

Radio Microphones

6 Mar 2007

“Extract from a speech by Peter Luff MP at an Adjournment Debate at the House of Commons on 6 March 2007, regarding radio microphones”.

Motion made, and Question proposed, That this House do now adjourn. —[Mr. Roy.]

10 pm

Peter Luff (Mid-Worcestershire) (Con): I am grateful for the opportunity to speak on an important subject, and to the Minister for Industry and the Regions for coming to the Chamber to reply. I know that there is a limit to what she can say because of the nature and timing of the Ofcom consultation, so we have agreed it will not cause a problem if I stray over the usual 15-minute limit on Back-Bench contributions.

My purpose is to alert Parliament, all users of radio mikes and the general public to a real and present danger—I believe that Ofcom is now aware of it—caused by Ofcom’s proposal to auction the spectrum, which has been freed up by the move from analogue to digital terrestrial television. Until recently, that was regarded as an exclusively good thing, enabling a whole range of new uses for one of the most valuable commodities of the modern world—the radio magnetic spectrum. It has become apparent, however, that there is a potential casualty—the radio or wireless microphone. It may not sound serious at first blush, but closer examination shows that it could be a significant problem. My hon. Friend the Member for Maldon and East Chelmsford (Mr. Whittingdale), who chairs the Culture, Media and Sport Committee, shares my concerns. Given my chairmanship of the Trade and Industry Committee, that means that the Chairmen of both Committees to which Ofcom is accountable in the House are worried about the issue.

For the technically minded, when I use the phrase, “radio mike”, I may be referring to a range of crucial wireless gadgets such as wireless in-ear monitor systems, wireless talkback systems and wireless instrument systems. There is even a Downing Street petition on the subject with about 6,000 signatures, including that of Gillian Lynne, who is perhaps the most distinguished choreographer in the world and the genius behind “Cats” and many other theatrical triumphs. I hope that the petition will attract many more signatures, although they may not reach road pricing levels. Ofcom is highly regarded, and rightly so, but it is only beginning to understand how serious the issue is and how incomplete its initial understanding of it was. That is not intended as a criticism, as it is a highly technical subject involving a plethora of firms, organisations and individuals. Indeed, despite having immersed myself in it for several days, I am apprehensive lest I make a serious gaffe in my brief remarks.

I could have entitled the debate, “The implications of Ofcom’s actions and the threat to the use of interleaved spectrum by the programme-making and special events sector”, but I would lose my audience very quickly. That may be why the issue has taken so long to gain traction. Unless—and I think that it may be the case—there is substantial change to Ofcom’s proposals, we run the serious risk that some very bad things will happen. I must declare an interest: I am a passionate fan of musical theatre,

and I am delighted that my son is studying at the London Academy of Music and Dramatic Art on a stage management and technical theatre course. His account of the gloom among his professional tutors is one reason why I wished to speak on the subject.

The loss of spectrum for radio microphones would mean many things, including an end to west end musicals. The use of radio mikes to achieve the necessary volume and co-ordinate the stage crew is essential, so it would be goodbye to “Phantom of the Opera”, “The Lion King”, “Evita”, “Spamalot”, “Porgy and Bess” and the rest, as they would have to close. Gillian Lynne told me:

“‘Cats’, one of the most innovative shows ever staged, could never have worked without radio mics. No one could dance at that technical virtuosity and pace and sing flat out, as the performers have to, without radio mics. That show has boosted English expertise and creativity world wide and made a great deal of money for this country.”

Some opera companies use radio mikes too, and touring productions like Raymond Gubbay’s operas in the round just would not happen. Tours by stars of the music world, whether that is Elton John doing his back catalogue at England’s cricket grounds, Kylie Minogue strutting her stuff, George Michael’s stylish pop, or Arctic Monkeys’ raucous rock, would all end.

Rob Marris (Wolverhampton, South-West) (Lab): The hon. Gentleman is arguing against himself, now!

Peter Luff: There are some arguments on the other side. I shall come to that later.

There would be an end to all UK film making, including most television drama—they all use radio mikes now, not the old boom mikes. Think of “The West Wing”, with its long continuous shots in corridors and offices. That is what audiences expect, and radio mikes are needed to do it. Lord Puttnam—David Puttnam—told me:

“In the past decade the film and television industry has moved to a point at which virtually all sound recording is now down to using wireless technology.”

