


MEETING BETWEEN RSC COUNCIL AND THE EPSRC Minutes of the Discussion Held on 2nd October 2008

EXECUTIVE SUMMARY

EPSRC was invited to meet with RSC Council to discuss the management structure changes that have taken place within EPSRC recently. These, coupled with the fact that the EPSRC is conducting an International Review of Chemistry at present, mean that substantial changes to both the extent and way that chemistry is funded within the UK could take place over the next year. Some of these possible changes are concerning the chemistry community and this meeting with Professor David Delpy (CEO of EPSRC) and Dr Lesley Thompson (Director, Research Base) was set up to inform Council and exchange views between the two bodies. Below is a report on the meeting itself (held on the 2nd October 2008).

SUMMARY OF MEETING BETWEEN RSC COUNCIL AND EPSRC (Representatives from EPSRC were Professor David Delpy and Dr Lesley Thompson)

The discussion between RSC Council and EPSRC commenced with a presentation from Professor Delpy. He outlined the key aims of the EPSRC that underpinned their current strategic thinking:



EPSRC GOALS 2008-11

- Increase focus on the key challenges for society
- Encourage even more ambitious and transformative research in a healthy research base
- Attract and nurture talented and skilled people
- Work with all partners to more effectively translate/understand how research can contribute to solving the challenges facing society
- Realign our own internal organisation to deliver our goals most effectively

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Figure 1: EPSRC Goals

Within the context of these aims, he outlined the EPSRC budget to the end of 2011:

