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Witnesses: David Willetts, Earl Howe, Lord Taylor of Holbeach and Nick Gibb

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Members present

Lord Krebs (Chairman)
Lord Broers
Baroness Hilton of Eggardon
Baroness Neuberger
Baroness Perry of Southwark
Lord Rees of Ludlow
Lord Wade of Chorlton
Lord Willis of Knaresborough
Lord Winston

Examination of Witnesses

Mr Nick Gibb, Minister of State for Schools, Department for Education, Earl Howe, Parliamentary Under-Secretary of State and Government Spokesperson, Department of Health, Mr David Willetts, Minister of State for Universities and Science, Department for Business, Innovation and Skills, and Lord Taylor of Holbeach, Parliamentary Under-Secretary of State, Department for Environment, Food and Rural Affairs.

Q210 The Chairman: Welcome to all four members of our second witness panel this morning. Thank you very much for making time in your busy ministerial diaries for this session. As you know, we are looking into the function and role of Departmental Chief Scientific Advisers and we are very grateful to you for coming along to talk about your departments. In a moment, I will invite each of you just to briefly introduce yourselves for the record, and if any of you wish to make any opening statement, please feel free to do so, otherwise I will proceed with the first question.

So perhaps, Nick Gibb, I could start with you and move along the row. Would you introduce yourselves for the record.

Nick Gibb: I am Nick Gibb and I am the Minister for State for Schools.
Earl Howe: I am Frederick Howe and I am Parliamentary Under-Secretary of State for Quality at the Department of Health.

David Willetts: David Willetts, Minister for Universities and Science.

Lord Taylor of Holbeach: John Taylor, Parliamentary Under-Secretary at Defra.

Q211 The Chairman: I will kick off and start with a general question on which you might all wish to offer a view, which is really about describing how you see the function of the Chief Scientific Adviser in your department and how you ensure that your CSA is able to give independent advice and challenge, and whether you think part of that process involves the CSA being on the departmental board. We have heard mixed views about that. Bob Watson in Defra, for example, felt that it was important that to be on the board, whereas in Education, Carol Willis is not on the board, and she did not think that was an important impediment to her functioning. But perhaps you, with experience in those departments, and indeed in Health and BIS, could offer a view on that. So perhaps could I start with Nick Gibb.

Nick Gibb: Yes. Carol Willis is our Chief Scientific Officer, and she plays a very important role in the department. We believe, as a new Government, in evidence-based policy-making, and she has played a very important role in that. She is not on the board, she is not a director general, she is at a director level, but she has a team of analysts that work with her. I met her more than a dozen times over the period as a Minister. She is involved with all the statistics that we publish, but also the evidence. The Secretary of State is particularly keen on ensuring that we have evidence to our policy. Before the White Paper was published, The Importance of Teaching, we published a lead-up paper, which was the evidence, The Case for Change, which was an accumulation of all the evidence that has informed the way we have made policy in the White Paper. So in the whole range of measures we use her work. She has a budget of, I think, £25 million in 2010-11, and it will be broadly a similar figure next year
that we spend on evaluation and research. We regard these as very important in policy-
making.

The Chairman: Thank you. Earl Howe, do you wish to add anything from a DH
perspective?

Earl Howe: Thank you. The Department of Health is—I am sure along with other
departments, but maybe par excellence—committed to ensuring that our policy is based on
the best available evidence of what works. In Dame Sally Davies, our Chief Scientific Adviser,
we have someone who is ideally placed, we believe, to provide that element of independent
challenge that you referred to, where necessary and appropriate. She is also, as you will
know, the Chief Medical Officer, combining those two roles. She combines those roles ad
personam with the agreement and approval of Sir John Beddington. We do not necessarily
anticipate that the two roles will be joined in perpetuity, but I think it is an arrangement that
works well with Dame Sally. We are very aware that early warning, early insight, is essential
to the CSA function. Policy teams in the department are open to Dame Sally’s advice and
challenge.

You asked about whether the CSA should sit on a department board. Dame Sally is in fact a
member of the departmental board. She meets very frequently with me and my ministerial
colleagues. I would judge that a seat on the departmental board is not essential necessarily
for a CSA, as long as there is adequate access to Ministers and senior policy-makers. That
would be my judgement.

