## Briefing document on UKFN and the transition to UKFN 2.0

Prepared by the UK Fluids Network Executive Committee, 4/12/2023

The purpose of this briefing document is to begin planning **UKFN 2.0**, a refresh of the UK Fluids Network (UKFN) incorporating new ideas and a new generation of leaders to take it into the future. This will be a collaborative effort by the UK fluids community, in close consultation with EPSRC.

## **Background**

The <u>UK Fluids Network</u> (UKFN) was launched in September 2016 with a <u>3-year grant</u> of £900K from EPSRC to set up and support Special Interest Groups (SIGs), fund Short Research Visits and provide an inclusive focus for UK fluids researchers open to all organisations, research areas and career stages. There are currently over 1500 registered users across more than 70 institutions, with nearly 2000 receiving the weekly newsletter, and over 30 active SIGs.

UKFN also commissioned the report <u>Our Fluid Nation</u>, which examined the economic benefits of UK fluids research. Published in September 2021, the report concluded the impact was substantial: 'Fluid Dynamics is a £13.9 billion UK industry, employing more than 45,000 people in 2,200 companies'.

Most recently, EPSRC is funding eleven 3-year fellowships under the £3.8M National Fellowships in Fluid Dynamics scheme (NFFDy), with a subsidiary 4-year grant of £500K to set up the NFFDy Hub to run alongside the fellowships. The NFFDy Hub brings the fellows together as a cohort through activities such as two 6-week summer programmes, regular online catch-ups and CPD activities. The Hub is also tasked with keeping UKFN running at a basic level.

NFFDy will end in 2026, almost 10 years since UKFN was launched, and so it is timely to begin planning the next stage and ensure a smooth transition. Given the above platform, where should it be taken next?

The <u>UK Robotics and Autonomous Systems Network (UK-RAS)</u>, established around the same time as UKFN, has successfully secured further rounds of funding, and may therefore provide useful tips. Their approach has been to consult their community, discuss requirements with EPSRC and choose a team to write the proposal. We propose to follow the same broad procedure, with a collegiate approach at all stages.

## **Funder's position**

EPSRC are very supportive of the aim of establishing UKFN 2.0, and would be open to a broad range of suggestions and willing to work together to coalesce ideas. However, they have stressed that UKFN 2.0 would need to be taken in a different direction and not simply offer 'more of the same'.

Points that might be considered include:

- What step change would additional funding enable?
  - We need to take it in a different direction and create a new dynamic
  - Could this become the proto-institute for a postulated National Fluids Institute?
- Do we want a Network+, with small amounts of money for scoping studies?
- Do we want research money for big challenges?
- Do we want another round of NFFDy's?
  - This isn't ruled out if the case can be made it would need to involve 'future leaders'
- Could we create the glue that holds the NWTF together?
- Are there hooks in the 'Our Fluid Nation' report that we could use?
- Can we involve MRC, NERC, STFC, as well as EPSRC?
- Can we involve some chief scientific advisers (CSAs)?

## **Next steps**

To take this forward, we would like to hear your thoughts on what we could do next, and we have prepared a <a href="mailto:short form">short form</a> for you to complete. We will collate the responses, and circulate a digest of the results. If you prefer not to use the form, or if you have any questions, please email Nick Daish and Matthew Juniper using the details below.

Following this, we will set up one or more Zoom meetings to discuss ideas for UKFN 2.0 and the procedure for putting a proposal together.