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Session 3 – OST Science in Society Programme

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Suzi thank you very much for that kind introduction, I'd no idea I'd had such an interesting career until I heard it all read out. Okay that's me introduced, and that's by far and away the most pretentious job title I've had to date.

Science and Society, what is it about? From our point of view it's about making the world a better place, and so this is my opportunity in 10 minutes to give you a description of the world as we see it and not to miss out anything that's important.

We see our mission as something like engaging with society to shape science and technology for the future. How do we look at this? Why are we interested in this? Well, science underpins our national prosperity, that would be our view. It also underpins our individual well being and I think it's not an overstatement to say that it underpins our culture and our civilisation. This of course is not a simple linear model and that there is a strong linear dimension to it, but I don't think it is the case that if you get more science you get more prosperity as strong feedback loops.

What is the government looking for in this area? Well, first of all as you will no doubt have read in Gordon Brown's recent presentation on the 10 Year Science and Innovation Strategy, we are looking for the UK to be the location of choice for research. That means a number of things. It means that we are looking to have world class research, which is driven by competition for money and for talent. It means that we are looking for a research base that meets the needs of both private and public funders. It means that we are looking for better translation of leading edge technology into commercial applications. It means that we need more scientists whose careers are underpinned by and promoted by excellent teaching and by an excellent curriculum.

In order to achieve this we need to earn public confidence in the development regulation and use of science and technology in all its rich diversity. There are some very serious downside risks that we see if we don't achieve in particular public confidence, or should I say continuing public confidence. The first is that ultimately the public will decide whether we like it or not, they will make decisions and if they are not confident about the way things are being developed on their behalf, options will be foreclosed, potentially promising options will be shut down, and that means that there will be a loss of potential benefit, a benefit which is likely to be unknown because of course

it will be lost before its actually accrued. And I think if you look in the direction of the issues surrounding primate research you can see the sort of problems, very straightforward really that people get into if public confidence is compromised.

The third risk clearly is that if the public doesn't engage then there will be an absence of the potential workforce, and I don't believe it's too much of an overstatement to say that in 10 or 20 years time research organisations ability to function could be compromised by the absence of scientific workforce. And that problem arises across the whole of the scientific community and I'm tempted to say hands up anybody that doesn't have trouble getting a plumber these days. So, science right through the spectrum is an area that we're interested in and concerned about.

How does this look from our point of view? We see three strands, public engagement, the science workforce and the question of improved collaboration. Turning to public engagement. I think the first point I would want to make is that as Lord Whitty mentioned yesterday, we feel we're entering a new era of public engagement. A key element of this is raising public awareness, engagement and support for science innovation which is very much what our agenda today is about and yesterday. A second critical dimension we see is increasing public confidence in the government's use and management of science. Now that is not a propaganda exercise, it's not intended to be a propaganda exercise, this is not an exercise in persuading the public that what the government's doing is right, it's much more an exercise in exposing the way that these things work, the way that decisions are made, to satisfy people that the decisions that are made by government on their behalf are indeed the right decisions, the decisions that they would want to have made. It's also an exercise I think in engaging the public to understand what their expectations and aspirations are, rather than as a scientific community presenting them with oven-ready options from which they can select without actually going through the process in the first place, sufficiently through the process in the first place of actually asking them what they'd like.

The next dimension is we need to catch them young, we need to ensure that young people leave school sufficiently engaged in the science agenda and sufficiently equipped so that when they become citizens, when they become voters they can actually engage in the scientific questions that they are going to have to deal with, because its certainly the case that however you see the pace of scientific change, and I never cease to be amazed by it, and I've been working in it for most of my career, its accelerating, and however fast things are changing today the world is going to look a very different place in a decade when today's school children are tomorrows voters.

So, these goals will be achieved if we improve engagement with the public, at all ages, and we need, in order to do that, to have greater openness and to engage them in our decision-making process, particularly about risks, which again Lord Whitty mentioned yesterday, with the object of winning their trust in the development, regulation and use of science by both government and by commercial enterprises and by other bodies.

Turning now to the science workforce, the first thing is that we seek to increase an involvement of women and ethnic minorities in science and its governance. Its very interesting actually to come to a meeting like this and talk to a group like this, because this is one of the rare occasions it seems to me that the gender balance is about right. So the science communications community seems to have got the gender balance about right. If you go to meetings like this, and I'm sure you all do, within specialist scientific areas, it tends still to be male dominated and with serious under-representation of ethnic minorities. These are two very serious problems particularly in the context of women, that's half the population that we are talking about. That's half the population where the investment in education is not being realised, if you look at it from the treasury point of view, and where people are not getting the satisfying and rewarding careers that they might otherwise have. I say particularly with women, not because the ethnic minority issue isn't very important, we understand the problems surrounding the involvement of women better, we are working on the issues surrounding the involvement of ethnic minorities.

The second dimension on the scientific workforce question is that we need to make sure that there are simply enough scientists well qualified scientists, engineers and technologists to work the scientific enterprise.

Now, all of these areas we see can be enhanced, so the areas of public engagement and the science workforce can be enhanced by improving collaboration which we see as one of our key functions, and that's collaboration between government departments, between devolved administrations, between the research councils and between and with the learned societies, and all of these bodies have Science in Society programmes of their own. They are not all entirely consistent and we feel there is a major growth area if you like for improving the coordination between these groups.

Turning to the vision that we have, I think as Kathie Sykes mentioned yesterday, we are seeking to develop a vision, over the next weeks and months. We're very interested in peoples views on what that vision ought to contain, because we take the issue of having a vision which reflects what society wants very seriously indeed. The sort of issues that we see as the possible content of the vision, are things like mainstreaming science and society issues in government policy across government. Government, for

those who haven't worked in it, is a many splendid thing, and the seamless road that sometimes appears to be Whitehall it actually contains many houses which don't always get on entirely well with each other. There is, that said, a clear consistent across government evidence-based policy in general and evidence-based policy, science evidence-based policy on science issues, and there is also clear appetite, and again I think Lord Whitty made this clear yesterday for public engagement which is characterised by openness, transparency and honesty. And the second point there, Lord Whitty mentioned risk and uncertainty, these are critical issues, and I think the way that we are inclined to look at that is that there is a need to improve the way that risk issues are communicated by scientists and policy-makers to the public, so that the capacity of the government to understand how the public feel about these things is improved. There has traditionally been an appetite for changing the public because they didn't understand, and that I think is currently referred to as 'the deficit model' which doesn't sound very nice and we don't think it is and so we are looking to look at this whole issue through the other end of the telescope and change the way that we behave.

I will skip over trade integrate because I think that is self-evident, and the final point is that we are contemplating piloting public engagement into the SR2006 process, the spending review process is traditionally rather a closed book and we think that there is scope to involve the public more in the decision-making prioritisation that goes on in that process.

Very quickly, I won't go through these because I'm afraid I'm out of time, but we are looking very seriously for indicators of success, because we want to know if we're actually getting there, so we want to know whether the trends in public perception of scientists and engineers are improving. We want to know whether the trends in the roles of women and ethnic minorities are improving. These are issues that we are not going to change rapidly but certainly over a 5 year period, or a 10 year period we want to see improvement in those areas.

So, in summary, the government is quite clearly committed to the importance of this agenda. We in OST want to have a clear vision of where we are going with your help, we want to have clear targets so we will know whether we're getting there, we want to pursue a properly structured approach, and we want to have a clear set of indicators to assess our progress and I and our colleagues would be delighted to hear your views either in the discussion following this debate, or during the rest of the day, if you want to talk to us directly, and that's all because Science in Society really is about making the world a better place for all of us. Thank you very much.

