



HOUSE OF LORDS

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OPEN ACCESS

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Questions 71 - 83

TUESDAY 29 JANUARY 2013

3.30 pm

Witness: Rt Hon David Willetts MP

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Members present

Lord Krebs (Chair)
Lord Broers
Lord Dixon-Smith
Baroness Hilton of Eggardon
Baroness Perry of Southwark
Lord Rees of Ludlow
Earl of Selborne
Baroness Sharp of Guildford
Lord Wade of Chorlton
Lord Willis of Knaresborough
Lord Winston

Examination of Witness

Rt Hon David Willetts MP, Minister of State for Science and Universities, Department of Business, Innovation and Skills (BIS).

Q71 The Chairman: It may be that you have to leave us for a short while to take part in the vote. We obviously accept that. You will know that the point of this very short inquiry is not to question the overall policy of open access, but to look at the details of how the recommendations from the Finch review, which you set up, have been and are being implemented by the Research Councils, HEFCE and others. We are very much in the phase of looking at the nuts and bolts of implementation and we would very much like to be able to put some questions around that topic, but before I start the questioning, perhaps for the record you could introduce yourself.

Mr Willetts: David Willetts, Minister for Universities and Science. Thank you very much. I should apologise in advance to the Committee; we are expecting a vote at about 4 pm in the House of Commons, so I am going to disappear briefly for that.

The Chairman: We will crack on as fast as we can. I would like to start with the whole issue of embargoes in relation to green open access, which, as you will be aware, has been a subject of great debate and contention, and many of the written evidence statements we

received pointed to a lack of clarity on the part of RCUK on exactly what their policy was and whether or not their policy coincided with the one that you have publicly adopted, which follows the decision tree produced by the Publishers Association.

What we have heard earlier on this afternoon from RCUK is that they envisage a period of time over which they will evolve towards a six/12-month embargo of green open access, but they accept that at the beginning there will be greater flexibility with longer embargo periods for certain subject areas, as has been articulated in the Publishers Association decision tree. They have told us that they envisage a review in the next two years to see how things are going before they decide the pace of further travel towards a six/12-month embargo implementation. What I wanted to ask you, Minister, was whether you are content at this point that RCUK are following the line that you have set out as BIS policy, or is there a gulf between you?

Mr Willetts: No, I am content that they are. The Government policy was set out in our response to Recommendation 10 in Janet Finch's excellent report. It is captured very clearly in the Publishers Association decision tree, which I think does very much reflect our policy. Of course I understand that RCUK have ambitions of going even further, but I think the Research Councils accept that the Government policy is the framework within which they will also be operating before we reach the nirvana of which they dream.

The Chairman: Yes, that is very encouraging and I think that in itself will provide a lot of clarity and be very helpful to many of the stakeholders who have written in with their concerns.

Another point, another aspect of this, is the question of whether it should be a one-size-fits-all model, and you will be very well aware that particularly in the humanities and in the social sciences there is concern that the half-life of literature is much longer than in the biomedical and perhaps in the physical sciences, and therefore it will be reasonable, even at equilibrium,

to think of differentials in different subject areas in embargo periods. Again, this is something that I guess is implicit in what you have said, but I wondered if you feel that the Research Councils have adequately taken on board the notion that it may not be a one-size-fits-all model, that it may be horses for courses.

Mr Willetts: Again, I do, Mr Chairman, and it is not a one-size-fits-all. The so-called half-life of a publication in the humanities is longer than at the other end of the spectrum, medical research, where I am told the world moves on very rapidly indeed. We completely understand that. It is one of the reasons why we formulated that policy in answer to Recommendation 10 the way that we did. I know and I understand that the Research Councils also appreciate this, and we are all keen to work with the humanities and respect that they have a rather different form of scholarly publication than some other disciplines.

The Chairman: That is extremely helpful to us. I think I would like to turn to Baroness Sharp to pick up some thoughts about costs and benefits.

Q72 Baroness Sharp of Guildford: I think one of the interesting issues that has become apparent to us as we have moved into this inquiry has been to realise that the gold and the green routes really go side by side, and that many universities, particularly over the transition period, are going to have to pay subscriptions to journals, because a lot of articles are still going to be published in journals, while at the same time the Research Councils are going to be putting funding into the universities in order to pay the APCs for our own researchers, who are accessing the journals through the open access route. This raises the whole question of the costs and the benefits that will derive from this policy, and we wondered what work the department had been doing in terms of looking at the costs and benefits of the open access route. I think in particular we are quite interested in knowing what you see as being the benefits of the open access route.

