

Senate Estimates on the National Broadband Network

Answers to Questions on Notice

Public Hearing 20 November 2014

Communications Portfolio

Department of Communications

Question No: 223

Program No. NBN Co

Hansard Ref: In writing

Topic: CBA – Page 166

Senator Urquhart asked:

The Cost Benefit Analysis states that the Choice modelling analysis included a sample of 3,312 people (page 166). It also states that respondents were “randomly” split into two groups (uninformed and informed), the informed group of which was given information from Communications Chambers that states, among other things, that 5 Mbps is required for “streaming HD TV, downloading HDTV, downloading 4K TV and streamed gaming” (Chart H.1, page 167).

- a) Is the Cost Benefit Analysis panel aware that Sony—which operates the first 4K online download store—states that “average movie file size [for 4K is] approximately 38 GB [gigabytes] per movie?”
- b) Is the panel aware of how long it would take to download an “average” sized 4K movie from the Sony store at 5 mbps, assuming a stable internet connection that never dropped below 5mbps?
- c) Is the panel aware of how long it would take to download an “average” sized 4K television episode from the Sony store at 5 mbps, assuming a stable internet connection that never dropped below 5mbps?
- d) What timeframe does the panel consider appropriate to download a movie and or television show in the context of willingness to pay for broadband speeds?
- e) Did the Choice modelling survey ask participants of the survey their views on how long they are willing to wait for a download to complete before they would consider upgrading their broadband connection?
- f) On this basis, does the panel consider it appropriate to “inform” participants of the Choice modelling study that 5 mbps is adequate to download 4K content prior to these participants conducting the study?
- g) Did the Cost Benefit Analysis panel consult with Sony, or any other online 4K content providers, before “informing” participants in the Choice modelling study that 5 mbps was adequate to download 4K? If so, who, and what were their comments?
- h) The “informed” group represented 1,583 respondents of the 3, 312 total (page 179). Correct?
- i) The Cost Benefit Analysis states that a result of the Choice study was that the “informed” group—the group that was fed information from Communications Chambers prior to conducting the survey—was “more likely to choose cheaper lower speed packages as the price of the top plan (100 Mbps down/40 up) increases” (page 73). Is this correct?
- j) None of the options shown in Chart H.5 in the Cost Benefit Analysis are available on the market. For example, the Dodo plan is listed at \$185 a month for 50/20mbps, with 20GB of data, no home phone, and no PayTV or mobile bundle. The most similar plan (all the attributes listed in Chart H.5 but with 50GB data instead of 20GB) is available for \$59.90 a

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month, not \$185 as shown in Chart H.5. On what basis were the fixed broadband plans in Chart H.5 (page 172) chosen for the Choice study?

- k) Does the panel see any methodological issues with estimating willingness to pay by conducting a survey containing fictitious broadband plans, when the Cost Benefit Analysis panel had at their disposal more than 160,000 actual households already on the FTTP NBN and demonstrating actual willingness to pay for actual broadband plans available in the actual marketplace?

Answered by the Department of Communications (Program 1.1):

- a) Page 28 of the Communications Chambers report considers 4k bandwidth requirements including noting Netflix 4K streaming requirements (15.6 Mbps) and performance of video compression technology.
- b) As noted on page 29 of the Communications Chamber report, it “assumed that 4k TV requires 16 Mbps in 2013”. Downloading equivalent content would take approximately three times longer.
- c) See answer above.
- d) Pages 66-69 of the CBA examine time savings based on technical demand.
- e) As noted on page 169 of the CBA, participants were provided information on download times as these apply to speeds.
- f) As noted on page 166-167, informed participants were given a range of appropriate information on internet bandwidth requirements, including that streaming 4k TV requires a 20 Mbps stream and that 4k TV could be downloaded on a 5 Mbps.
- g) Please note response to question above.
- h) A breakdown of the number of participants is provided on page 168.
- i) Yes. As noted on page 166, informed respondents “were shown information from Communications Chambers on the current technical bandwidth required for different types of internet activities. The image that was shown to respondents in the survey is displayed in Chart H.1.”
- j) A choice modelling study allows for testing of a broader range of options than available in the market. By doing this, valuation information outside of that available from looking only at market data can be found. This means that combinations will of course be offered outside the range of combinations available in the market. For example, a choice modelling study will adjust the prices of different plans across a sufficiently wide range to show how many consumers continue to choose particular plans as the price changes. This is important, as otherwise, it would be impossible to identify a demand curve. For example, in a perfectly competitive market with identical consumers, only a single price-quality combination will be offered; presenting consumers with only that option generates no information at all about the shape of the demand curve at any point other than that which currently prevails. The choice modelling provides a method of presenting options to respondents.
- k) No. As noted on page 61 of the CBA, the CBA used three methods for determining willingness to pay including existing data on take up of NBN plans.