

House of Commons
Science and Technology
Committee

**NATIONAL
ENDOWMENT FOR
SCIENCE, TECHNOLOGY
AND THE ARTS:
A FOLLOW-UP**

Sixth Report of Session 2001–02

*Report, together with
Proceedings of the Committee,
Minutes of Evidence and Appendices*

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Footnotes

In the footnotes of this Report, references to oral evidence are indicated by 'Q' followed by the question number. References to written evidence are indicated by the page number as in 'Ev 12'.

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SIXTH REPORT

The Science and Technology Committee has agreed to the following Report:

NATIONAL ENDOWMENT FOR SCIENCE, TECHNOLOGY AND THE ARTS: A FOLLOW-UP

I. INTRODUCTION

NESTA and the National Lottery Act 1998

1. In 1997, the White Paper *The People's Lottery* set out the case for an organisation which would identify and foster innovation and creativity, in order to develop and commercialise original artistic and technological ideas. The National Endowment for Science, Technology and the Arts (NESTA) was set up under the National Lottery Act 1998. Under the provisions of the Act, NESTA's objective is to "support and promote talent, innovation and creativity in the fields of science, technology and the arts":¹

- by helping talented individuals or groups in the fields of science, technology and the arts to realise their potential;
- by helping to turn inventions or ideas in these fields into products and services which can be effectively exploited and the rights to which can be effectively protected; and
- by contributing to public knowledge and appreciation of science, technology and the arts.²

Funding and status

2. Funding for NESTA took the form of a one-off endowment of £200 million, derived from the profits of the National Lottery. In 1998, this was expected to provide NESTA with an annual income of around £12 million.

3. NESTA was launched on 30 June 1999; its programmes became active in December 1999. It is an executive non-departmental public body of the Department for Culture, Media and Sport. NESTA is governed by a board of up to thirteen trustees, which meets five times a year, chaired by Lord Putnam of Queensgate. The staff are led by Jeremy Newton, the Chief Executive. NESTA's core work comprises three distinct programmes: Invention and Innovation; Fellowships; and Education.

Our inquiry

4. Our predecessor Science and Technology Committee reported on NESTA in 1999, shortly after NESTA announced its first schemes.³ The Committee welcomed NESTA and urged it to take a strategic approach to its activities. It encouraged NESTA to take a high risk approach and suggested that NESTA should be evaluated over the long term "on a

¹ National Lottery Act 1998, section 17(1)

² National Lottery Act 1998, section 17(2)

³ *The National Endowment for Science, Technology and the Arts*, Second Report of the Science and Technology Committee, Session 1998-99, HC 477 (hereafter HC 477)

basis of output and value for money rather than operational cost efficiency".⁴ As NESTA approached its first quinquennial review, we decided to follow up that Report and examine NESTA's progress.

5. Lord Puttnam of Queensgate, Chair of NESTA, Mr Jeremy Newton, Chief Executive and Mr Mike Tomlinson, Director of Science Year and Education Committee member, appeared before us on 8 July 2002. We received written memoranda from NESTA and also the British Antarctic Survey and Braunarts; the Arts and Humanities Research Board; the Department for Culture, Media and Sport; the Particle Physics and Astronomy Research Council; the Royal Academy of Engineering and the Royal Society. We are grateful to all those who provided evidence to us and especially to our specialist adviser Professor Michael Elves, former Director of the Office of Scientific and Educational Affairs, Glaxo Wellcome plc.

⁴ HC 472, para 9

II. PROVISION OF INFORMATION

Reports

6. NESTA has produced three Annual Reports and a three year Strategy Plan for 2000 – 2003. All are available on NESTA's website. We looked to these for information about NESTA and its activities. The Annual Report 1998–1999 is brief, as is reasonable for such a young organisation, and contains information about its plans for future work and targets for its administration and award schemes. *Journeys*, the Annual Report for 1999–2000, and *Take the Plunge*, the Annual Report for 2000–2001, might be expected to contain more factual information. Both have chapters dedicated to describing current projects and award recipients. Neither have detailed information about costs or programme objectives. *Journeys*, for example, includes two 'think' pieces, "Patronage – creative space or creative shackles" and "Are UK investors brave enough?" which although relevant in subject to the work of NESTA are of no value in describing or assessing what NESTA has achieved in the past financial year. "Patronage," for example, tells us

"Design and the emotional and aesthetic responses that it provokes, together with a whole set of hard-to-define qualities known as "symbolic values" are what give products, and the economies that produce them, their competitive edge".⁵

The section containing the summary financial statement however warns the reader "This summarised statement does not contain sufficient information to allow as full an understanding of the results and state of affairs of NESTA as would be provided by the full Annual Accounts".⁶ It explains that the full Accounts can be provided on written request from NESTA.

