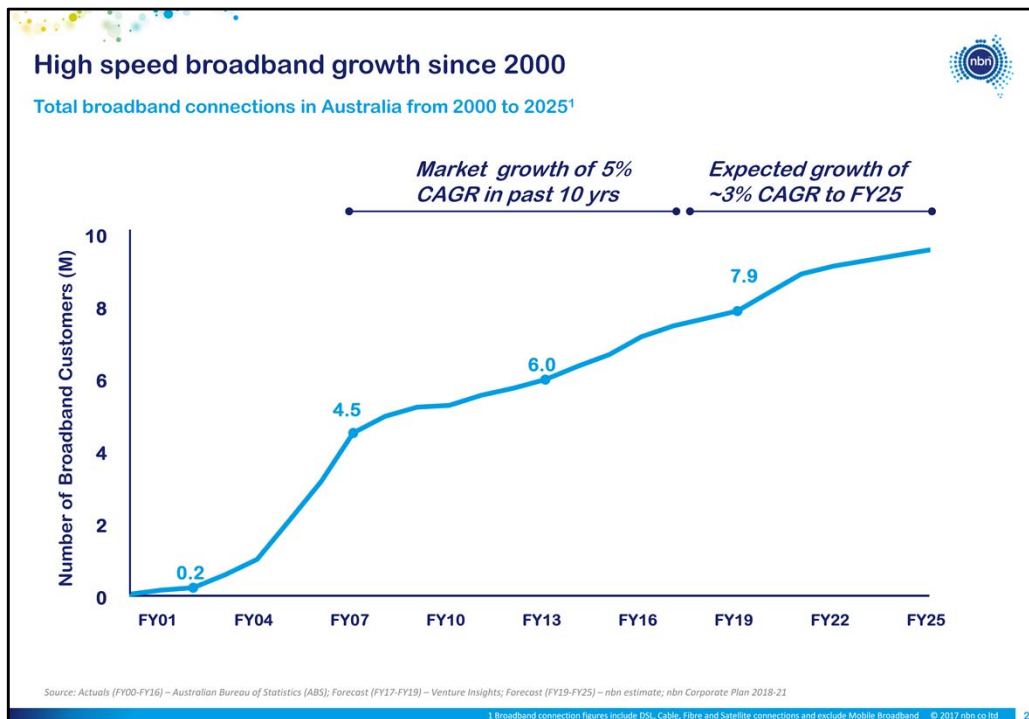
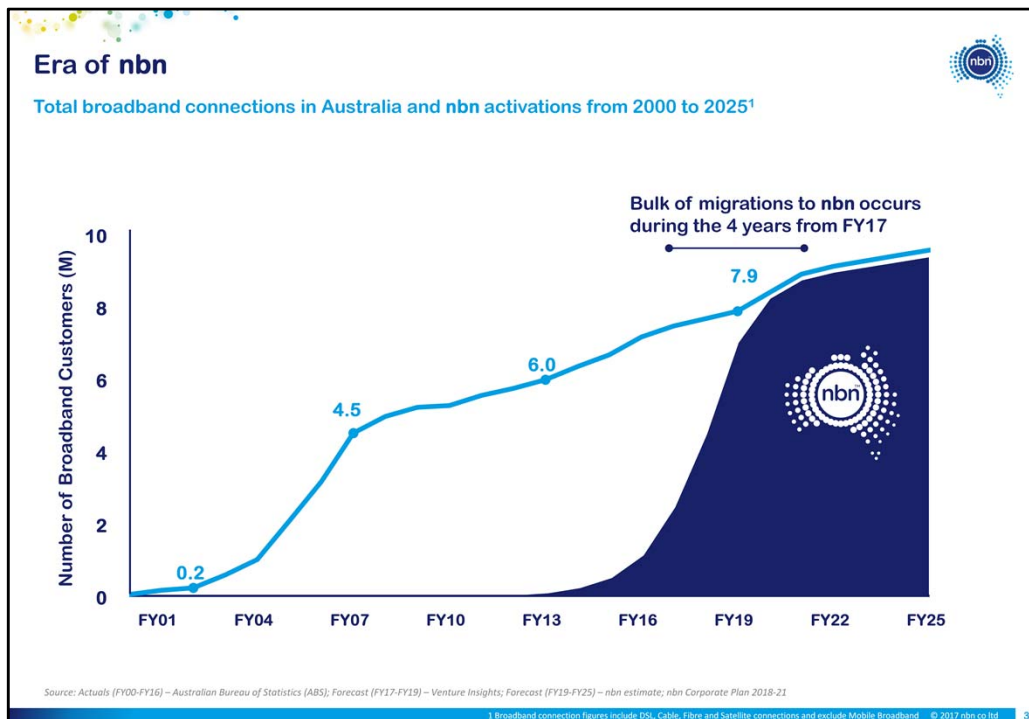




