External Geophysics Forum
25th January 2017
Royal Astronomical Society

Attendees:

Yvonne Elsworth (Birmingham)
Jonathan Bull (Southampton)
Robert Fear (Southampton)
Mark Lester (Leicester)
Jonathan Rae (UCL)
Steven Schwartz (Imperial)
Richard Horne (British Antarctic Survey)
Jolyon Reburn (STFC RAL Space)
Ian McCrea (RAL)
Mark Lester (Leicester)
Adrian Brocott
Duncan Wingham (CEO of NERC)
Robert Massey (RAS)
Sylvia Hales (RAS)

Welcome and Election of Chair

The meeting began at 2 p.m. and Prof Yvonne Elsworth was elected as Chair. Participants introduced themselves.

Update on political engagement

Robert Massey asked delegates if anybody had been in contact with MPs, MEPs or other elected politicians. The RAS is trying to meet various MPs to discuss concerns about the impact of Brexit, and a shift in UK government policy to place a greater emphasis on applied research, on support for blue skies disciplines.

Building Our Industrial Strategy green paper

Robert alerted the meeting to the green paper on the UK industrial strategy[1]. This 132-page document sets out proposals to support current and emerging industries, and areas of research and development, to reshape the UK economy in the light of the decision to leave the European Union.

It says very little about basic research, other than to note that the UK spends a relatively high proportion of its government R&D budget in this area (though as a share of GDP this is still low in comparison with other OECD nations).

[1] https://beisgovuk.citizenspace.com/strategy/industrial-strategy/supporting_documents/buildingourindustrialstrategygreenpaper.pdf

The RAS will submit an official response to the green paper, and the geophysics community should send any comments to Robert in advance of this by the end of March.

Update from NERC (Prof Duncan Wingham) (questions from Forum members are in italics)

Duncan Wingham, CEO of NERC, gave an update to the meeting on the work of the research council in the context of Brexit, the Higher Education and Research Bill[2] and the Industrial Strategy (he welcomed the emphasis on training and skills in the green paper). Changes resulting from the bill include the creation of UK Research and Innovation or UKRI, in line with the Nurse Review, greater flexibility in degree awarding powers for higher education institutions (HEIs), and the introduction of a Teaching Excellence Framework.

HE and Research Bill:

- The Bill is currently at the committee stage in the Lords, and some aspects of it (for example around perceived constraints on the independence of HEIs) have been the subject of detailed scrutiny by peers
- The Bill is still expected to receive Royal Assent
- The Secretary of State's power to change or remove research councils is subject to a vote of both Houses of Parliament, and the Bill is specific on this regulatory function
- Government understands that decisions on grants should be peer reviewed by scientists, but nonetheless retains the right to set strategic priorities for publicly funded research bodies
- CEOs of the different RCs will no longer be 'accounting officers', but the legislation explicitly protects the autonomy of the Councils, and makes it clear that UKRI has to use the research councils to deliver scientific objectives within their fields of competence as defined in the Bill.
- The Autumn Statement uplift of some £ 2 bn by 2021 is focussed around the goals of the Industrial Strategy. This is very substantial in comparison with the NERC spend on innovation of £20m
- There are some concerns around the consideration of economic benefits in investment decisions

Following the presentation, a lively discussion ensued.

What is the impact of the Global Challenges Research Fund (GCRF), in line with Official Development Assistance (ODA) rules, particularly in the light of the inquiry by the Commons International Development Committee?

[2] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/543500/bis-16-285-higher-education-research-bill-summary.pdf

Prof Wingham indicated that NERC is successful in implementing GCRF, and that this is in line with expectations. NERC does in-house peer review to assess whether projects are compatible with ODA rules.

There are issues arising from the nature of cross-disciplinary programmes, in that they are expected to encompass everything from engineering to arts, and it can be difficult to achieve this. Forum members should note that the GCRF share is rising quickly, and is expected to be 23% of the science resource budget by 2021[3].

Once the current Comprehensive Spending Review (CSR) period comes to an end, there is a risk that the growth in the ODA-related science budget may decline, but the ODA component will still be required. Once UKRI comes into being, the GCRF funds may be under its control, and this might make it easier to argue for some parts of the science budget to be reflated to offset the 17% loss of purchasing power since 2010.

Brexit:

- As the UK withdraws from the European Union, the research sector will need to adjust to the post-Brexit environment. There is a clear risk concerning the potential loss of EU funds (that might to some extent replaced by domestic investment). There is also a risk that future immigration rules may make the UK look less attractive to overseas scientific talent.
- NERC is keen that EU27 nationals still feel welcome in the UK, and are not deterred from opportunities for employment. So far there is little evidence of movement of staff and students in NERC centres as a result of the Brexit vote, but NERC is monitoring this.
- UK universities face the challenge of the potential loss of fees from EU students from 2019, depending on the outcome of negotiations with the EU27.
- Post-Brexit, a 'scientific passport' could be helpful in simplifying the process of moving to the UK, and would extend beyond Europe to include applicants from the US and elsewhere
- It is important to emphasise the benefits to UK projects of international, as opposed to EU scientific collaboration.
- *What is the current success rate for applications for grants from NERC now that demand management is in place?*
- The new framework has been in place for two years, and applications have a 20% success rate. Groups report that they have improved the quality and management of their application process, but that there needs to be more support for young investigators.

How is the 'dual key' with the UK Space Agency working?

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3 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/505308/bis-16-160-allocation-science-research-funding-2016-17-2019-20.pdf

- The creation of the UK space agency has made it possible for ministers to negotiate more effectively at the ESA Ministerial meetings. The NERC / UK Space Agency dual key approach appears to be working well, and (in contrast with considerations for STFC) the UK doesn't for example build Earth observation instruments in the same way as space science instruments

Can you give an update on the Service, Facilities and Data Review?

- Through the Review NERC will make data more widely available, and service facilities are being looked at in a more strategic way.
- NERC is considering a bid to upgrade the development of EISCAT.
- Many small services are not innovative enough but there is a question concerning the value for money of smaller services.

AOB

There is less success in physics-based students (for example in solar-terrestrial physics) than others in accessing the Doctoral Training Centre programmes. What can we do to improve this?

- It would be useful for the community to provide hard data on this. NERC is reviewing its present DTP cohort and will examine the distribution of subjects that the present arrangements have produced.

The Forum closed at 4.20 p.m.