Meeting of UKFN Executive Committee

14:00-15:30, Monday 23 March 2020 via Webex

AGENDA

- 1. Agree the **Minutes** of last EC meeting (18/7/19).
- 2. Review outstanding actions from last EC meetings
- 3. Discuss website:
 - a. recent developments
 - b. update on web developers
 - c. suggestions for improvements
- 4. Discuss SIGs:
 - a. new SIGs
 - b. final status of expenditure
 - c. ideas from SIGs for EPSRC
- 5. Discuss SRVs:
 - a. final status of expenditure
- 6. Discuss future of UKFN:
 - a. final figures for overall budget
 - b. continuing role of UKFN
 - overall coordination
 - newsletter and website
 - other responsibilities [ERCOFTAC]
 - other activities [competitions, Tom Crawford, UKFC]
 - c. relation with Leeds Institute of Fluid Dynamics & UK Fluids Conference
 - d. 'Our Fluid Nation' booklet
 - e. seeking future funding

7. Discuss refresh on EC membership

- a. how many?
- b. modus operandi?
- 8. Any other business

MPJ/NCD, 18/3/20

Item 2: Outstanding actions from previous EC meetings

There are no outstanding actions of note to discuss.

Item 3: Website

Recent and ongoing developments

- Gallery page (<u>https://fluids.ac.uk/gallery</u>): this new page collects the various photo and video competition entries, as well as Tom Crawford's video interviews.
- SIG page (<u>https://fluids.ac.uk/sig</u>): this is being revised to include details of the open call for new SIGs as well as the archive of inactive SIGs (see Item 4).
- Directory (<u>https://fluids.ac.uk/directory</u>) the subject tags are now interactive, making it easier to find researchers working in a specific area.
- Network News the 'What's New' section of the home page (<u>https://fluids.ac.uk/</u>) has been repurposed to accept items from anyone with suitable access status. Currently this is restricted to SIG leaders.

In addition, the web developers will be working to make the website smoother and more responsive.

Update on web developers

Suggestions for improvements

New SIGs

Following a third call for proposals, as agreed at the previous EC meeting, the following new SIGs were approved:

- 1. Computational astrophysical fluid dynamics, László Könözsy, Cranfield
- 2. *Data-driven methods, machine learning and optimization in fluid mechanics,* Luca Magri, Cambridge
- 3. Flow, deformation, and reaction patterns in porous media, Ran Holtzman, Coventry
- 4. *High-speed computational fluid dynamics,* Rene Steijl, Glasgow
- 5. Hydrodynamics of open-channel flows, Vladimir Nikora, Aberdeen
- 6. Non-equilibrium molecular dynamics, Edward Smith, Brunel

Each SIG was allocated to £2,000 to hold a kick-off meeting, and given a page on the UKFN website.

Subsequently, one additional SIG was approved for inclusion on the website:

7. Turbulent heat transfer, Yasser Mahmoudi Larimi, Queen's University Belfast

Since 1 March 2020, there has been an open call for new SIGs, which will operate along the lines of (7). Proposals will be reviewed in batches every 2 months.

Retired SIGs

Of the 48 SIGs initiated by UKFN, three wound up during the course of the project:

- a. Aeroacoustics
- b. Evolving interfaces in complex flows
- c. Turbulent free shear flows

A further three do not intend to continue beyond the end of the grant:

- d. Experimental flow diagnostics (xFD)
- e. Fluid mechanics of nanostructured materials
- f. Sprays in engineering applications: modelling and experimental studies

These SIGs will no longer appear in the active list, but their SIG pages will remain accessible in a separate part of the SIG page.

The other 42 SIGs all currently intend to remain active into the future.

Expenditure

UKFN supported a total of 220 SIG meetings. The total spend was £417K out of an original allocation of £480K, i.e. an underspend of around £63K. (See also discussion of overall spending, Item 6.)

Ideas from SIGs

Item 5: Short Research Visits

A total of 87 SRVs took place, including one ad hoc visit in February 2020 from a person who asked speculatively about SRVs near the end of the grant and was able to arrange one in time. A total of £65K was spent on travel and subsistence expenses, £20K more than the original allocation of £45K.

Item 6: Future of UKFN

Final overall expenditure

The total Direct Costs budget for UKFN was £780K. In round figures, spending on the main categories was as follows.

Category	Budget £K	Spend £K	Balance £K
Travel & Subsistence	552	507	45
Staff Costs	180	156	24
Other Costs	48	47	1
TOTAL	780	710	70

Hence around £70K will be handed back to EPSRC.

For information, the largest budget category, T&S, had the following spending breakdown.

Sub-category	
SIGs	416.9
SRVs	64.9
UK Fluids Conference (including SIG events)	16.7
Publicity (Tom Crawford)	4.7
Executive Committee	1.5
Misc other	2.3
TOTAL	507.5

Continuing role of UKFN

Overall coordination [MPJ and NCD]

Newsletter and website [Leeds, Cambridge]

Other responsibilities [ERCOFTAC, Osborne Reynolds]

Other activities [competitions, Tom Crawford, UK Fluids Conference]

Future interaction with Leeds Institute of Fluid Dynamics & UK Fluids Conference

'Our Fluid Nation' booklet/report

Further funding

[Paul Linden: 'Is it worth discussing whether we can find other funding for the UKFN - say by canvassing industry who are part of our SIGs?']

Item 7: EC membership changes

-number of new members - suggest 2 or 3 -how should we do this?