7. *Take the Plunge* is divided into three parts: "Talking the talk", "Walking the walk" and "Putting our money where our mouth is". "Talking the talk" is comprised mostly of a "conversation" between Lord Puttnam, Chair of NESTA and Jeremy Newton, Chief Executive, with an outline of NESTA's future plans. "Walking the walk" contains short descriptions of various projects and "Putting our money where our mouth is", the shortest section by far, contains outline financial statements and targets for the coming year in the form of a Business Plan.

8. NESTA's Annual Reports are a break from the norm. While it is refreshing to see a creative approach in these documents, the cost of these publications and the need to convey essential information to the reader make it important that they be clear and concise in style. An Annual Report which contains essays but lacks full financial statements is of no assistance to those attempting to evaluate the work of a publicly funded organisation. **Annual Reports should not read like the production notes in a theatre programme. Creativity should not be at the expense of clarity. We recommend that NESTA in future provide Annual Reports which contain clear and full information on expenditure, including awards made; the targets; and expenditure plans.**

⁵ *Journeys*, NESTA's Annual Report 1998–1999, Patronage – creative space or creative shackles

⁶ *Journeys*, NESTA's Annual Report 1998–1999, Summary Financial Statement

Website

9. NESTA's website has information about its programmes and how to apply for grants. It also has an archive of press releases and brief background information. Those interested in NESTA's work are able to find information about its programmes and advice on making an application. Information about how NESTA makes its awards and the financing behind them is harder to find. We would like to see NESTA making greater use of its website in order to enhance its accountability to the public in a transparent manner. For example, full accounts should be made available online, to accompany the Annual Reports. **We urge NESTA to make greater use of its website in conveying important information to those seeking to evaluate its work.**

III. WORK OF NESTA

Programmes

Invention and Innovation

10. The Invention and Innovation programme is designed to help inventors develop ideas into commercial products and services. Funding supports a range of activities such as research and development, patenting and securing intellectual property right and general business costs. Since funding began, in 1999, to the end of June 2002, NESTA had spent £5.3 million on 94 awards.⁷ As part of the programme, NESTA takes a stake in each business. Any returns generated are invested in new projects.

11. NESTA's Annual Report 2000-2001 contains a variety of 'success stories' from the Invention and Innovation programme. The memorandum we received detailed some of the projects funded by NESTA. These varied from the production of a device to simplify key hole surgery to the development of a method of making music from the structures of protein molecules.⁸

12. 2,000 applications have so far been received for the awards. The number of awards given each year has steadily increased.

Table 1: Invention and Innovation awards distributed

Financial Year (April to March)	Number of Awards	Amount spent (£ million)
1999-2000	7	0.5
2000-2001	34	2.3
2001-2002	40	1.7
1 April 2002 – 20 June 2002	13	0.8

Source: NESTA⁹

Lord Putnam told us that NESTA decided at its inception to devote around 40% of its annual income to its Invention and Innovation programme.¹⁰ Mike Tomlinson, Director of Science Year and a member of NESTA's education committee, explained "you have to accept that from the point at which an idea is developed to its actual production, the selling of that product and the making of it, is not a short period of time. It can be lengthy and it can be quick, but there is a period of time. I think it takes about two years between an idea going through to actual production".¹¹ NESTA has now received its first royalty cheque although Jeremy Newton told us that it was worth "less than £1,000".¹²

⁷ Ex 18

⁸ Ex 21-23

⁹ Ex 24

¹⁰ Q 15

¹¹ Q 49

¹² Q 48

13. Jeremy Newton told us in detail about some of NESTA's most successful projects. In addition to the one project already producing royalties for NESTA, he estimated that five or six would begin to show a return within a year. He said –

"Most of the successful invention and innovation projects, interestingly, are in the transport area. They are either very small-scale improvements to engine design, like the one that is already delivering income, or they are very, very large-scale ambitious projects like the amphibious vehicle, which is one of our first projects. That has now received its first million pound order for four large-scale vehicles from British Waterways, who are keen to buy more; and Mitsubishi are planning to order many more. There is a substantial amount of income that we are likely to derive from that project. Cardiff have just committed over £25 million to the Ultra Urban Light Transport Scheme that Martin Lowson developed—again, one of our early projects. Our equity participation in that will mean that we will start to derive income, and probably quite a substantial capital gain from that over the next few years".¹³

We are encouraged to see that NESTA's Invention and Innovation programme has produced its first commercial success. We hope that it will continue to see a return on its investment as projects come to fruition and recommend NESTA state clearly in its annual reports the level of return it achieves.