So no radio mikes means that no more British triumphs, like “The Queen”, will be made in Britain and, by the way, no Bollywood extravaganzas will be filmed at British locations, either.

TV news gathering would also grind to a halt. All outside broadcasts now depend on radio mikes and spectrum for the cameras to transmit footage back to the outside broadcast van. One cannot have trailing cables at scenes of terrorist outrages like 7/7, and one cannot have single-handed film crews interviewing people, including MPs, if they have to hold a furry mike in front of the interviewee as well as operate the camera. ITV told me:

“Access to these channels has been essential to ITV’s effective operation and news coverage; they are used to service talkback and radio microphones, on

location and in studios. To date, the Joint Frequency Management Group has effectively managed allocation of spectrum to broadcasters, ensuring efficient and effective use of radio spectrum to serve broadcast needs.

Any potential loss of the ability to operate radio microphones will compromise the quality of the news service they can provide nationally and locally.

Over the years, ITV has made a significant investment in these systems, and the future viability of this investment will be in doubt.”

Outside sports broadcasts, from Formula 1 to the rugby World cup, depend on radio mikes for the reporters and camera crews to cover the event, and even to let us hear the referee’s comments to players. One of the best inventions in TV coverage of cricket, the snickometer, would also be endangered. As for the possible effect on the 2012 Olympics, the BBC told me:

“It is difficult to see how the UK can meet the commitments it set out in its bid regarding access to spectrum.”

Major special events would suffer in particular, as they make huge use of the spectrum, so no more “Children in Need”, no more televised 80th birthday parties for Her Majesty, no more Brit awards, no more VE-day celebrations, no more Band Aid or Live8. Finally, perhaps my right hon. Friend the Member for Witney (Mr. Cameron) may never have become Leader of the official Opposition without a radio mike. He needed one to walk confidently around the stage at Blackpool in October 2005, delivering to that imposing hall and a wider television audience his barnstorming and inspiring speech.

One of our greatest screen and stage actors, Patrick Stewart, of “Star Trek” and “X-Men” fame, said to me, also making the point that even if the actors do not need mikes, the backstage crew do:

“Modern entertainment depends on the use of wireless equipment to communicate. I am currently in ‘The Tempest’ in the West End and the stage management rely on radio technology to do their work. The same is true for film making and other forms of entertainment.

If access to the spectrum became unaffordable or unavailable, the British entertainment industry would be severely handicapped and perhaps even grind to a halt. It would be disastrous.”

There is, however, one silver lining—no radio mikes would mean an end to reality television, and programmes like “Big Brother” would no longer grace our screens!

The programme making and special events, or PMSE, sector is a disparate and diverse community of content producers, manufacturers, rental organisations and freelance engineers.

John Barrett (Edinburgh, West) (LD): Does the hon. Gentleman agree that the PMSE industry has neither the finance nor the organisation to bid through an auction

to Ofcom for the spectrum? That is the heart of the problem. If it is forced into an auction, it will not win it.

Peter Luff: I am grateful to the hon. Gentleman, who I know takes a close interest in the subject. He anticipates remarks that I shall make later and he is entirely right.

The sector, with its vast diversity of people, plays a critical role in the British entertainment industry. It represents over 100,000 professionals who belong to organisations such as Equity, the Broadcasting Entertainment Cinematograph and Theatre Union, SOLT—the Society of London Theatres, the Association of Motion Picture Sound, and the Musicians Union. It relies very largely on the unused spectrum that interleaves between existing analogue TV broadcasts, to enable the use of radio microphones.

The UHF spectrum for TV broadcasting has 49 channels numbered 21 to 69. Each channel is 8 MHz wide, enough for eight radio mikes—in some circumstances, up to 16. The only UK channel dedicated to radio mikes is Channel 69, so when more than eight systems are needed in one location, Joint Frequency Management Group—JFMG—allocates other channels as required. That is possible because of the low power of radio mikes compared with TV transmitters. A radio mike needs to communicate with its receiver over only a few hundred yards.

