

# Maximising the Value of the NBN; comparing our NBN to Australia's Top 10 trading partners and the OECD

Melbourne, Jan/Feb 2020  
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# Fletcher, Rowland - agree on value for NBN

- ✦ “get the maximum social and economic impact from the \$51B taxpayer’s money” Minister Fletcher
- ✦ “how best to leverage this extraordinary national investment” Minister Fletcher
- ✦ “maximise the benefit of [NBN] investment now and in the future” Shadow Minister Rowland



Telsoc Future Forum 31.7.19



# What does more value mean for NBN?

- ✦ Faster | Cheaper | Reliable | Service | Choices
- ✦ How to measure value? Value is more than speed.
- ✦ Happy customers, More revenue, More usage
- ✦ Compare to? OECD, Ookla, Trading partners. The past (ADSL, HFC). Our neighbours.

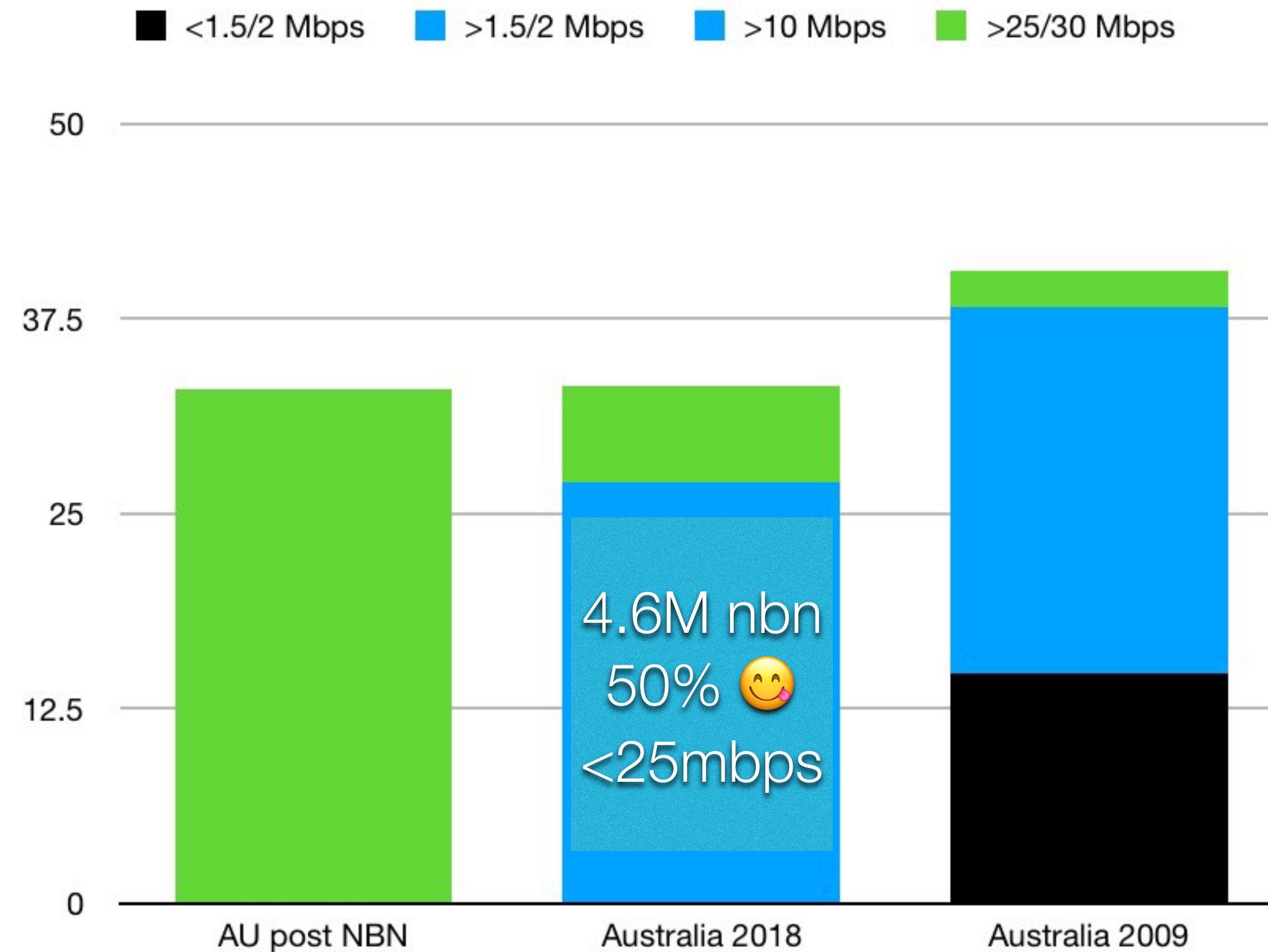


- ✧ 1. Where have we come from?
- ✧ 2. Where are we now?
- ✧ 3. Where are we going?