David Willetts: Yes, I would say in answer to your broader question that we see that a
Chief Science Adviser would have four roles: first, ensuring that there is proper science and
engineering evidence as part of the policy-making process, very much what the Minister for
Schools said; secondly, ensuring that we have the right systems in place to ensure that that
voice is heard; thirdly, linking to the Chief Science Adviser network across Whitehall; and,
fourthly and finally, providing a kind of leadership role for the science and engineering expertise within the department. The discharge of those four functions does not, I think, require that the Chief Scientific Adviser should necessarily be on the board. I think that it is possible to discharge them without that and we have not historically in BIS had the Chief Scientific Adviser on the board.

For us in BIS, of course we did have a rather salutary review, the Science and Engineering Assurance Review, last summer, which had some very frank criticisms of the position as reviewed in the period March to June 2010, and although it has taken us a while, we have tried to act on that review. I think one of its criticisms was that our previous Chief Scientist, Brian Collins, excellent man though he was personally and for whom I have great regard, just was not provided with sufficient support and back-up to do the job properly. That is why we have, even while we have been reducing the departmental budget overall, allocated more funding to establish the office of the Chief Scientist. We are very close to appointing our new Chief Scientific Adviser. I hope it will be a Christmas present for this Committee, and we should be able to announce it before Christmas. It is very close to a conclusion. Of course, we are strengthening the resource around him with the new appointment of a Deputy Chief Scientist.

The Chairman: Will the new CSA, when appointed, as recommended in the Go Science review, be appointed for four days a week, or what level is it likely to be at?

David Willetts: We are not currently envisaging that the post will require more time than in the case of Brian Collins, but that is open for review. When he arrives, if he were to argue that more time was needed, we would consider that very carefully.

Lord Taylor of Holbeach: Thank you, my Lord Chairman. As you might expect with a department that has to use science a lot in its portfolio ranging from animal health to climate change adaptation, our Chief Scientist is a very important person. You have had the
opportunity of interviewing Bob Watson, who we all rate very highly, I have to say. He is, as you know already, substantially integrated into the whole departmental decision-making process, not only by rank but also by practice. He is a member of the management board, he meets with Ministers weekly on a Monday as part of the management team. We also of course see quite a lot of him in terms of briefings and advice, because he heads up a team within the department that we use to provide evidence to support policy-making. Therefore, I would like to think that his relationship with the department and his work within the department is very effective.

The Chairman: Thank you. Perhaps I could turn to Baroness Neuberger for a follow-up on this.

Q212 Baroness Neuberger: More particularly for Mr Willetts on this, you have referred to the Go Science review and you are going to give us our Christmas present, which we are very much looking forward to, but we have heard a great deal of variation in the status of CSAs and in their access to Ministers directly. You have all four talked very warmly about them, but would you think that there would be some value in there being either a Minister—and you as Science Minister perhaps could talk to this—or a Cabinet Committee that had some oversight of CSAs, and could perhaps ensure that they get the kind of access and have the sort of status that might be required?

David Willetts: I think all departments, in order to function effectively and draw upon science advice, need to have an arrangement in place that ensures that that voice is heard, and that includes direct access to the Permanent Secretary and Ministers. Different departments will deliver in different ways, but I think all four of us here—I think the expression for us in the Coalition nowadays would be “the quad” before you today—we are all, in our different ways, committed to that.
There was, under the previous Government, a separate Cabinet sub-committee on science. I do not myself think that that is necessary for the science voice to be heard. To some extent, it happens within the departments, and for me personally, as the Minister for Science sitting on both Home Affairs Committee and Economic Affairs Committee, it is an opportunity to make sure that that angle is properly covered. I was reflecting on discussions that we have had, when the Department of Health was discussing mental capital and well-being, that the Foresight Report and the scientific advice fed into that; perhaps dare I say the Home Affairs discussion of bovine TB involved quite a significant discussion of the science. So it is fed into the mainstream policy discussions that we have in the main Cabinet Committees of Government.

Q213 Lord Broers: I wanted to address my question to David Willetts. We had a very interesting discussion with Sir Gus O'Donnell about the transparency that is maintained in making policy decisions. Now, in BIS, of course very major policy decisions on transport, for example, and on energy. The policies, the mechanisms that we use to come up with those policies, are singularly opaque, in my experience. He cited the example, looking at economics, of the Monetary Policy Committee, where it is done, if you like, by technocrats—the new term—but at least economists know who they are, they know whether they respect them or they do not respect them, whether they agree with them or they do not agree with them, and they know how they voted on that committee.

