

## STFC Consultation on funding options

1. What is your view on option 1: 3 year standard grants (including proposed variations)?

Given their shorter duration, the RAS argues that standard grants are best suited to well defined and time limited problems. The present standard grant scheme meets this need effectively but is not appropriate for longer-term projects. We disagree with the assertion that the current tapering of rolling grants in years 4 and 5 means that the transition to a pure standard grants system would have a low impact on research groups.

The Society also strongly opposes any shift to the EPSRC model of a 12-month cooling off period for repeatedly unsuccessful applicants. This appears to have arisen as a consequence of the EPSRC move to a standard-only grants model and is described as their approach to 'managed decline'. We fundamentally disagree with moves to shift STFC to this approach to resource management.

2. What is your view on option 2: Core grants (including proposed variations)?

Core grants would indeed give some security to core staff described in this proposal. Nonetheless, they would sit alongside shorter-term standard grants and the RAS believes the absence of longer term rolling grants would therefore weaken the critical mass required to tackle many scientific problems.

This model could also disadvantage those groups with theoretical or modelling research interests, as much of the core funding is directed towards engineers and technicians.

3. What is your view on option 3: 5-year rolling exploitation grants alongside standard grants (the current system)?

The RAS strongly supports the continuation of the present grants system, where rolling grants sit alongside standard grants that support research on shorter timescales. We agree that funding will need to continue to be made available for both types of grant.

Comments specifically relating to standard grants are in our response to question 1.

The rolling grant scheme allows between three and fifteen post-doctoral research associates (PDRAs) to be appointed, providing experienced researchers with a baseline of support that allows them to tackle long term problems. Rolling grants also focus support to generate critical mass in a given research area and allow junior staff

to take responsibility for some aspects of grant management, thereby gaining experience and training in the 'key skill' of research leadership.

If there is a contraction in overall grant funding, some concentration of resources is likely. The overall breadth of research activity will decrease or alternatively groups with a single rolling grant may need to use it to cover a number of research areas, with a softening of the focus on specific problems.

Rolling grants also allow involvement in a research area over a reasonable timescale, something of vital importance in maintaining confidence in the UK as a partner in international collaborations and which applies as much during the exploitation phase as during initial development and construction.

We also believe that the existing system provides a good framework for demand management. Aspirations of research groups are inevitably much greater than the number of PDRA requests they ultimately request and very much greater than the number funded. There is a high degree of self-regulation in the application process.

4. Do you have any other options you would like to put forward?

Two areas for improvement are identified by the RAS. The first centres on the exploitation of completed facilities including space missions. At present the requests for PDRA support in the exploitation phase are considered alongside all other funding proposals. When a new facility is opened or satellite or space probe is launched, STFC could instead announce an opportunity for funding the science associated with these projects. STFC committees could then allocate PDRA posts which reflected the strategic investment in the facility and thus ensure that the initial investment was exploited when the facility became operational.

The second suggestion from the Society is to link the technical grant applications with industrial interest to better facilitate knowledge transfer from universities to interested companies.

5. Any other comments?

The RAS believes that the current grants system for astronomy in STFC has a very high administrative and managerial efficiency. Before the Shared Services system was introduced, three staff members administered grants with a total value of about £100 million. The management costs were therefore far less than 1% of the total spend, a level of efficiency that very few public and private sector organisations could achieve.

Another significant advantage of the current system is the detailed knowledge the office staff has of the astronomy community and the projects it is engaged in. That

knowledge and associated commitment means that mistakes are quickly picked up, double counting is avoided and excellent advice is available to applicants.

A key concern for the Society is that despite the assurances given in the consultation document, major changes to the system could be exploited to mask the substantial drop in grant funding that astronomy faces at present.