Joint Standing Committee on the National Broadband Network Answers to Questions on Notice Committee Hearing 15 August 2018 NBN Co Limited

Question No: 10

NBN Co Limited

Hansard Ref: Page 18-19

Topic: HFC bend radius

Senator Deborah O'Neill asked:

ACTING CHAIR: So which frequencies are most impacted by the bending?

Mr Ryan: I'll probably have to take that one on notice. In the range of the spectrum that we have in the HFC, we can typically bend these cables on anything around an 18-inch radius. That's probably the most accurate thing we can say. I can take that on notice and go away and come back to you with a spectrum range that's most impacted by bending. It will be a ratio of the amount of bend versus the frequency as to the degradation that would occur.

Answer:

If a cable has exceeded its specified bend radius, the strength of the signal will be reduced across all frequencies, but higher frequencies are more susceptible to attenuation than lower frequencies.

If the cable has exceeded its specified bend radius and is damaged, the strength of the signal will be reduced and the quality of the signal will be at risk from interference across all frequencies, but lower frequencies are more susceptible to interference than higher frequencies.