14. Our predecessor Committee's Report stated "NESTA will have to take risks with its selection of individuals to be nurtured and ideas to be exploited. If NESTA is to succeed overall, it must dare to fail on specific projects". We asked about the failure rate of projects so far. Jeremy Newton told us that four of the Invention and Innovation projects had so far been written off: "In two of those cases, they are fascinating failures, if you like, and we have learned more from them than we have learned from most of our successes".¹⁴ We were worried that so few awards were made in the first years of NESTA and asked whether those in charge at NESTA felt that they had been too cautious or had 'dared to fail'. Lord Puttnam told us –

"in the past two years we have absolutely spent up on the sums of money available to us and we have taken some significant chances; and I am quite sure that we will fall on our faces on one or two occasions; but I now think that we have enough of a track record now to be able to deal with that. I was less confident that was the case two years ago".¹⁵

We encourage NESTA to continue to take chances with its Invention and Innovation projects.

Fellowships

15. NESTA awards bursaries or Fellowships each year across the fields of science, technology and the arts. The value of these awards varies from £25,000 to £75,000 and they range from three to five years in length. Most Fellowships are awarded early in the individual's career and are made to those outside academia. Jeremy Newton said that "a small minority ... find their way to institution-based academics, university-based academics".¹⁶ Funding is provided for different activities depending on the needs of the Fellow, such as financial assistance in attending courses, providing an income during research and development and research costs. A new Fellowship, the "Dreamtime" award,

¹³ Q 42

¹⁴ Q 51

¹⁵ Q 28

¹⁶ Q 31

is to be introduced in 2003. This will be a Fellowship lasting up to a year for individuals established in their careers to take a break from their work for personal development.

16. The number of Fellowships awarded has increased at a similar rate to the Invention and Innovation awards.

Table 2: Fellowships awarded

Year	Awards made	Amount spent (£ million)
1999-2000	6	0.5
2000-2001	15	1.3
2001-2002	35	2.4
1 April 2002-30 June 2002	3	0.2

Source: NESTA¹⁷

The Royal Academy of Engineering praised NESTA's Fellowship scheme, and mentioned the mentoring aspect of the award: "Most NESTA Fellowships involve the appointment of a mentor, who can act as a source of support and advice, as well as playing a role in assessment and monitoring. This scheme works well, with many mentors providing advice and assistance 'beyond the call of duty'"¹⁸

17. The Arts and Humanities Research Board (AHRB) expressed concerns about aspects of NESTA's Fellowships.¹⁹ In its business plans, NESTA has given targets for the number of Fellows it wishes to appoint each year. The AHRB was not sure why NESTA wanted to set targets. We asked NESTA if it had met its target of creating 30 Fellows in 2001-2002. Lord Putnam told us that they had appointed 28, although figures provided after the evidence session state that 31 had in fact been appointed.²⁰ We too question the wisdom of targets for Fellowships, given that the length and amount awarded varies according to the recipient. **There is a risk that targets might lead to the appointment of NESTA Fellows for the sake of it.**

18. NESTA's first Fellowships are still ongoing. The AHRB told us "we are not clear as to the monitoring and evaluation strategies and mechanisms that have been put in place to enable NESTA to reach a rigorous assessment of whether the scheme has met the aims and objectives set when it was established".²¹ We share these concerns but appreciate that it will not be possible to carry out a full appraisal of the scheme until the conclusion of the first set of Fellowships. **We urge NESTA to identify the objectives of the Fellowships, and the basis of its monitoring and assessment of them, and to carry out an appraisal of its Fellowship programme once the first awards are completed.**