# 1. The past - we need speed... NBN is speed

Source:  
OECD,  
ABS  
8153.00,  
NBN



2009 dialup:  
100MB/mth  
2009: 6GB/mth  
2019: 250GB/mth

Substantial  
progress...

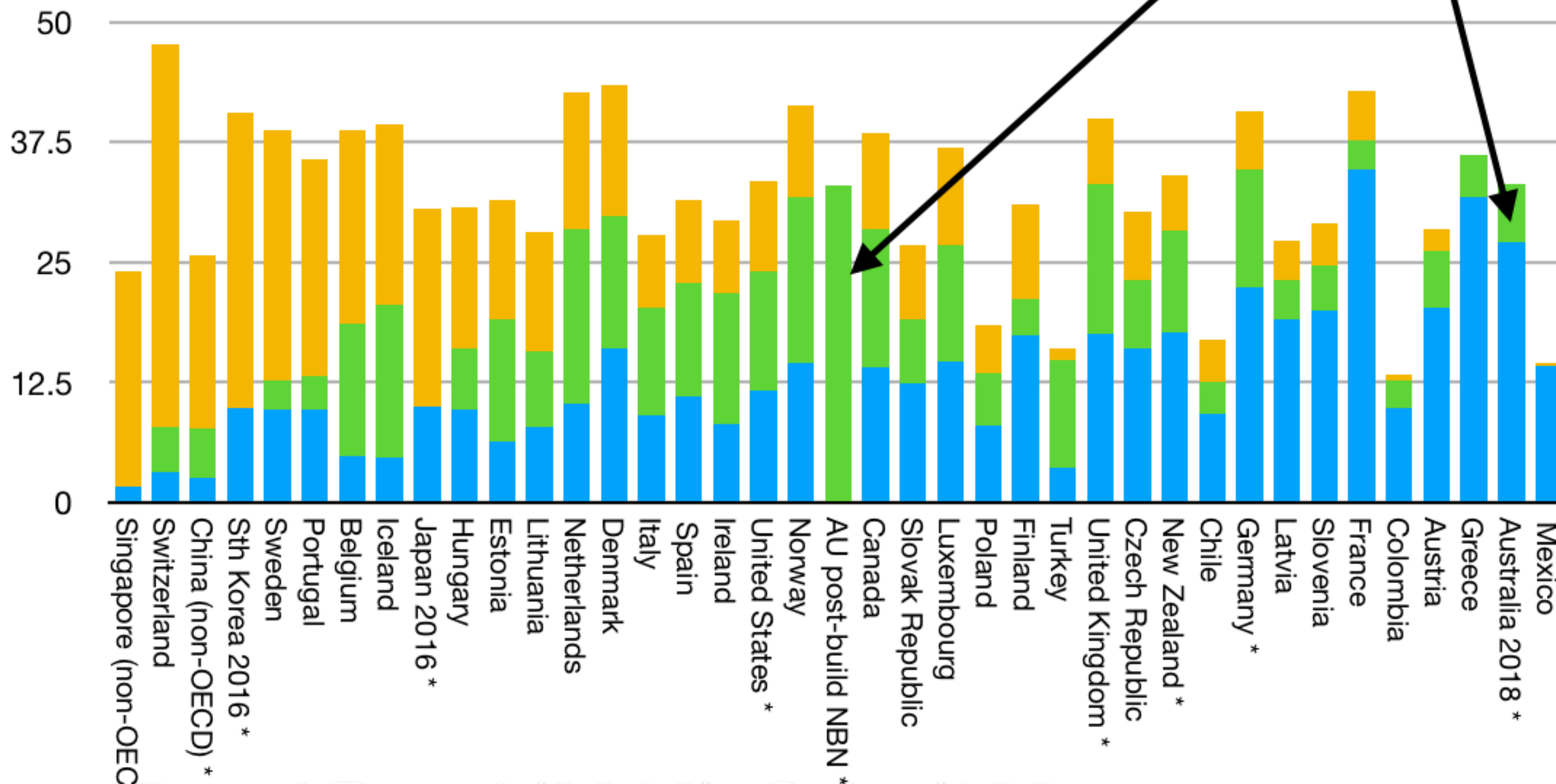


## 2. NBN:

### Appendix 2 - Comparing Australia's broadband to OECD (2018).

# Where are we at now?

Slow (<25/30 mbps) Mid Fast (>100 mbps)