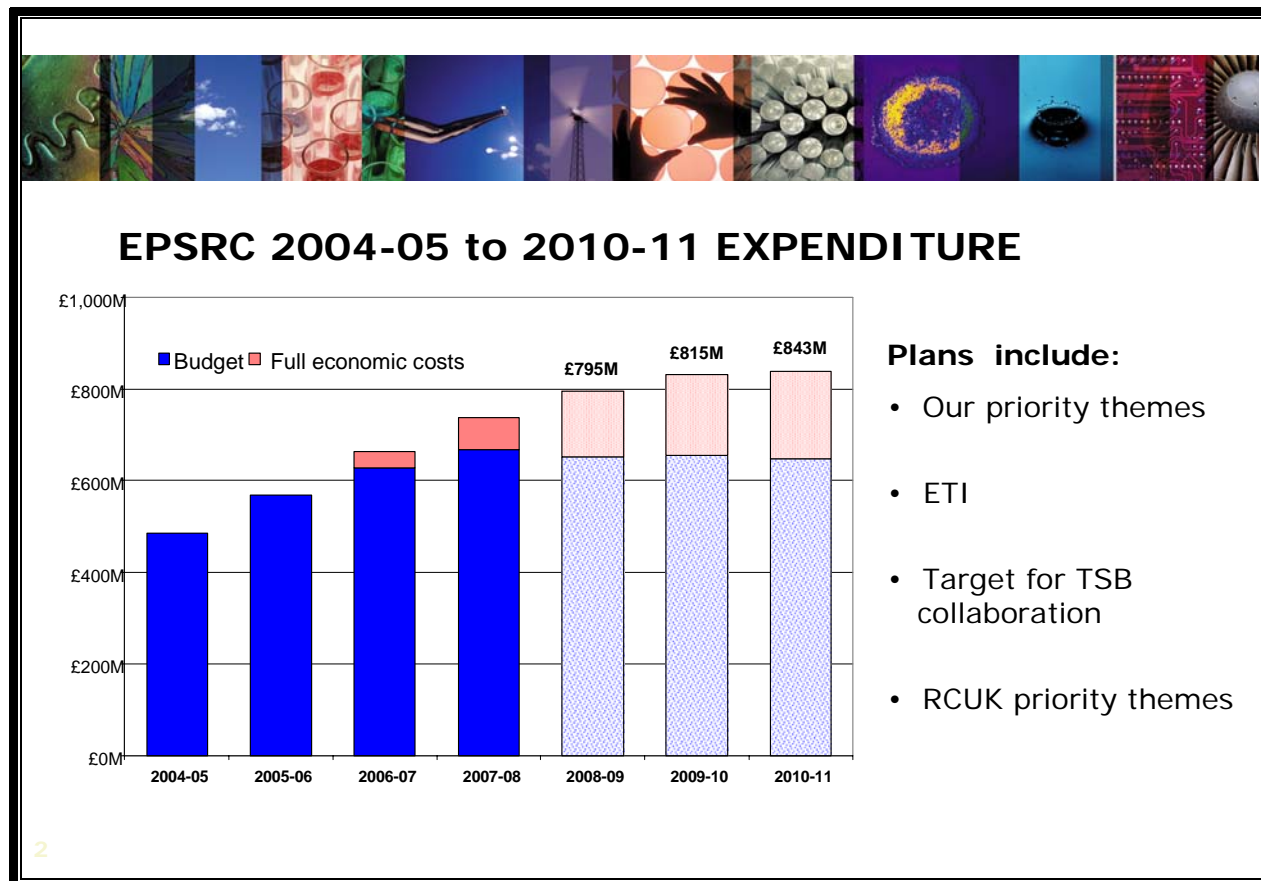


Figure 2: EPSRC Projected Expenditure

Professor Delpy noted that over the last few years “science in the UK has done reasonably well” and that Full Economic Costing (“fEC”), now and through 2010 and 2011, would remain at 90%. He surmised that universities were likely to be expected to find the rest. If fEC is stripped out, Professor Delpy pointed out that if the increase per annum were to average to about 1,5% over the next three years in number terms. This means that in real terms, after taking inflation into account, we are likely to see a squeeze in real terms of 8-10% over that period.

Professor Delpy emphasised that the EPSRC considers that universities should in effect be hypothecating this money – for what used to be called the ‘well founded laboratory’. He emphasised a concern that whilst this has been widely publicised and emphasised, such hypothecation was not necessarily happening.

When asked if vice-chancellors were aware of this hypothecation assumption, Professor Delpy emphasised that he explained this every time he went to a university. The Russell Group are aware of it but their position is that they cannot as yet confirm that this is happening. However, he said that they should be anticipating this now and planning for it in their ongoing budgets.

He emphasised next that the EPSRC was employing target metrics and also measuring how the UK was performing in different subjects compared to other parts of the world. For example, in biosciences, business, clinical studies, environmental studies and humanities we currently ranked second in the world. However, in the areas of maths, engineering and the physical sciences we appeared not to be so strong, generally ranking at fourth. Professor Delpy did not distinguish here between physics and chemistry, both of which reside in the new Physical Sciences Programme within the Research Base (training and research support):

