From: Michael Grayson Sent: 08 January 2020

To: Mark Hill

Cc: Chris France; Hilary Saunders

Subject: RE: mobile communications advice

Hi Mark

It is clear that this person has done a lot of reading around this subject matter.

However I would like to bring your attention to a recent article published by the BBC, which helps set the scene for you and what the general consensus on the subject is relating to 5G. https://www.bbc.co.uk/news/world-europe-48616174

The persons key point to this is that the ICNIRP have not completed studies in the 868/870 Mhz spectrum range specifically. The reason for this may be that the further down the spectrum you go the less effect the frequency will have.

The mobile phone operators have been using the 800 Mhz since it was available in 2013 and to date there have been no negative reports.

As it moves into the 400 Mhz spectrum area for the smart meter installation there is less likelihood of any issues. The lower end spectrum has been used for radio and television for decades.

As 5G is deployed the $3.6 \, \text{Ghz} - 3.8 \, \text{Ghz}$ spectrum will be used in dense urban areas with the 700Mhz spectrum being deployed in rural areas. The reasons being is that the $3.6 - 3.8 \, \text{Ghz}$ frequency does not travel very far but it has greater data capacity, as opposed to the 700Mhz which can travel further but it will have less capacity.

I hope this helps you in your decision

Thanks

Michael

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