About 180,000 wireless units use this spectrum at 45,000 different events, from small-scale ones such as church fetes using a single frequency to much larger live events that might use up to 240 frequencies. I recently went to a drama school musical production that used about 14 channels, while a west end production will use four or five times as many. Responding to public demand, there is a growing trend in live entertainment towards much larger live events, such as Live 8, which require very significant frequency capacity.

Following digital switchover, in each region some channels will be cleared and some re-used to allow expanded digital television coverage. There will be new interleaved spectrum, but at different frequencies from the current interleaved spectrum, demanding massive new investment by everyone using radio mikes even if they can access the spectrum. Crucially, Ofcom proposes to auction this new interleaved spectrum. Bizarrely, it said in a letter to me:

“We have not identified anything intrinsic to the nature of professional PMSE use that would preclude a bid that reflected its value.”

I think that it now understands that it did not look hard enough. It says:

“Our conclusion was based on the observation that this use forms part of a commercially viable industry, which is capable of funding the purchase of other inputs to its business as it deems necessary.”

However, there is no single “commercially viable industry”—there is a massively disparate community making much more extensive use of the spectrum, often ingeniously, than Ofcom realises. Its offer of free access to the new spectrum to the end of 2012 showed a worrying lack of understanding of the sector, its use of the

spectrum, and the cost of changing to new frequencies. Indeed, given that Ofcom intends to abolish the organisation that currently co-ordinates the spectrum, JFMG, it is not even clear how it would ensure access to the new spectrum at all.

How much of this community is commercially viable? Theatre is on a constant knife edge. Yes, the big blockbusters make money, but only a lucky few have ever made their fortune out of the stage. Are the BBC and ITV awash with cash to fund new equipment and massive new charges for access to spectrum? Do the charities which benefit from major events really want to hand over enormous sums to the Treasury to pay for this spectrum? Even the relatively rich music industry believes that there are not enough superstars touring with high-income events to enable venues to continue to afford sufficient access to the spectrum—and they need a lot of it. A recent George Michael concert used 17 frequencies for in-ear monitoring and 24 for radio mikes.

Ofcom has laboured under a number of misapprehensions which have, until now, hampered its ability to engage successfully with the issue. They include its estimate of the size of the PMSE sector; on a related point, its ignorance as to the large number of unlicensed users; and the true value of redundant equipment and of the time needed to re-equip. Recently, though, things have been changing, and Ofcom has been engaging more positively with the sector. The auction process is a sensible mechanism for many sectors interested in the digital dividend review—the DDR. However, for the PMSE community, which has well-established grandfather rights for the use of this spectrum, and is absolutely dependent on access to it, the auction process is unacceptable. Interestingly, one sector—radio astronomy—is already rightly protected from the full pressure of the market, so there is a precedent for special treatment.

I have to ask, perhaps on a slightly more partisan note, to what extent this process is being driven by the Chancellor of the Exchequer. With the public finances under pressure, the prospect of a repeat of the staggering success of the 3G spectrum auction in April 2000 must be very appealing, but when he becomes Prime Minister, does he really want to preside over the ending of so much pleasure? It would confirm many people's prejudices if he did.

The crucial point is that all the other bidders in an auction—even high-definition television—would be new users of the spectrum. Only one existing use is threatened—radio mikes. Those who are providing this crucial service have those grandfather rights. They are already there, providing a service greatly valued by society, and they should be protected in some way. There is no other use of this spectrum of which that is true.

What are the dangers to the sector of the auction process? The sector unanimously agrees that it is impossible for it to enter a simple auction system for spectrum release. It has three main grounds for saying that. In detailing them, I shall deal with some of the comments of the hon. Member for Edinburgh, West (John Barrett).

First, the spectrum cannot organise a bid. It is a disparate and diverse community of content producers, manufacturers, rental organisations and others. Many of its members are extremely small. They do not possess the financial resources, nor is there a mechanism to co-ordinate bidding for the collective needs of the community.

Secondly, there is the nature of the competition. The sector genuinely believes that it could not be successful in securing spectrum at auction. The other bidders have huge financial muscle. The turnover of the entire world-wide radio mike manufacturing industry is approximately £1 billion a year. By contrast, Vodafone alone has a turnover of nearly £30 billion. Dell, Hewlett Packard, Microsoft, Apple and many more IT and communications giants will also be bidding.

