Additional comments:

We welcome the 'license exempt' approach to white space exploitation taken by Ofcom. This should help encourage innovative use of the newly available spectrum that could bring significant economic and social benefits. Our submission offers general comments focused on the implications of the proposals for privacy, rather than addressing the specific questions in the consultation document.

The consultation focuses on how Ofcom deals with what it defines as its central regulatory functions in the white space field: managing possible interference and protecting existing spectrum users.

Ofcom sets out in the consultation and related documents requirements to facilitate the logging and management of white space device use. These requirements are designed to ensure devices exploiting white space do not accidentally or deliberately interfere with licensed spectrum use.

This process raises two issues that to date we do not believe have been fully considered. At this stage we intend to merely set out the nature of these issues, and recommend that Ofcom defines and addresses them in more detail.

1. Privacy

Devices making use of white space will be required to share information with other parts of the infrastructure. For example, 'slave' white space devices will share information with the 'master' white space device; the master white space device with white space device databases.

This could include unique device identifiers and location details. Added together this information, depending on the nature and extent of the use a given device, could be a significant pool of information.

As a result, we believe that the mandatory requirements should be the absolute minimum required to manage possible interference. Anything further will hard wire unnecessary information gathering. That would create a pool of information that may, for example, leak by accident or intent, or become susceptible to data retention requirements (for example falling under the scope of reformed communications data laws).

How securely the information is held, for how long, and by whom, also raises significant privacy and data protection concerns.

The consultation makes clear that further consideration of how white space databases will work is beyond the scope of this consultation:

The full requirements for the operation of the databases are outside the scope of this consultation and will be the subject of future engagement with stakeholders.

This process should involve study of the privacy implications of the information sharing requirements set up by the white space scheme.

We believe Ofcom should define and address the privacy implications of the white space proposals. We would be happy to assist, and recommend Ofcom also consult with other civil society groups and regulators, including engagement with the relevant European policy makers.

There is a risk that there may be a constituency of potential users who perceive requirements for white space devices unduly privacy invasive. If Ofcom fail to look at the privacy implications, they may unintentionally encourage the use of devices that do not comply with the Ofcom white space requirements. We are concerned that there may be a small but significant constituency who would be sufficiently motivated and able to do this.

2. The "kill switch"

Page 29 of the consultation document states:

"A master WSD (and its served slave WSDs) must cease transmission within 60 seconds of receiving instructions to do so by the WSDB. This implements a so-called WSDB "kill switch" to rapidly disable individual WSDs. The "kill switch" will be applied by the WSDB in appropriate circumstances, such as for example, in the event of interference to the DTT and PMSE services."

More information is needed from Ofcom on what 'appropriate circumstances' would be. We would recommend if the circumstances in which Ofcom stipulates the "kill switch" could be deployed was limited to managing interference.

Question 1: Do you agree with our approach to defining the various categories of WSDs?:

Question 2: Do you agree with our proposed sequence of operations for WSDs?:

Question 3: Do you agree with our proposed additional operational requirements for master WSDs?:

Question 4: Do you agree with our proposed additional operational requirements for slave WSDs?:

Question 5: Do you agree with the proposed device parameters, operational parameters and channel usage parameters? :

Question 6: Do you agree with our approach of implementing the requirements in the example SI and the draft IR and VNS?: