

30th November 2011

Advisory Board Structure Consultation

Introduction

1. STFC Council agreed in July 2010 to implement a number of changes to the Science Committee structure. A revised Science Board came into operation on 1 August 2011. STFC Council also agreed to seek advice through consultation on the future structure of Advisory Panels reporting to Science Board. A twelve week consultation was launched on 25 July 2011 and finished on 14 October 2011. A total of 38 responses were received, including group responses from the Royal Astronomical Society and Institute of Physics. Based on suggestions from the community, a proposal for revising the Advisory Panels (APs) was discussed by Science Board on the 11th November 2011. The proposed Advisory Panel structure was endorsed by Council on the 22nd November 2011. This paper summarises the responses from the consultation and the new advisory panel structure.

Advisory Panel Structure

2. STFC places great importance on obtaining strategic and peer review advice from the external scientific community and other stakeholders. This advice plays an essential role in the decision making process within STFC. External strategic advice is required at all levels to ensure that STFC strategy and roadmaps are focused on the most important and internationally competitive scientific and technological objectives and drive the strategies of our international collaborators and partner organisations.
3. STFC will establish an advisory panel structure which will facilitate the gathering of expert advice from the community on scientific and technological priorities.
4. A clear distinction will be made between Science Board and the APs regarding their respective roles. Science Board is a strategic committee providing scientific overview and assessment of, and science advice on, all of the programmes STFC supports. The APs should represent the views of their specific communities and develop science and technology roadmaps relevant to their specific areas. There are likely to be instances in which

Science Board does not follow all AP recommendations when tensioning across the whole of the STFC programme, and the process set out above is designed to address this issue in a transparent manner.

Particle Physics, Astronomy and Nuclear Physics programme

5. For the grant funded science programme, advisory panels reporting to Science Board will be established in the following areas:
 - Particle Physics AP
 - Nuclear Physics AP
 - Particle Astrophysics AP
 - Astronomy AP
 - Solar System Science AP
6. The Astronomy and Solar System Science APs will be encouraged to meet together, as will the Particle Physics and Particle Astrophysics APs, but all APs will be encouraged to maintain appropriate links.
7. The purpose of the advisory panels is to provide a link between Science Board and the community, and represent the needs and views of the community to STFC. Specifically the advisory panels will be mandated by Science Board to:
 - maintain an overview of activities within the area;
 - develop and maintain a roadmap describing current and future research opportunities in their areas, for presentation and approval by Science Board; develop and maintain a technology roadmap for their area of research for presentation and approval by Science Board; provide advice to Science Board on specific questions as requested.
 - liaise with the other APs as appropriate.
8. APs will be required to report on these activities to Science Board on a regular basis using the process set out below. The strategic science and technology advice will be used by Science Board as input to ongoing strategy development and in future Programmatic Reviews.
9. Each advisory panel will consist of a chair and deputy and up to twelve other members. The final panel size will be dependent upon the size of the community and the need to ensure that the panel membership fully reflects the breadth of the community.
10. Panel members will be appointed by Science Board, based on recommendations by a sub-group comprising members of Science Board and STFC Executive, following an open nomination process in which the community can participate. One or two members of each AP can be appointed by the Chair; following their appointment, the APs can set up and run a process so that this can happen.

11. STFC will provide administrative and financial support to allow the APs to hold one to two in-person meetings per year and an annual community meeting. The APs will be encouraged to self-organise email discussions and teleconferences in between these meetings. The APs should also seek community input through other consultative methods such as email/online consultations. STFC will provide access with editing rights to the STFC Community webpages for use by the APs when consulting with the community. These can be used for hosting information and documents and as a forum for discussion.
12. The APs will report directly to Science Board. AP Chairs will be invited to attend Science Board to report at least annually and attend as observers as appropriate. Science Board will consider the APs robustly and will provide feedback to AP Chairs either in person at the meeting or written feedback following the meeting. This will be especially important where the recommendations of Science Board differ from those of the AP.
13. In order to aid two-way communication between Science Board and the APs, the Board will provide specific guidance and information to the APs when appropriate and Science Board members should be invited to attend AP community meetings.

Facilities programme

14. The consultation emphasised that STFC should continue to consult with facility users in order to obtain strategic advice regarding the STFC facilities programme. The existing Facility User Groups and Facility Advisory Boards have specific remits regarding single facilities and their remits would need to be changed substantially in order to provide Science Board with strategic advice across a range of facilities.
15. Aware of the role that the Large Facilities Steering Group plays within the facilities programme, STFC is responsible for “actively managing and carrying out the process of deciding which facilities are considered for funding to provide the research funders requirements”. The Research Funders are responsible for obtaining input from the end user communities regarding their science requirements and producing corresponding requirements documents.
16. Taking account of this, STFC will consult with the users of its large facilities to obtain strategic advice regarding the STFC facilities programme (including the international subscriptions) and to identify and appraise new opportunities for facility development. When consulting, STFC will refer to advice received by the Research Funders regarding the science requirements of their communities.