The energy policy, or even transport policy, has come out of the blue and we engineers sit on the side wondering who on earth could have come up with that policy. There does not seem to be any mechanism of finding out who it was and whether the people who made that decision we have respect for or not. Do you think that with the new CSA and the support that the process could be made a little more transparent?
David Willetts: I am obviously not the Minister in Transport or Energy, but I think that there has been rather a lot of published evidence on both transport infrastructure decisions and on energy policy. What we do have a responsibility for in BIS is the infrastructure as a whole, and I have to say that probably the main focus of Brian Collins’ work, when he was the Chief Scientific Adviser, was working on infrastructure, and a lot of proposals on infrastructure do involve BIS and we do have a wider role as a department, and that is a crucial role for our Chief Scientist. Of course Brian himself, just now having moved on from BIS, is currently working within the Treasury, partly on its infrastructure policy. We can therefore be confident that there is an extremely competent and experienced scientist who is ensuring that that angle is covered in the policy process.

Q214 Lord Willis of Knaresborough: Yes, I was particularly interested in Nick Gibb’s opening comment about the Departmental Scientific Adviser being very important in terms of evidence-based policy-making, and I was also intrigued to hear that you had a number of meetings with the Departmental Scientific Adviser. She did not say that when she was before the Committee. In fact, she said quite the opposite, and also that she had little access with the Permanent Secretary; she did everything through the DG.

But can I just press you on this issue of evidence-based policy? We got the distinct impression that the role of the Scientific Adviser within DfE was that when Ministers have decided on their policy, her job was to find the evidence to support that policy, rather than finding evidence that would inform the policy before it was made. Could you tell us which is right?

Nick Gibb: On your first point, Carol and I have met about 16 times since I became the Minister. She is involved in all the briefings when we release statistics, for example, on results, but the department is an evidence-rich, data-rich department, which is why there is
involvement particularly with the Minister for Schools and the CSA. In fact, the Go Science report praised us for being a data-rich department.

But, we do have policy that was formulated before the general election that went into the manifesto, and so we start from the premise on our major policy direction that that is the direction in which to take the country in—

Lord Willis of Knaresborough: Can I stop you, Minister. I do not disagree at all that as a Minister you have a right to have a policy, and I think the Permanent Secretary made it absolutely clear that Ministers make policy. My question is whether in fact you gather the evidence, which is empirical evidence, which is peer-reviewed evidence, before you make a policy, or whether you then have an idea and then you find the evidence afterwards.

Nick Gibb: I was trying to address your question directly by saying we do come to government with a number of policy initiatives that were in the manifesto, they were elected upon, and then we asked the department to make sure that we are not doing things that are not sensible. So we do ask the department to check the evidence, and it has done a lot of work. As I said, the evidence, The Case for Change, we published before the White Paper, setting out what the evidence was for the initiatives that are in the White Paper, and I think that is an unusual initiative. But we have relied very heavily on international evidence. We look at the PISA data, for example, that does drive our policy. The National Curriculum Review has been established using an expert panel which has been charged with looking at the evidence from around the world, and a huge amount of work has been conducted under Carol Willis’ tutelage, if you like, or direction, with her team of analysts, looking at that international evidence, which has then informed the expert panel and informed the advisory panel as we begin to develop programmes of study and the National Curriculum Review. We do rely very heavily on it, but of course we do have policy direction that was established before the election.
Q215 The Chairman: Could I just pick up on this point about international evidence? I just want to read you a quote from the Swedish Education Minister, Bertil Ostberg. He said, “We have actually seen a fall in the quality of Swedish schools since the free schools were introduced. The free schools are generally attended by children of better educated and wealthy families, making things even more difficult for children attending ordinary schools in poor areas”. I wondered whether that summary of the Swedish experience fed into the policy preparation for free schools in this country.

Nick Gibb: Well, of course the difficulty with education policy is that people have very strong opinions on it from all angles, and that is why ultimately Ministers have to take a decision.

The Chairman: But this is not about opinions. This is about evidence.

Nick Gibb: No, sure. Well, all evidence is open to interpretation. There are people in Sweden saying other things, and I have a list here of evidence about the Swedish example. There is clear evidence that standards do rise in the schools that are established, the free schools, and in schools in the surrounding area. Now, there are a whole host of other factors that will be impacting on the Swedish education system, external assessment and so on, and we have to look at the evidence of the micro-issue of that particular policy of establishing new schools. What happens when you bring in a new school into a municipality? You have to look at it at that kind of micro level, and there is evidence from the United States that it does raise standards, not just in the new school that is established but also in the surrounding area. As the tide rises, it raises all the ships that are on the tide.

Q216 Baroness Perry of Southwark: Yes, my question is: within your department, how you do ensure that appropriate use is made of scientific evidence, what structures are there
or what systems are there? And perhaps you might offer evidence or suggestions of when Ministers decide on the grounds of public interest or on their own policy interests that they will not follow scientific advice how is that handled, or would it be handled, if it were a scenario that has not yet happened. Can you give us any examples? So two questions, really.

