

Notes of the External Geophysics Forum held at 2 p.m. on 2nd May 2014 at the Royal Astronomical Society, Burlington House, W1J 0BQ:

Attendees:

David Southwood (Chair), Duncan Wingham (NERC), Matt Collins (Exeter), David Stevenson (Edinburgh), Jonathan Rawlings (MSSL/UCL), Anasuya Aruliah (UCL), Farideh Honary (Lancaster), Mark Lester (Leicester), Steve Schwarz (Imperial), Peter Haynes (Cambridge), Christopher Mutlow (RAL), Ben Taylor (MSSL), Chris Merchant (Reading), David Kerridge (BGS), Albert Naveira Garabato (Southampton), David Marshall (Oxford), Robert Massey (RAS)

Apologies: Sylvia Hales (Notes secretary)

1. Welcome & Introductions (Chair)

The Chair gave a brief background on the External Geophysics Forum explaining that it had been set up by a number of organisations. The Forum is convened by the RAS, the Royal Meteorological Society, the Challenger Society and the BGS. It serves to facilitate interaction between the community and bodies such as NERC. It could also involve DEFRA, the UK Space Agency etc. in the future.

2. Contact with Policymakers (e.g. MPs) (Chair)

The Chair has twice met with the Science Minister David Willetts MP. He and RM have also met the Chair of the Commons Science and Technology Committee Andrew Miller MP, the CSA to the President of the European Commission Anne Glover and the Shadow Science Minister Liam Byrne MP. DS stressed the importance of building relationships between university departments and research establishments and their constituency MPs.

DW commented that NERC can talk to opposition MPs from six months before the next general election i.e. December 2014. NERC has just appointed a Director responsible for this liaison.

Action: Robert Massey to contact this person.

Forum members commented:

- 10-15 MPs attended the recent seminar on Marine Science in the Commons
- Layla Moran, the Liberal Democrat candidate for Oxford West and Abingdon (a marginal seat held by Nicola Blackwood MP) is a physics teacher
- The Parliamentary Office of Science and Technology recently produced a note on Risks from Climate Feedbacks. The Lords Climate Change Committee wants simple rebuttals to the arguments of sceptics
- We can also talk to Chief Scientific Advisor Mark Walport as he has access to a network of CSAs across government departments.

The Chair commented that the next 12 months will be very 'political' with the Newark by-election, Scottish Independence Referendum, European Parliament Election and General Election.

3. Updates from NERC (Prof Duncan Wingham, CEO)

(i) 2013 Spending Review

DW described the outcome of the 2013 Spending Review settlement on the NERC budget. He explained that the 'flat cash' spending review settlement was better than expected and that no large scale changes were needed as a result.

The restoration of capital spending to pre-2011 levels was also welcome. New opportunities open up using unallocated capital, so NERC has created a planning group for this.

The admin budget for NERC will be cut by 8% in 2014/15 and a further 8% cut is likely in 2015/16, so there will need to be further integration of back office functions.

Nonetheless, the overall spending review settlement for the Research Councils is good compared with the bulk of the public sector.

An extensive discussion followed:

Q. How does NERC admin compare with overseas RCs?

DW: Every comparison suggests that NERC is very efficient but the details are complicated as systems are different.

Q: Should scientists be careful about saying money goes on science rather than admin?

DW: The admin Budget for RCs was separated from science in 2010. Some Councils are using the resource budget to provide some project management functions. Do we handle further reductions by simply cutting or do we accept that the resource budget as well is used to address this?

Q: When capital commitments are made is the resource implication considered - do we have the funds to exploit this?

DW: This should be the case but is difficult. In an ideal world, you want to take the capital and resource requirements together. We do this with standard investigative grants.

Q: How do we respond when capital comes from elsewhere e.g. the space (UK Space Agency) budget? How do you watch how people are investing on your behalf?

DW: This is very generous! NERC has been reluctant to be swayed by national interest arguments alone, but prefers scientific priorities in the first instance

(ii) Strategic research priorities

DW explained the system of strategic research priorities and how the scope is determined before the opportunity is offered. NERC is good at being a lead partner and relatively poor at being a minor partner. The 'theme leader' system was less effective than it needed to be at being open to interdisciplinary (other partner) offers. For these reasons the mechanisms have been reformed. Research is now split into categories in the ratio 1:2.

The first category is strategic partnership funding e.g. climate studies in Africa led by DFID. NERC is funding this. Here the partners are primarily government departments and other RCs.

To qualify for strategic partnership funding, NERC is primarily interested in balanced partnerships, often a 50:50 arrangement and with shared managerial control.

The system allows NERC to take decisions in a timely way and is much more bottom up than in the past. NERC is absolutely open to ideas and it should be stressed that the budget for research priorities has increased slightly.

DS: There is a question regarding the power of advisory groups.

DW: Special Project Advisory Group (SPAG) is ad hominem.

