Speech by John Dickie, Head of Public Affairs at the BBC delivered at The Foundation for Science and Technology Meeting on 21st June at The Royal Society.

Public broadcasting – the impact of technology

This is a very timely discussion.

I have spent the afternoon watching the House of Commons debate an Opposition motion on the 'Future of the BBC', braced for the criticisms – from both sides of the House – about the BBC's political coverage.

Instead, the debate focused on the role that the BBC should – or should not – play in developing new services based on new technology.

Enthusiasm for BBC innovation is tempered by concern that we will crowd out the private sector and I want to address both these issues – what we aspire to do, and how we make sure it is in the public interest – in my remarks this evening.

But first, I should perhaps say what I mean by Public Service Broadcasting, or PSB it's called in the vernacular, as there are a number of competing definitions.

The relevant section of the Communications Act takes 650 words to describe PSB and how it should be assessed. OFCOM, in their PSB review, spend nearly 1,000 words in assessing the consumer and citizen aspects of PSB.

By contrast the Davies panel on the funding of the BBC back at the end of the last century – 1999 – said "we may not be able to offer a tight new definition of PSB, but we nevertheless each felt that we knew it when we saw it."

Each of these definitions has its own merits: but none is quite right for the BBC as we move towards our first Charter of the 21st Century.

- sustaining citizenship and civil society;
- promoting education and learning;
- stimulating creativity and cultural excellence;
- representing the UK, its nations and regions; and
- bringing the UK to the world and the world to the UK.

All of our activity should seek to meet at least one of these purposes.

In addition, we are developing a measurement framework, based on reach; quality and distinctiveness; audience impact; and value for money to assess our programming.

But putting measurement and metrics aside for a moment, the central public service purpose of the BBC can be summed up in one word: content. Content which is creative, innovative and enriching.

The key difference between the BBC and any other broadcaster is that, thanks to the licence fee, we are in the position where we can take real creative risks.

Risks which would never make sense for a company focused on its bottom line.

We provide, as the Secretary of State has put it, the venture capital for Britain's creative industries.

It's great when a programme gets a large audience: but that is never our sole motivation.

Planet Earth and Doctor Who command large audiences; but we also make programmes like Panorama or The Thick of it which play to much smaller numbers of people.

Impact of technology

So, how does technological change affect our mission?

On the supply side, technological change makes some things, like editing or video journalism, cheaper; but other things become more expensive, because viewers and listeners expect higher quality: contrast an episode of Dr Who today with that of 20 years ago.

But while these developments affect our costs and production values they do not affect our purposes.

Change on the demand side, however, has had a bigger effect.

New technologies have altered the structure of the market – we no longer live in a world of three, four or five TV channels and a limited number of radio stations.

There is much greater freedom of entry and choice.

And of course the internet has created an entirely new channel to market for the BBC amongst others.

But so far, the impact of new technology on the traditional media has been incremental.

The television broadcasters have launched new linear channels.

We, the newspapers and others have set up primarily text-based websites.

And tentatively we have looked at new distribution platforms, such as mobile phones – where, again, we're essentially seeing how our existing content can best be used on these new devices.

These developments have been an effective response to the first wave of technological change; but a second wave is starting to reach audiences. And this really will shake things up.

In this wave, we will see radical, dislocative change.

On-demand technologies mean that all media will be available on all devices all of the time. Media will be searchable, moveable and sharable.

For example you will be able to create your own virtual TV and radio stations: mixing new schedules from broadcasters with content from their archives and other sources, such as user generated content. You can do this yourself or have it auto-generated from your preferences and previous viewing patterns. You can watch at home or on the move.

Audience behaviour compounds these technological innovations.

Historically it takes years, perhaps decades, for innovations to shift from the lab, through early adaptors, into mass market living rooms. As sales pick up, prices slowly drop. But no longer.

Contrast, for example, the speed of take-up of video recorders with DVDs.

Or look at Digital Terrestrial Television. Relaunched as Freeview in 2002, Digital Terrestrial TV was in around 1½m homes. By the start of this year, it had overtaken analogue television as the primary source of TV in over 7 million households; and is set to overtake satellite by the end of the year. A Freeview box – like a DVD player – can be bought for less than £30.

Similarly, there are now around ten million broadband homes in Britain – up from just tens of thousands in 2000. Prices are falling as bandwidth is increasing.

Broadcasting audiences increasingly have the same expectations as the sophisticated couple in Martini commercials from the 70s: they expect content anyplace, anytime and anywhere.

This is particularly true of younger audiences.

Let me give an example from a household with a TIVO personal video recorder. The mother has set the machine to record a range of children's programmes and this how her daughter watches TV. There is always a familiar strand of programming that she likes to hand.

And for the child it is: it doesn't do what she expects it to do. New technology isn't new when it's what you have grown up with.

Implications for the BBC

Technological change of this kind creates an extraordinary opportunity for the BBC. Our ambition – to give our audiences great content – has been hampered by logistical and information difficulties: we might have had a programme perfect for you at 6:30 on Thursday but you were busy, or out; or perhaps you just didn't know it was on.

So how do we seize this opportunity?