Mr Willetts: First of all, this is a process, and indeed, if one tries to imagine what the alternative would be, sort of one moment at midnight the existing publishing model disappears and a new arrangement comes in around the world where everything goes gold, it is not going to be like the famous day when in Sweden they shifted from driving on the left to driving on the right at 4 in the morning. It is not what the world is like. It is a process. I think we are already across the world at about 17% of academic research papers being published under gold open access, and it is clear to me that that is the way the world is heading. It is the Government's view that it is a good thing that the world is heading in that way, but it is going to take time.

For the economics of the costs and benefits, there was economic analysis prepared for the Finch inquiry, which I think is probably available. We have done some economic analysis in BIS, though it has tended to focus on a much narrower set of questions, kind of trying to work out the costs, not least for public expenditure costs of different routes to green and gold. I think what we could do is provide a summary of that very expeditiously; I think the fuller report is due to be published and certainly shown to the Committee in the next few weeks.

In a way, taking a lot of steps back, I have been very influenced by thinking about, for example, the industrial revolution. There is that book by the economic historian, Joel Mokyr, *The Gifts of Athena*, which argues that one of the reasons why we had the industrial revolution in Britain was that we had a better means of transmitting information and new technical advances were more rapidly absorbed across British society than any other country in the world because we had a rich network of learned societies, publications, a lively literary life. I see that underlying argument as applying to open access today in just the same way.

The Chairman: Of course, a difference is that open access in the gold model would be access to anybody in the world instantly, so it would benefit industries and entrepreneurs in other parts of the world just as much as in the UK, so we are sort of altruistically sharing our investment and benefits and the fruits of that with everybody else through paying upfront for gold open access. Is that part of the calculation that your department undertook?

Mr Willetts: Indeed, one of the things we did reflect on was: is there a kind of first mover advantage or a first mover disadvantage? My view is that there is a first mover advantage. I think this is a change that is happening around the world, and my view is that, setting aside the particular details of Government policy, academic publishing is probably going to go through the same kind of transition that, for example, the music industry has gone through. We cannot pretend that in five years' time it is going to look the same as it did five years ago, so my view is that getting ahead of the curve is better than trying to race to catch up big underlying changes. We also took the view that a clear position from the British Government could help influence the debate elsewhere and would have an influence across the EU and could have an influence in the US, and I think that there is a pretty clear trend in both the EU and the US to move in the same kind of direction.

The Chairman: I think that leads neatly to Earl Selborne.

Q73 Earl of Selborne: Going on with the thoughts as to the relative merits of gold versus green and to what extent the rest of the world are likely to follow, am I not right in thinking that in the United States the NIH, although it is certainly promoting open access very staunchly, does not take a stand between green and gold and supports both forms of access? Is it not true also that in Australia, as from 1 January, they have just announced their own open access institutional response and that again is effectively a requirement to put papers in repositories? That seems to me another example where the green route, which we of course describe as a legitimate second-best, nevertheless has plenty of legs still and it

may even be that the direction that the rest of the world is heading is not so clearly demarcated towards gold. Are you convinced that gold will ultimately win this particular battle?

Mr Willetts: Of course we ourselves envisage a kind of mixed model for years to come through this transition. I very much agree with Janet Finch: I do think there are some advantages in gold. First of all, it is honesty, it is explicit. There is a cost and a value to publishing and we should recognise it, and it is a legitimate and inherent part of the research process, the costs of transmitting and publishing the work. It is explicitly recognised and I like that about it. I like the fact of course that you do get the work openly accessible straight away. The hidden cost in green is waiting six months, 12 months, 24 months, whatever it is, until the layperson outside the academic community can access a piece of work that he or she as a taxpayer has already paid for once. That is the second advantage.

Thirdly, CC BY and the ability as part of gold to have proper access to the data behind the research I think is another advantage of gold, so I do think there are significant advantages, but we are not purists; we do not expect Britain, let alone the world, to go completely gold anytime soon.

