Meeting of UKFN Advisory Board

16:00 BST, Wed 21 September 2016 Via Webex

AGENDA

- 1. Discuss ***Terms of Reference for the Advisory Board.
- 2. Note and discuss the ***Website (https://www.ukfluids.net).
- 3. Discuss ***Operational principles ("set of values").
- 4. Note and discuss the call for proposals for *** Special Interest Groups (SIGs).
- 5. Note that a call for **Short Research Visits (SRVs)** has been issued.
- 6. Any other business.
- 7. Approximate date of next meeting.

MPJ & NCD, 19/9/16

^{***}There are additional notes for these items below.

Terms of Reference

The relevant text from the Case for Support is:

"The Advisory Board, consisting of Dr Simon Bittleston (Schlumberger Gould Research), Dr Ton van den Bremer (University of Edinburgh), Prof GertJan van Heijst (Burgerscentrum), Prof Ann Karagozian (APS-DFD), and Dr David Standingford (ERCOFTAC), will have strategic oversight of the UKFN. The Advisory Board will be tasked with drawing up a set of values, taking advice from network members, to ensure that the network is run impartially and transparently, in the interests of and with the support of the entire UK fluid mechanics community. The Advisory Board will maintain oversight of the allocation of SIGs and Short Research Visits, ensuring a healthy coverage of scientific, societal, and industrial challenges and a healthy distribution of SIGs across the UK community. The Executive Committee will report to the Advisory Board."

"The first task of the Executive Committee, overseen by the Advisory Board, will be to build consortia where there are overlaps [of SIGs], identify SIGs that best complement existing networks, and prioritize SIGs that have the highest potential to achieve the aims of the network."

Based on this text, the proposed Terms of Reference for the Advisory Board are:

- to ensure that the network is run impartially and transparently in the interests of and with the support of the entire UK fluids community
- to maintain oversight of the allocation of SIGs and SRVs, ensuring a healthy coverage of scientific, societal, and industrial challenges and a healthy distribution of SIGs across the UK community
- [with input from the Executive Committee] to draw up a set of values, taking advice from network members
- to oversee the allocation of SIGs by the Executive Committee

In addition, the following terms could be added:

- to advise the Executive Committee of best practice in other networks in the UK or overseas
- to facilitate links with other networks
- to suggest strategic directions and corresponding activities for the UKFN

Would the Advisory Board like to suggest further Terms of Reference?

Website (https://www.ukfluids.net)

Current Status

The current version (Beta version) contains news, call for SIG proposals, call for SRV proposals, an RSS feed for talks, a contact form, and a sign-up form.

Next Steps

Admin page (Q1) This will contain links to Grants on the Web, the initial proposal, agendas and minutes of Executive Committee and Advisory Board meetings, institutional points of contact, and records of emails sent to points of contact and to the mailing list. It will be available by 1 October.

Registration page (Q1) This is where members will register their name, affiliation, research areas, application areas, and type of research (experimental, theoretical, numerical). This generates a searchable database that will link to the Research Councils' konfer database (https://konfer.online). It will be available by 1 November.

Talks (Q1) We will feed in RSS streams from other institutional seminar series, where available. The Facilitator will pursue this with individual institutions. We will live-stream the Cambridge DAMTP seminars from October, and would like to make recorded versions available for a short period. We will live-stream other institutions' talks where they are available.

Researcher Resources (Q2) We will migrate existing researcher resources to the website. We will find fluids outreach resources, link to them from website, and create new resources.

Discussion Board (Q2) We have specified the requirements of the discussion board (modelled on stackoverflow.com). When it is available, we will advertise it and encourage people to use it.

Would the Advisory Board like to suggest further items for the website at this stage?

Operational Principles 'Set of values'

The relevant text from the Case for Support is: "The Advisory Board will be tasked with drawing up a set of values, taking advice from network members, to ensure that the network is run impartially and transparently, in the interests of and with the support of the entire UK fluid mechanics community".

The Executive Committee agreed to present the Advisory Board with a draft set of values for the forthcoming AB meeting on 21st September. After discussion, the EC found it useful to distinguish between two aspects of the term "set of values": (i) the aims of the network and (ii) the running of the network.

