RADIO SOCIETY
of Great Britain

The Hon Ed Vaizey MP,
Minister for Culture, Communications and Creative Industries
Department of Culture, Media and Sport
2-4 Cockspur Street
London SW1Y 5AH

Date: 11th June 2010

Dear Mr Vaizey,

Ofcom and interference to radio spectrum users from Powerline Technology

The Radio Society of Great Britain represents the interests of some 60,000 radio amateurs and short-wave listeners in the UK and in addition takes a close interest in the proper management of the radio spectrum in our country. I am writing to you on a matter of great concern to the Society. It relates to the position of Ofcom in relation to Powerline Telecommunications technology (PLT)

PLT was initially conceived as a means of bringing Broadband service to the home over the mains public power wiring. As such, it received initial encouragement from the EU. However, as all engineers know, transmitting high-speed data over wiring not intended to carry such frequencies causes unintended emissions in the radio spectrum, which can cause severe interference to authorised radio services.

In the event, "Access" PLT (the form of PLT technology that brings broadband to the home) failed. It was neither commercially nor technically viable, but it did survive just long enough for in-situ tests to confirm the high levels of interference which such a system causes to radio reception.

Now the focus has shifted to Powerline Adaptors (PLA) – small devices which are sold to allow householders to move high-speed data around the home using the mains wiring. This application of PLT technology brings exactly the same problems of interference. However, PLAs do nothing to improve the availability of broadband service at the doorstep – they are simply in-house commodity devices for distributing an existing Broadband connection around the home. There are readily-available alternatives to PLAs, most notably Ethernet wiring and Wi-Fi.

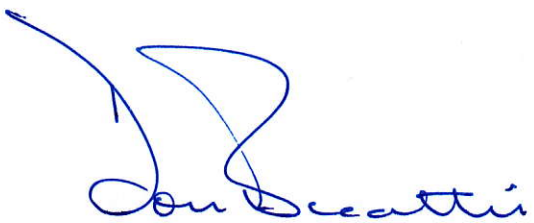
Despite the proven emissions from these PLA devices (30dB or 1,000 times the levels specified in international standards) across much of the short-wave frequencies and the fact the devices fail to meet the essential requirements of the EMC Directive or its transposition into UK legislation, Ofcom has been unwilling or unable to take positive action to regulate this pollution of the radio spectrum. These devices are now readily available over-the-counter and shortly the noise floor in the radio spectrum, that has been properly protected over the last half century by adherence to sensible standards, will be damaged beyond recovery. New devices are coming onto the market that bring the real threat of damage to FM and DAB broadcast radio reception, private mobile radio and safety of life service frequencies, such as air traffic control. Once these devices have been sold to the public and are in use, because they are not in any sense licensed, there is no means open to Ofcom or the Government by which they can be taken out of use.

The Society firmly believes that the "market forces" approach of Ofcom in a technical area such as this is extremely dangerous, and that action needs to be taken to reinstate a level of discipline in the sale of devices that so evidently fail to meet accepted standards. Ofcom argues that it has only had a few hundred complaints. But this is to miss the point entirely. The very fact that a main supplier (BT) of these devices agrees to change them in cases of interference for an alternative technology is a tacit admission that the devices do not meet accepted international standards.

I do hope you will feel able to take some action, including if necessary by giving Ofcom additional powers, to ensure that it takes its spectrum management responsibilities in this area more seriously and moves to protect an invaluable resource which, once destroyed, will be impossible to replace.

I would be pleased to meet with you or your officials to discuss this and to provide any supporting commentary that may help with your review of this matter. I am copying this letter to David Hendon at BIS.

Yours sincerely



Donald F Beattie
Technical Director

c.c. David Hendon, BIS