Earl of Selborne: Of course, if we accept that subscription journals are going to continue simply because the rest of the world is locked into a system whereby that is one of the main forms of delivering, it is not going to change rapidly. It follows, therefore, that university libraries are going to probably have to continue to subscribe more than they would wish, and of course they complain bitterly, not unnaturally, about the cost of some of these publications. It means therefore that the APCs represent an additional cost. If, therefore, they are able to continue to use green, which is clearly a cheaper option, without the APC, there might be advantages.

I accept in the life sciences, where you are mining data and text and doing all sorts of clever things, integrating the data, that is where the gold is without doubt going to be the preferred option, but of course a lot of people from the humanities and social services have said that they really cannot see this benefit for their discipline. They already have the repositories and they do not even necessarily see that the embargo will have to be enforced. There are many ways around it—people can identify the publication that they are interested in and they can get hold of a preprint or whatever—so it is not clear to me that gold will always prevail over green. Is there a danger that we are going to be isolated by being the prime mover?

Mr Willetts: I would be very surprised if we were isolated. Two points: first of all, of course we have in the future to think of an academic journal not as a bundled-up physical publication with 10 articles physically stitched together. I think we increasingly unbundle, and it will be individual research papers, and if it is available on gold we are also going to have to pay for it to access it through a pay wall, so the university library, in your case, is not going to be paying twice for the same piece of research. There may be a piece of research from the US it still has to pay for, and there will be another piece of research covered under gold it does not have to pay for, but it is not going to pay twice for any given piece of research.

I think the second point I would make is that of course I understand there are these distinctive concerns in the humanities. I love the humanities. We partly hear this undercurrent of anxiety that because of the power of the physical sciences, the humanities are being ignored. The humanities have a distinctive model, they have a slightly different form of scholarship and there is no attempt to impose on the humanities a model that, in your own fair example, works probably more in medical research. I am sure that is already reflected in the different proposals on green and I am sure that both the Higher Education Funding Council and the Research Councils will keep in very close touch with the humanities as this policy develops. But I think even for the humanities there is some upside here. This is

the way the world is going and they are themselves, I hope, going to potentially be beneficiaries of this direction of travel, but we will work with them and not try to impose uniformity on them.

Q74 Baroness Sharp of Guildford: Ironically, those in the humanities areas where there are learned societies feel that the particular gold model undermines the economics of course of the learned society itself.

Mr Willetts: Yes, I hear that, and I will be having another meeting on all this I think next week at BIS, when the representatives of the learned societies will be able to make this point. I personally would be surprised. The purpose of gold access is properly to meet the costs of publishing a piece of work, so if there is an academic journal produced by a learned society and it costs X thousand pounds to get this piece of work to appear, then that will be reflected in the payment made under gold. It is an open and honest reflection of the costs they face.

Baroness Sharp of Guildford: Yes, it does depend very much indeed upon the degree to which the other countries go the same route and authors from other countries go that route or not, because if some authors are submitting articles, there are going to be hybrid journals, some of which come under open access and some do not. At the moment the economics of it really depend on the subscriptions that come from overseas. Many of these learned societies' journals have something like 80% of international subscribers.

Mr Willetts: Indeed, and I think we will. I can envisage that hybrid model, and as I say, it will be unbundling, but are we really saying that British scholars will be at a disadvantage because their work will be the work that is openly accessible and immediately readable, and the other scholars whose work is behind a pay wall for a year or two years or longer are going to be somehow the ones who are enjoying the benefits? It seems to me absolutely clear. I am trying to put myself into the unlikely role and imagine myself as a scholar, and say, "Okay,

your article is going to be available around the world to be read, not behind a pay wall, from day one” and it is not immediately obvious to me that being behind the pay wall is the superior option that he or she will look at enviously.

The Chairman: One of the points that was made this morning to us by Dr Rita Gardner, the Chief Executive of the Royal Geographical Society, representing learned societies, was the suggestion that there ought to be some kind of fund, an innovation fund, to enable learned societies to transition from their current traditional subscription-based model—which is often a mixture of library subscriptions at quite a high price and then membership subscriptions for academics, including research students, at a very low price—to a model that may be a mixture of green and gold or may be completely gold. There is going to be some disruption during the transitional phase. Do you think there is a case for the Government providing a modest degree of support through an innovation fund to learned societies for them to bid into?