¹⁷ Ex 24

¹⁸ Ex 33

¹⁹ Ex 30

²⁰ Q 52, Ex 24

²¹ Ex 31

Education

19. NESTA's education programme aims to work through collaborative projects to further public understanding of science, technology and the arts. Each year a 'priority' area is selected and project proposals are then invited, which are put to the Education Committee. Successful bidding organisations then work in partnership with NESTA. In the last three years, these areas have included stimulating interest in design and technology and the re-engagement in learning of low-performing groups. NESTA told us "we seek out initiatives which improve the public's understanding of creativity and we pilot new methods of creative learning and support ways of fostering individual talents".²² The value of the award varies from project to project. From 1999 to 30 June 2002, NESTA spent £4.6 million on 69 education projects.²³ Examples include "Technogames", a robot-building exercise carried out with the BBC and others which is now in its second year, and Online Jemma, a 'cyber heroine' studying science who will take part in interactive online dramas featuring topical science related issues, invented by XPT Ltd.

20. The Royal Academy of Engineering told us " [we] would encourage NESTA to steer away from supporting educational projects, for which other sources of funds exist".²⁴ We put this suggestion to NESTA. Lord Puttnam rejected it, telling us "I would say that of all the relationships we have created in the last two years, the most dramatically successful and productive has been that with the Qualifications and Curriculum Agency over the re-design or support for the design technology curriculum".²⁵ We received a memorandum from the British Antarctic Survey and Braunarts who have been involved in Education projects for two years. They told us "Working with NESTA's education team has been a very positive experience for our production team. During the two years since we first approached NESTA for funding ... we have received an unprecedented level of support and encouragement as well as practical guidance".²⁶ **NESTA's Education programme appears to have found a niche in an overcrowded market and we are pleased to hear of its successes. We recommend that NESTA take steps to ensure that it is not funding projects which could be better funded by others.**

Applications for funding

21. Jeremy Newton explained the process used by NESTA in allocating awards across its programmes. Three committees, each comprising three to four trustees (members of NESTA's governing board) and the same number of non-trustees, decide which applications will be successful. The inventions and innovations committee meets monthly and the others every other month. Mr Newton told us –

"They receive quite a substantial amount of background information about all of the substantial proposals we have had in the previous couple of months, and they are discussed and decided on in detail at that stage. They have a reasonable degree of delegated authority to take smaller scale financial decisions. In larger scale cases they are remitted to the next full trustee meeting for final ratification. Most of the detailed discussions and assessments and decision-making is done at committee level".²⁷

²² Ex 16

²³ Ex 24

²⁴ Ex 33

²⁵ Q 71

²⁶ Ex 32

²⁷ Q 44

Applications for the Invention and Innovation and Education programmes are open to all. The Department for Media, Culture and Sport told us that NESTA was “seen as a model for electronic handling of applications”.²⁸

22. The AHRB perceived that “the majority of awards to date have been made in various areas of the arts”.²⁹ We would be concerned if this were indeed the case. Lord Putnam told us that NESTA did not separate what was spent on the arts, technology and science, “as we believe that could lead us into making a series of wrong decisions, so we try very, very hard not to make decisions on that basis, certainly quarter-to-quarter”.³⁰ We asked if NESTA monitored its work across the categories. Lord Putnam replied “we monitor very closely, but not in a category sense”.³¹ **NESTA covers science, technology and the arts. We recommend that NESTA give close attention to the distribution of its awards between those sectors as well as the quantity.**

Nominations for Fellowships

23. NESTA Fellows are selected by a network of nominators, experts who are asked to identify talented people in their areas: there are around 150 nominators at any one time. Each nominator may only make two nominations. Once nominated, the candidates are subject to consideration by a fellowship committee and an independent assessor. Applications are not openly sought and only those nominated by the nominators will go forward for consideration by the fellowship committee. Our predecessor Committee’s Report concluded that

“NESTA will have to be constantly alive to the risk of partiality in the selection of Fellows and projects. It must also be prepared for close scrutiny of its selection procedure and be able to demonstrate that it is operating in a fair and open manner”.³²

We heard no criticism about this method of selecting Fellows in the memoranda we received. The Department for Culture, Media and Sport told us “on the whole, the selection processes are open and fair”.³³ Professor Ian Halliday, the Chief Executive of the Particle Physics and Astronomy Research Council (PPARC), who had acted as a NESTA nominator, pointed out that inviting applications for such Fellowships might well have resulted in many thousands of applications. He felt NESTA had acted wisely when it “chose instead to seek Fellowship nominations through organisations such as PPARC who already had highly competitive selection schemes in place for funding individuals”.³⁴ Lord Putnam told us that NESTA had taken its system from the MacArthur Foundation in the United States because “it would have been very easy in years one and two to be flooded by an avalanche of inquiries, and then you are just dealing with the consequent situation in which many people are terribly disappointed”.³⁵