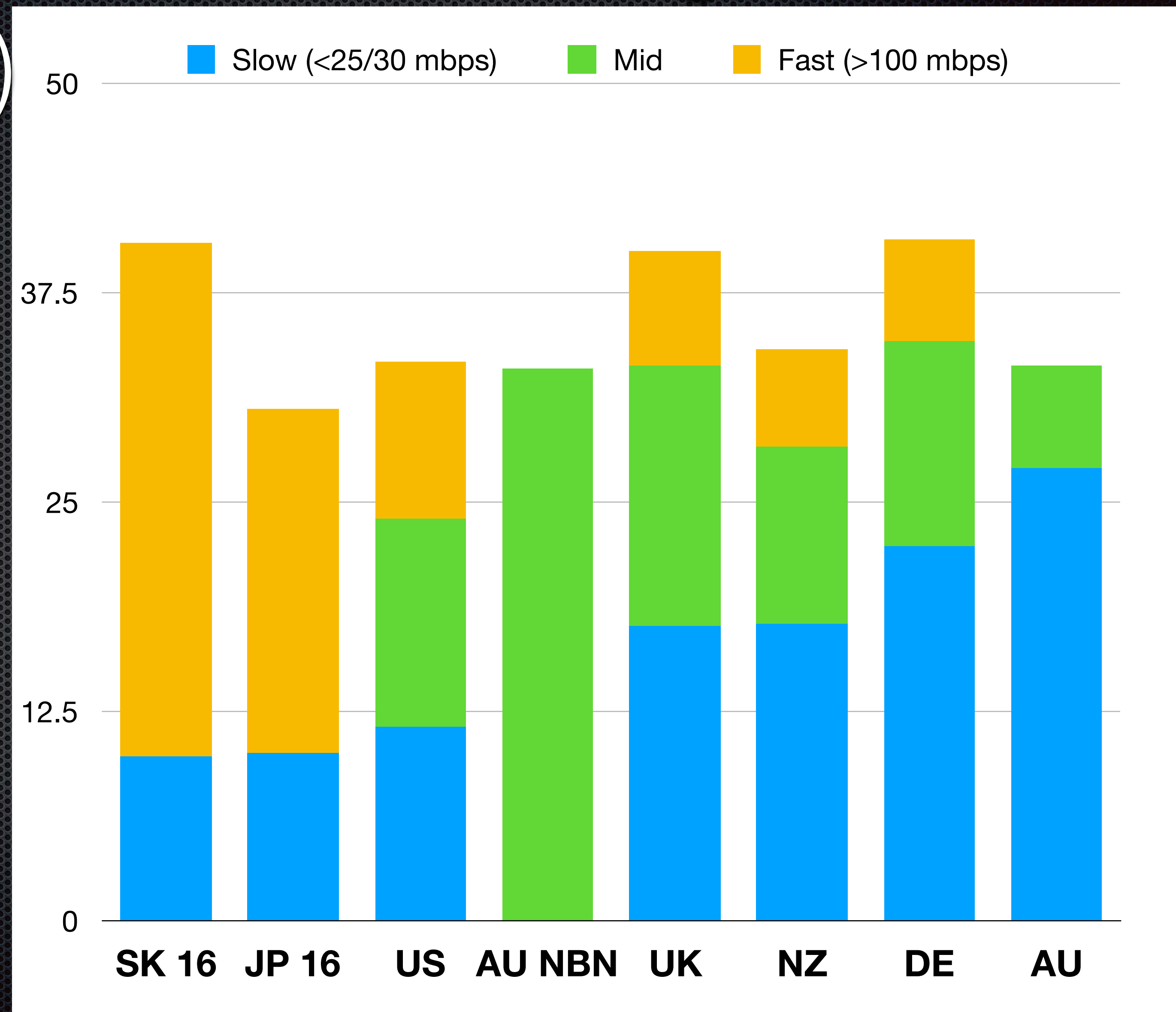


Source: OECD Broadband Portal (2018), Subs/100pp.



