Consultation response form

Consultation title	Notice of Ofcom's proposals for changes to the licence exemption for Wireless Telegraphy Devices
Organisation name	Itron Metering UK Ltd

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 modernising 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 'Proposals to implement a European Commission Decision on short range devices and to revoke the licence exemption for Railway Level Crossing Radar Sensor Systems'.

Itron would be very happy to respond to any questions or concerns that there might be about these proposals.

Question	Your response
Question 1: Do you agree with Ofcom's proposals to implement changes, that are consistent with the SRD Decision, within the 874 to 876 and 915 to 921 MHz frequency bands for SRDs?	Itron welcomes the release of spectrum in line with the SRD Decision and agrees that the proposals broadly, correctly implement the letter of the SRD Decision, HOWEVER when combined with existing regulations - captured in IR2030 and IR2095 - these proposals would cause legal confusion, lead to missed opportunities and cause operational inefficiency. <u>Band 870-874.4MHz</u> In the UK, Networked SRDs are currently able to operate (at usable duty cycle allowances) from 870-873MHz. Furthermore, High Duty Cycle NRPs (Network Relay Points) are allowed to operate under licence at elevated DC (10%). The latter concept was introduced in 2015 (IR 2095) in order to allow Ofcom to monitor the operational impact of high-DC devices and await developments at a European level. Since then, we are aware of no such issues, and the fact that NRPs' replacements – NAPs (Network Access Points) – are mandated on an

	unlicensed basis suggests that their concept is safe. The relevant entry (Annex 2, band c2) in ERC Recommendation 70-03 encourages administrations to release spectrum from 870-874.4MHz, if possible. Ofcom's proposal would leave the band segmented with spectrum at 870-873MHz released separately to 874.0-874.4MHz. This would have two effects: it would leave the spectrum from 873-874MHz isolated and unused; and it would allow devices operating in this band(s) to double their time on the air, contrary to the restrictions agreed appropriate in the relevant ECC study. High duty cycle devices are currently allowed to operate in the band 870-873MHz on a licenced basis and are referred to as NRPs (Network Relay Points), a term now obsolete in both the SRD Decision and Rec 70-03. The introduction of NAPs according to the SRD Decision would allow a second band of operation on an unlicensed basis. This would lead to similar problems as for general networked SRDs devices. Finally, the appropriate Harmonised standard, EN 3030 204, is not referenced. <u>Band 915-919.4MHz</u> Similar to the 870MHz band, SRDs, Wideband SRDs and RFID are already allowed to operate in this band, and Ofcom would generally be better served to simply amend these entries to avoid confusion and duplication.
Question 2: Do the proposed Regulations and proposed changes to IR 2030 correctly implement our proposals?	<u>Band 870-874.4MHz</u> Strictly, the proposed regulations do correctly implement changes in IR 2030 but, as set out above, would lead to undesirable consequences. Therefore, the best way to implement change would be by editing the existing text. Broadly the changes would be: - Extending (in IR2030/31/1 2014/88/UK June 2014) the band from 870-873MHz to 870-874.4MHz - Adding the proposed new entry for NAPs but allow their operation – on a licence-exempt basis – across the entire 870-874.4MHz with a single DC allowance

	- Consequently, to retire IR 2095, because licensed high-DC devices are no longer appropriate. <u>Band 915-919.4MHz</u> The proposed regulations do correctly implement changes in IR 2030 but, as for the 870MHz band, some would lead to undesirable consequences. Therefore, the best way to implement change would be by editing the existing text. Broadly the changes would be: - Alter bands to align with the new top frequency; - Remove restrictions designed to protect railway operations (which are not foreseen in the UK); The full details of the proposed amendments to IR2030 are shown below.
Question 3: Do you agree with Ofcom's proposals to remove the licence exemption currently in the 2010 Regulations for Railway Level Crossing Radar Sensor Systems?	No comment

The consequent ***changes***[1] to the ***existing*** IR 2030 are show below.

Interface / Notification number / Date	Application	Comments to application	Frequency band	Maximum transmit power / Power spectral density / Field strength	Comments to Maximum transmit power / Power spectral density / Field strength	Channelling	Channel access and occupation rules	Reference
IR2030/31/1 2014/88/UK June 2014	Networked i. Meter Reading ii. Sensors and Actuators	~~Article XI~~ 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	870-873~~3~~4.4 MHz	500 mW e.r.p.	Adaptive Power Control (APC) required, alternatively other mitigation techniques which achieve at least an equivalent level of spectrum compatibility	≤ 200 kHz	~~Duty cycle limit ≤ 2.5%~~ ~~Adaptive Power Control (APC) required. The APC Control is able to reduce a link's transmit power from its maximum to ≤ 5 mW~~ 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 Directive 2014/53/EU shall be used. If relevant techniques are described in harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive	EN 303 204 and 2018/1538/EUBand No.1

Interface / Notification number / Date -	Application	Comments to application	Frequency band	Comments to frequency band	Maximum transmit power / Power spectral density / Field strength	Comments to Maximum transmit power / Power spectral density / Field strength	Channelling	Channel access and occupation rules	Reference

[1] Text highlighted in yellow is new

IR2030/1/35 2014/88/UK June 2014	Non-specific short-range devices	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.	915.2 -918~~8~~9.4 MHz		25 mW e.r.p.		≤ 600 kHz	Duty Cycle limit ≤ 1% ~~Duty Cycle limit ≤ 0.01% and limited to a maximum transmit on-time of 5ms/1s~~ Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used. If relevant techniques are described in harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, performance at least equivalent to these techniques shall be ensured	EN 300 220 and 2018/1538/EU Band No. 5
IR2030/13/7 2014/88/UK June 2014	Radio Frequency Identification	Operation only when necessary to perform the intended operation, i.e. when RFID tags are expected to be present	916.1-916.5~~8~~.9 MHz ~~917.3-917.7 MHz~~	Interrogator transmissions at 4 W e.r.p. only permitted at the centre frequencies: 916.3 MHz; 917.5 MHz; and 918.7MHz	4 W e.r.p.		≤ 400 kHz	Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU shall be used.	EN 302 208

								If relevant techniques are described in harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union under Directive 2014/53/EU, performance at least equivalent to these techniques shall be ensured	

IR2030/13/8 2014/88/UK June 2014 should, as a consequence, be removed.

We would agree that the entries IR2030/1/49 & IR 2030/7/5 should be added as new, but reference should be made to the associated harmonised standards, EN 303 659 & EN 303 220, respectively.

Finally, in reviewing IR2030, we would like to highlight that the harmonised standards associated with the entries IR2030/1/46 & IR2030/7/3 are incorrect and EN 300 220 should be replaced by EN 303 659 & EN 304 220, respectively.