24. We asked how NESTA picked its nominators and Lord Putnam told us the organisation had looked for people who were “full of energy and self-starters”.³⁶ NESTA told us in writing that “nominators are recruited for their level of expertise and achievement within a specific field...and for their knowledge of cutting edge practice ... Nominators

²⁸ 13, 29

²⁹ 13, 33

³⁰ Q 36

³¹ Q 37

³² HC 477, para 11

³³ 13, 29

³⁴ 13, 35

³⁵ Q 56

³⁶ Q 55

come to our attention through networking, suggestions (solicited and unsolicited), desk based research, our own contacts within the sector and through media attention".¹⁷ Organisations such as PPARC have also been invited to become nominators and 50 are now registered. Having received almost no nomination from the East Midlands and appointing no Fellows from that region, NESTA has established a network of 'talent scouts' there to be more pro-active in finding nominations. Across the country it is also inviting organisations to nominate individuals. We note with approval that the new Dreamtime Fellowships will be open to applications from all.

25. We remain to be convinced that the nomination system does not rely too heavily on who knows whom. Nominators are not recruited through an open appointment system. We understand that NESTA's nomination system is designed to avoid a flood of applications which could overload its administrative capabilities. We have not heard any evidence of problems with applications to NESTA's Fellowship programme but we are nevertheless concerned that it lays the organisation open to accusations of networking or favouritism. Those who are not working in areas which have a nominator appointed within it, or do not move in the same circles, may not be given access to a Fellowship. We recommend a rethink of this system to ensure it does not discriminate against any suitable candidates.

Other work

26. Over the past four years, NESTA has also moved into other areas. It has taken the lead in the Government's *Science Year* project; developed the NESTA Futurelab, which is a project to discover new ways of using new technologies in education, and extended its awards programmes. Partnerships have been established with other bodies for a series of projects. For example, the Science Museum and the Royal College of Art have produced a 'Product of the Future' exhibition which showcased young designers' work. Channel 4 and Blackwatch Television have received backing for a digital animation project. MESH; and NESTA and the BBC, in partnership, distribute the Tomorrow's World Awards for inventions and innovations.

Science Year

27. NESTA was awarded the contract to manage Science Year by the Department for Education and Skills (DfES). Funding for Science Year was initially £3.35 million.¹⁸ It was to run from 7 September 2001 to 31 August 2002 and was aimed at 10 to 19 year olds. In July 2002, DfES announced that it intended to extend Science Year to July 2003 and rename the project Planet Science. We asked NESTA whether Science Year had cost it any money, in terms of extra staff or programme costs. Jeremy Newton told us

"it is all paid for from the DfES. We have allocated some of our programme money towards projects that relate to Science Year, so some of NESTA's education programme money has been allocated to the Science Year project; but the total operating bill has been picked up by DfES".¹⁹

We were told that NESTA would retain management of the project for as long as it runs. Lord Puttnam told us that NESTA would sign a new contract and "see it through".²⁰

¹⁷ F 27

¹⁸ Q 45

¹⁹ Q 82

²⁰ Q 81

28. Mike Tomlinson, Director of Science Year, told us "I am worried at the moment how one is going to say to schools in September that we are not finished and we are starting again with a second year ... We are faced with a challenge".⁴¹ The profile of Science Year has not been as high as its organisers had hoped. NESTA told us that there had not yet been any formal evaluation of the success or otherwise of the project but that "quantitative measures, for example the numbers of schools, teachers and pupils involved in different activities" appeared to show a good level of involvement.⁴² We are concerned that the public awareness of Science Year/Planet Science, a project to which well over £4 million has already been committed, may be low, even among those in the target age range. **We recommend a thorough analysis of Planet Science be carried out as soon as practicable, and an assessment of its impact in the media and in schools made to inform future projects of this nature.**

⁴¹ Q 78

⁴² Q 79

IV. FUNDING

Expenditure

General

29. NESTA's expenditure and its funding commitments for 2001-2002 are contained in its *Business Plan*, which is found in its *Annual Report for 2000-2001*.⁴³ More detail is provided in the full published accounts.⁴⁴ NESTA's *Business Plan* also contains targets for the number of awards it intends to distribute over the coming year. The *Business Plan* for 2001-2002 was the most recent available to us. It shows a total commitment of £12.8 million, broken down over the three main programmes and non-programme related costs. However, the figures we received from NESTA after our evidence session were significantly different.

