Minutes of the 51st meeting of the UK Computing Research Executive Committee on Tuesday 4 June 2019 at 11:00 at the IET, 2 Savoy Place, London, WC2R 0BL

PRESENT

Jane Hillston (Chair)	Chris Johnson	Luc Moreau
Cliff Jones	Ann Blandford	Jie Xu
#David De Roure	#m.c. schraefel	

BY INVITATION

Edmund Robinson (CPHC)	Samantha Francis (EPSRC)	Rhys Perry (EPSRC)
James Davenport (BCS Academy)	Ahmed Kotb (IET)	

#*Joined by teleconference*

IN ATTENDANCE

Maxine Leslie (BCS)

APOLOGIES

Derek McAuley	Bill Mitchell (BCS)	Amber Clabburn (IET)

1. WELCOME AND APOLOGIES FOR ABSENCE

The Chair welcomed the meeting participants and apologies for absence were received as above.

2. MINUTES OF THE LAST MEETING

The minutes of the meeting held on Tuesday 5 March 2019 were APPROVED following a correction of the date on the heading and are now ready for transfer to the UKCRC website.

ACTION: Secretariat/T Cook

3. MATTERS ARISING

UKCRCEC meeting held on 5 March 2019

Item 4.2.2 CRA Snowbird Conference: M Leslie undertook to circulate the Snowbird report to the UKCRC membership.   **ACTION: M Leslie**

Item 7.4 BCS Academy: J Davenport reported that the DCMS announcement on the new UK Cyber Security Council was due in the following week.

4. CHAIR'S REPORT

RECEIVED and NOTED the report.

There had been two new UKCRC Members, from Glasgow and Leeds, following the action from the March meeting. The Chair had been invited to speak about UKCRC and past grand

challenges at the CPHC annual conference in April. She is keen for UKCRC to work more closely with CPHC on activities such as the *'A Chair in 10 Years'* workshop. Members agreed that the education Grand Challenges were still very relevant and this could form the basis of future work.

The Royal Society Working Group had been set up and work was on target to report back to S Furber with nominations.

in addition to speaking about UKCRC at the CPHC Conference, the Chair had taken part in the latest iteration of the CPHC workshop *'A Chair in 10 Years'* held in Edinburgh. This was a great initiative for early career researchers with the morning spent on each participant's plan and the afternoon on obtaining funding. There had been EPSRC input from Rhys Perry on the use of criteria for shaping participants' ideas. There was potential for rolling out this workshop in Scotland through SICSA and possibly in other areas too.

There were a number of benefits falling out of the workshop, including initiating discussion between different types of HE institution and comparing promotion criteria between research-intensive and post-92 institutions. E Robinson indicated that one of the aims of this workshop was to collect these criteria for comparison in areas such as support and mentoring across institutions.

It was reported that Ursula Martin, who sits on the REF cross-advisory board for impact, had been trying to contact Tom Rodden about UoA11 REF guidelines and had asked the UKCRC EC to help, in particular with a technical query about topic omissions (eg, computing education, computing history and medicine) and differences with the previous REF. A Blandford indicated that she had been involved with Chris Taylor in setting the guidelines and offered to seek clarification. It was agreed that would be important to ensure that institutions know exactly what should be covered. *[Note: after the meeting Tom responded to Ursula]*

5.   CONSULTATIONS & SUBMISSIONS

RECEIVED and NOTED the report.

C Johnson reported that UKCRC had responded to 13 consultations since the March meeting. He was now receiving details of consultations direct, which helped in terms of giving more time to respond; however there was still little response from the membership. The IoT consultation had been an exception with about 8-9 good responses received. UKCRC does not always hear back that a response has been accepted, although occasionally there is an emailed acknowledgement or an indication on the website that particular evidence has been included.

The government webpage which lists consultations is at https://www.gov.uk/search/policy-papers-and-consultations.