First and foremost we need to get the content right. We have recently undertaken a pan-BBC project called "creative future" which has looked at how we change the way we produce great content for this on-line, on-demand interconnected world.

Around 95 percent of the population use our services on radio, TV and online every month. But as we move to the second wave of the digital revolution, what do we need to do to maintain or increase that reach?

To begin with, it is vital for us to understand audience expectations – and so we have undertaken substantial audience research.

As a consequence we have identified areas – from News through to programmes for teenagers – where we think we need to raise our game. Mark Thompson, the Director-General of the BBC, recently set out these conclusions in detail.

He also sought to map some of the big themes. The key - in terms of utilising the new technologies available to us - is that the BBC should no longer think of itself as a broadcaster of TV and Radio with some new media on the side.

Instead – as the Government's White Paper makes clear -- we need to aim to deliver public service content to our audiences in whatever media and on whatever device makes sense for them, wherever they are.

Wherever possible we need to think cross-platform: in our commissioning, our production, our distribution.

And our audiences won't just be recipients anymore: but participants and partners, uploading as well as downloading content. We need to get to know them as individuals and communities and let them configure our services in ways that work best for them. Our vision should be that we have a direct one-to-one relationship with every individual household in Britain.

Second, we need to put in place the tools to make this new relationship with audiences work.

The centrepiece of this for the BBC is something we call the iplayer: software you can put on your PC which will allow you to download BBC programmes.

Like any innovation, there are details to be worked out but the core proposition is that you'll be able to download programmes for the forthcoming week, to watch them once they've been transmitted; and to download and watch programmes that you missed over the past week.

The iplayer is based on peer-to-peer technology, so that instead of having to unicast each programme file to each PC, the iplayer will be able to meet requests for a programme file from other PCs on the network.

Each file – indeed each packet of data – will have a digital rights management wrapper around it.

Once downloaded, there will be a period of time when the file can be opened and, once opened, there will be seven days when it can be viewed.

Then, as in Mission Impossible, the file will self destruct. The Rights Management technology will do that, as well as preventing unauthorised further distribution, access or copying.

The Open Archive – which will unlock the content that the BBC has in its archives, once commercial exploitation has largely ceased, so that licence-fee payers can watch again content that they have already paid-for; and

The Creative Archive – which will allow users to manipulate content for their own personal purposes under a non-commercial licence.

And these will, in turn, be complimented by search tools to help people find our content.

As anyone who has ever sat goggle-eyed in front of the hundreds of channels available on satellite will know, one of the great challenges of the digital age is finding the programme you want – let alone the programme you don't know you want – amongst all this choice.

"Discoverability" is the catch-all term: we need powerful search algorithms so that you can interrogate the archives and search the metadata – that's to say the information that describes the programme-- whether by text, voice or other pattern recognition.

And we need to adapt to this world the skills developed by broadcasters.

For example in the old days of limited choice, public service schedulers used to "hammock" programmes, say putting *Panorama* in between *Eastenders* and *Only Fools and Horses.*

We need to think how we can use links and our knowledge of individuals' viewing preferences to give audiences what they don't know they want – programmes which will surprise and delight.

In creative terms, the way to achieve this is emphasise distinctiveness – that we provide public service content that is different from that of other broadcasters or media players.

Michael Grade, the BBC Chairman, has joked that too often the BBC's core purpose seemed to be 'Cor, we could do that'.

If ever true, it will certainly not be the case going forward.

In terms of governance, the BBC will have a much more transparent and robust framework than ever before.

All existing services will receive a licence from the Trust which will set down clear aims and objectives.

New proposals – such as the iplayer, open archive and creative archive I have mentioned – will be subject to a public value test by the Trust which involves:

(i) a public value assessment from management of the likely consumer and citizen benefits, which they scrutinise and

(ii) a market impact assessment provided by Ofcom.

The BBC Trust will consult widely, and must be satisfied that the public value added by a new service outweighs any likely negative market impact if they are to approve BBC management's proposal.

But while we need radical change in all these ways the mission of the BBC remains essentially unchanged.

The deal remains a very simple one: the public give us the licence fee, we give – or at least strive to give them – great content which informs, educates and entertains.

As markets fragment, the case for a broadcaster funded by all, free at the point of delivery grows rather than weakens.

Broadcasting remains a public good and the economic case for public intervention – externalities, increasing returns to scale and information deficiencies – remains.

But I want to shift from an economic analysis to that of an historian.

As Simon Schama recently said on the Today programme "There's nothing like a little distance to make you reflect on what really makes Britain great, and since I live in the United States most of the time I can tell you that many is the time I wish deeply there was a presence like that of the BBC in American Broadcasting."

He went on to say "It's impossible to imagine in America anything like the take no prisoners irreverence of Jeremy Paxman on Newsnight, it's impossible to imagine the kind of powerful and wildly eccentric satire, the kind that we saw in Little Britain, it's

impossible to imagine the scale and depth and beauty of something like the dramatisation of Bleak House."

As technology changes the ways we will seek to engage with our licence-fee payers will change and develop for the better.

But our mission – great content in exchange for that licence fee – will remain.