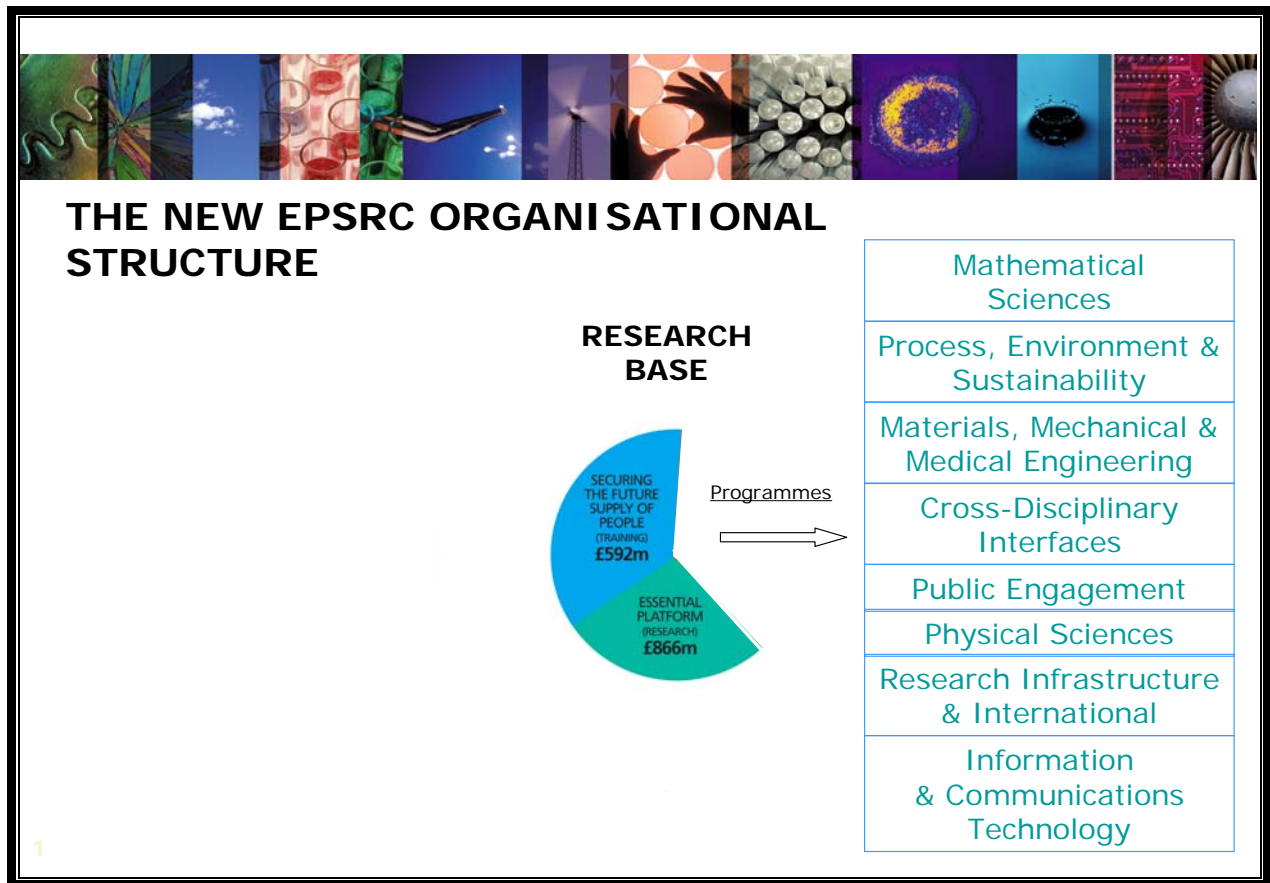


Figure 3: The Research Base

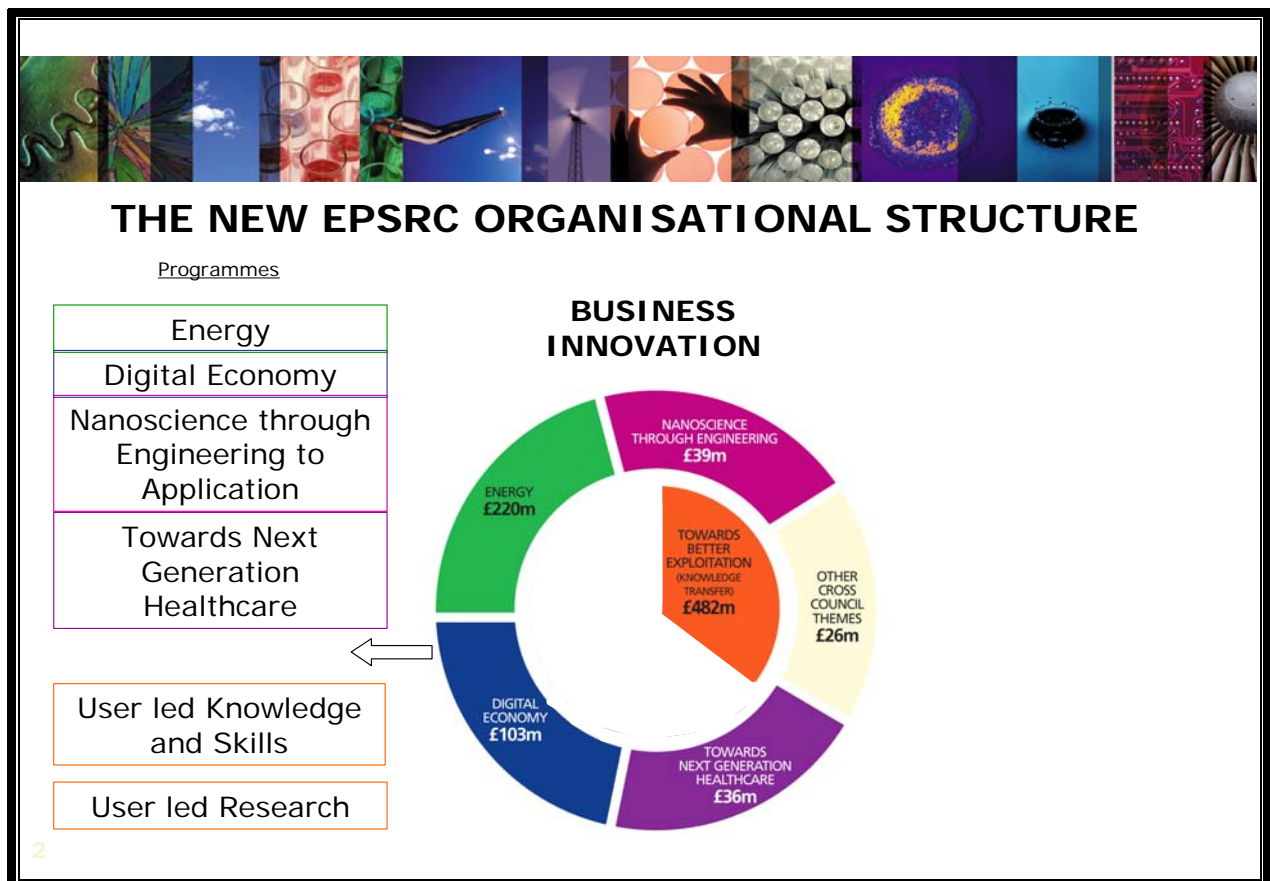


Figure 4: The Business Innovation Component (responsive mode)

As indicated above in Figure 3, the Physical Sciences Programme sits in the Essential Platform part of the overall picture. In examining this diagram, Professor Delpy emphasised that funding is not proportional to area: most of the money is to be found in the three components that comprise the “hub”. However, Professor Delpy commented that if inflation increased, it would be the hub portions that would be likely to be squeezed rather than the (smaller) “rim programmes” (see Figure 4 above). He was asked how much of the £866,000,000 that sits within the Essential Platform component was assigned to Physical Sciences. He stated that this varies a little from year to year but was about £90,000,000, with Chemistry accounting for about half of this. Professor Delpy was also asked what the management costs for running this system amounted to. He replied that this summed to only 2.7% of the total budget – much lower than other Research Councils. These of course differ from the EPSRC in having Research Institutes that substantially reduce the amount of responsive mode money available to applicants within these other Research Councils.

Professor Delpy then looked at the “rim” programmes in more detail. Some of these are linked to the RCUK Global Challenges (see Figure 4 and also Figure 5 below). The EPSRC leads in three of these – Energy (£220m), Digital Economy (£103m) and Nanoscience through Engineering to Application (£39m).

An important (relatively new) partner in these Global Challenges is the Technology Strategy Board (TSB). Professor Delpy noted that, in addition to the budget that the TSB holds in its own right, the Research Councils together commit another £120,000,000 to the TSB (with about £45,000,000 of this coming from the EPSRC).