Table 3: Costs for year 2001-2002

	Fellowships (£ million)	Invention and Innovation (£ million)	Education (£ million)	Non- programme costs (£ million)
Business Plan	3.4	4.6	3.4	1.4
Memorandum	2.4	1.7	1.6	

In its initial memorandum, NESTA gave us figures for total expenditure to April 2002. These showed a total commitment since 1999 of £4.45 million to Fellowships, £5 million to Invention and Innovation and £4.49 million to Education. Lord Puttnam told us that NESTA spent 30% of its programme expenditure on Fellowships, 30% on Education and 40% on Invention and Innovation.⁴⁵ This does not appear to be reflected in the figures we were given after the evidence session. We suspect that this confusion stems from the differences between "expenditure" and "commitment". NESTA's full financial accounts for 2000-2001 include breakdowns for "soft commitments", "hard commitments" and "provision for hard commitments".⁴⁶ The figures NESTA gave us appear to be those for hard commitments. **We recommend that NESTA be clearer in its terminology when presenting financial information.**

30. In oral evidence with NESTA in July we tried to get a clearer picture of what had been spent where. We found confusion on the subject. For example, we asked about the £8 million that had been committed in the *Business Plan* to Invention and Innovation and Fellowships in 2001-2002. Jeremy Newton told us "and Education. The figure definitely was spread across all three [programmes]".⁴⁷ We asked about the £5 million which had been committed to 81 Invention and Innovation projects since 1999, according to NESTA's memorandum.⁴⁸ Jeremy Newton replied "That splits across both the Invention and Innovation and the Education programme".⁴⁹ Both these replies were at odds with the information we had obtained from NESTA's *Business Plan* and memorandum. Lord

⁴³ *See Take the Plunge*, NESTA's Annual Report 2000-2001.

⁴⁴ *National Endowment for Science, Technology and the Arts: Account 2000-2001*, HC 285, published October 2001.

⁴⁵ Q 15.

⁴⁶ HC 285.

⁴⁷ Q 30.

⁴⁸ Ex 18.

⁴⁹ Q 17.

Putnam then told us that "roughly £8 million has been spent on Invention and Innovation and £6 million each on Education and Fellowships".⁵⁰ We were told these were the up-to-date figures, which included activity to the end of June 2002. It seems unlikely that the totals had increased so much in three months. We assume that NESTA's accountants know how much it has spent and where, but it is worrying that the Chief Executive and Chairman can demonstrate such vagueness, not over thousands of pounds, but over millions. We note that NESTA's business plan for 2002-03 is still not available on its website, even though we are six months into the financial year. **We are disturbed at NESTA's lack of clarity surrounding its programme expenditure. We expect the next Annual Report to provide reliable figures, making it clear what has actually been spent and what is an estimate.**

Administration and staff

31. NESTA's initial memorandum did not include a figure for its administrative costs. The Business Plan committed £1.4 million to non-programme related costs in 2001-2002. NESTA told us that expenditure on administration in 2000-2001 was £1.27 million, which represents 9.8% of income for the year.⁵¹ The AHRB told us that its running costs were subject to a cap of 5% of total expenditure.⁵² The Research Councils are required to spend less than 4% of their total expenditure on administration. The breakdown of NESTA's expenditure on operating costs revealed that in 2000-2001 it spent substantial sums on agency staff and IT costs, respectively £149,000 and £185,000. NESTA explained to us in writing that this was in a period of development for NESTA. NESTA also has a target in its Business Plan for staff numbers which is set at 35. The 2001-2002 Business Plan included costs for 48 staff. We asked NESTA to explain. Jeremy Newton told us that the extra staff were partially made up by the Science Year team.⁵³ As we were told that these staff were funded by DfES, we do not see why they are accounted for in NESTA's Business Plan. We were told other staff were working on 'off-line arms' length projects.⁵⁴ We asked whether or not staff levels would return to 35. Lord Putnam replied "I do not think there is a hope in hell that we will keep to the 35".⁵⁵ If this target is unrealistic, it needs to be readdressed and new targets made. **We understand that NESTA may have faced high operating costs during its development. Nevertheless we hope to see administration decreasing as a percentage of NESTA's income in the future. We also urge NESTA to make a realistic estimate of its staffing needs in order to minimise the amount spent on agency staff and permit accurate financial planning.**