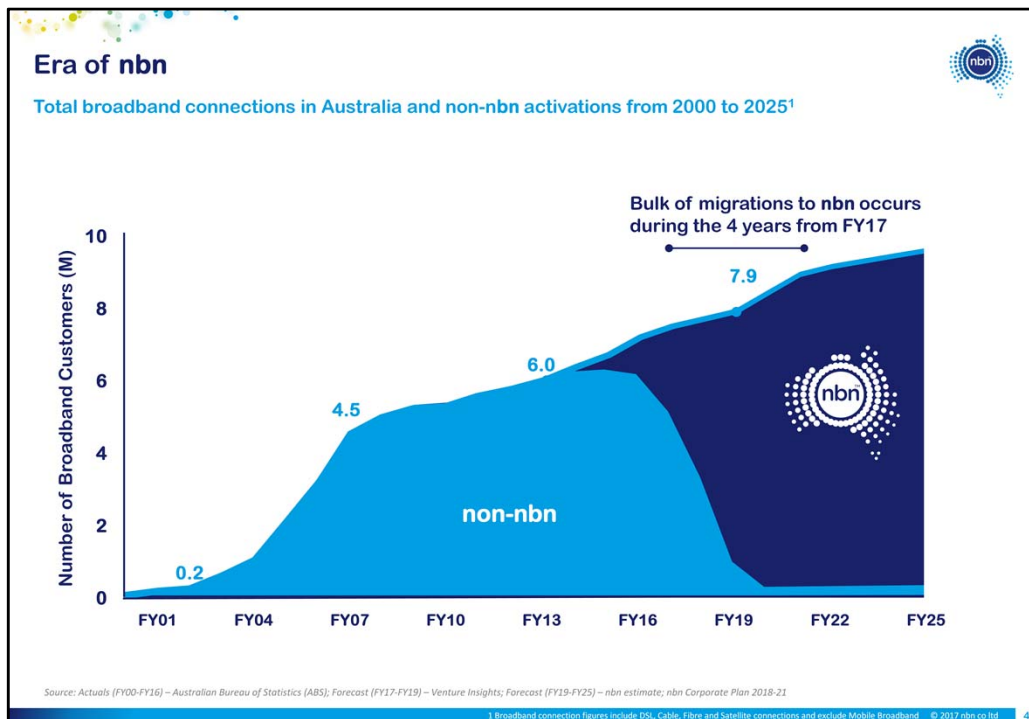
- Telecomm industry is traversing a period of hyperactivity as **nbn** buildout reaches peak rate
- For next two years, **nbn** focus will be upon completing network build, improving customer experience during connection and use, and working with govt, regulators and RSPs to get settings for post-2020 right