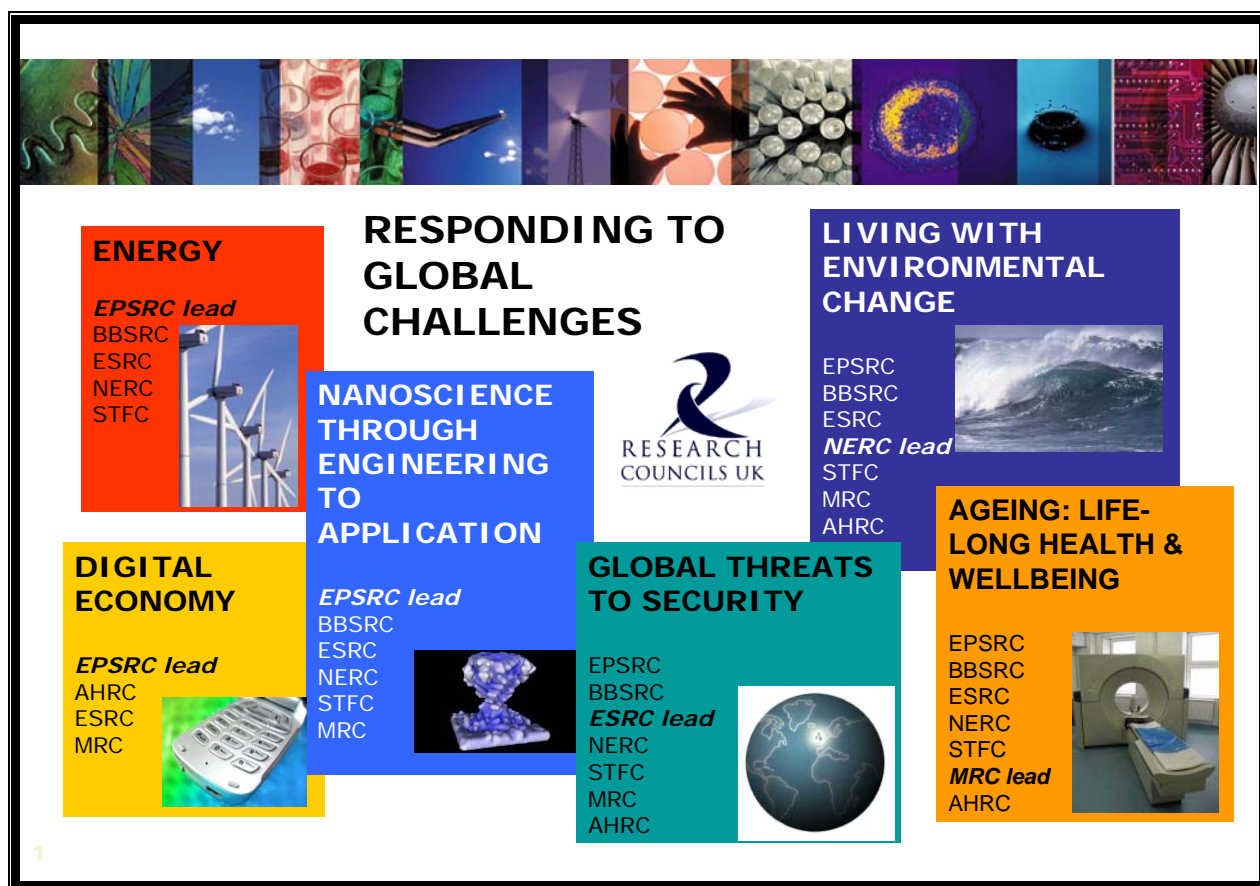


Figure 5: The responsive mode Global Challenges (three led by EPSRC)

The discussion then moved on to identify personally areas that various parties believe should merit significant future action. The discussion that follows **should absolutely not to be taken as current EPSRC policy** . Areas covered were:

1. *The need for demand management in the light of poor application success rates:* Far more applications are coming in than can be funded, so success levels are low. To improve this

situation, Professor Delpy did not consider that the way forward should be through prescribing the number of applications that an applicant could put in within a given time frame. One suggested way forward was to use a first stage “sifting process” – this sifting process, which could be carried out using only a brief summary of the proposed application, could filter out a significant portion of applications. Another possibility would be to look at an applicant’s whole portfolio and ask how much time *in toto* he/she is committed to the research programmes he/she is operating. One could set a maximum figure (e.g., 25%). As the discussion developed Professor Delpy was keen to pursue a dialogue with the RSC on this matter and perhaps get views from publishing houses such as RSC Publishing on typical screening processes currently employed. He commented that “we are all struggling with these issues”. Regarding the 25% maximum, Professor Delpy commented that he would recommend that applicants should look to obtaining funding for a few larger programmes of work rather than for several small ones. It was pointed out to him however that that this needs a big culture change in thinking from the community and that there is a major communication issue here which needs to be addressed. It was agreed that improving communication processes should be a priority.

2. *How to make peer review a more effective process:* The only comment made here was that Professor Delpy felt there still was an ongoing issue on how to achieve consistency in peer review.
3. *The issue of first grants to younger academics:* Professor Delpy acknowledged that the number of these was dropping but noted that the size of the average awarded first grant is currently increasing (currently it is >£500,000 and these are to people with no previous track record). Naturally, peer review is more stringent for grants of (say) £600k than it was for previous grants of <£100k so “starters should not be encouraged to apply for £600,000 grants”. It was again stated that the community probably has not changed enough to recognise the changes that were going on. The discussion moved on to whether the EPSRC was seriously looking at imposing a cap on starter grants and whether universities should also back “starter grants” with a proportion of funding from their own resources. In this context Professor Delpy reminded everyone of the much more generous packages that many universities in other countries gave to new academics and he commended this thinking more to UK institutions. Dr Thompson also emphasised that EPSRC recognised the need to give universities time to respond to these changes – “we have to get away from the £300k way of thinking” – she felt that in some parts of chemistry we still think in terms of relatively short term, small grants and that there was a need to have a better dialogues with people in other parts of the community such as physics or even within some other parts of the chemistry community (e.g., physical chemistry).
4. *Full economic costing:* This had already been discussed earlier (see page 2, ¶¶1-3).
5. *Portfolio management:* This discussion was in part a continuation of (3) above, concerning first grants. Professor Delpy remarked that “in many disciplines a major programme grant marks you out as being at the top of your game. However, in chemistry and engineering it is the number of grants that seems to count”. However, it was emphasised with general agreement that there was no right or wrong way here and Professor Delpy responded by affirming that in his view there were “just as many high quality grants in chemistry as elsewhere”.
6. *How to develop even greater impact:* Professor Delpy emphasised that a key part of EPSRC strategy was to raise our international profile in areas where we are currently trailing, which, as we had noted (page 2, ¶4), includes chemistry. Professor Delpy was asked to comment further on EPSRC’s approach to international research. Professor Delpy and Dr Thompson commented that they were looking at how to work closer with the National Science Foundation (NSF) in the USA and how to remove any barriers that were currently obstructing closer working between these two bodies. Within Europe, they noted positively the work of the European Research Council (ERC) and its complementary activities, especially the ERC Young Investigator Grants. Dr Thompson commented also that the MRC was taking a lead on behalf of RCUK “to develop traction across Europe”.

To conclude his presentation Professor Delpy highlighted once more a few key strategic issues:

- EPSRC continues actively to identify key priority themes;
- EPSRC considers all main research disciplines to have important roles to play in programmes and themes;

- The largest proportion of the budget is spent on investigator-led research and training and this will continue;
- EPSRC wants to encourage researchers to be even more ambitious;
- There is a need for all of us in partnership to demonstrate to government and society the wider impact that science and engineering have on wealth creation and the economy.

Professor Garner thanked Professor Delpy for his presentation and his honest and positive responses to questions and underlined a key message he had picked up, which was the need for much better communication between EPSRC and the chemistry community. This would help to avoid unnecessary fears about changes currently happening and the outcomes of the forthcoming International Review of Chemistry. Professor Delpy and Dr Thompson agreed that they should further improve their communication to the community; Dr Thompson commented that “nothing that had been discussed here was secret”.