D De Roure thanked C Johnson for his work on this and E Robinson asked if there was any input that the CPHC Committee could help with. C Johnson suggested that if a member of CPHC Committee had a specific interest in a consultation and would like to manage a response themselves on behalf of both CPHC and UKCRC, they could let him know. Alternatively if Committee Members wished to feed into any collated responses that would be a good opportunity. One way of initiating this would be for the Secretariat to forward consultations to CPHC Committee Members to ask if they have a specific interest and, if so whether they would be interested in leading a response. M Leslie undertook to take this back to the CPHC Chair for consideration.   **ACTION: M Leslie**

5.1   Joint response procedure

Members noted that both BCS and the IET are on the UKCRC circulation list, providing opportunities for input where appropriate. J Davenport undertook to update B Mitchell on this on the BCS side.   **ACTION: J Davenport**

6.   RESEARCH FUNDING AND POLICY

6.1   EPSRC Update [Samantha Francis/Rhys Perry]

EPSRC representatives reported on the EPSRC Delivery Plan, the changing funding landscape, the ICT Portfolio: Balancing Capability, future activities in the ICT Theme and wider activities. See Appendix for further details.

6.2   UK Software Sustainability Institute Third Phase project [D de Roure]

D De Roure gave a verbal report, providing written details following the meeting as follows. The project is a significant and unique UKRI software investment in the research community, which involves software engineering, skills development, careers paths and policy influence. In its new phase SSI is reaching out comprehensively across the sector. Hence this item is for information and to open a discussion about CS research community connections going forward.

The Software Sustainability Institute is the national facility for cultivating better, more sustainable, research software to enable world-class research – the slogan is "Better software, better research". See software.ac.uk.

The partner institutions are Edinburgh, Manchester, Oxford, Southampton – they are responsible for SSI operations but really this an investment for the whole community. SSI activities include advice, workshops, the SSI fellows programme, training ("the carpentries"), joint consultancy projects, software assessments and policy work.

SSI is commencing its third phase:

Phase 1: 2010-2015 £4m over 5 years (100% EPSRC)
Phase 2: 2015-2018 £3.5m over 3.5 years (EPSRC + ESRC + BBSRC)
Phase 3: 2018-2023 £6.6m (all RCs)

SSI has assessed the importance of software to the research funders, for example the UK Software Survey 2014 (92% use software, 69% fundamental to results, 56% develop own software). RC investment averages £479m over the 10 years 2007-17.

SSI has also developed a UKRI software strategy for the 10 year road map, and has provided the basis of best practice guidelines in multiple disciplines, nationally and internationally.

Finally, SSI has led the Research Software Engineer programme, developing from EPSRC's initial investment, supporting research software through the creation of software careers. This is an idea whose time has come (to quote Simon Hettrick/Victor Hugo). The community now has over 1400 RSEs, with mirroring organisations in six countries (USA, Germany, Netherlands, Nordic countries, Australia and New Zealand). We now have 20 universities that host an RSE group (the largest is 23 RSEs), and the model is demonstrably self-sustaining.

In summary, SSI is a unique and internationally leading capability and closely engaged with our community, funders, infrastructure and skills agenda. SSI welcomes input and engagement with UKCRC.

m.c. schraefel welcomed the opportunity for a better pipeline as she was personally frustrated with the lack of skills in building Apps. D De Roure undertook to take this comment back as they were into the 3rd phase now and it is consequently a good time for this to be raised.

6.3   2019 Workshop Proposal [J Hillston/C Johnson/S Francis]

RECEIVED the paper on an EPSRC-UKCRC draft workshop proposal for 2019, which summarised discussions between representatives from each organisation with a view to following up on the workshop held in March 2018 with two workshops.

It was suggested that the morning of the 1st workshop could concentrate on the roles of UKCRC and the needs of the community, possibly including input from external parties in a panel discussion format including Q&As. Then the afternoon could be used to discuss suitable topics for Big Ideas/Grand Challenges. There should be no more than 2/3 UKCRC members with early career researchers making up the balance. Possible venues included Edinburgh and Glasgow.

A Blandford reported that last year there were about 50 attendees including the convenors. It was advisable to list selection criteria that are defendable (eg, diversity in terms of different types of institutions). Another suggestion for a topic was about first grant applications. Invitations to early career researchers could be directed through the UKCRC Members in institutions or EPSRC. Possible presenters/panellists were discussed: Paul Watson of RSC, potential users of research such as Thales, someone from Europe or USA to talk about problems facing, someone to talk about past Grand Challenges to get up to speed with the history (such as Jim Woodcock).

7.   REPORTS

7.1   Membership Panel

See Chair's report above.