The Chairman: Would Lord Taylor like to pick up on this?

Lord Taylor of Holbeach: Well, we of course have the science to back up the policy-making decisions, and we rely on the evidence presented, but in the end it is for Ministers to make the decision, and the Minister’s role is a political one, measuring the impact of a decision in the political context of its time. It has never led to any tensions when this has occurred. In my own case, I have not had to make a decision contrary to ministerial advice in the short time that I have been in office, but within the department I do not think tensions exist, because there is sufficient mutual respect between the scientific team and the Ministers involved.

I might also add we do have externally a Scientific Advisory Committee that supports the Chief Scientist, and this is a body appointed from outside on the Nolan principles, and we also have 11 Scientific Advisory Committees with specialist subject areas within the department. So I hope I have answered your question satisfactorily.

Q217 Baroness Perry of Southwark: My question was really about what structures and systems you have within your four departments that ensure that advice is received and is available. I suppose your committee would be one of the structures that would ensure that, would it, because presumably in the event—I know you said it has not happened—that a Minister, for quite proper public opinion reasons or political reasons, decided not to follow advice, that would have to be reported back to the committee?
Lord Taylor of Holbeach: Yes, and if we have submissions, they clearly include the evidential element in order for us to determine what we should be doing and we can call on scientific input at the time when we are discussing this matter or talking about things with the specialist team within the department. So I find that the system does work pretty well, as long as it is integrated at official level as well as at ministerial level.

Baroness Perry of Southwark: Exactly.

Q218 The Chairman: Could I just perhaps tease that out a little bit further? In many cases where the scientific advice comes forward, it will not be absolutely clear-cut one way or the other. There will be uncertainty and there will be a range of opinions about what the evidence says.

Lord Taylor of Holbeach: Yes.

The Chairman: One of the things that Sir John Beddington said to us was that it was very important that advisers expose the uncertainties in the scientific evidence and the assumptions that underlie a particular conclusion. Do you feel, in your department, that that is satisfactorily delivered to you? When you are provided the evidence on a particular policy issue, does the advisory system explain the level of uncertainty and why group A of scientists might think one thing and group B thinks something else?

Lord Taylor of Holbeach: Yes, I think one of the vehicles for doing that of course is the impact assessment, which is often not seen by Ministers at the time of making submissions initially. For example, on the whole business of greenhouse gas emissions and the reporting of them, the assessment projected quite a range of benefits, and to some degree costs, but more specifically on benefits, because they were difficult to pin down. It was not the lack of scientific input, but that the science is uncertain and cannot necessarily be quantified directly.
We were aware of that and we are making a decision in the context of the advice we have been given in that way, and I hope therefore that is the right approach.

David Willetts: In BIS we are in the very fortunate position of having a kind of cornucopia of science advice. We have the Chief Scientist advising the Government as a whole based in BIS, and of course there are all the Research Councils, but I guess for the purposes today, we are thinking specifically about the departmental Chief Scientists. There I would say for me personally, the way that that advice is most valuable is as we think about the high-tech industries of the future. Be it space or synthetic biology, nuclear fission, generation for nuclear fusion, you need briefing for policy discussions in those areas. It is informed by our scientists and you would quite often have one of our scientists sitting and participating in the policy discussion. Brian came along to the Space Leadership Council and contributed to our discussions there.

In terms of the second question, kind of what happens if things go wrong, this is an opportunity for me just to report to the Committee that this morning we have published our new Code of Practice for Scientific Advisory Committees, the updated code. Christmas has come early. This updates the code in the light of the advice, some of it from the previous Government, which we then took into account. It does provide very clear statements of the ethical principles, and also of course the procedures in the event of things going terribly wrong. Obviously, Scientific Advisers might want to speak to their own Permanent Secretary, they would be able to speak to Mr John Beddington, the Chief Scientist, and it might well come to me as the Science Minister.

Q219 Lord Winston: David, it is really on your first point. We have some evidence from the adviser to the Treasury with regard to the announcement about graphene research, and we know graphene is obviously an extraordinarily exciting material that may have massive
economic potential. He gave us the impression that really he had not consulted the community much and he said he had read the papers, so the question really is where would the Government get its scientific advice about that announcement? Did it come to your department, for example? How much cross-departmental advice is there? How much coordination is there in the advice that Ministers get?