The third danger is the cost. The certainty of losing in an auction process is increased by the estimated value of the likely bids. Ofcom's supposition that the spectrum is likely to be of only limited value is undermined by both a letter from Dell Corporation about its value and by Vodafone's public comments on the implications of the digital dividend.

Worse, with powerful commercial forces up against a disparate sector, there is a genuine prospect of spectrum hoarding—"land-banking" of spectrum for future possible uses. They do not make spectrum any more, and one of the IT giants could decide to take pre-emptive action to squeeze competitors out of the market. That would mean "Bye-bye PMSE."

Then there is the question of equipment. It is worth spending some time on that. The suggestion by Ofcom that around only £10 million worth of equipment would become redundant as part of the DDR is wrong and underestimates the figure by at least a factor of five. One medium-sized company, Autograph Sound, has approximately £7 million worth of affected equipment.

The PMSE sector must be given sufficient time to amortise the value of current equipment that will become redundant. A considerable amount of it will be unsuitable for upgrading because of the restriction of the hazardous substances directive.

Even fully depreciated equipment holds commercial value because of its longevity and the rental nature of part of the sector. Equipment filters down through the industry. Ofcom's proposed changes would abruptly end the life cycle of the equipment by making it redundant.

The timetable for spectrum release must be sufficiently long to allow the manufacturing industry to produce a sufficient quantity of new equipment for the new frequencies. It is an international industry, so it cannot change everything just to suit the British market. It will need time to avoid disruption to production. Anyway, will international artistes really want to abandon the kit that they use everywhere else simply to perform a UK tour?

Ofcom proposes the deregulation of Channel 69, but it may be a bad idea. Existing PMSE needs, as well as those of amateurs, require interference-free use of spectrum. If the PMSE sector continues to use Channel 69 professionally, it is certain that sound production will suffer from interference. It is absolutely fundamental that the spectrum used by the PMSE community should be licensed and co-ordinated by a successor to JFMG.

Ofcom's argument that the current system offers no security of tenure is bizarre. Until the DDR, there was no risk to the sector's use of the spectrum. Ofcom and the review

created the risk and now it wants to take the credit for a solution to a problem that it invented.

I believe that market-based, flexible solutions are good, but there are always exceptions, such as the radio astronomers, who could not afford to pay for the spectrum they use. Let us be clear: PMSE users accept that change is inevitable and that that will mean a higher price. I think that they accept Ofcom's view that current prices probably do not even cover the regulator's costs, but one does not need the perils of a full auction to correct that. The price could simply be increased.

There must be an acceptable medium-term solution to permit investment in new equipment. The JFMG has an important co-ordinating role that must be protected. Perhaps some appropriate spectrum could be allocated on an annual rental basis to a successor to JFMG. That successor would be independent of Ofcom, which would not therefore be responsible for the organisation. The sector could bid for additional spectrum that it would ideally like, but with the comfort of some security. The new JFMG could charge and police authorised spectrum usage by the PMSE sector. Whatever happens, there must be a smooth transition to the new spectrum allocation world, with a longer time scale than that currently envisaged by Ofcom.

I emphasise that I respect Ofcom, and I am sure that the consultation is genuine and poses it real challenges in balancing competing demands. However, there is not much time left. The sector must come together even more closely than it has so far to express a coherent view and offer a possible solution to this real problem. Individual points of view, however, are also valuable: short letters making one or two points to Ofcom will have their impact. The consultation ends on 20 March. My appeal to the sector is that it makes its voice heard so that a real danger is prevented.

Earlier, I quoted Patrick Stewart, who is currently playing Prospero in "The Tempest". I say to the Minister, and through her to Ofcom, that there will be a tempest of public outrage if this goes wrong. Adapting Prospero's final soliloquy, I say:

"Now I want

Spirits to enforce, art to enchant,

And my ending is despair,

Unless I be relieved by Ofcom,

Which pierces so that it assaults

Mercy itself and frees all spectrum.

As you from crimes would pardon'd be,

Let your indulgence keep radio mics free."

10.20 pm