Regarding (i), it was agreed that the aims of the network are satisfactorily expressed in the Case for Support, in which it is stated that the network should:

- initiate novel and creative fluid mechanics research, within and across discipline boundaries;
- provide a forum for the UK fluids community to speak collectively to research councils;
- maximize the impact of EPSRC's recent investment in fluid mechanics;
- maximize the utility and value of applied projects by engaging as a group with UK industry;
- keep the UK an international focal point for creative, innovative, and relevant fluids research.

Regarding (ii), it was agreed to propose the following points, which are based on suggestions received from the community during the proposal writing stage, summarized in the document **'Principles for UKFN'** attached on the next page:

- Administrative business should be carried out impartially and transparently. The UKFN
 website will be used whenever possible to publish centrally all relevant discussions and
 correspondence at the earliest available opportunity, including
 - o EC and AB agendas and minutes
 - Messages sent to the points of contact and mailing list
 - Outcomes of the calls for proposals for SIGs and SRVs
- The selection of SIGs (and SRVs) should aim for a broad range of subjects and distribution of institutions, i.e. the number of SIGs approved in a given subject or led by a given institution should not be disproportionate. This is compatible with the Case for Support, which states: "The Advisory Board will maintain oversight of the allocation of SIGs and Short Research Visits, ensuring a healthy coverage of scientific, societal, and industrial challenges and a healthy distribution of SIGs across the UK community".

There was discussion about whether to state explicitly that the UKFN will be operated in a way that is ethical, respectful, etc., as recommended by a network member. It was agreed that the network will be expected to operate in this way and that an explicit statement of this would be unnecessary.

There was discussion about rotating members of the EC, which had been put forward by a network member. It was noted that any rotation would have the disadvantages of (i) lack of continuity within the EC and (ii) significant administrative complications requiring grants to be shifted from one institution to another. It was agreed that members of the EC will stay the same during the initial 3 years of the network.

Would the Advisory Board like to amend or add to these operational principles?

Principles for UKFN

1/9/2015 (compiled from members during the proposal writing stage)

Tim Pedley (Cambridge):

I think there should be an explicit mechanism by which the Executive Committee exerts strong leadership in quality control, and only puts resources (of time even more than money) into supporting activities and proposals that it is satisfied are of the highest quality, both (or either) scientifically and/or in industrial impact and involvement.

Peter Haynes (Cambridge):

If the Advisory Board are going to draw up a set of values then my opinion is that the Advisory Board should include at least a couple of UK academic representatives -- it seems odd to me if defining the operating principles is assigned to a set of people who are all external. (Perhaps there could be a member who is a very senior and trusted academic who is not in fluid dynamics?)

Tim's message contains the starting point of a set of operating principles: "The Executive Committee will exert strong leadership in quality control and will ensure that resources (of time even more than money) are allocated to activities and proposals where input from the network will be most effective and which it is satisfied are of the highest quality, both (or either) scientifically and/or in industrial impact and involvement." (or something like that).

Simone Hochgreb (Cambridge):

Promote the maximum generation and dissemination of knowledge in fluid mechanics throughout the community.

Richard Green (Glasgow):

Impartiality and transparency are critical to the success of any network, especially one that is as large as this. There's risk that this kind of venture could be exploited to further personal careers at the expense of the well-being of the network. I'd be more comfortable dealing with this kind of matter by a phone call, but I am not in the UK at the moment. For starters I think there needs to be a fair distribution of heads of SIGs among the partner universities. Each university will have different organisational set ups, so it might be difficult to gauge how even the distribution is. Perhaps there should be a quota per university or group, certainly a maximum per investigator? I don't know what the workload of an SIG head would be, possibly higher that might be thought, so people could be over-stretched, and delegation might not work. As for transparency, I can only think of the usual things, such as rapid publication of minutes of meetings, publication on a central web page, consistent e-mail habits (comprehensive cc lists, with every single e-mail also copied to a central address). That will help with impartiality also.

Rebecca Lingwood (QMUL):

Suggestions for values:

- socially responsible with high ethical standards and a tolerant, open-minded community.
- highest standards of professional and research integrity
- governance and decision-making processes to be informed by appropriate consideration of their ethical, social and environmental impacts."

