Senate Standing Committee on Environment and Communications

Answers to Senate Estimates Questions on Notice

Supplementary Budget Estimates Hearings November 2016

Communications Portfolio

NBN Co Limited

Question No: 164

NBN Co Limited

Hansard Ref: Page 16, 25/11/2016

Topic: FTTDp - Architecture

Senator Chisholm, Anthony asked:

Senator CHISHOLM: In terms of fibre to the distribution point, has the technical configuration been completed yet?

Mr Morrow: The designs are just about to begin. We have a model architecture that has been completed and designs are expected to start by the end of this year.

Senator CHISHOLM: Can you release that once it has been completed?

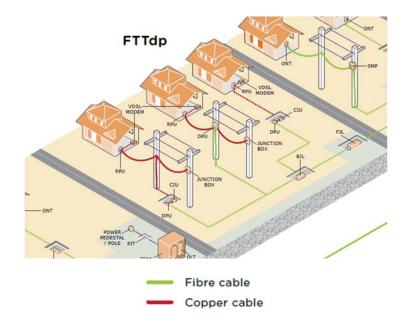
Mr Morrow: The architecture? **Senator CHISHOLM**: Yes.

Mr Morrow: We can certainly take that on notice. I do not believe there are any commercial issues but I would like the team to validate that first.

Answer:

Fibre to the Curb (FTTC) architecture is made up of three key components:

- 1. Optical fibre cable, installed from nbn's fibre access nodes to access pits outside the home
- 2. Distribution point unit (DPU), installed in the access pits
- 3. Existing copper lead-in cable from the access pit into the home



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Fibre Network

FTTC utilises nbn's fibre cable network that connects to the DPU in the access pit. nbn uses multi fibre cables installed in Telstra's pit and pipe network.

Distribution Point Unit (DPU)

The DPU converts the optical signal in the fibre to a VDSL signal, carried over the copper lead-in cable into the home. Each unit provides four nbn broadband services.

The DPU is powered by low voltage from each customers' home, through the copper lead-in cable. nbn expects that, on average, end-users will be supplying approximately 6W to power their FTTC service.

Copper Lead-in Cable

DPU installed in access pit is connected to copper lead-in cables through the Copper Interconnect Unit (CIU). Short lengths of copper lead-in cable enables VDSL to operate at maximum speed.

