

Response to Ofcom consultation on proposed changes to licence exemption for Wireless Telegraphy Devices and on licensing equipment in 57 to 71 GHz

Introduction

Itron has developed a portfolio of smart, foundational networks, connected devices and insightful services that enable our customers to build new futures for their business, their infrastructure and the community they serve

Itron has decades of experience, delivering innovative, secure solutions for utilities and cities to 8,000+ customers in more than 100 countries. Our devices, networks, software and services have all been proven at scale—in some of the least hospitable environments on earth. Itron understands utilities' challenges and the complexity of modernizing critical infrastructure, and offers broad and deep domain expertise with complete, end-to-end solutions and services for any environment.

Itron is delighted to respond to this consultation on the proposed changes to SRD regulation in the UK and applauds Ofcom's leadership in this matter, both nationally and across Europe.

Question 1: Do you agree with Ofcom's proposal to update the authorisation approach and technical criteria for SRD data networks in the 870 to 874.4 MHz band? If not, please provide your reasoning.

Itron broadly agrees with the authorisation approach and technical criteria set out in the consultation document.

Itron has been tracking the availability and use of these bands for many years, and has deployed several million devices in the bands across Europe. Ofcom was an early mover, releasing some of the 870MHz spectrum in 2014, but understandably was cautious because of the uncertainty both in the technology that would be deployed in the bands and the railway sector's requirements.

Itron initially deployed devices in the band using a test and development license, before rolling out end nodes on a licence-exempt basis and, when made available, procuring an NRP license (IR2095). Large scale deployments have followed in Bristol, Cambridgeshire, Surrey and Glasgow. This experience, combined with other deployments around Europe, including Sweden, Denmark, Switzerland, Austria and Belgium has confirmed the importance of this band.

Releasing 873-874 in the UK, in effect, increases the spectrum available by almost 50% (874-874.4MHz on its own is unusable), and although not the full 6MHz that was requested from CEPT, this should assure the future of operations in these bands.

Question 2: Do you agree with Ofcom's proposals to authorise higher power use of 57 to 71 GHz by wideband data transmission systems via a light licensing regime? If not, please provide your reasoning.

No comment

Question 3: Do you agree that the Proposed Regulations would correctly implement the policy decision made earlier this year on extending Wi-Fi to the 6 GHz band, the SRD Decision and, if agreed, the changes to SRD Data Networks in the 870 to 874.4 MHz band?

On the understanding that A6 represents **changes** to IR203 Itron agrees that the Proposed Regulations would broadly implement the changes to SRD Data Networks in the 870 to 874.4 MHz band, however, we believe there might be some transcription errors, and an error that was introduced when IR2030 was updated in May 2020.

We believe that the new entry should read (~~striketrough~~ and new text in red):

Replaces 2030/1/47 , IR2030/31/1 & IR2030/31/2	Non-specific short-range devices Networked i. Meter Reading ii. Sensors and Actuators	This set of usage conditions is only available for data networks. All devices within the data network shall be under the control of network access points	870 – 874.4	500 mW e.r.p.	Adaptive Power Control (APC) required, alternatively other mitigation techniques which achieve at least an equivalent level of spectrum compatibility.	Bandwidth: ≤ 200 kHz	Duty cycle: ≤ 10 % for network access points Duty cycle: 2.5 % otherwise Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of	EN 303 204
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We also believe that the corresponding 25mW entries should be replaced/updated as shown below:

Replace R2030/1/29 to R2030/1/33 with:

	Non-specific short-range devices		870 – 874.4	25 mW e.r.p.		Bandwidth: ≤ 200 kHz	Duty Cycle limit ≤ 1%	EN 300 220
	Non-specific short-range devices		870 – 874.4	25 mW e.r.p.		Bandwidth: ≤ 600 kHz	Duty Cycle limit ≤ 0.1%	EN 300 220

Finally, given the need to reserve spectrum above 874.4MHz is mandated only by an EC Decision and we are aware of no plans for railway systems to be rolled out there in the UK, Ofcom might consider allowing operation up to 875.6, 875.8 and 870MHz, respectively, for 500mW, 25mW at 1% and 25mW at 0.1% DC devices, especially as at least two European countries have already done so (Denmark and Norway).