## 2.1 Compare NBN to Top 10 Trading Partners (OECD '18)

- ✦ AU lowly ranked OECD (2018)
- ✦ Compared to our OECD Trading Partners - bottom
- ✦ Post NBN mid-ranked
- ✦ Scale: Subs/100pp
- ✦ Ranked: <- fastest | slowest ->



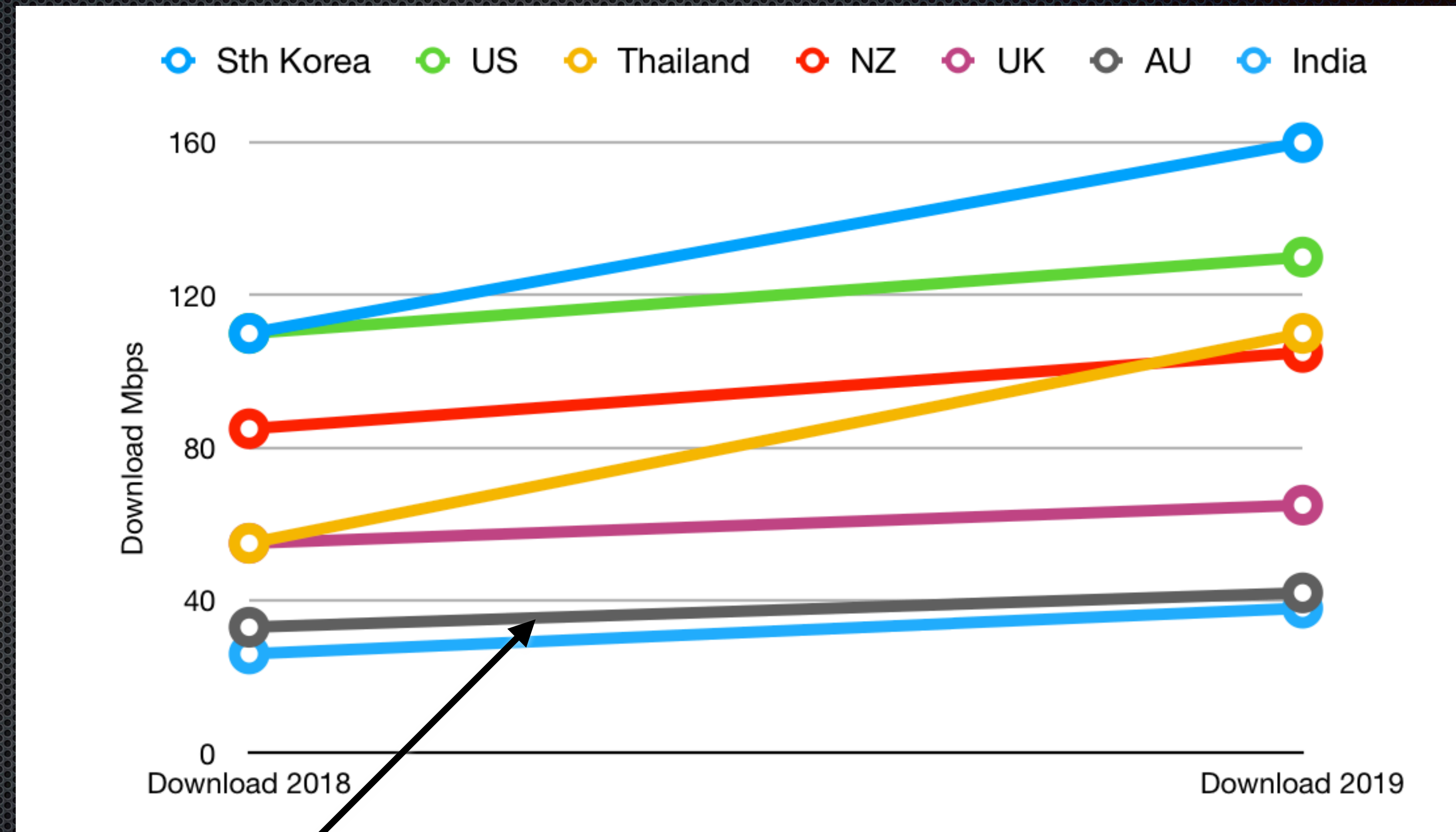


## 2.2 Compare NBN to Trading Partners

Australia is towards the bottom (except for India ie 9th of 10) of all our major (Top 10) Trading Partners. However some countries accelerate quickly eg Thailand 2018 55mb 2019 110mbps

Japan, China similar to NZ.  
Germany similar to UK.

