superior Técnico (Portugal).

- ECCOMAS CFD Conference, Egmond aan Zee, Netherlands, September 5-8, 2006 (eccomas-cfd2006.fyper.com)

The conference included invited lectures, invited mini-symposia and peer-reviewed contributed papers. The link between research and industry was fostered by special technology sessions.

The conference topics were:

1. Computational fluid dynamics;
2. Computational Acoustics;
3. Computational Electromagnetics;
4. Computational Mathematics and Numerical Methods;
5. Optimisation and Control;
6. Computational Methods in Life Sciences;

7. Industrial Applications.

The conference organisers offered exhibition space to interested companies and co-operation partners. The Exhibitions were situated in an area near the main session rooms. The ECCOMAS CFD 2006 Exhibition will include the following exhibits:

- Software, hardware;
- Books, journals;
- Industrial services, consulting.

Documents:
- Conference Announcement (Other relevant documents)

**STRIA Roadmaps:** Other specified

**Transport mode:** Multimodal transport

**Transport sectors:** Passenger transport, Freight transport
- Societal/Economic issues, Deployment planning/Financing/Market roll-out

**Transport policies:** Other

**Geo-spatial type:** Other