

ASTRONOMY FORUM: NOTES FROM 6th OCTOBER 2010

1. In attendance: Forum members (including Roger Davies as chair); Keith Horne (St Andrews, KH), Mark Cropper (UCL-MSSL, MC), Andrew Young (Bristol, AY), Mike Merrifield (Nottingham, MM), Tom Hartquist (Leeds, TH), Mark Lester (Leicester, ML), Gordon Bromage (UCLancs, GB), Elias Brinks (Hertfordshire, EB), Albert Zijlstra (Manchester, AZ), Glenn White (Open University, GW), Rob Ivison (Edinburgh, RI), David Wands (Portsmouth, DW), Ken Strain (Glasgow, KS), Steve Schwartz (Imperial, SS), Walter Gear (Cardiff, WG), Paul Crowther (Sheffield, PC), Mike Barlow (UCL, MB), David Axon (Sussex, DA), Alberto Vecchio (Birmingham, AV), Coel Hellier (Keele, CH), David Burgess (Queen Mary, DB), Tom Marsh (Warwick, TM), Rob Kennicutt (Cambridge, RK), Pat Roche (Oxford, PR), Natalie Bealing (STFC, NB), John Womersley (STFC, JW), Sharon Cosgrave (STFC), Robert Massey (RAS), David Elliott (RAS)
2. The Chair opened the meeting at 1400. He welcomed Forum members and set out the business for the meeting, including an update on the STFC work on the imminent Comprehensive Spending Review (CSR – with an STFC presentation on work done to date), ESO and the 'Science is Vital' campaign against the proposed budget cuts.
3. John Womersley gave a substantial update on the STFC preparations for the imminent Comprehensive Spending Review (CSR), with the main announcement due on 20th October.

The Government was set to deliver an average cut of 25% in spending by different departments over the next 4 years, with a 33% cut in 'administration' (in the case of STFC this equates to around 200 staff, most of whom are not predominantly based in Swindon).

Although feedback from the Treasury was positive towards science, it was also made clear that it will not escape the cuts.

Points made to Treasury include the relative (public and private) R & D spend by the UK (1.7% of GDP) compared with 2.5% of GDP in Germany, 2.8% in the US, 2% in France and 3.4% in Japan.

At the time of the Forum, the Department for Business, Innovation and Skills (BIS – which oversees the STFC budget) was still in the final stage of negotiation with the Treasury. STFC had been advised to plan for three different investment scenarios, all with respect to an inflating baseline.

A: near cash flat over four years, capital cut by 33%

B: near cash cut by 10% over four years, capital cut by 33%

C: near cash cut by 20%, capital cut by 50%

[In the event the newly named Spending Review (SR) settlement for science from 2011-15 as a whole is flat cash, with a 50% cut in capital and initial signs that the Medical Research

Council will receive real growth in investment. As yet there is no announcement on the allocation for other Research Councils.]

The impact of the CSR on the Research Councils will not be clear until at least mid-December.

At the moment STFC is working to the earlier principles established by former Science Minister Lord Drayson, i.e. with three separate areas of international subscriptions, UK facilities and the core programme. STFC has also assumed that they will be compensated in full for currency shifts and that the space programme will be transferred to the UK Space Agency.

The STFC CSR Planning Group developed delivery plans for each scenario, taking input from Science Board.

In the case to BIS and the Treasury, the arguments used focused on the impact on the economy, the ability to address the 'grand challenges' (e.g. security, healthcare, climate change), the role of inspirational science in attracting people into STEM careers, the assets in the form of world class facilities and scientific output and the links to industry.

STFC's strategy is to find ways to sustain our scientific position without serious damage, despite the serious constraints on funding. For example, if cuts of 15% were required, each research community would be asked about their vision for their area in that light.

Another issue for consideration is the concentration of research and what that might mean not just for science but for prospective undergraduates. 80% of STFC research funding is allocated to only 16 Higher Education Institutions (HEIs) so the scope for further concentration is limited. Against this background, some thought is being given to the role of consortia of HEIs in maintaining a critical mass in strategic or vulnerable science areas. In the RAS areas this would be principally astroparticle physics.