David Willetts: Of course we were already aware of graphene and the excellent work that had been done, not least because of the prominence of the Nobel Prizes for Professors Geim and Novoselov. There was a joint letter from Manchester University and Manchester Council to the Chancellor, which the Treasury immediately passed on to my office as well. It led to commissioning advice, which was provided through BIS. I do not know exactly the internal Treasury advice, but I know that we got internal advice in BIS, and that both Treasury and BIS drew on advice from the EPSRC. It was already thinking about graphene, because of course it was already funding some research in graphene. So this was not new as it built on work that was already under way; second, the TSB, who also had been considering graphene as part of its kind of horizon scanning work on future technologies. So in that way, I think there was very well-informed advice, both on the science from the EPSRC and the kind of technological opportunities from the TSB, which was then reported both to me and to the Chancellor.

The Chairman: Thank you. Going back to the original question that Baroness Perry asked, perhaps I could turn to Earl Howe now for comment.

Earl Howe: The question related to how each department had systems in place to make sure that appropriate use was made of advice that came forward and I think, for our part, that depends on two main ingredients being in place. The first is that the Chief Scientific Adviser should be heard and be able to be heard at ministerial level whenever appropriate, but also that she should be adequately supported. Now, Dame Sally is supported in her role
by the Research and Development Directorate, because she is of course in charge of our research effort. She is supported by a whole range of Scientific Advisory Committees. I counted up the number, we have 23 in the department, ranging from herbal medicines to human genetics, and she is also, as lead for research and development, responsible for our policy research programme. She has a budget of about £50 million for that, and that entails that there is a regular channel of communication between her and the policy teams so she is supported by the policy teams and she herself supports them.

It is important from our point of view as Ministers that the submissions that we see have input from the Chief Scientific Adviser. That happens on a routine basis and Dame Sally herself regularly sends submissions to me as the Minister responsible for research as she does to my colleague who is in charge of public health. So I think that is how I would summarise the systems in place that we have and we regard them as working very well. On the policy research side, a review was done by the Government Office for Science in 2008 found that the PRP was a model of good practice in concept and operation and that is certainly our judgement.

Q220 The Chairman: Could I just follow up with a couple of questions. You described Dame Sally’s role and the input that she has. Is that in her position as CMO or as CSA or both?

Earl Howe: I was focusing on her role as CSA and not on her role as CMO.

The Chairman: So if in future the posts were separated then how you describe Dame Sally operating would apply to a new CSA if that individual were not CMO as well.

Earl Howe: It would. I did refer to her input to the Minister for Public Health and the work done there, and of course that is very often in her role as CMO but not always. For example Dame Sally contributed in a major way to the work we did to produce the Public Health
White Paper very much from the scientific perspective and the evidence that we used to underpin that paper.

Q221  The Chairman: My other question is a bit of a curve ball but one that you might well expect. When we took evidence from Sir John Beddington we asked him whether there were any cases that he regretted that scientific advice had not been followed by government. The one he chose to refer to is in your department—namely, the fact that the NHS spends money on homeopathic medicines for which there is absolutely no scientific support whatever. Is this recognised by Ministers in the Department of Health as a case where scientific advice has been, let us say, relegated in favour of other considerations?

Earl Howe: I cannot speak for that particular example as I was not personally involved in it. I do know that that particular issue has been a source of considerable debate and discussion in the department and I know that strong views are held on both sides. There is a policy that we as a Government have about patient empowerment and it is not that the science is ignored. I am not aware of any instance in fact where Dame Sally’s advice has been ignored or sidelined, but maybe that is one example of where there are overriding considerations that we think take precedence.

Q222  The Chairman: Just to be clear, when you say there are strong views on both sides, you do not mean there are strong scientific views on both sides.

Earl Howe: No.

The Chairman: There are strong views of people who take homeopathic medicines and believe they do them good and scientists believe they do not.

Earl Howe: That is right. There are two opposing views, exactly as you have described. It is not in terms of the science.
Q223 The Chairman: I turn then to Nick Gibb, coming back to Baroness Perry’s question.

Nick Gibb: Carol Willis combines the role of CSA with being Director of Research and Analysis, so she, or her team, is involved in all the policy submissions that come to Ministers. She herself has direct access to Ministers. She is a senior civil servant in the department with access to the private offices and can ask for meetings whenever she seeks them. She also chairs the Research Approvals Committee, which is the committee that scrutinises what we are going to spend on external research, so she is very much part and parcel of what the department is doing. You asked for examples of where her advice has been ignored or challenged. There are not many examples I can think of but there was the issue of the pupil premium, about whether we should spend money evaluating the effects of pupil premium. There is an argument against doing an evaluation because you cannot really have a control group of children who qualify for free school meals where the school will not get the money to see how they compare. However, in view of the huge amount of money we are spending on the pupil premium we did bow to Carol Willis’ advice that we should have an evaluation, albeit difficult to put together, but we rely on her to do so and we have gone ahead with her advice.