Endowment

32. NESTA was set up with an endowment from National Lottery funds of £200 million. The National Lottery Act requires NESTA to maintain, at least, the initial cash value of this endowment and to invest it via the National Debt Commissioners.⁵⁶ The core endowment can only be invested in very safe funds, as laid out in the Trustee Investment Act 1961. Income generated from the core endowment can then be invested in a far wider range of investments by an independent financial manager. In 1998, it was envisaged that the endowment would provide an annual income of around £12 million. In 2002, NESTA's annual income was close to £8 million per annum. Lord Putnam explained that this was due to "the lamentable regulations that require us to invest in the worst-yielding

⁵⁰ Q 18

⁵¹ Ex 23

⁵² Ex 31

⁵³ Q 45

⁵⁴ Q 45

⁵⁵ Q 46

⁵⁶ *Looking Ahead: NESTA's strategy 2003-2003*, section 4

government stock. That has hurt us particularly in the present economic climate. Frankly, if our original regulations had been more flexible, we could have invested the same money equally safely in something that gave us a significantly better return".⁵⁷ Treasury Bills, where most of the endowment is invested, are linked to interest rates, so returns in 2002 are low.

33. NESTA told us "the original conception (before it ever appeared on the statute book) was of NESTA as a half a billion pound endowment"⁵⁸ Under the National Lottery Act 1998, the Secretary of State for Culture, Media and Sport has the power to increase NESTA's endowment. NESTA has applied to the Department for Culture, Media and Sport for a graduated increase of its endowment to £500 million. It would like to expand its work in its different programmes, for example to create junior fellowships, provide second stage funding for projects in Invention and Innovation and expand the funding currently provided under that scheme. Lord Putnam told us

"I am making a very, very powerful case to DCMS: I think they will be making a shocking mistake not to increase our funding. It does not mean that they will not make a mistake, because there are many, many mistakes made in government, but I think they would be making a tremendous mistake, and it is, I am afraid, whether you like it or not, a remarkably small sum of money to be tackling the brief we have been given".⁵⁹

34. The Department for Culture, Media and Sport's memorandum states that it supports "in principle, some elements" of NESTA's bid for an increase in its endowment by £300 million and "is considering carefully the funding options".⁶⁰ We formed the opinion from the evidence given by Jeremy Newton that DCMS might be interested in expanding some of NESTA's schemes, such as the Fellowships and the Invention and Innovation awards, but had not given a blanket go-ahead for the increase in funding. Lord Putnam estimated that DCMS would meet NESTA "half-way" in the first instance.⁶¹ **We believe it is premature for NESTA to request a significant increase in its endowment. First it must better demonstrate its cost-effectiveness and be clear about how it would use its extra funds. It is a bit rich for an organisation getting £8 million a year to distribute in grants and bursaries, to go asking for more, when it is unable to maintain a clear grasp of how much it is spending and on what.**

⁵⁷ Q 12

⁵⁸ Ex 21

⁵⁹ Q 50

⁶⁰ Ex 20

⁶¹ Q 12

V. PROFILE

35. The Royal Academy of Engineering told us

"of over 130 Fellows of this Academy who responded to our call for comments, 110 professed no knowledge or awareness of NESTA whatsoever. Given that the Academy's Fellows occupy senior positions in academia and in major engineering companies...it is disappointing that so few are aware of the opportunities".⁶²

The AHRB commented "in the higher education sector at least, we believe that there is as yet very little understanding of what NESTA's distinctive role is, and of how, if at all, its activities are intended to complement those of other bodies".⁶³ We note that most of NESTA's Fellowships are distributed outside academia. We were interested to know whether obscurity concerned NESTA. Lord Puttnam explained "we were very conscious of the resources we had and the fact that we could very easily be criticised for spending significant sums on promoting ourselves as opposed to making sure the bulk of the money got into the hands of our awardees. There is now a realisation that we have to make more noise".⁶⁴ We think that NESTA's lack of profile in the academic community could lead to a failure to attract talented Fellows, awardees and nominators. A publicity campaign conducted jointly with bodies such as the Royal Academy of Engineering would not necessarily be very costly. **We urge NESTA to make efforts to raise its profile by ensuring that it has made itself better known to all relevant organisations and higher education institutions.**