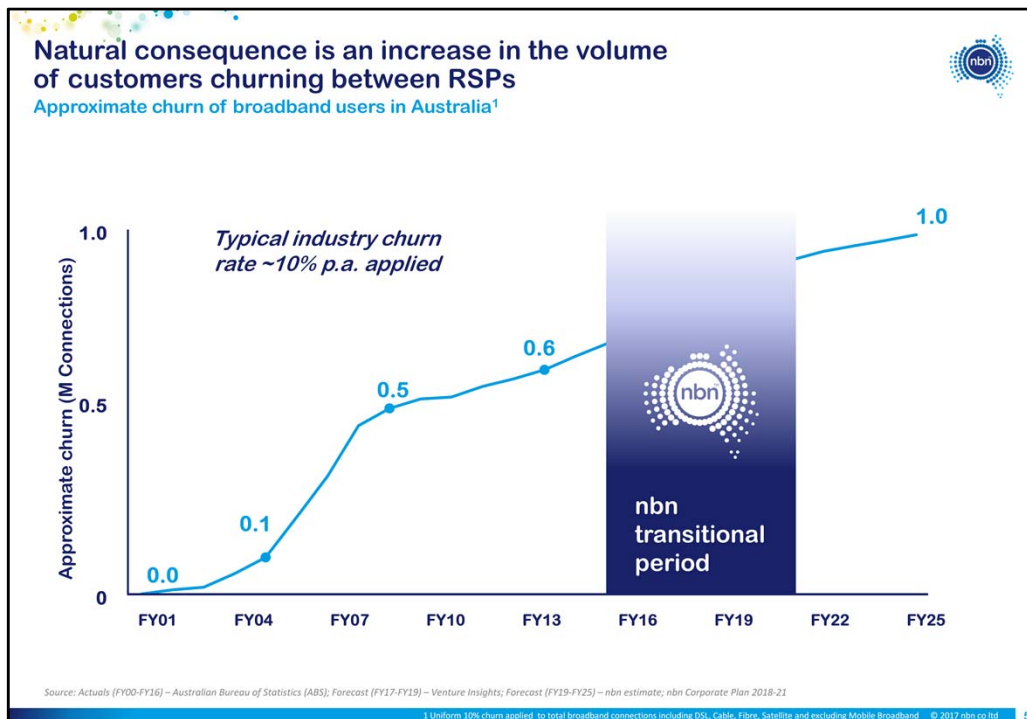
- Start of the modern bband era probably 2004
- Graph does not include mobile bband
- **nbn** goal is 8m connected households in 2020
- Beyond 2020, forecast trend is uncertain



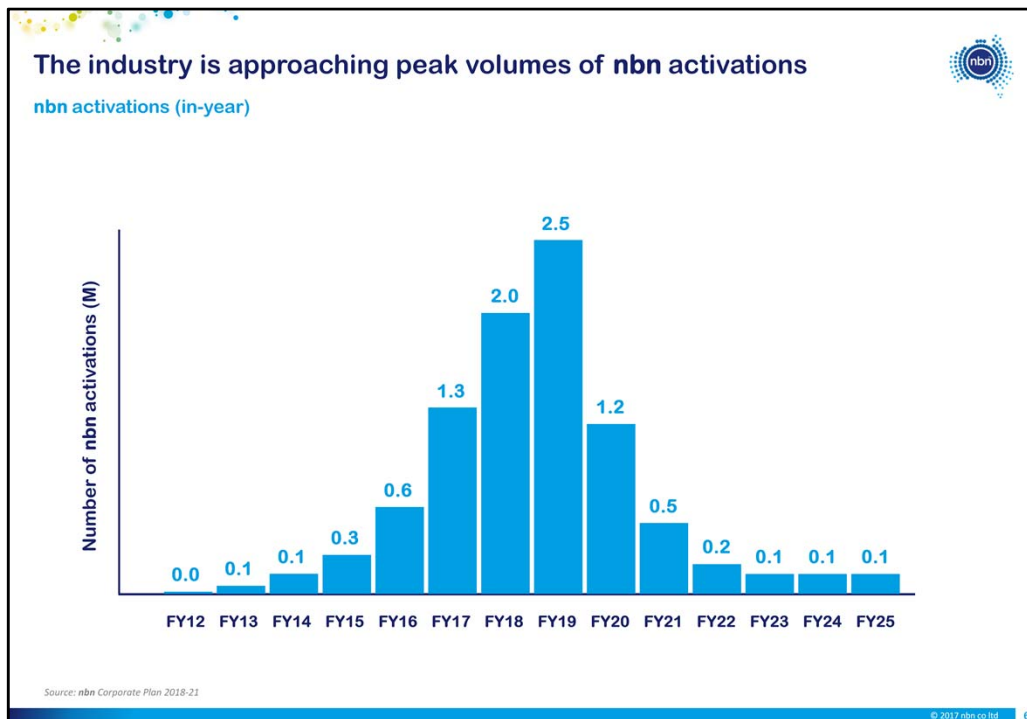
- **nbn** connected customers are now material (3m HHs today; 6.1m homes Ready to Connect)