Source: Ookla 2018, 2019

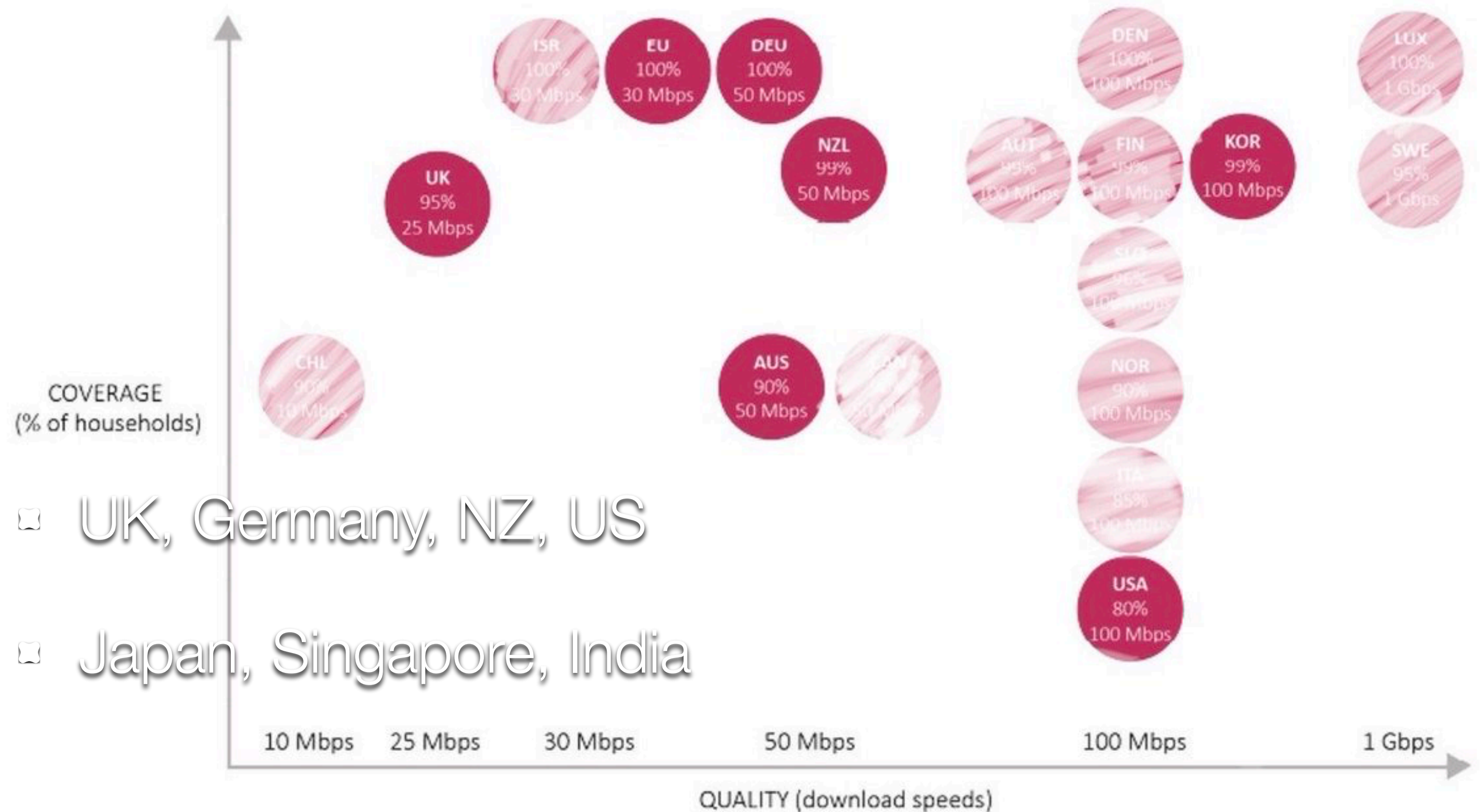


Australia



# 3. Comparing NBN to our Top 10 Trading Partners

- ✦ China
- ✦ South Korea
- ✦ Thailand