Mr Willetts: First of all, I recognise the issue of transition. This is a process; it is not a sudden moment when the world completely changes. Part of why it is a process is absolutely to help—to work with the academic community through the process, which I personally think is heavily driven by changes in technology and underlying economics. I have no available public expenditure at this moment. Of course, when we did have a modest amount of leeway, I was able to find an extra £10 million additional to the ring-fenced budget to offer a tiny bit of extra help. I do not immediately see where we would have that resource, but I am very happy to have that conversation and try to understand what their anxieties are about the costs of transition.

The Chairman: That may well come in the meeting you have with them in the weeks ahead.

Q75 Lord Broers: Might I just ask you, Minister, how fixed you are in the timetables, et cetera? If you look at the rate of change here—and I do not think any of us disagree with you about the overall benefits of open access—there are very popular journals such as *Science* where we have received conflicting evidence, I must say, as to whether it is going to meet our open requirement and whether it is not. We also hear that the National Science Foundation in the States, which after all is the largest body funding science, is in favour of green. If perchance things do not go as rapidly as we might envisage or you might envisage, do you see us being flexible about that, in delaying the rate of implementation?

Mr Willetts: We have said, or the Research Councils have said, already that they envisage reviewing this in 2014. This is a journey and it is a big change, as we were talking about. I do think that the arguments for gold are quite strong. No, more than that, I think they clearly make it superior to green, but I realise there are other people who believe in green. From my conversations with both people in the US and in the EU, I think they understand the particular merits of gold, but yes, we will be reviewing implementation in 2014 and that will give us flexibility on timing and everything else.

The Chairman: One thing apropos of what Lord Broers has just said, and we were told about it by RCUK, is that they have constructed a table of where different countries are in their journey towards open access and whether they are heading towards a gold or a green model. I wondered if this was something that RCUK had shared with BIS so one could keep an eye on what the likely picture was going to be in 2014 and beyond.

Mr Willetts: Yes. I do not immediately recall having seen that kind of table, but I should well imagine it has been shared with my officials. We are very aware of the importance of the international scene and monitoring is something that I discussed with the EU Commissioner. It is something I discussed with John Holdren, the President's science adviser, too. But as we

have the advantage of a very clear, well-argued report from Janet Finch, I think that gives us an opportunity to influence what happens elsewhere in the world.

The Chairman: One other point that has been made to us on the international dimension by the universities is that of course the ranking of our universities in international league tables—which, while one may disagree with the details of it, nevertheless is important to us, and we like to boast about our universities being in the top 10 or top 20—could be affected by the policy because there may not be enough money to pay for all the authors who would wish to publish their articles in APC-charged journals or there may be international journals that are not compliant with RCUK policy, but nevertheless are high-profile journals that affect our standing in the international rankings. Is that a storm in a teacup or is that something one should be concerned about?

Mr Willetts: First of all, I did not properly answer that point that Lord Broers made. My understanding—and I am going on the reports—is that *Science* and *Nature* would both be compliant within our policy. I realise there are different claims about that, but that is what I have been assured by experts, who should know.

More widely, if the funding for gold has run out—and I fully recognise that gold does come with an upfront cost, and with an upfront benefit as well, of course—then the famous publishers' decision tree absolutely shows what the alternative options are, and it would be hard to envisage a major journal that was not covered by the full range of options in that decision tree.

Q76 Lord Rees of Ludlow: Is there a risk of a race to the bottom, in that the learned society journals, even if they budget for open access, have to exist to provide the benefits you need, and they may be under threat if there are a number of rather less austere refereed journals that start up, charging lower fees? This is already happening. Do you think the market will allow the policy to survive at the risk of the really good journals, many

learned society journals, being squeezed out because they have been undercut by journals of, frankly, lower quality and less stringent refereeing?

Mr Willetts: This is fascinating, and it is absolutely analogous to what is happening in other areas as technology advances, exactly the same as the question whether you would pay for a newspaper when you can get so much information directly on Google. It depends on the value that is attached to the editorial function. If the editorial function has high value and is done well and there is saving of time and effort by being told this because it appears in the *Journal of the Royal Society* and it has a massive value, then the system will carry on as before. If, however, the democratic surge of new forms of availability of science publications through some new mechanisms or portals—if that is a surge—and people, young scientific researchers, find out a better way of accessing the material they want rapidly, then that will indeed be the future model, but we are not pronouncing on that, and it is just the competitive environment within which the publishing industry will be operating.

