FAO: Mark Binns Spectrum Policy Group Floor 3 Ofcom Riverside House 2A Southwark Bridge Road London SE1 9HA

14 January 2014

Dear Mark Binns,

We are writing in response to the TV white spaces: approach to coexistence consultation issued on 4<sup>th</sup> September 2013. We have made comments on questions 3 and T17, these are our only comments, see below.

 $Q_3$ : Do you have any comments on our proposed approach to ensuring a low probability of harmful interference to 4G services above the UHF TV band? Please state your reasons for your comments.

EE believes Ofcom's approach to ensuring a low probability of harmful interference to 4G services is insufficiently robust. Ofcom makes the assumption that interference will be managed by suppression of WSD 'in band' power by the LTE device duplexer. EE believes that this assumption is optimistic and that the ACLR (AFLR) of WSDs and the defined allowable out of band emission limits for WSDs of -54dBm/100KHz into the 791-862MHz band remain of concern. Ofcom needs to consider the scenario where mobile devices are indoor, at cell edge & operating close to 5MHz carrier QPSK device sensitivity of -100dBm. Indoor mobile users will be significantly constrained from moving away from any interference source and should be considered semi static. The WSD is therefore likely to act as a permanent interference source from the perspective of that user. A deterministic approach to physical separation protecting the -100dBm device sensitivity is therefore appropriate. EE believes Ofcom should protect LTE device sensitivity allowing only minimal desensitisation (< o.4dB) at WSD/device separation distance of 2 metres. This implies a revision of thinking on allowed WSD out of block/band emissions and reconsideration of the size of appropriate guard band between WSDs & 4G services above 791MHz.



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Question T17: Do you have any comments on our proposal not to permit WSDs to operate in channel 60?

EE supports the principle of a guard band to protect services above 791MHz but believes that a guard band consisting only of channel 60 would be inadequate and that greater frequency separation is required to fully protect 4G services. (Please see EE response to Question 3).

Yours Sincerely,

Robin Whitfield Principal Designer RAN Design & Performance



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