Professor Yellowlees then followed up by highlighting some questions that Professor Delpy and Dr Thompson had received in advance of the meeting and which had not been discussed already in sufficient depth. She concentrated on three questions:

1. The chemistry community is keen on multidisciplinary research but it still needs core funding. There is a real concern in the community that this might be substantially eroded.

Question: Where does the EPSRC see itself on this matter?

Answer: First of all, Professor Delpy emphasised his strong view, held in common with the view of the EPSRC, that “inter-disciplinary research can only be successful if we are strong in core science, engineering and mathematics”. He reminded everyone that £1.94 billion is to be found in the central core (Figure 3). He noted that this comes back again to communication – “because we forget to mention this, the community gets anxious”... Professor Yellowlees reminded him that he had also mentioned that an inflationary squeeze would apply to the core in particular – hence the concerns expressed by the chemistry community. Professor Delpy replied by highlighting the point that “we are also funding basic chemistry in the global challenges (Figure 4) such as energy, environment, and health”. Again, the issue of improving communication processes came to the fore.

2. There was also a worry about the future of Doctoral Training Accounts (DTAs), and the fact that DTA money is projected to be given to universities for them to distribute them according to their business strategies across the particular university departments/faculties rather than as before, when EPSRC indicated to the university how it wished the monies to be distributed. Another issue concerns the future DTA-DTC balance (DTC = Doctoral Training Centre).

Question: What is the future here?

Answer: Professor Delpy commented that “we will be entering into a dialogue to look at the balance of PhD training” in the light of the “huge growth in the number of project students”. He explained how each programme area was allocated a training budget and if they have DTCs that obviously affects the DTA allocation size. Therefore EPSRC managers were very conscious of the need to balance across the portfolio. Because of budget limitations, he commented that it was obviously a “zero sum game”. A comment from Council was made that the changes could be seen as a “coded means of moving money from chemistry”. It was emphasised how important studentships were to the health of chemistry research in the UK, even though studentships do not attract fEC. Dr Thompson promised to look further into this issue together with the community but she commented that “it would be surprising that where chemistry was regarded as a strength by its university it did not then invest in a chemistry DTA”. In response, Professor Garner pointed out that subsuming chemistry within the top-level title “Physical Sciences” could serve to reduce the profile of chemistry within an academic institution and so affect the DTA allocation – the change “it doesn’t help chemistry”. In response, Professor Delpy stated that his experience did not accord with this view. He commented also that it still seemed to be the case that when people thought of core chemistry they tended to revert to thinking just about the Physical Sciences part of the whole programme rather than recognising that basic chemistry is funded through and across the whole EPSRC Programme.

3. The chemistry community has noted with concern the closure of the National Computing Centre and is generally concerned at the run-down of National Services.

Question: Would the EPSRC care to comment on this matter?

Answer: Concerning continuation of these services Dr Thompson commented that personally she “was not content with the current situation”. She drew attention to the infrastructure funding component of the current EPSRC programme and admitted that currently she did not have a complete answer to the problem. She emphasised also that services from their very nature should be expected to be time-limited in their funding. Professor Yellowlees remarked that whilst she understood this point, nevertheless, whilst this uncertainty persists “in the interim period, some are vulnerable” and running out of funding. It was recognised that this was another area where EPSRC and RSC should be working together over the next few months.

The discussion was then brought to a conclusion by Professor Garner, who invited Professor Delpy to make any final remarks he wished. In response, Professor Delpy commented again on the communication issue – the need to keep repeating messages. He commented that we were in a situation where overall funding was likely to be declining to some extent over the next few years and that we were all on the same side and we must continue to have a positive, honest dialogue. However, what is required are good, objective and clear arguments for funding. Nothing, and no current programme, can be taken for granted.