Q224 Baroness Perry of Southwark: Can I just follow that up? I was a little surprised when Lord Taylor said that the impact assessment was not part of what Ministers sought at the time they were making decisions. Is that common across Whitehall? It seems rather an important part of the scientific advice.

Lord Taylor of Holbeach: In my case, I do not see impact assessments when submissions are presented, except in circumstances where the impact assessments may be contentious.
But elements of course that go to make up an impact assessment, which may well be an extremely thick, robust document, are included in the submission. As I said earlier, any submission regarding policy includes the evidence that the department has available to support alternative policy changes but it is not in the form of an impact assessment.

**Q225 Lord Willis of Knaresborough:** Very briefly, to all four of the Ministers. We have heard evidence during this inquiry and indeed in the previous inquiry that Baroness Neuberger conducted about the status of social science across government, and while certainly three departments rely heavily on the physical sciences to underpin policy, I wondered whether you would accept that there is a need to beef up our approach to social science in all your departments and whether in fact having a government Chief Social Scientist would be an advantage.

**The Chairman:** Maybe I could ask Nick Gibb to start that since it probably applies particularly to his department.

**Nick Gibb:** Carol Willis is an economist not a physicist or a chemist. Inevitably our policy is social science rather than hard science, which means there are nuances to it. That is why it is difficult to say you ought to have somebody on the board or a Chief Social Scientist. What is the purpose of having such a senior appointment? Is it so that they can overrule decisions by Ministers? That is the danger of elevating these positions to that height. No Minister wants to take a decision that is not based on the evidence. You would be mad to do so because you as a Minister are responsible for the outcomes of those policies and if they are not based on all the evidence available they will not go in the direction you expect them to go in and you will pay the price for that in this building and with the electorate. So we want to have evidence-based policy but because social science is more nuanced than hard science, ultimately Ministers have to take those decisions having looked at the evidence and also
challenged the evidence. What I want to be able to do is to say to the CSA, “What was the methodology behind this evidence? How do they come up with the view that 90% of teachers are against this policy?”, or, “This policy is very popular with teachers,”, or, “It worked.”. If you say that this approach works in classrooms and the evidence for that is 90% of teachers liked it rather than the attainment of the children improved, it is probing into that kind of issue that I think it is very important for Ministers to be engaged with. Therefore I would not want to see social science elevated in departments such that it meant that Ministers were not ultimately taking those decisions.

**Q226 The Chairman:** When the evidence is, in your view, unconvincing/incomplete, do you sometimes ask Carol Willis to put in place a pilot study or commission research to establish what the evidence is before you implement a policy?

**Nick Gibb:** Yes. An example of that would be the phonic screening check. This is a test of six year-olds at the end of year 1 in primary schools, 40 words. We wanted to make sure that it worked and there were no administrative problems or difficulties with children of that age taking the test. We did pilot it in 300 schools and we learnt a lot from it. So, yes, we would do that.

**Q227 Baroness Neuberger:** Can I just probe a little further about the role of the social sciences? In the inquiry that I chaired on behaviour change, it was perfectly clear that government were interested in the behavioural economics and the behavioural psychology areas where indeed you would need very specific expertise. Some of our criticism is that the expertise is not present throughout and indeed that the small Cabinet Office team possibly does not have sufficient reach. Is that not a good argument for having particularly in your department a senior social scientist who understands those issues?
**Nick Gibb:** We would argue that we do, in Carol Willis. We have three centres; the Centre for Analysis of Youth Transitions; a Centre for Childhood Wellbeing Research; a Centre for Understanding Behaviour Change. So we are engaged in all those areas of social research that you are talking about. Should Carol Willis be a Director General? Well, I am sure she would like the salary boost but is it necessary within the department given that she does have access to Ministers? Her team is involved in all policy submissions. What more would she achieve by having a higher status? What is it that lies behind the question? If what lies behind the question is to reduce the policy-making decisions of Ministers to move to a more technocratic form of government, I think that would not be in the interests of a democratic state.