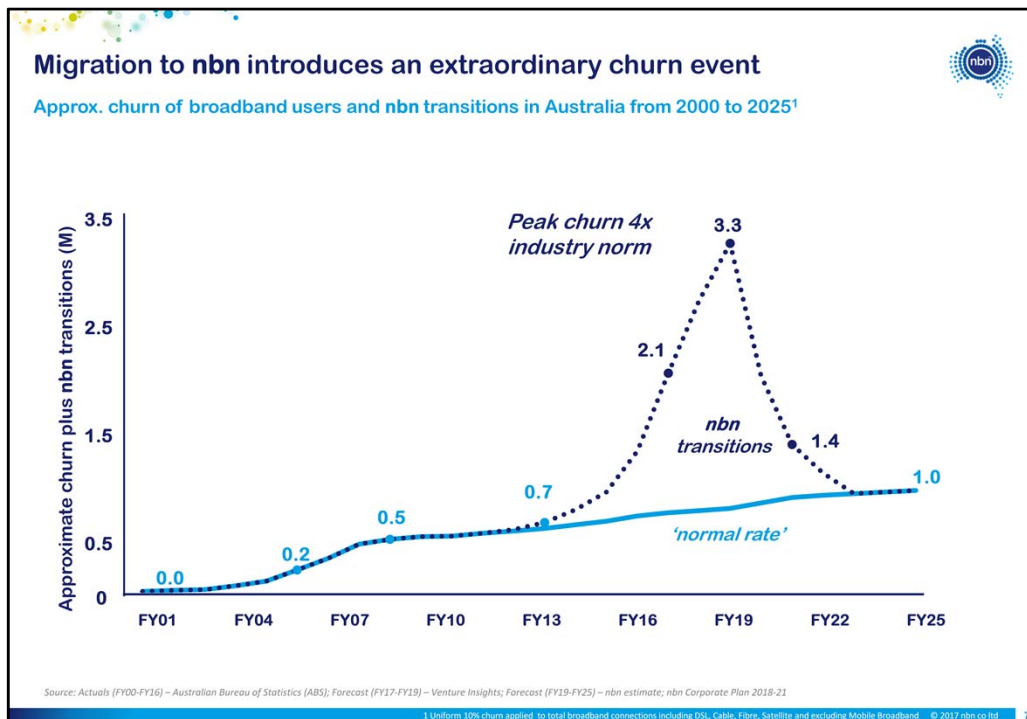
- Era of DSL and broadband over cable (HFC)
- From 2015-2020, 8m HHs will transition to **nbn** service – this is a tectonic shift and a huge ‘churn’ event



- Assume an approx. 10% annual churn level of bband households (ignoring possible growing impact of mobile bband)
- Graph shows general trend in customer switching in telecomm market in the absence of severe disruption, and before '**nbn** effect' (graph is only approximate and intended to help illustrate a theme)
- RSP focus has been on retention and market share protection