17. STFC will establish two facilities advisory panels reporting to Science Board: a Physical Sciences and Engineering Advisory Panel and a Life Sciences and Soft Materials Advisory Panel. These APs will operate in a similar fashion to the grants programme APs as outlined above. The APs will still maintain the core function of representing the community needs to Science Board however their remits would vary according to their purpose outlined in Paragraph 35.

Advisory Panel Structure Consultation

18. STFC Council sought advice through consultation on the future advisory structure. A twelve week consultation was launched on 25 July 2011 and finished on 14 October 2011. The consultation questions can be found in Annex 1. A total of 38 responses were received. The breakdown of responses received is as follows:
- 26 – Individuals
 - 7 – Institutions/departments
 - 3 – Learned societies (Institute of Physics, Royal Astronomical Society and Royal Society of Chemistry)
 - 2 – Advisory committees
19. There were 11 responses focused on the facilities related question and 28 responses focused on the particle physics, astronomy and nuclear physics advisory panel related questions. One response addressed both of these areas.

Summary of Consultation Responses

20. The consultation responses broadly welcomed the decision by STFC to simplify and streamline its advisory processes. Concerns were raised regarding the ability of a single committee to adequately represent and consider the whole of the STFC programme. Given the merger of PPAN and PALS into Science Board, respondents emphasised that the Advisory Panels should therefore play an important role in providing Science Board with subject-specific expertise.
21. Responses to the specific consultation questions are summarised as follows.

For the grant funded science programmes, advisory panels reporting to Science Board should be established in the following areas:

- a. Astronomy***
- b. Nuclear Physics***
- c. Particle Physics***

d. Particle Astrophysics

22. The consultation responses clearly welcomed the intention to re-establish advisory panels (APs) reporting to Science Board in the grants funded programme; and emphasised the important role that the APs can play in representing the community.
23. The responses to the specifically proposed APs varied. There was a feeling from some responses that the proposed APs did not adequately reflect the programme and size of each community, and may give the impression that smaller programmes “have excessive influence” in strategy development. Science Board noted that the APs represented programmes of different sizes and that this would be taken into account when tensioning advice from each AP.
24. Some respondents note that a single astronomy AP may prevent areas of science from “falling between the cracks” and would also facilitate interactions with the UK Space Agency. There was a strong feeling that the size of the astronomy programme necessitated two APs. Suggestions for determining the split between astronomy APs included:
 - Consulting the previous AP reports for suggestions,
 - Maintain Near Universe AP and Far Universe AP,
 - New Astronomy AP and Solar Science AP,
 - New Astronomy and Astrophysics AP and Planetary and Space Physics AP.
25. Some respondents felt that there should not be a separate particle astrophysics AP and suggested that this should be folded into a particle physics or astronomy AP. Science Board noted particle astrophysics was an area of strategic importance and that there was a need for an AP not only to allow the UK community to provide strategic input but also maintain a European standing in this area.
26. Other suggested APs include an Accelerator Physics AP; and a Space Strategy Board to manage STFC’s interface with the UKSA. Science Board noted the existence of the Accelerator Strategy Board and that the relevant Astronomy APs should also consider the science that is supported by UKSA provided facilities.

For the facilities, comments are solicited on:

- a. Whether the users groups offer sufficient opportunity for facility users to provide strategic input to STFC.***
- b. What changes would be needed to facilitate this input.***
- c. Whether there is still a need for the Photon and Neutron Advisory Panels.***

27. The consultation responses suggest that the facility user groups do not offer sufficient opportunity to provide strategic input to STFC. User groups are considered to serve a specific purpose in providing advice on a particular facility rather than broader overarching strategic advice which helps to shape the programme. They are also limited to the users of the facility in question rather than the broader community.
28. Accordingly, respondents felt that there was still a need for at least one AP in the facilities area and that a facilities AP would also provide a balance between the grant funded programme and facilities programme. It was suggested that APs offer advantages over user groups in that they provide balance between the users of different facilities and from different research areas; provide focus and leadership when representing a range of facility users; and can include broader community expertise (including international experts).
29. It was suggested that a facilities AP could link into the existing user groups.
30. Respondents noted that there was not yet clarity regarding the ways in which other Research Councils (as the prime drivers within the Large Facilities Funding Model) would consult with facility users. Respondents noted that a facilities AP could assist STFC in shaping its programme and would base this advice on evidence of wider research outputs rather than grant research inputs.

It is proposed that membership of all the advisory panels should be appointed by Science Board, based on recommendations of a sub-group comprising members of the Science Board and STFC executive following an open nomination process adhering to the Nolan Principles.

31. There was a mixed response to this proposal. A number of responses agreed with the proposal. An equal number of responses disagreed with the proposal and noted that this approach could lead to the “system becoming self-propagating along lines that maintain the status quo”. It was also suggested that AP members appointed in this way may not have the necessary connections with the community. It was suggested that these issues could be overcome by allowing an open nomination process; asking group leaders to elect members; or having an independent representative (e.g. from the Institute of Physics or Royal Astronomical Society) sit on the sub-group.
32. It was suggested and agreed that existing AP members are considered for membership to provide some continuity.
33. It was suggested that the criteria for selecting AP members should be published.