7.2   International Matters/Informatics Europe meeting in Zurich 9 July 2019

RECEIVED and NOTED the IE Digest provided by Luke Ong. M Leslie to forward the version (minus the lapsed deadlines) to the membership.   **ACTION: M Leslie**

E Robinson reported that Carsten Maple (CPHC Immediate Past Chair) would be attending the IE meeting of National Associations in Zurich on 9 July. It was likely that Luke Ong would be attending as well.

7.3   CPHC [Edmund Robinson – verbal]

As well as the second iteration of the *'A Chair in 10 Years'* workshop in Edinburgh, a further iteration was planned for later in the year. There had been requests for a teaching and scholarship contracts workshops as well as a further *'North of 300: dealing with significant growth'* workshop.

The outcomes from the workshops have not been formalised as discussions have focussed on scoping problems that faced by the participants.

The CPHC Conference had been held on 29/30 April 2019 and the Chair was thanked for her participation and input. CPHC was keen to work more closely with both UKCRC and the IoC. An item that emerged during the Conference were that subject level TEF was running into difficulties with aligning subjects with data.

The initial take on the Augar Review is that we do not expect any controversial government department decisions. It would be worth taking a closer look at the Review as the underlying methodology is interesting.

The Committee membership had changed slightly at the AGM and efforts were being made to be more systematic about engagement and seeking representation from devolved nations so the activities are not as England-centric.

7.4   BCS Academy [James Davenport – verbal]

It was reported that the majority of effort was being put into working with schools; however the Academy was hoping to push forward its work with Cygnets. Although the bid application to EPSRC had not been successful, it was hoped that further EDI work will be taken forward with the Women in Computing research team. The BCS Needham Award Lecture was taking place on the evening of the Executive Committee meeting (with a female speaker!).

7.5   IET [Ahmed Kotb – verbal]

As reported at the last meeting, one new digital platform had been formed from the existing ones and the IET was looking to scope new areas such as eVoting, AI, Augmented Analytics and other areas.

8.   UKCRC Roles

Members RECEIVED the paper and noted the gaps. It would be good to raise the profile of UKCRC on social media and be more proactive in general communications. Luc Moreau undertook to take on this role. One suggestion was an interview with Executive Committee Members, perhaps asking 5 questions to give the EC more visibility. S Francis indicated her willingness to contribute as well.

Other ideas considered included blog posts (such as those on the IET website), monthly articles, opinion pieces such as policy in relation to peer review in future and short documents/guidelines as discussed at the last meeting. It was suggested that 2-3 short-lived working groups could be established each year to work on topics such as these in order to draw in more members and increase the profile of activities on the website. C Jones undertook to email the membership to gauge interest in a possible working group/sub-committee for publishing, to come up with useful recommendations and/or foster a discussion with (some) publishers to explore concerns about the cost to the employers of people who write/review/edit for journals for nothing. If there is an appetite for this, volunteers will be sought to act as members (including a chair) of the sub-committee. *[Post meeting note: action complete.]*

A further vacancy in the UKCRC roles was for the UKCRC representative on the CPHC Committee. m.c. schraefel volunteered to undertake this role.

9. ANY OTHER BUSINESS

9.1 Case for AI service: The Chair informed Members that she had been approached by Mark Parsons, Director of the Parallel Computing Centre at Edinburgh for UKCRC's help in making a case to DCMS for whether a dedicated national Artificial Intelligence service is required. The Chair had offered to circulate a message to the membership to obtain cases to support the need for such a service. D De Roure indicated that he was willing to help with this.

ACTION: Chair

9.2 Expenses: M Leslie explained that up to now the working arrangement with the IET had been an informal written agreement. The IET and BCS have now agreed to formalise this in writing, which will have a minor effect on the expenses reimbursement procedure to BCS. Currently, BCS will reimburse the travel and subsistence expenses for UKCRC Executive Committee Members and invoice back to the IET for half of the total expenses following the end of the UKCRC financial year in December. It has now been agreed that the invoicing will take place following each meeting. Members are therefore asked to submit their expenses as soon as possible after the meeting so that the invoice can be prepared in a timely manner.

The Chair thanked Members and closed the meeting at 12:56.