Lorenzo Botto (QMUL):

I personally believe the "set of values" list should include:

- i) career progression of young researchers and members of small fluid mechanics groups should be protected:
- a role of the UK Fluids network will be the identification of mechanisms by which young researchers can gain visibility based on science achievement and respect from the community only. In this way, small but scientifically solid groups/individuals will have a chance to thrive and steer the directions of the network
- ii) periodic rotation of the committee/board members based on consultation of the community, with of course possibility for "re-election", should be considered
- iii) promotion of fluid mechanics as "enabling technology" among industrial partners/private stakeholders should be a priority of the network: more funding UK-wise for fluid mechanics will mean less funding polarisation and a healthier more lively community. (In this respect Prof. Toropov has suggested that the division between industrial and non-industrial SIGs may not be ideal, because it suggest a separation between two rather intertwined realities.)

[Later email]I have already sent my comments on the "set of values": essentially, every good researcher should be able to gain visibility in spite of the ranking or size of the institution he/she belongs to; promotion of fluid mechanics technologies among industrial practitioners – fluid mechanics is a difficult subject, we should strive to make it accessible and usable by providing training and examples of what can be achieved if fluid dynamics is understood beyond the level of plain CFD.

Vassili Toropov (QMUL):

- The network should provide UK industry with a mechanism for making an informed choice of a research partner and become the first port of call when a new challenge arises.
- The network will help academics identify industrial research challenges and focus, engage with industry and obtain industrial funding for PhD projects.
- It will address industry's need for best practice guides.
- The activities of the network will lead to the improvement of the industry's expertise in selection and use of appropriate techniques, software and experimental facilities.
- Provision of high impact cases for the academic partners.
- The network will provide companies with domestic opportunities for CPD and training that is often important for the UK-based businesses.

Jan Wissink (UCL):

To ensure that the network is run impartially and transparently it would be good to have a maximum on the number of SIGs that are can be run from people working in one University.

That maximum could be calculated, for instance, by taking the ratio of the number of fluids researchers in that institution to the total number of fluids researchers in the UK Fluids Network times the total number of SIGS times 2 (rounded up to the nearest integer). I know this factor 2 is a bit arbitrary but using such a simple formula is better than having an absolute maximum.

Special Interest Groups (SIGs)

Current status

The draft call for SIG proposals was circulated to the Executive Committee and the Advisory Board. The draft was circulated amongst Institutional Points of Contact over the summer, with a note that the call would go live on 1st September. After comments, the final call for proposals was posted on the website on 1st September and an email sent to all points of contact. Since then, the EC agreed that further clarification on funding and maximum SIG size was needed, which will be posted online after approval by the EC. The deadline for SIG proposals is 31st October. The EC will review SIGs in the first two weeks of November, and meet on 11th November to form a provisional list to go to the Advisory Board. The AB will approve the final list by email circulation by 30th November. The EC agreed that members of the EC can participate in SIGs but should not lead them.

Selection Criteria and procedure

Relevant passages from the proposal are:

CfS: "The first task of the Executive Committee, overseen by the Advisory Board, will be to build consortia where there are overlaps, identify SIGs that best complement existing networks, and prioritize SIGs that have the highest potential to achieve the aims of the network."

CfS: "Each SIG will be focused on an industrial or societal challenge, an interdisciplinary problem, or a theoretical, experimental or numerical method."

CfS: "The Advisory Board will maintain oversight of the allocation of SIGs and Short Research Visits, ensuring a healthy coverage of scientific, societal, and industrial challenges and a healthy distribution of SIGs across the UK community."

P2I: "A major goal of the network is to bring about research and applications of knowledge in fluid mechanics that would not otherwise occur. The network will facilitate the initiation and growth of new research areas in fluid mechanics, new developments and advances in new and existing experimental and numerical methodologies, and their application to real-world problems."

The Executive Committee agreed the following selection procedure

- <u>Allocation</u>: It was agreed that proposals will initially be collated by the Facilitator and PI. Each proposal will then be reviewed by two Co-Is.
- Scoring guide: It was agreed that a set of categories will be devised, each of which will be scored A-D (or A*, A, B, C). Written feedback will also be provided for each proposal.
- <u>Further calls</u>: It was agreed that, subject to the outcome of the first call for SIG proposals, a second call for SIG proposals could follow shortly afterwards so that members could benefit from the ideas received in the first call for proposals.

We anticipate around 20 successful SIGs from around 40 proposals, each with a title, 50-word summary and 500-word description. We anticipate that the tasks of the Advisory Board can be achieved by reading the titles and 50 word descriptions only.

Would the AB like to comment or suggest improvements to the selection criteria or procedure?

Please could the AB reserve some time (2 to 3 hours) between 14th and 25th November to approve the final list of SIGs.