

User Engagement Strategy

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Executive Summary & Action Requested

The Research Computing Service (RCS) is an established college partnership that provides central access to computational hardware (processing and data storage) and software, support and consultancy, and training.

The number of registered service users has grown to around 5000, and we recognise that users in this extended community have different requirements, expectations, and levels of engagement. Our challenge is to more clearly identify and prioritise academic requirements through engagement to develop the service in support of the college's research.

- One route to channel academic engagement is to **strengthen RCS's academic governance**: through an Advisory Board, faculty-based Research Computing Groups, and a User Group, supported by the creation of an academic leadership team for RCS in 2021. These groups align with a model for user engagement on three levels developed as part of the RCS consultation in 2020.
- RCS offers some services free at the point of use, with scope to pay for priority or extended access. In maintaining and developing this approach, we will more clearly **define the 'social contract'**: what's expected of users given access to these facilities, for example in citing the service in research outputs and costing on research grants.
- For the first quarter of 2021, we will work with the ICT communications team to more clearly define and to communicate the service as it's been developed to date, both to those who currently use it and those who don't, before seeking user views on specific proposals for changes and future investments. This **publicity and engagement campaign 2022** is planned as an exceptional engagement, alongside the normal academic governance.

Background and Current Status

Parsons Review (February 2017)

"Why do most major research-driven Universities in the UK invest in research computing such as this? Some people argue that in a few years all research computing will be provided in the Cloud. *While it is true that much of the compute and data storage could be done in the Cloud today, what defines a successful service is the software and support accompanying it.* Universities that successfully run strong research computing services place their academics

at an advantage in terms of their scientific research and the quality of their outputs. Imperial should be one of these Universities.”

Imperial's RCS currently has around 5000 registered users: how to engage with them all effectively, when their needs are increasingly diverse, and depend on career stage, department / faculty, and research area?

Academic Engagement: Three User Groups

We suggest that current RCS users can be identified as belonging to three distinct groups:

- The RCS team's weekly clinics have helped engage directly with Research Fellows and Assistants, PhD students and taught postgraduate / MRes students: those who use the RCS systems themselves every day.
- Established RCS users - those representing direct investments through grant funding, and those leading large college initiatives - can (and sometimes expect to) make direct contact with the core RCS team and its academic governance.
- The majority of academic PIs are somewhere in the middle. They're not fully aware of what's available via RCS, or what's expected of them to use it, and aren't sure who to approach with more general questions, ideas and concerns.

Crucially: not all RCS users are High Performance Computing (HPC) specialists any more, with established support networks of their own. Continuing the evolution from HPC to a broader RCS – as outlined in the last external review – requires additional user engagement.

Proposals for the next 12 months

Strengthen RCS Academic Governance

One route to channel academic engagement is to strengthen RCS's academic governance: through an Advisory Board, faculty-based Research Computing Groups, and a User Group, to ensure academic requirements are at the heart of the evolution of RCS.

The **User Group** will represent active service users – especially RA / PhD / MRes – and will be convened by the Director of User Engagement. It will be based on the user group for the Materials and Molecular Modelling Hub Tier 2 national supercomputing centre. There will be regular open calls for participants but also targeted invitations based on a better understanding of RCS user data.

Faculty-based Research Computing Groups: currently these exist for FoNS, and are being set up for FoE, FoM. The FoNS group meets twice termly, and its terms of reference have been shared with the other groups. RCS will be represented at these meetings by the ICT Head of RCS and the academic Director of User Engagement.

An **Advisory Board** that meets annually, anticipating external input, review and benchmarking.

These three groups approximately align with the user classification developed above.

Defining the ‘Social Contract’

RCS offers some services free at the point of use for users, with scope to pay for priority or extended access. In maintaining and developing this model, we must be clear about defining the ‘social contract’: what’s expected of users given access to these facilities. For example:

- The service has a Digital Object Identifier (DOI: [10.14469/hpc/2232](https://doi.org/10.14469/hpc/2232)). We ask via the RCS website that the service is cited in research outputs, explaining that this is an important measure of its impact that helps secure ongoing funding, but we don’t currently have a clear picture of how effective this is.
- It’s unclear what’s expected of research groups in raising funds on grants for additional priority computing, data storage, Research Software Engineering engagement. These can all be costed via TRAC. While in some cases this may be because the possibilities aren’t known, either by applicants or research services, there are also some tensions in the ways these additional services are provided: for example, whether express computing is via dedicated compute nodes which were popular but difficult to support versus an express queue that has not been so widely adopted.
- We consider that new users should complete a short training course before using the service as other national centres require, and that they explicitly sign up to terms and conditions for access. The aim of these would be to reduce the number of support queries for the RCS team, and to be clearer about expectations: to reinforce the message about citing the service, and to discourage any user behaviour that compromises the performance of the service for others.

Publicity and Engagement Campaign 2022

The external review of 2017 emphasises that it’s the level of service offered by RCS that makes it valuable to the college, not just the provision of computational hardware. This reflects the growth of the user community to include non-specialists and users with a focus on research data as well as specialist compute user groups with their own support networks. We want to communicate when there are new investments, but not to focus exclusively on this, recognising that it’s the level of service and the ability to carry out their research that matters most for users.

For the first quarter of 2021, we will work with the ICT communications team to more clearly define and to communicate the service as it’s been developed to date, both to those who currently use it and those who don’t, before seeking user views on specific proposals for changes and future investments. This publicity and engagement campaign 2022 is planned as an exceptional engagement, alongside the normal academic governance that’s being implemented. This will help us to define how RCS strategy fits in with the overall ICT strategy and the research computing priorities for the college.