

Title:

Mr

Forename:

Stephen

Surname:

Pattison

Representing:

Organisation

Organisation (if applicable):

ARM Holdings

Email:

stephen.pattison@arm.com

What additional details do you want to keep confidential?:

No

If you want part of your response kept confidential, which parts?:

Ofcom may publish a response summary:

Yes

I confirm that I have read the declaration:

Yes

Additional comments:

A good and timely consultation which we support.

Question 1: What other developments, in addition to the international and public sector developments we have identified, are relevant to our identification and assessment of options for release? :

Release of unlicensed spectrum is welcome. It will help stimulate the development of machine to machine connectivity, including Internet of Things. This has huge potential to

deliver benefits in a variety of fields including: smart energy, remote health monitoring, smart cities etc Momentum is growing around Internet of Things and the UK has a chance to help lead the way through its decision on spectrum release.

Question 2: Do you have any additional information or analyses that could help to inform our assessment of the value that could be created through different uses of the spectrum?:

See above. In general, the potential value to the wider economy of IoT applications is immense.

Specifically, the spectrum under consideration is classic smart meter territory. Proper use of smart meters holds out the potential for considerable energy savings.

But we agree that licensed use of this spectrum could have limited commercial value due to power limitations and if not harmonised with other territories. Even a narrow band licensed LTE network dedicated to Machine to Machine would be commercially challenging given issues around coverage and device availability.

In short, we believe that pushing the spectrum to unlicensed will drive wider adoption/greater number of devices vs a licensed option which could be limited in its capabilities and hard to monetise by the operator.

Question 3: Do you agree with our proposal to release 870-876 MHz / 915 -921 MHz for licence exempt SRD and RFID applications if Government releases 870-872 MHz / 915-917 MHz? :

Yes.

In addition we agree that any RFID spectrum should be harmonised at minimum in EU and more likely at a global level. RFID for asset tracking ideally should be a globally harmonised approach to facilitate logistics tracking and widespread use.

Short Range Radio is interesting in this band as 800MHz gives nice propagation characteristics (e.g. goes through walls etc) and so will reduce the overall cost of deployment for unlicensed short range devices.

As noted above, this is classic smart meter territory and is most likely use case to dominate the use of this band.

Question 4: Do you agree with our proposal to release 872-876 MHz / 917-921 MHz for licence exempt SRD and RFID applications if Government does not release 870-872 MHz / 915-917 MHz? :

Yes. See above.

The bigger the block released, the better.

Alignment with international efforts is also important.

Question 5: Do you have a view on the sequencing and timing of Ofcom's next steps if the spectrum is released for licence exempt SRD and RFID applications?:

Openminded. But speed is important if the UK is to seize an opportunity lead the way in this area.