

***“Statement of Strategic Priorities for  
telecommunications, the management of radio spectrum and postal services”***

Consultation Response from

Prof. R. W. Stewart  
Centre for White Space Communications  
Department of Electronic and Electrical Engineering  
University of Strathclyde  
Glasgow, G1 1XW  
[www.wirelesswhitespace.org](http://www.wirelesswhitespace.org)

27th March 2019

---

## **Background**

The University of Strathclyde has been at the forefront of shared spectrum technology in the UK and other parts of the world for almost 10 years. Through our Centre for White Space Communications, we pioneered and played a key role in the development of the UK's TV White Space (TVWS) shared spectrum framework (for which regulations were put in place by Ofcom on 31st Dec 2015). In recent years we have built test networks on Isle of Bute, Glasgow City Centre, Orkney Islands, and on joint projects with industry partners in Kenya working on TVWS alongside industry, academic and Govt partners. We are active participants in the DCMS-funded 5G RuralFirst project, within which we are responsible for devising, deploying and demonstrating the next generation of '5G-friendly' dynamic spectrum access (DSA) solutions. The strategy we follow on this is 5G - *New Thinking*.

## **Response to Consultation Questions**

**Q1:** *Do you agree with the Government's strategic priorities and desired policy outcomes for telecommunications, the management of radio spectrum and postal services?*

We fully agree with the Government's strategic priorities and desired policy outcomes for telecommunications and the management of radio spectrum. In particular the intention to bring more flexible licensing of spectrum will allow new operators, new business models and indeed perhaps new collaborations with MNOs for rural coverage to prosper. We also believe that the current market position of low cost software defined radios and remote radio heads from new tier 2 suppliers will bring disaggregated radio networks using shared spectrum, that can form self organising and/or neutral host type networks and support the priorities. We also recognise and agree that fibre and 5G are complementary technologies and 5G can be a viable alternative to fibre. We note the 'outside-in' approach as regards getting fibre to the most difficult areas at the same time it is deployed to more viable areas. It is our opinion that the same strategy of outside-in should be applied to 5G deployments and commence rural deployment at the same time as urban roll-out, enable by fair and manageable spectrum sharing policies. We take note of the statement 'use it or lose it' from ECC as regards spectrum in the document. Our view is in line with the option that it should be a more progressive incentive, and one of 'use or share it' with opportunities for partnerships with spectrum licence holding MNOs, such as for example 1800MHz being encouraged. We also believe that if the UK can take a lead in spectrum policy and management through Ofcom regulation, then this could lead to a leadership opportunity in international markets.

**Q2:** *Does this document set out clearly the role of Ofcom in contributing to the Government's strategic priorities and desired outcomes?*

The consultation document is clear in the expectations of Ofcom, however it is not as clear how Ofcom will be assessed or how the relationship will work with bring about change required for these Government priorities and strategic objectives.