On the administration side, proposals include the streamlining of the grant awarding process to reduce overheads (the RAS submitted a response to this consultation in September).

Looking forward, STFC is considering whether a fellowship scheme could be used to retain key researchers in the UK and whether some Research Council funding could support university lectureships. There is also discussion about the importance of the national studentship schemes.

The role of national laboratories in the future research landscape is also being considered. The technology role of the labs should complement the science exploitation role of the HEIs and so there is scope for efficiency gains where duplication takes place. A scheme where instrumentation is largely done in the labs while exploitation is focused in universities is under consideration. Many serious concerns were raised about this as recorded in the questions below.

An extensive discussion followed the presentation. Questions and comments included the following:

Q: How does the internal review within BIS fit in with this?

JW: This feeds down to the RCs, HEFCE, the TSB etc. All the funded areas will argue for the best settlements at each stage.

Q: The Financial Times is suggesting that the science budget will be cut by 17%. Can you comment on this?

JW: If true, I very much hope this is with respect to an inflating baseline. Examples of our responses include pressing CERN to reduce its subscription and being in active discussions with ESRF and ILL.

Q. National laboratories are costly and relatively inefficient at doing instrumentation. If this is not done in HEIs it will also remove the oversight of scientists – so why focus on labs?

Q. Do not accept argument that there is much overlapping work and RAL dominates compared with other facilities.

Q. Training (PhD) experimentalists is vital and happens in universities – won't happen in labs and will hit 'impact' hard.

Q. Will the people who build hardware at HEIs be taken on at facilities – presumably not?

Q. On impact, aren't universities already connected to industry?

Q. Will the same argument be made by the UK Space Agency regarding the hardware / exploitation split?

JW: We have to deploy a declining budget effectively, but I take these points on board. UK Space Agency is within BIS, so the framework is different.

Q. Nascent projects are discussed by university scientists in different nations – how would international partners adjust to a shift to labs?

- MM then updated the Forum on the STFC grants review, indicating that there is still potential for further community input into the final recommendations.

Q. What do we do now – if we are about to apply for a grant?

MM: The way in which grants are awarded will change, but not yet, as it will take around 15 months to implement any modifications.

Q. Where is the saving in setting up consortia of research establishments for particular areas? With no additional funding, this could be a way of partly addressing community concerns, along the lines of the Scottish SUPA approach.

Q. What about those projects that bring in funding from outside the UK?

JW: These are seen in a favourable light and leveraging will help make the case for supporting UK funding.

Q. What if the 16 HEIs that receive 80% of STFC funding don't overlap with the 20 HEIs that the Science Minister has in mind as research-facing establishments?

JW: We are working with EPSRC, BIS etc on this. It's harder to go from university department to HEI level, given that some leading research HEIs don't do physics (e.g. LSE). The grants panel is looking at this when trying to ensure that projects have a critical mass.

4. JW then gave a presentation on negotiations with the European Southern Observatory, including the scope of the E-ELT project and the possible accession of a new member state.
5. PC briefed the Forum on the 'Science is Vital' campaign, noting that this had been initiated in response to the interview with the Secretary of State for BIS following his interview where he referred to 45% of research as not being of an excellent standard. The campaign, now supported by the RAS, included a petition, demonstration, parliamentary lobby and encouragement of scientists to contact their MPs.

The Chair stressed the importance of Forum members and research astronomers in general keeping in touch with their local MPs, inviting them to visit their departments and take part in events, perhaps with photo opportunities.

JW urged Forum members to think about proposals for the future of astronomy beyond this CSR.

MM suggested the RAS should be asked to collect information on which people are in touch with their MPs. Those RAS Fellows outside of the professional astronomy community should be encouraged to write to their MPs, as their employment outside of science might carry more weight.

Action: RM to draft and send model letters to MPs to all Fellows, making the case for astronomy

6. The Chair and AZ drew the attention of the Forum to the Nobel Prize for Physics won by two researchers at the University of Manchester, congratulating them on their achievement and noting their accomplishment as an example of outstanding blue-skies research in the UK.

7. The Chair closed the meeting at 4 p.m.