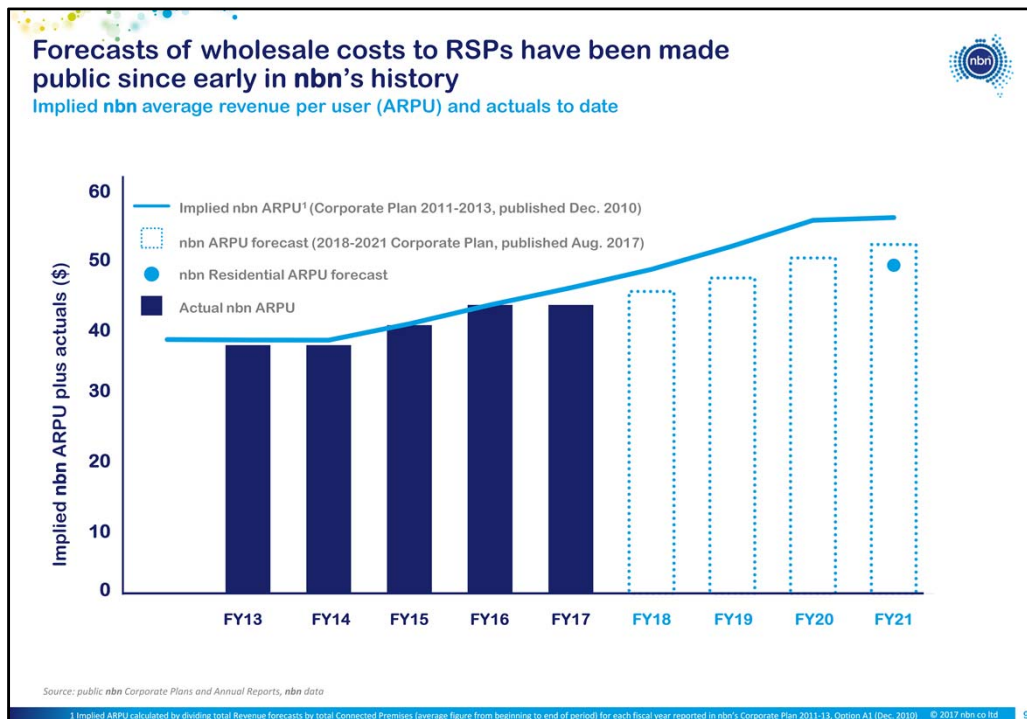
- **nbn** rollout is approaching peak levels – 300k HHs monthly RFS with up to 50k connections each week
- Having been announced in FY10, after a slow start, rates of build and customer connections have been dramatic
- This has put pressure upon industry players



- Transitioning to **nbn** is a huge, and from an incumbent point of view - risky 'churn event'
- Unsurprisingly, established RSPs are focusing upon customer retention by making customer decisions uncomplicated, while newer players tend towards lower pricing
- Partly explains why low cost packages are prevalent, and upselling to higher speeds not yet a priority (84% services at 25Mbps or less). Will be a feature of the market until transition completed during 2020



- With intense price based competition, input costs become a focus, ie **nbn** ARPU
- Many views re **nbn** pricing and consultations with industry will continue throughout this transition period



- Slide shows history of **nbn** ARPU – as reflected in published plans and actuals since FY2013
- Interestingly, the forecasts published in late 2010 have turned out to be remarkably accurate
- Industry players have no basis for being unprepared for these costs – which are higher than those that prevailed before **nbn** was established
- Composition of blended ARPU likely to change during this transition period and thereafter, but quantum probably not. Reducing prices to RSPs – by whatever model – basically subsidizes a ‘race to the bottom’ during the so-called land grab phase. It becomes another transfer of value from the Commonwealth (aka taxpayers) to RSPs and/or end users.
- Completion of **nbn** has happened ‘too fast’ for the industry to adjust seamlessly. Four years to transition 8m HHs in a very competitive marketplace has put pressure on RSPs and possibly led to ‘lowest common denominator’ marketing
- Wholesale input costs, aka average **nbn** ARPU, have been telegraphed since 2010 and were always going to be greater than pre **nbn** levels for some obvious reasons (‘new for old’ - previous ADSL and HFC infrastructure well depreciated, **nbn** FTTH overbuilt existing network – ie a hi cost model..) but as importantly costs included payments to Telstra and Optus (“political costs”) and reflected cross subsidies to ensure equitable and ubiquitous access in rural and regional Australia
- Our price outlook anticipates a period from 2020 onwards when telecomm industry activity is likely to return to a more conventional state post **nbn** transition. Tactical pricing by **nbn** before then is possible under certain conditions which will require industry support.

Conclusions



The nbn™ network will be:

- Completed on time (2020)
- On budget (\$49 Billion)
- To specification
- Fit for Purpose, and continuously upgradeable
- World's first fully connected continent

Between now and then, key priorities remain:

- Improved customer connection processes and end user experience
- Evolution of product/pricing structures

nbn - the transition years

Dr Ziggy Switkowski AO
Chairman, NBN Co

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