**David Willetts:** Can I just clarify the position on this? The Department for Education has an excellent arrangement for drawing on evidence from social science as you have heard from the Minister. There is a wider question about social science across government as a whole and on that I think there are arguments in favour of a further identification of that function. We are not ruling that out. We will consider it. I think the Cabinet Office is very strong on all this and David Halpern and his group are already doing excellent work and I can see its influence across government. What we do in BIS, we do draw very heavily on the SRC. There is a capacity there so that if you are having discussions—I am trying to think of an example overlapping with Education—for links between neuroscience and education; for links between neuroscience and policy on youth. I was at a ministerial meeting this week where one of the things that we drew on was the excellent research paper that Tim Loughton had been involved in on what we know about neuroscience and how our understanding of neuroscience is an important perspective on understanding the behaviour of teenagers. You start with some physical science. Incidentally, I hate this thing that I noted from a previous exchange where the physical sciences become the “hard” sciences. Social
science can be pretty hard as well. There are physical sciences and social sciences. So we do try to draw on it but all of us, John Beddington, myself, we are open-minded and look forward to the Committee’s advice about how the social science function could be strengthened across government as a whole.

The Chairman: Would anybody else on the panel like to comment on that particular point?

Lord Taylor of Holbeach: Can I just say that one area where we are particularly engaged in understanding people’s behaviour is in the area of waste, which I have departmental responsibility for. Given the current trend towards non-regulatory governance of issues in politics generally, nudge theory and understanding people’s motivations is very important, and we have within the department’s family, RAP, which is a body that clearly works very strongly on this front and their input on all waste policy is very robust and also very useful to the department. So while we do not have a specific social scientist working at the senior level within the department, we do draw on that experience in making policy.

Q228 Lord Winston: I think we take Nick Gibb’s point very well, it is a very good point, but I suppose I am really interested the Department of Health, here. As we both know, one of the issues are behaviours that make a massive difference in health and I wonder how you see the roles of social science in trying to persuade people to adopt behaviours that are perhaps a bit more healthy.

Earl Howe: There is no doubt that social science has risen in importance in terms of policy-making in the Department of Health over the last few years and certainly since May last year. The way in which people behave in terms of their lifestyle, the way in which we can influence people on diet, physical activity, the way they use medicines or do not use medicines; all these things have a behavioural aspect to them and what is often criticised, I am afraid and I
feel unfairly, the nudge policy we have as one ingredient of the public health agenda is I think going to be increasingly influential. So yes, of course, we do expect our scientific advice to take a full account of the latest thinking in these sorts of areas.

**Q229 Lord Winston:** Do they commission research themselves or do you leave it to the Research Councils to do the kind of research that you need to have done?

**Earl Howe:** My understanding is that we feed off the work that is being done outside the department in this area.

**Q230 Lord Wade of Chorlton:** Just following on from Nick Gibb’s point between this line between the technocratic and the democratic Government, which I agree with entirely. At the same time you have to admit that a lot of democratic Governments in my lifetime have made some appalling mistakes that have been very, very costly to the taxpayer and against the interests of the nation as a whole because they have been driven by some short-term political ambition that has turned out to be entirely false. So in a sense I agree that has to be where the decision-making lies, what I think the purpose was, was to make sure that at least the chances of making those mistakes are very much reduced in the future than they have been in the past. So the technocratic advice is there within Government so that people do not just see the short-term advantages politically but see the long-term disadvantages, if they are there, for the nation as a whole.

**Nick Gibb:** I could not agree more. To make a partisan point, we are paying the price with the public spending problems we are now facing.

**Lord Wade of Chorlton:** Why is Europe in such a mess? Because of political decisions that should have never been taken in the first place but I do not want to go down that route.
**Nick Gibb:** I would just add that we need to have more reliance, we need more evidence, more data. We need to make sure our policy-making is evidence-based, absolutely, but I think also Ministers have a responsibility to understand how that evidence is gathered and not just to look at a black box and say, “Oh, that’s science; we must obey”.

**Earl Howe:** I was going to say that if there are two areas in particular that my department is involved in that relate to the long-term agenda for the country, they are public health, the health and well being of the nation over the next two decades, and research, also a very long-term business. We want to be absolutely sure that we are directing our efforts and our money in a way that will provide value over the long term.

**Q231 The Chairman:** Could I perhaps just ask a closing question—any of you might wish to answer—which is something we have asked other witnesses, including CSAs themselves, about the situation in which the CSA’s advice disagrees with the policy decision that is made. The question we are interested in is what your view is on the transparency of that process. Is it fine for CSAs to make public the fact that their advice to you has been overridden by other factors or do you feel that is an internal matter in the machinery of government?