⁶² 13.32

⁶³ 13.30

⁶⁴ Q 6

VI. CONCLUSION

36. We welcome the work that NESTA has done so far. It has set up three distinct programmes which are now fully in operation. Awardees have filed 30 new patents and registered 25 new companies. The Invention and Innovation programme has produced its first return. Although 'risk-taking' is not easy to measure, the projects undertaken by NESTA are varied and we await the outcome of some with interest, but we remain to be convinced that NESTA is making the most of its less than expected income. We are not impressed by NESTA's lackadaisical attitude to figures. We have some concerns about the lack of open competition in the system for nominating Fellows. We call for NESTA to put more substance than spin into its reports to the public. We hope to see evidence of improvement in these areas over the next year and expect that the quinquennial review will provide assistance in helping NESTA improve its efficiency. NESTA needs to demonstrate greater control over its income as a whole before it can claim to merit a substantial increase in its endowment; we hope that this will be achieved as NESTA moves out of its initial period of development. NESTA may well be able to claim there is a need to expand its programmes once it has raised its profile and seen concrete outcomes from its first projects.

LIST OF RECOMMENDATIONS AND CONCLUSIONS

Provision of Information

1. **Annual Reports should not read like the production notes in a theatre programme. Creativity should not be at the expense of clarity. We recommend that NESTA in future provide Annual Reports which contain clear and full information on expenditure, including awards made; the targets; and expenditure plans (paragraph 8).**
2. **We urge NESTA to make greater use of its website in conveying important information to those seeking to evaluate its work (paragraph 9).**

Invention and Innovation

3. **We are encouraged to see that NESTA's Invention and Innovation programme has produced its first commercial success. We hope that it will continue to see a return on its investment as projects come to fruition and recommend NESTA state clearly in its annual reports the level of return it achieves (paragraph 13).**
4. **We encourage NESTA to continue to take chances with its Invention and Innovation projects (paragraph 14).**

Fellowships

5. **There is a risk that targets might lead to the appointment of NESTA Fellows for the sake of it (paragraph 17).**
6. **We urge NESTA to identify the objectives of the Fellowships, and the basis of its monitoring and assessment of them, and to carry out an appraisal of its Fellowship programme once the first awards are completed (paragraph 18).**

Education

7. **NESTA's Education programme appears to have found a niche in an overcrowded market and we are pleased to hear of its successes. We recommend that NESTA take steps to ensure that it is not funding projects which could be better funded by others (paragraph 20).**
8. **NESTA covers science, technology and the arts. We recommend that NESTA give close attention to the distribution of its awards between those sectors as well as the quantity (paragraph 22).**

Nomination of Fellows

9. **We understand that NESTA's nomination system is designed to avoid a flood of applications which could overload its administrative capabilities. We have not heard any evidence of problems with applications to NESTA's Fellowship programme but we are nevertheless concerned that it lays the organisation open to accusations of networking or favouritism. Those who are not working in areas which have a nominator appointed within it, or do not move in the same circles, may not be given access to a Fellowship. We recommend a rethink of this system to ensure it does not discriminate against any suitable candidates (paragraph 25).**

Science Year

10. We recommend a thorough analysis of Planet Science [Science Year] be carried out as soon as practicable, and an assessment of its impact in the media and in schools made to inform future projects of this nature (paragraph 28).

Expenditure

11. We recommend that NESTA be clearer in its terminology when presenting financial information (paragraph 29).
12. We are disturbed at NESTA's lack of clarity surrounding its programme expenditure. We expect the next Annual Report to provide reliable figures, making it clear what has actually been spent and what is an estimate (paragraph 30).
13. We understand that NESTA may have faced high operating costs during its development. Nevertheless we hope to see administration decreasing as a percentage of NESTA's income in the future. We also urge NESTA to make a realistic estimate of its staffing needs in order to minimise the amount spent on agency staff and permit accurate financial planning (paragraph 31).

Endowment

14. We believe it is premature for NESTA to request a significant increase in its endowment. First it must better demonstrate its cost-effectiveness and be clear about how it would use its extra funds. It is a bit rich for an organisation getting £8 million a year to distribute in grants and bursaries, to go asking for more, when it is unable to maintain a clear grasp of how much it is spending and on what (paragraph 34).

Profile

15. We urge NESTA to make efforts to raise its profile by ensuring that it has made itself better known to all relevant organisations and higher education institutions (paragraph 35).