The Advisory Panels' purpose and remit.

34. The consultation responses identified a range of activities which could sit within a well defined AP purpose and remit:
- Develop a short, medium and long term science vision and strategy by assessing the scientific merit of future research/missions/projects/opportunities;
 - Develop a technology roadmap;
 - Provide input to future Programmatic Reviews [not specified if this refers to reviewing current projects/research];
 - Provide a link between the Science Board and the community;
 - Assist in the development of the web-based Science Roadmap;
 - Provide advice on specific questions as requested.
 - Respond to STFC consultations on behalf of the community.
 - Prioritise the science programme but *only* if given financial information to allow this to be done effectively.
 - Maintain an overview of activities within the field;
 - Organise a one day community/town meeting to allow discussions with the community;
 - Organise meetings between the AP, grant holders and major project PIs to discuss topical issues;
 - Liaise with the other APs.

The optimum size of panels.

35. Respondents varied in their comments on the optimum size of panels. Suggestions were made of between five and fifteen members. Responses emphasised the need to ensure that the panel size reflected the size of the community and that the members covered the breadth of research within each area (including interdisciplinary research).

The balance between frequency of meeting, cost and effectiveness.

36. Respondents considered that as the three science advisory committees (Science Board, PPAN and PALS) had been merged into one Science Board, there was an even greater need for the APs to meet regularly and to be provided with secretariat support accordingly.
37. Most responses considered that the APs should meet in person at least once or twice a year supplemented by telephone conferences and email discussions as appropriate, in between face to face meetings.
38. Respondents considered that each AP should hold at least one community/town meeting per year to consult directly with the community.

39. Some respondents from the particle physics community highlighted the methodology of the Particle Physics Advisory Panel as being highly effective and encouraged STFC to consider this. This is shown below:
- Meeting (by teleconference) roughly every 2 months, to maintain an overview of UK PP activities and international developments.
 - Organising an annual 1-day community ‘town meeting’ for discussion of the UK PP programme, project statuses, and new opportunities.
 - Organising ad hoc meetings (about twice per year) between PPAP, the rolling grant-holders, major project PIs and the STFC Executive to discuss topical issues of concern to the community.
 - Meeting ad hoc with the Executive to provide input on specific issues.

Interactions between the panels and community, and between the panels and the new Science Board.

40. Respondents noted that the APs played an important role in connecting the community and Science Board. It was suggested that the APs hold regular (at least once a year) community/town meetings as well as consult in other ways. Sufficient time should be allowed for the APs to consult with their community when necessary. One respondent suggested that the APs should publish their minutes to ensure transparency of operation.
41. Respondents welcomed the direct reporting line between the APs and Science Board. It was suggested that Science Board should give the APs a clear and specific mandate, which also specifies the level and regularity of interactions between them. There were differing views on how often the APs should interact with Science Board. It was suggested that the APs should report at least yearly and more regularly on any other issues as required. The respondents observed that in previous interactions between Science Board and APs, it was perceived that Science Board had not clearly fed back any differences of opinion. It was suggested that Science Board should consider advice from the APs robustly and provide transparent feedback when advice was not able to be acted upon.
42. A recurring suggestion from respondents to enable efficient two-way communication between the APs and Science Board was that AP Chairs should attend Science Board in some capacity. This could be done by AP Chairs attending as observers for all or some of the appropriate meetings; or AP Chairs having non-core Science Board member status and sitting on the appropriate sub-groups.
43. It was suggested that Science Board members be invited to attend relevant community meetings to allow direct communication between Science Board and the community.

Other comments

44. Respondents broadly welcomed the attempts by STFC to simplify the advisory structure and emphasised the need for Science Board to maintain a balance in its representation of the STFC programme and to ensure they are educated across the whole of the STFC programme. It was noted that the advisory structure needed to maintain its rigour in decision making within a simplified structure.
45. Some respondents identified the following areas as those where they thought Science Board needed further representation: particle theory, particle physics and structural biology (synchrotron user). It was stated by respondents that it was important to maintain the presence of space scientists on STFC committees even with the existence of the UKSA.
46. The following questions were also raised in the consultation and are addressed below:
- *How does the Accelerator Strategy Board fit with the APs?*
The role of the ASB is to “recommend an accelerator plan, taking into account the agreed programme priorities, synergies between areas and the long term science strategy”. As part of their technology roadmaps, APs may identify accelerator needs. These will be fed into the ASB as part of the process of developing an accelerator strategy.
 - *Who should consider science areas considered to cut across the APs?*
The APs remit includes a requirement to liaise with other APs as appropriate.
 - *How does Science Board intend to use its non-core members?*
A college of non-core experts will be established so as to provide Science Board a wider breadth of knowledge to be called upon as required. It is anticipated that STFC, on the basis of need, will establish time limited subgroups of both core and non-core members to carry out particular tasks. For example, non-core members will be called upon to assist in carrying out reviews or provide specific technical expertise when developing the programme.