# European Research Community On Flow, Turbulence And Combustion

#### **MINUTES**

## **INDUSTRIAL PROGRAMME COMMITTEE**

## Budapest, May 5<sup>th</sup> 2009

Attendance

Philippe Geuzaine CENAERO

Charles Hirsch NUMECA International

Anthony Hutton Airbus UK
Sarah Hutton BAE Systems

Chris Lea Lea CFD Associates
Woflgang Rodi University of Karlsruhe

Richard Seoud ERCOFTAC

Stefan Wallin FOI

The meeting was formally opened, late, at 10-15 by Chris Lea - IPC Chairman, who also took the minutes.

The main actions are underlined below.

#### 1. Apologies for absence

None received.

#### 2. Approval of the agenda

Approved without comment.

## 3. Minutes of IAC meeting held in Brussels on 20th November 2008

The minutes of the IAC meeting in Brussels on 20<sup>th</sup> November 2008 were circulated and agreed without comment.

### 4. Wiki version of QNET-CFD Knowledge Base

Sarah Hutton presented the Wiki to the meeting. Sarah has been working on the development and transfer of content from the QNET-CFD database to the Wiki whilst on under-graduate placement at BAE Systems. The contributions of Sarah, Wolfgang Rodi (technical content and quality review) and David Ellacott (Wiki support and development) in producing the Wiki were recognised and appreciated by the Committee.

Sarah Hutton and Wolfgang Rodi provided an overview of recent developments with the Wiki. The current status was clarified and actions agreed as follows:

- It was agreed that David Ellacott would be retained to support the development and running of the Wiki, at a fee of £20/hr up to a maximum of £10k per annum. This arrangement to be recommended to the Executive Committee for their approval. The agreement is to be reviewed after one year.
- Terms and conditions for use of the Wiki to be circulated by Sarah Hutton to all members of the IPC, for comment - following an open discussion on the issue of copyrighted material.

- Wolfgang has reviewed all 32 QNET-CFD Application Challenges (AC); reporting that 14 are of 'gold' standard, 5 are of 'silver-plus' standard, 7 are of 'silver' standard, and that 6 have been removed altogether.
- Wolfgang has also reviewed all 40 QNET-CFD Underlying Flow Regimes (UFR); reporting that 15 are of 'gold' standard, 8 are of 'silver-plus' standard, 13 are of 'silver' standard, and that 4 have been removed altogether.
- There was agreement with Wolfgang Rodi's review of the split of content for the Wiki between 'gold' and 'silver' very roughly 50:50. The gold content will be fully accessible to ERCOFTAC members only.
- It was agreed that new 'gold' content would initially be labelled as 'silver-star', for a period of six months, before being uplifted to the gold area.
- It was agreed that *Chris Lea* would re-iterate the financial commitment for two new UFR and one AC being developed for the Wiki, and pass this information to Charles Hirsch.
- A final target launch date of July 2009 was agreed for the wiki. Action: Sarah Hutton, David Ellacott and Wolfgang Rodi.

### 5. ERCOFTAC Industrial strategy

Dr Richard Seoud – Industry Engagement Officer, provided a presentation on his activities implementing ERCOFTAC's business plan. His presentation summarised planned and future activities, their schedule for delivery, industrial membership development, cash flow and closing balance actuals and forecasts. The presentation is available upon request from the IPC Chairman or Dr Seoud. The following detailed suggestions and actions arose during the ensuing discussion:

- It was agreed that <u>Richard</u> should develop a more complete programme of industrial events and activites for the year ahead, for scrutiny and comment by the Executive Committee as soon as practicable, with the aim of agreeing a final programme by the time of the Autumn Festival.
- Philippe Geuzaine proposed that <u>Richard</u> should investigate VKI's programme of events, for ideas.
- Agreed that <u>Richard</u> should draw on the more active involvement of SIG & PC coordinators in devising industrial activities.
- Charles Hirsch suggested that <u>Richard try a trial in which Technology Awareness</u> Seminar take place over one-a-half days, rather than one day at present.
- Charles Hirsch proposed that *Richard* should make efforts to substantially increase the size of his mailing lists for events.
- Agreed that <u>Tony Hutton</u> would provide Richard with guidance on the scope of discussions on joint activities with SIAMUF.
- <u>Tony</u> to provide feedback to Richard on his drafts of publicity material for ERCOFTAC.

#### 6. Best Practice Guidelines (BPG)

• It was agreed that the <u>Admin & Development Office</u> would in future record full details of purchasers of ERCOFTAC BPG, for sharing electronically with Richard, etc.

### (i) Dispersed Multi-Phase Flow BPG

 Agreed that Sarah Hutton would be brought into the planning of efforts to market the multi-phase flow BPG.

### (ii) Preparation of second edition of BPG

Production of a 2<sup>nd</sup> edition of the original BPG is still envisaged. The team comprises Dr Mark Savill (University of Cranfield), Dr Chris Carey (ANSYS Europe), Dr Chris Lea (Lea CFD Associates), Dr David Standingford (BAE Systems), Prof Dr Ernesto Casartelli (Lucerne University) and latterly Prof Hirsch (NUMECA). This effort was initially led by Tony Hutton, but due to volume of work this activity was taken over by Chris Lea.

• Chris Lea to take forward the production of the 2<sup>nd</sup> edition of this BPG.

#### (iii) Other BPG

- It was agreed that <u>Richard</u> would explore the possibility of a BPG on combustion, with <u>Ananias Tomboulides</u>, with the aim of a proposal being produced.
- It was agreed that discussions on the possibility of a BPG on heat transfer should continue by 'phone during forthcoming Executive Committee meetings.

## 7. Next IPC meeting

The next IPC meeting is planned for Lausanne, October 2<sup>nd</sup> 2009.

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None.

Meeting closed at 12-00.

Chris Lea September 2009