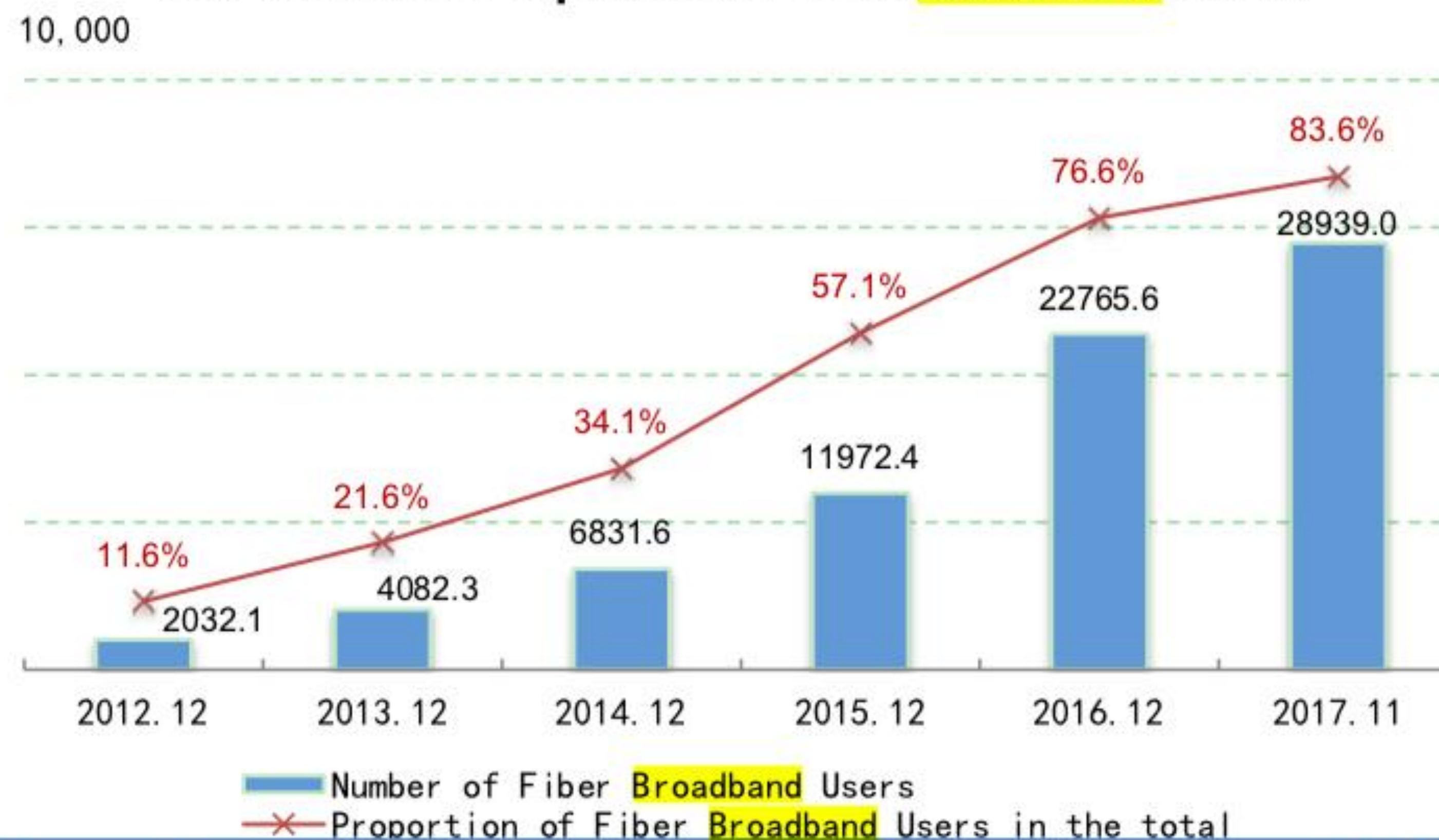


- ✦ UK, Germany, NZ, US
- ✦ Japan, Singapore, India



# Case 1: China

The Scale and Proportion of Fiber Broadband Users



Source : Ministry of Industry and Information Technology

