



**NOMINET**

# **Variation of UK Broadband's Spectrum Access Licence for 3.6 GHz spectrum**

**Response to Ofcom's consultation**

August 6, 2018

## About Nominet

Nominet is an internet company delivering public benefit and is the trusted guardian of the UK namespace – one of the world’s largest country code registries. Nominet manages and runs the infrastructure for over 10 million domain names that end in .uk as well as Welsh Top Level Domains (TLDs) .cymru and .wales and 35 other branded and generic TLDs, including .bbc and .london. Over 3 million businesses, and millions more consumers, rely on its domain registry services. It has a team of 160 people based in Oxford and London and over 2,500 members.

Through its work keeping the .UK namespace secure, Nominet is exploring the further potential of the Domain Names System (DNS) and the challenges and opportunities around emerging internet technologies. As a result, it operates in a number of business areas, from providing internet connectivity and analytics for Internet of Things (IoT) devices to selling complex data analytics software, including its network analytics tool for tackling cyber threats. Nominet is also working with the UK government to protect its Public Service Network, in partnership with the National Cyber Security Centre. And, Nominet is a member of the DRIVEN consortium, exploring the provision of trusted and secure data exchange for real-time transactions, including a framework for security and privacy, vital to future development of autonomous vehicles.

Lastly, but most importantly in the context of this consultation, Nominet is working on providing advanced software solutions for managing spectrum dynamically.

With the proceeds of its successful registry business, Nominet funds initiatives that can have a profound social impact.

## Nominet’s involvement in TV White Space

Nominet has been actively involved in the development of TV White Space (TVWS) for a number of years as we believe it has the potential to provide and enhance access to the Internet at home and abroad, and to act as an enabler of the emerging Internet of Things technologies. Over the past five years, Nominet’s Emerging Technology team has built a TVWS database and qualified for participation in Ofcom’s pilot scheme as a White Spaces Database (WSDB) provider. The ongoing collaboration between Nominet, Ofcom, and other stakeholders has helped inform Ofcom’s development of the TVWS regulatory framework.

Following Ofcom’s decision to release TV white spaces for use at the end of 2015, Nominet was the first company to successfully complete the qualification process for its WSDB. The WSDB has since been used for a mixture of academic and commercial activities. Most notably, Nominet is providing its expertise and access to the geo-location database to internet service providers (ISPs) enabling the first commercial broadband rollouts that use TVWS technology, on the Isle of Arran, Llanarth in Wales, Loch Ness in Scotland, and other locations.

Internationally, Nominet is at the final stage for the qualification of its WSDB for operation in the U.S., and we are currently supporting trials in Mozambique and Kenya with geo-location databases which use the rules for protection of the incumbents as recommended by the Dynamic Spectrum Alliance.

These projects have provided Nominet with significant practical experience of working with all the components of the TVWS framework and we expect these will be the basis of the frameworks for spectrum sharing in other bands.

### **Nominet's position about spectrum policy**

Nominet believes that the adoption of dynamic spectrum access techniques is essential to avoid the impending wireless spectrum crunch, caused by the rapid growth of smartphones usage and IoT devices. This would be in line with any national spectrum regulator's commitment to see spectrum used in the most economically efficient manner. The existing static models used for allocating spectrum are inherently inefficient and are ill-suited when it comes to handling the continued rapid growth of wireless data traffic. The use of dynamic spectrum management for TVWS has shown that it can be successfully implemented, and it is an important first step for using the approach more widely in other spectrum bands.

## **Response to the consultation**

We express our appreciation for the opportunity to respond to this consultation, and we are pleased to see Ofcom determined to enable next generation wireless networks and to increase the effectiveness of spectrum utilization.

### **Question**

*Do you agree with Ofcom's proposal to vary the UKB Licence as requested? If not, please explain why you think it would not be appropriate to vary the licence.*

Nominet believes appropriate to grant the H3G's request as it would help defragment the 3.6-3.8 GHz band which would ultimately benefit customers by providing higher performance through coupling the new licence with the one recently awarded in the 3.4-3.6 GHz band.

Most notably, this change will make more spectrum available (i.e., 120 MHz) in the upper part of the 3.6-3.8 GHz band to be allocated for innovative uses, such as 5G. Nominet encourages Ofcom to take this opportunity to adopt innovative authorisation frameworks, such as database-enabled three-tiered sharing: the first tier would be for Fixed Satellite Services and Fixed Links; the second by regional licenses (where needed); and a third tier for generic access.