Lord Rees of Ludlow: What could happen is that the top journals are indeed doing a much better editorial job, but those in universities who allocate the funds may be under pressure not to support those expensive journals, but to go for cheap ones, so it is not clear to me that the strong journals will be supported even if in fact they are deservedly so and have higher fees.

Mr Willetts: Lord Rees, you are a distinguished academic administrator in your time, having been a master of a college and a vice-chancellor, and also a member of the committee for the defence of the university. Let me just say that this kind of model where university administrators are kind of the enemies of academic endeavour and will push their own scholars, of whom their institutions can take great pride, and say, “No, we are not going to have you publishing in *Science*. We want to publish in a junior journal”, I would be very surprised at. They are not the enemy. This is a shared academic endeavour in universities,

and I think it is bad to get into a mindset that they will suddenly decide they can save money by instructing a researcher to publish in some undervalued journal. As I say, I think the problem is not oppression by universities. The issue is whether, as the external environment changes, the editorial value added by these journals is one that is sufficiently valuable or how much it is worth. On that, it is not for Ministers to decide. We will see over the next five or 10 years.

Q77 Baroness Perry of Southwark: You talked about having made an assessment of the costs and benefits of being the first, being the early bird going in this direction compared to other countries, and our earlier witnesses from the publishers' field did say to us that they saw the British scientific publications as a sort of shop window for British science in general, because they are prestigious journals and are seen around the world and it sort of rubs off on the scientific community here. Nevertheless, about 90% plus of what they publish is not British science, it is from overseas. Did you worry at all that by being first in the field with what is an expensive way of publishing we may discourage some of our overseas contributors from coming to British publications? They may take their business elsewhere and we will lose the prestige of our publications.

Mr Willetts: If you are an overseas researcher in a country that does not have a gold access policy, then your research paper can be published in the old way. There is nothing that stops that happening. For the British researcher, as we move towards gold open access—and we are certainly a long way off 100%—the British Government will be covering through research funding your publication costs and you can appear with your research being immediately available. I see that as absolutely delivering what you talk about, Baroness Perry. That makes the British research even more prominent, and for the publishing model, insofar as it is financed differently because it is an article from overseas, that will carry on.

Baroness Perry of Southwark: What about an American researcher who would normally publish in a British journal? Might they not decide to publish elsewhere?

Mr Willetts: I do not know. The truth is none of us can be absolutely sure. The truth is this is a changing environment, and I think the biggest single change is not driven by Government policy, it is driven by wider technological change. But I do not see why that should happen. In 2014 when the Research Councils review it, if they find this is happening, I am sure they would take that very seriously and report it to me and we would all consider it, but I do not myself see why that problem should arise, but we will keep an open mind. If it did, we would certainly have to react.

Q78 Lord Winston: What about the hiring position, where a research worker is, let us say, working on premises that are funded by EPSRC but the experiment that they are doing is funded by somebody else, a charity or not public money. Does that matter?

Mr Willetts: Yes. I think that that is a very fair point and those are exactly the kind of issues that have to be addressed as the policy is developed. We are trying to operate from the basic principle of: if it is research that has been funded by the British taxpayer, we think that it should be publicly accessible, but when there is a blend or an international co-operation, that does make it more tricky and they will have to develop rules of the road through those rather more complicated situations.

Q79 Lord Broers: I think you have already answered this question, Minister, but I will ask it and set it perhaps in a slightly different context. The question that I want to ask is whether you are confident that universities are able to distribute the APCs in a reasonable way. I think you have already pointed out that it was in their interests so to do. However, there could be the situation where a university really did not have enough money to do this in the money being provided, and there is always a temptation. It was Lord Rees who was telling us in an earlier session that there are repository databases or archives where people can shove

their paper in there anyway, and I believe your community uses these quite frequently. People do like that because their first priority is to get their publication out there, as you are saying, and if the obtaining of money is going to delay that, they might just go back to a completely un-peer-reviewed route instead. But my central question is: are you confident that there should not be some rules about how these monies should be distributed?

Mr Willetts: May I reflect very carefully on that and report back after I have voted? Would that be all right?

The Chairman: Yes, certainly.

Mr Willetts: I will be back in a moment.

Sitting suspended.

Sitting resumed.