**Nick Gibb:** We are very keen to publish as much evidence as possible and that is what we are doing. In terms of all the data we have, we are publishing them and putting them out into the domain. So all the pupil-performance data are now going to be published so that parents and the public and policy analysts can have access to that data. So absolutely we want that and we have been publishing and will continue to publish the scientific evidence behind our policy decisions. Having said all that, I think it is also important that Ministers have access to advice from civil servants, whether they be a CSA or head of analysis, that is not subject to being published because otherwise you fetter the free thinking that should be taking place within departments by Ministers and their civil servants and you move that debate out of
Whitehall if you pursue that. I think it is important that Ministers have confidence in being able to challenge the evidence before them and that they have confidence to seek evidence from sources where they know in advance that they may not be comfortable with the results. I think it is important that they can feel free to do that without worrying that if it is published it will embarrass their ultimate policy position.

Q232 The Chairman: Do others agree with Nick Gibb?

David Willetts: I think Nick put it very well. In fact if I may say so, I think the way this question has been formulated is slightly odd. When should science give way to interests of policy or public opinion? Science is part of the evidence and there is then the exercise of judgment, which has to be by democratically accountable Ministers. Scientific evidence should be at the table and it should be heard and I think we all have very strong procedures in place now to ensure that happens but ultimately democratically accountable Ministers have to reach a judgment and often evidence itself conflicts. But on the “ought” decision—what ought you to do; what is the right thing to do?—it is very hard for that to be completely determined by the “is” evidence; descriptions of circumstances. That is where democracy and ministerial responsibility comes in.

The Chairman: Do Lord Taylor or Earl Howe wish to make a comment?

Lord Taylor of Holbeach: I suppose I could refer to the TB issue.

The Chairman: That is dangerous territory, I would say.

Lord Taylor of Holbeach: I appreciate that but I felt that to some extent your question provokes a situation where one Government evaluating came to one decision and another Government comes to a contrary decision. I think that just points out that there can be a political evaluation of scientific data. I think that is a reasonable thing and indeed Bob Watson’s own position on that is that he accepts that scientific evidence is not the policy
making—that is a matter for Ministers—but he has told me, and I would agree with him, that if that scientific evidence is being misused, then he has a responsibility as Chief Scientist to speak out. Otherwise it is a matter for Ministers to carry the can for the decisions that they are publicly accountable for.

**Earl Howe:** I have very little to add to what has already been said, all of which I agree with. I think as regards a situation of this kind, which I hasten to say has not happened in the department during my time there, if there were to be a situation where scientific advice had been ignored or misused, then one could imagine there was an overriding public interest in that fact being made known. As a generality I absolutely concur with Nick that a Minister should feel that the advice they are getting from several quarters, whatever quarters, of the department, should be there for them to assimilate and take a judgment on without fear that somebody is going to pipe up and say that they do not feel that sufficient weight has been given to that advice, whatever it may be. So I think it does depend on the circumstances.

**Q233 Lord Rees of Ludlow:** The view has been expressed by many witness that there is an advantage in having scientists who are appointed from outside of the Civil Service because of their expertise and the fact that they are more likely to feel unconstrained by career prospects and so on. Would you feel in general that there should be an external appointment?

**David Willetts:** I think it is clear that in the majority of cases it is now an external appointment and Lord Rees puts very clearly the arguments for that. We have not said this is the blanket rule because the advantage of the internal appointment is that those are people who understand the system and are able to operate very effectively within it. There is this permanent trade off that people who have strength externally do not necessarily understand the wiles of Whitehall and the people who are entirely Whitehall warriors may
not have a sufficient external understanding. If I may say so, going right back to where we began, just for us in BIS it is one of the reasons why at the moment we are still inclined to have our Chief Scientist a part time post; some time inside Whitehall advising us but also time to be connected with the external science community. I think in general, but not universally, Lord Rees’ advice applies.

The Chairman: Any other views about that?

Nick Gibb: I do not have strong views about that particular point but if I can just say one final thing about expert advice. The exchange rate mechanism in the early 1990s, there was huge consensus among all the expert economists that Britain joining the exchange rate mechanism was in our best interests—it was hard to find economists that would challenge that; there were some—and we did it and it was not a success. I think Ministers always should be challenging the evidence that they receive.

The Chairman: Thank you. That is a good note to end on. I would like to thank all four of you for this session, which has been very useful to us. We very much appreciate the time you have spared for us. As you well know, because you are familiar with this process, there will be a transcript coming to your office shortly and you have an opportunity to amend it. I should also say, as I always do, if there are any points you would like to add in writing, please feel free to do so. Thank you very much indeed.