Q. Does SPAG prioritise in scientific terms regarding how SISB allocates funding?

DW: SISB decides depth of funding, balanced across highlight topics

- If you want more highlight topics then funding is available
- We need competitors

Q. Does this mean funding is shifted from discovery science to strategic science?

DW. Not fair to say this as money is going in addition to other areas such as innovation and postgraduate training. We are increasing the sharpness of the decision between strategically justified and blue skies science. It is true that we are decreasing discovery science funding but we are also increasing bottom up control of strategic science.

Universities are responsible for the low success rate in grant applications. The success rate has been buoyed by underspending in other areas but is now at 12% again – the underspend is reduced.

Boards remove grant applications that are flawed in some way – 2/3 do not make the first cut. Of the 1/3 that do, 55% are funded. The average success rate across NERC is 20%.

Universities must prioritise and write fewer, better proposals.

Q. Do you have any data on the scale of problems due to REF e.g. huge expansion of universities and six yearly 'transfer windows' where academics are pushed for REF assessment?

DW. Salary levels are rising in universities and QR income is not. There is a strong correlation (0.97) between grant income and research excellence.

Q. Is success rate for universities the same as for centres?

DW. Depends how you look at it. Centres are neither best nor worst in distribution.

Q. How do we control the number of applications? As this creates a lot of frustrations e.g. STFC consolidated grants, I applied for 20 post docs and got 2.

DW. I would like universities to recognise this [demand management] is a shared problem of the RCs and HEIs.

Q. Strong personalities in HEI groups will suppress minority interests.

Q. ESA has pointed out that the UK had too many proposals to ESA and many asked for more than the maximum funds available.

DW. Proposals to ESA aren't really comparable with those to research councils

Q. Has NERC considered charging a grant application fee?

DW. Yes, but it would just recycle public money, because the origin of the fees would be largely HEFCE. So the money would go from HEFCE, which is in BIS, to HEIs, to RCs, which are in BIS again.

Q. Young people build their careers through research income. There needs to be a dialogue between NERC and universities before changes are made. Universities criticise departments for not making enough applications.

DW. We will definitely consult before making changes but it is a pressing issue. The problem is widespread across different universities.

Q. We have heard of an example where removing deadlines could improve the quality of applications.

DW. This doesn't work as people know when committees meet.

Q. Is the increase to postgraduate training a ramp up to doctoral training centres (DTCs)?

DW. Yes. We will see an increase in the number of calls and we are aiming for 8 DTCs. We don't think supporting Masters' courses is a good investment.

Q. Will we get advance notice of DTC themes?

DW. They will be selected year by year. We need to market test each DTC.

(iii) Contingency planning for Scottish independence

DW explained that until the outcome of the referendum is known, NERC, as a NDPB, is not allowed to do contingency planning. But another key question is whether the science budget is devolved even if vote is against independence.

As a UK government body, the formal council position is that NERC wants to be a single UK wide body.

(iv) Engagement with Horizon 2020

DS: European level planning is vital for research. What can people in the UK do to make sure this is coherent – an example being CubeSats? Money is set aside but not turning up in either NERC or the UK Space Agency. How do European consortia fit in with UK national funding?

DW: Difficult issue for research councils as it's hard to influence the EU. Horizon 2020 requires significant interaction with SMEs and NERC isn't always good at this.

DS: Cubesats don't have a clear managerial and exploitation strategy.

Q: Do you have to notify and seek permission from NERC before applying to Horizon 2020?

DW: No, unless the application depends on NERC funding.

Q: Don't the RCs see ERC as a good thing?

DW: I agree with this. This is in addition to the UK science base but isn't that much money. But if it became much more significant, then BIS and RCs might come under pressure to fund it, and EU influence would become much stronger.

Q: Isn't this more positive - the UK is influencing the EU?

DW: It's a question of balance. The bottom-line question is whether the total of RC and ERC funding is increasing. Increasing the one [ERC] isn't useful if there were to be a corresponding reduction in the other [RCs].

(v) Living in a flat cash world (research centres)

NERC is considering giving its research centres independence, to better enable them to sustain themselves in a world in which NERC real terms funding is shrinking. It is however a mandatory condition that whatever changes we make, transparency and fairness of access to and ownership of data at these centres will not be affected. It is also very unlikely that we will transfer major assets into other ownerships.

DS: If BGS was in the private sector then Scottish independence would be less of an issue.

DW: Yes. Private institutions can work as they see fit. However, this is a theoretical consideration, because there is in any case insufficient time to make changes in advance of the independence referendum.

Q: Is there a danger that some research will be killed off as it is won't be commercially viable?

DW: No. Centres already operated 'mixed' economies, in that they have a portfolio of funding (just as HEIs do). BGS is an example today of where NERC is only just a majority funder but while in the other centres funding from elsewhere is a smaller component. If anything, the current arrangements can be restrictive.

The Forum closed at 4.30 p.m.