2017.11

Figure 18 The Scale and Proportion of Fiber Broadband Users



# Case 1: China

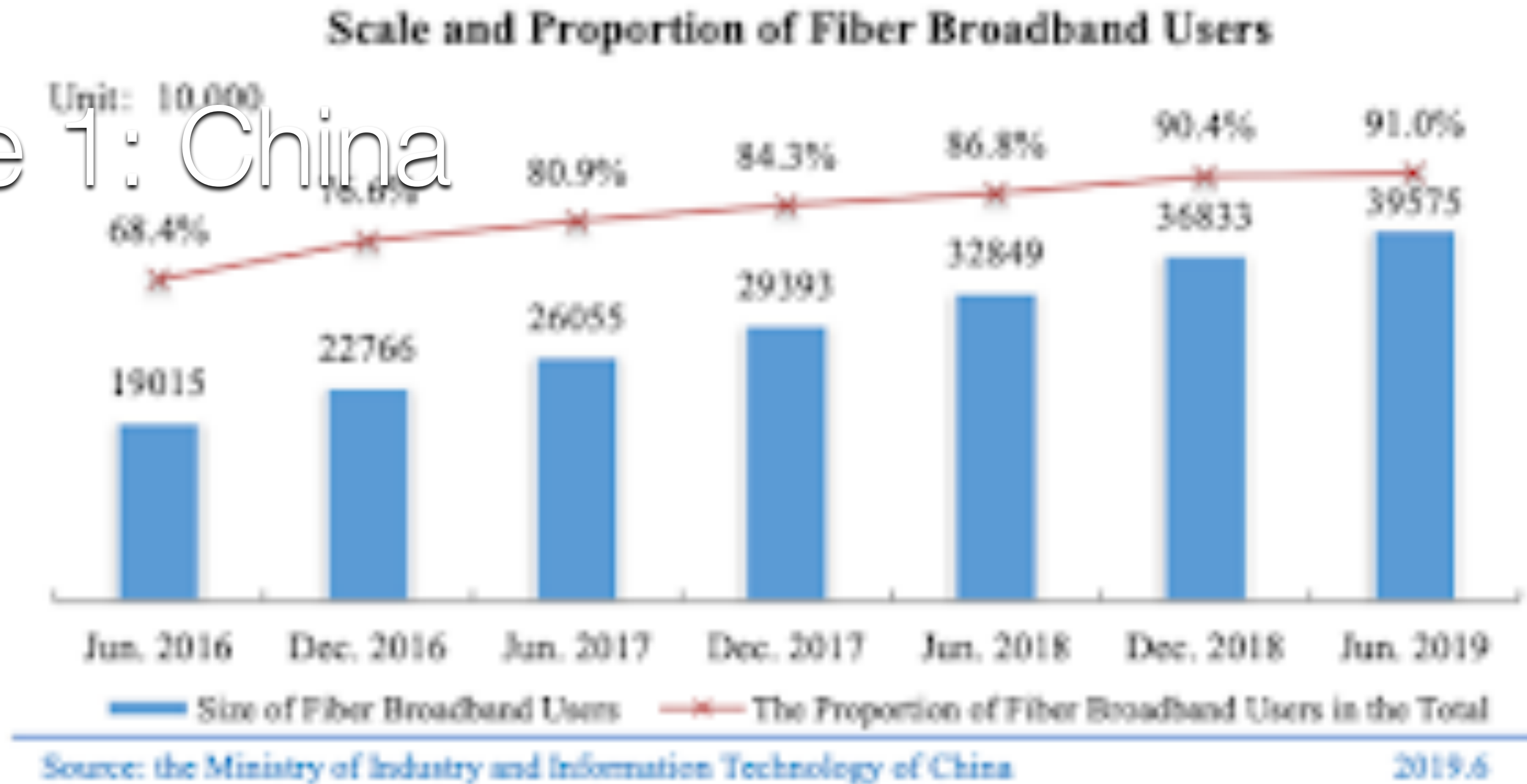
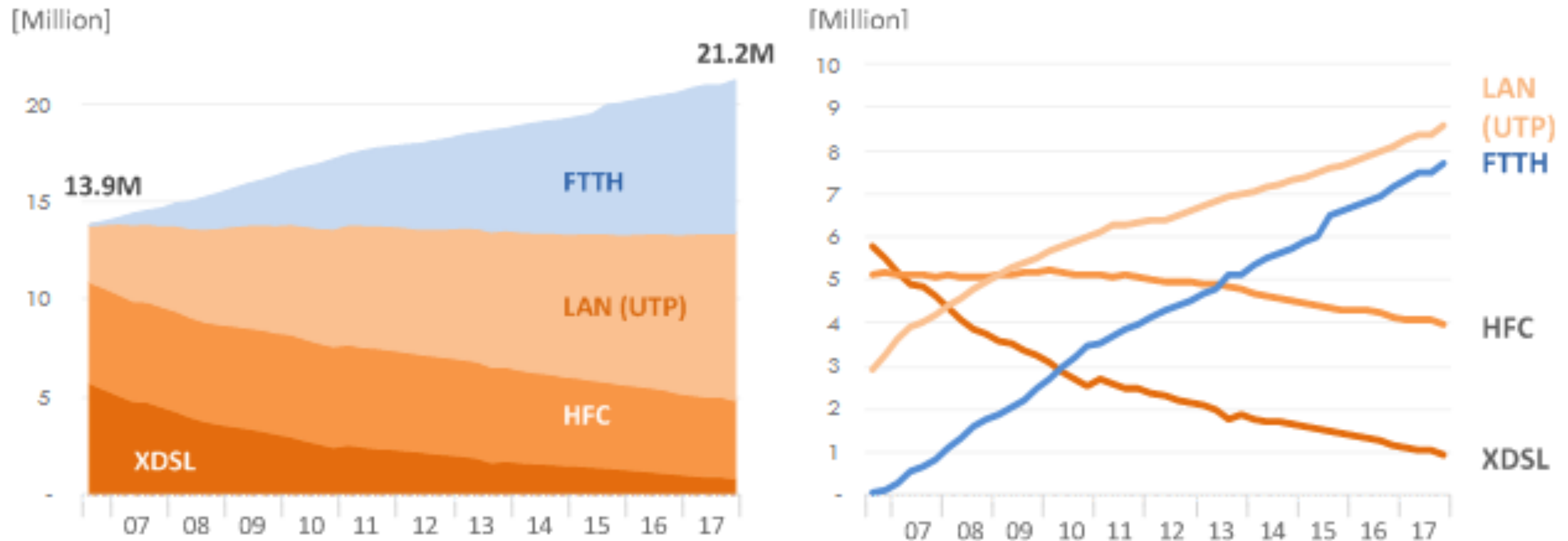