10. DATE OF NEXT MEETING AND ANNUAL GENERAL MEETING 2019

The next EC meeting would be held at BCS London on Tuesday 29 October 2019 and would include a joint meeting with the CPHC Committee during and after lunch (see below for other EC and the AGM dates). M Leslie undertook to circulate these dates as Outlook invitations.

ACTION: M Leslie

COMMITTEE MEETINGS FOR 2019 *Commencing 11:00 unless otherwise stated*
*Tuesday 29 October – BCS Offices, London

ANNUAL GENERAL MEETING FOR 2019
Friday 6 December at 14:00 – virtual meeting

COMMITTEE MEETINGS FOR 2020 *Commencing 11:00 unless otherwise stated*

Tuesday 10 March – IET Offices, London
*Tuesday 30 June – BCS Offices, London
Tuesday 27 October – IET Offices, London

ANNUAL GENERAL MEETING FOR 2020
Friday 4 December at 14:00 – virtual meeting

*Co-located with the CPHC Committee meeting to be held in the afternoon. Opportunities to network will be available over lunch at 1pm.
NB: BCS and IET rooms subject to availability

EPSRC Briefing for UKCRC
04/06/2019

EPSRC Delivery Plan
All Councils within UKRI will have a delivery plan which will contribute to UKRI's overall strategy. The Delivery Plan is due for publication on 10th June 2019.

Changing funding landscape
In light of the emergence of a variety of strategic funds (e.g. ISCF, SPF) the ICT Theme are working with the ICT Strategic Advisory Team to identify opportunities for ICT research and to think about community engagement. Our desire to communicate more with the community around identifying priority areas has led to a proposed joint workshop with UKCRC around strategic objectives for the UK computing research community. In addition, we continue to welcome ideas of ambitious and exciting challenges through the Big Ideas initiative:
https://epsrc.ukri.org/research/ourportfolio/epsrcbigideas/

ICT Portfolio: Balancing Capability
Through evidence gathering and engagement with the ICT community the following research area changes were made in early 2019:
- Artificial Intelligence Technology: Change in trajectory from Maintain to Grow to reflect its importance as a government priority. Corresponding update to the published rationale.
- Displays: Research area closed and removed from the taxonomy
- Information Systems: Updated research area rationale to better describe its relationship with AI
- Natural Language Processing: Updated research area rationale to better describe its relationship with AI

EPSRC now has a continuously open Call for Evidence to which organisations and stakeholder representative groups can input evidence about the current research environment:
https://epsrc.ukri.org/research/ourportfolio/gathering-evidence/

Future Activities in the ICT Theme
- People at the Heart of Software Engineering Call: This call aims to encourage research into responsible software engineering, which considers all stakeholders from the start of the research programme. The call is scheduled to open 5th June 2019 and close 24th July 2019 with up to £4 million available to support 4-6 proposals.
- Natural Language Processing Call: Up to £4 million will be available to fund proposals which demonstrate the potential of this field to underpin advances in AI Technologies, Human Computer Interaction and Data Science. Call planned to be published end of July/early August.
- EPSRC expects to put funding of around €1M into the CHIST-ERA scheme in the topic 'Explainable Machine Learning-based AI'. There will be a call development workshop in June 2019 for the call to be launched October 2019.
- Early Career Forum – The ICT Theme is planning to launch an Early Career Forum, with the call for Expressions of Interest to be published in the coming months. The Forum will be an opportunity for EPSRC to share information on our strategic aims and processes, and also an opportunity for early career researchers to network with colleagues from across the country and to discuss future EPSRC strategy related to Information and Communication Technologies.

Wider Activities

- UKRI Review of Artificial Intelligence: Four regional workshops were held throughout May 2019 to gather input from a broad set of stakeholders across the remit of UKRI exploring the current AI landscape, its future directions, current and anticipated needs and opportunities.
- Online Investment Timeline: The Investment Timeline is a high-level view of upcoming investment opportunities across EPSRC and UKRI. It is not a comprehensive view of all opportunities but is designed to provide early notice of both UKRI-led calls and EPSRC-led calls to help researchers with their grant submission planning. The calls are only indicative at this stage and are yet to be confirmed. Researchers should continue to use the Calls page of the EPSRC website and Calls Alert service to keep up-to-date with all opportunities: https://epsrc.ukri.org/funding/calls/investment-timeline/

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