

## National Deaf Children's Society

### Response

Here is the response to Public Sector Spectrum Release (PSSR) Technical coexistence issues for the 2.3 and 3.4 GHz award, from the National Deaf Children's Society.

Unfortunately we were only made aware of this consultation at very short notice, Tuesday 13<sup>th</sup> May 2014, so we have had little time to formulate a complete and comprehensive response. We have however been able to address some of the key issues and problems which this proposed release could cause.

Suffice to say that this spectrum release could have a potentially devastating effect upon deaf children and adults in the UK. High powered transmissions in these frequency ranges could make digital hearing aids, cochlear implants and radio aid systems (used extensively in UK schools and educational establishments) useless – denying the users basic human rights to access and education.

We are concerned that if this spectrum release goes ahead, without prior extensive testing being carried out, then OFCOM and the UK Government would be guilty of infringements under the:

UN Human Rights Convention, 1976

European Rights of The Child, 1989

Equality Act 2010

### Response to Consultation Questions

**Question 4.1:** Do you agree with our proposal to conduct a market led award through an auction process for licensed use of the 2.3 and 3.4 GHz bands? If not, please provide evidence to counter this proposal.

**No, we do not.**

The conditions laid out in the consultation are inadequate to safeguard users of the 2400 and 2483.5 MHz band, these consist of very large numbers of domestic and commercial uses who will be impacted. **This will especially impact upon deaf children who are fitted with the latest digital hearing aids and cochlear implants and who rely upon radio aid systems in order to access education and achieve some form of equality with their hearing peers.**

Whilst welcoming the 10Mhz guard band, reduced power should be implemented in the top 3 channels plus implementation of the reduction in out of band emissions of 15-20 dB as identified in: ***Liaison Statement to ETSI TC ERM on Unwanted emission of mobile terminals in the SRD band 863-870 MHz dated 14 march 2014 and the Input contribution from the administrations of Germany, France, United Kingdom and Sweden to ETSI MSG, ETSI ERM and JWG DD of May 2014***

We are not aware that an impact of the assessment this decision will have on disabled users – a requirement under the Equality Act 2010 – has been carried out. **If not, then OFCOM will be acting unlawfully.**

**Question 6.3:** Do you agree with our assessment of the available options for mitigation of interference to home networks?

**No**

In the case of Assistive Listening Device (ALD) equipment used for TV-listening and other home uses, the link budgets are much smaller, therefore LTE equipment “passing by” or in adjacent premises are liable to cause interference. **This is an infringement of The UN Human Rights Convention 1976, The European rights of The Child 1989 and The Equality Act 2010**, as it fails to address the needs of individuals both adults and children, who use hearing aids, cochlear implants and radio aid or streaming systems both at school and at home.

The effect upon deaf children at home would be that they would not be able to effectively use their hearing devices (hearing aids or cochlear implants) and that they would lose the ability to use radio aid and digital streaming products which help them follow family conversations, speak on the phone and gain enjoyment from listening to music or enjoying TV programmes and films. This could have a devastating effect upon both their everyday lives and their potential social and educational development.

In addition, these hearing and radio aid products are currently being supplied from NHS and educational budgets – this spectrum release could render this equipment useless, wasting hundreds of thousands of pounds of investment.

If this equipment could no longer be used, then it would lead to a huge increase in demand for funding from education for more support in the classroom, and possibly higher demand for educational statements, Health and Care Plans. It would also lead to an increased demand for funding from Access to Work to support deaf adults in employment.

**In light of these points, a full impact assessment is needed before any further steps can be taken. Ofcom will also need to discuss these issues with other Government departments such as the Ministries of Health and education.**

**Question 6.6:** Do you agree with our conclusion that the impact to Wi-Fi is not of a significant nature and therefore no regulatory intervention is necessary? If not, can you provide evidence?

**No**

In the case of the various forms of Hearing aids, cochlear implants and Assistive Listening Devices, this has not yet been tested and the effects of any interference caused to these devices is potentially “significant” and frightening. See our response to question 6.3

**Question 7.1:** Do you agree that we do not need to perform technical analysis on the applications in the middle of the band as set out in paragraph 7.7?

**No**

**Technical analysis is vital – both to ensure that the basic rights of the end users are being considered, and to ensure that OFCOM are not infringing UN Human Rights Convention 1976, European Rights of The Child 1989, the Equality Act 2010 and NHSP 2006**

See answers to Question 6.3 and 6.6

**Question 7.2:** Do you agree with our technical analysis in relation to Bluetooth devices operating in the 2.4 GHz band, and that no additional restrictions are required in order to protect these applications?

**No**

Bluetooth devices are increasingly being used by deaf adults and children for communication, education and entertainment. It is vital that these technologies are also protected.

See answer to Question 6.3 and 6.6

**Question 7.5:** Do you agree with our technical analysis in relation to radio microphones devices operating in the 2.4 GHz band and that no additional restrictions are required in order to protect these applications?

**No**

These can also be part of an ALD system and have not yet been tested. The English government introduced The Newborn Hearing Screening Programme, nationally in 2006 to ensure deaf infants were identified very early and provided with appropriate amplification. Such intervention is linked with improved linguistic outcomes. Any interference with the quality of the auditory signal compromises this already vulnerable group.

**Question 7.6:** Do you agree with our technical analysis in relation to short range devices operating in the 2.4 GHz band and that no additional restrictions are required in order to protect these applications?

**No**

Devices working with ALD have not yet been tested see 7.5

**Question 7.9:** Do you agree with our technical analysis in relation to hearing aids and assisted listening devices operating in the 2.4 GHz band and that no additional restrictions are required in order to protect these applications?

**No**

Further testing and restrictions detailed in question 4.1, 6.3 and 6.6 are required to provide evidence before additional restrictions are rejected

**Question 13.8:** Do you agree with our proposed maximum in-band power limit for user terminals in the 2.3 GHz band?

**No**

These should be considerably lower in the top three channels and the restrictions identified in Question 4.1 implemented in any licence conditions