Q80 The Chairman: We were in the process—Lord Broers, I think—of asking you about confidence in the universities to administer the APC funds in the inevitability of a squeeze, and there being more supplicants to the fund than can be supported by the limited funds available. We know from the RCUK figures that they are not going to fund all publications at APC level, and I think the question was: is this purely a matter for universities to figure out, or should there be some over-arching guide on this?

Mr Willetts: My instinct on that is it is largely something for the universities. In general, we try to work on the basis that we trust the universities and that universities have the best interests of their own academic staff at heart, but as I said in answer to the earlier line of questioning from Baroness Perry, we will remain open-minded. This is a journey, and if, for example, in the review in 2014 a problem presents itself, we absolutely undertake to reflect on it. We are not closed-minded. I personally think that some of these anxieties loom large in anticipation and may not prove to be so serious as the system works, but there may be

some that are proved to be well-founded. In that case we would absolutely have to engage with them and do our best to tackle them.

Q81 Baroness Sharp of Guildford: Under the same head comes the question of whether the methods of allocation will exclude those who are at an early stage in their academic careers, where it will be very difficult for the young researchers and young PhD students to get APCs paid for by the university.

The other area where concerns have been raised are for those universities that are not research-intensive and will not be receiving RCUK funds to help fund the APCs and whether they will be at a disadvantage. Bright researchers in such environments who come up with good ideas will be at a disadvantage compared to their peers in other universities.

Mr Willetts: Again, I do hear those concerns myself. They are expressed and you are correctly raising them, but I have to say that I think a university that did not want to bring on its talented younger researchers by giving them an opportunity to publish would be operating in a very odd way indeed and I think it is part of a university's responsibility. As I say, we believe in Britain in the autonomy of our universities, and I think by and large they can be trusted to do that. If it became clear that suddenly in the life of a post-doc, which in many ways has quite enough stresses and strains already, they were also suffering from this problem, we would engage with it. But if I were running a university, one of the things I would want is my university to have a reputation for nurturing their post-docs and pushing them forward to publish.

Yes, sorry, your second point. The fact is that for the universities that have more modest levels of research activity—and I will be honest, we have not been able to find a cost-effective way of directly providing extra funding for them—it cuts both ways. The sums of money involved are very modest so it is not a big cost in the context of their total budgets. On the other hand, it is quite hard for us or HEFCE to find a way of specifically funding

down, so it is just a matter of the overhead admin burden of doing it relative to the sums of money involved.

Q82 Lord Willis of Knaresborough: Just a general question: you produced the Charity Research Support Fund to support the charities in terms of full economic cost. Is there any plan to have a similar approach to invite open access? As I think Lord Winston remarked, a lot of the work that the charities cover is co-funded with NIHR and indeed with other departments. Is there any movement along that line to include it within the charity research support?

Mr Willetts: We are not envisaging that at this stage, and of course in some ways we are just following procedures that some of the leading charities like the Wellcome Trust have already introduced.

Lord Willis of Knaresborough: We are very supportive of it.

Mr Willetts: Some of them are ahead of us and we are trying to keep up with them. Again, if this proved to be an enormous problem, we would try to tackle it, but we have to see how it plays out, and we do not currently envisage that as being a problem and we do not currently have the funds to do anything about it even if it did emerge, but if it is big, we will look at it.

Q83 The Chairman: Thank you. Are there any other questions that members of the Committee would like to put? In that case I would like to thank you, Minister, and I think one conclusion that I draw very much from this afternoon's evidence is that things are more flexible and less rigidly set in stone than perhaps many of the people who submitted written evidence had come to believe. That in itself is a very helpful outcome of this afternoon—to understand there is greater flexibility, there is the thought of reviewing things as we move forward, and the policies that are being envisaged as maybe long-term aims will be reviewed

over time, and changes of direction or modification of direction may be relevant and appropriate.

Mr Willetts: Yes, I think it is a fair summary. The goal was set out not least in our innovation and research strategy back in December 2011, and I do think the world is moving to open access, but absolutely, if particular problems present themselves on this journey, we will do our best to respond to them in a grown-up way.

The Chairman: That is very helpful, and thank you very much for your evidence. As you know, you will receive in due course a draft of the transcript to make editorial corrections and we will publish our findings in fact very shortly. Thank you very much indeed.

Mr Willetts: Thank you.