Computational Science Centre for Research Communities (CoSeC) External Advisory Board Meeting Minutes

12 September 2025 10:00 - 15:00 The Boardroom, Daresbury Laboratory

Attendees:

External Advisory Board Members:

- Prof. James Kermode (Chair) University of Warwick
- Prof. Jane Winters University of London
- Henning Hermjakob EMBL-EBI
- Prof. Simon Hettrick University of Southampton and Software Sustainability Institute

In-attendance:

- Dr. Stephen Longshaw Director of CoSeC at STFC
- Dr. Barbara Montanari Associate Director of Programmes and Strategy at STFC Scientific Computing
- Prof. Mark Savill Cranfield University and Chair of the CoSeC Community Forum
- Mai Hoang (Secretary) STFC

Apologies:

- Prof. Andrea Cavalli CECAM
- Richard Gunn Programme Director for Digital Research Infrastructure, UKRI

1. Welcome

 Dr Stephen Longshaw, Director of CoSeC and Barbara Montanari, Associate Director for Programmes and Strategy at STFC Scientific Computing welcomed the members and opened the Board's first meeting. They thanked members for their time and for attending in person.

2. Roundtable Introductions

• The Chair invited introductions from the Board. Members presented a wide range of expertise spanning fields such as computational science, software engineering, research infrastructure, data management,

digital humanities, bioinformatics, research policy, software sustainability and more. They also shared their objectives for serving the board, some of these include providing new perspectives to enhance the programme, "delivering the best version of CoSeC", gaining a better understanding of the UK's science and funding landscape, supporting career pathways for Research Software Engineers (RSEs), and strengthening connections with fields like digital humanities.

(The list of members can be found in the "Attendees" section above)

3. CoSeC Overview

The Director of CoSeC presented an overview of the CoSeC programme, positioning it within the wider context of UK Research and Innovation (UKRI) and the Science and Technology Facilities Council (STFC) landscape. He highlighted STFC's dual role as a research council and as a custodian of the UK's national laboratories, which provides a natural home for fostering careers for Research Technical Professionals (RTP).

Key Presentation Points:

- CoSeC's primary mission is to serve as a UKRI-funded centre that enables computational research by developing and supporting research software as a critical national infrastructure. This is accomplished through stable, long-term partnerships with UKRI-funded Collaborative Computational Projects (CCPs) and High-end Computing Consortia (HECs).
- The CoSeC programme draws on the expertise of ~ 300 staff in the wider Scientific Computing Department and directly supports about 60 staff across its 25 research communities. The communities span diverse research areas, including materials science, biology, engineering, physics, imaging and digital humanities.
- Primary funding for the 2024-2027 period comes from the UKRI Digital Research Infrastructure (DRI) programme, with additional support from research councils EPSRC, BBSRC, and MRC. Oversight is managed by an internal programme board, funding council reviews, a community forum, and the new external advisory board.
- CoSeC's initiatives include research collaboration, community enablement funding, cross-cutting thematic work in areas like Applied Artificial Intelligence (AI) and sustainable software, a Postdoctoral Fellowship scheme, bi-annual community forums, an annual impact award, and a yearly conference held with the Computing Insight UK event.

Key Themes Discussed Following the Presentation:

- The challenge of clearly defining CoSeC's identity, given its vast activities across many scientific areas was acknowledged. There was agreement that the focus should be on its fundamental principle of providing "software as an infrastructure". Close partnership with research communities is a cornerstone of the CoSeC model.
- The Board explored the difficulty of supporting the long-term needs of research communities while operating within short-term funding cycles. It was noted that while some communities become selfsustaining, access to software infrastructure remains at risk without centralised support.
- CoSeC's important role as a "skills factory" and pipeline for high-tech industry was recognised. This led to a conversation about the practical challenges of recruiting and retaining staff due to salary competition from the commercial sector. Within STFC, different pay scales have been introduced to address this.

4. Terms of Reference

Board Feedback and Recommendations:

- The Board recommended establishing a formal membership refresh process, suggesting a three-year term for ordinary members to ensure new perspectives are continuously introduced.
- CoSeC noted the underrepresentation of certain communities, particularly funded by the research councils NERC and ESRC and in fields like tomographic imaging. The consensus was that the Board should not replicate the Community Forum's representation but should instead provide independent strategic oversight.
- Conflicts of interest were discussed, with specific attention to Principal Investigators (PI) of CoSeC funded communities (CCP/HEC). It was agreed that these roles represent a conflict and therefore would be ineligible to serve. Board members must also declare potential conflicts promptly and recuse themselves from relevant discussions as necessary.
- It was suggested the ToR itself should be streamlined by retaining the purpose and removing any extensive background details and members' names to ensure the document remains relevant over time.
- It was clarified that a relevant UKRI representative would be someone from the DRI programme.
- A suggestion was made to rephrase "leading researchers..." to "leading researchers in relevant fields" for better clarity.
- It was agreed that the meeting's format will be kept flexible to accommodate the needs of members. The Board will initially meet bi-annually with a cycle of one in-person session and one virtual

- meeting per year. The location of the in-person meetings will rotate to different relevant sites.
- Minutes will be published publicly with decisions and outcomes anonymised.
- To diversify the panel, membership could be extended to include more international representatives, an early or mid-career researcher (such as a CoSeC fellow) and an industry representative.

ACTION: CoSeC to revise the ToR incorporating the Board's feedback and bring an updated version to the Board ahead of the next meeting for approval.

5. Closed Session (panel members plus Prof. Mark Savill)

- The meeting moved into a closed session for board members to allow for open and frank discussion.
- The Secretary was not in attendance for this session. No minutes were taken.

6. Closed Session Feedback and Future Meetings

Board Feedback and Recommendations:

- The Board feels that in some cases CoSeC undersells its achievements and could promote them more actively.
- They recommended complementing traditional publication metrics for software with software-centric metrics to better capture impact.
- A key theme was the need to more clearly define CoSeC's unique value i.e. the distinctive activities only it can do and to focus on a subset of high-impact core tasks, rather than carrying out evermore-broad range of activities.
- The Board advised creating an explicit list of CoSeC's core capabilities (e.g. impact consultancy, porting codes to GPU, software testing, community sustainability) that can be offered as "building blocks" to communities.
- They also highlighted the opportunity to better exploit the colocation of its people across Daresbury and Rutherford Appleton Laboratory by enhancing cross-team collaboration and making internal expertise more accessible across projects.
- It was suggested that CoSeC could formalise its role as a convener by connecting people across communities to solve common problems, offering strategic "knowledge brokering" as a key service similar to what the Software Sustainability Institute (SSI) does.
- The CoSeC oversight diagram was found to be unclear in areas, especially regarding the decision-making hierarchy and a missing

reporting line from the Community Forum to UKRI DRI. The Board advised simplifying the diagram by removing outputs and recommended ensuring a UKRI representative attends Board meetings to improve communication and strategic alignment.

- The Board expressed interest in attending future CoSeC Community Forums to engage more directly with stakeholders.
- The Board recommended that CoSeC develop guiding principles to guide its partnership choices and external activities, ensuring they are driven by strategic priorities rather than opportunity. It supported CoSeC's UKRI-wide scope but thinks it may be necessary for it to restrict the types of activities that CoSeC can practically do.
- The panel agreed to meet again in six months' time 27 March 2025, between 9AM-12PM online.

ACTION: CoSeC to prepare responses to the panel's recommendations from the closed session by the next meeting.