Figure 11 Scale and Proportion of Fiber Broadband Users<sup>18</sup>



# Case 2: South Korea - it's an MTM

Broadband Subscribers in Korea - by Access Network, 2006 - 2017



<https://valman.blogspot.com/2019/07/the-future-of-nbn-comparing-to-sth.html>



# Case 3: Thailand - some fibre, not quite NBN

<https://twitter.com/avidcommentator/status/1198501050040217611?s=21>



**Avid Commentator** 🇦🇺

@AvidCommentator

Family in Thailand just had their ISP come out to install 1000 Mbps fiber in their home for free as an upgrade to the existing service.

Meanwhile my NBN service sometimes drops out when it rains 👍



# Case 3 - Thailand



Richard Ferrers @ValueMgmt · 29/1/20

Replying to @ValueMgmt

Q1 2018 - Thailand has 7M #fibre optic users, some 39% of 18M households; not quite #nbn - but with up to #gigabit speeds pushes their average speed way way past AU...



True slashes 1Gbps fibre internet price by 70%  
bangkokpost.com

Gbit :  
now  
\$140/  
mth,  
was  
\$499/  
mth

<https://twitter.com/valuemgmt/status/1222405379239247873?s=21>



# 4. The Future - gigabit and beyond...

- ✦ First gigabit services offered soon - May 2020
- ✦ Half the network can access gigabit; FTTP, HFC, FTTC
- ✦ Significant potential impact on national average speed
- ✦ But... Tyranny of Averages...
- ✦ NBN is speed...




# 4.1 Impact of gigabit NBN on avg speed...

Impact of Gigabit services on NBN average speed - Subs per 100 people

Scenario	Avg (Mbps)	Ookla Rank 2019 - AU Top 10 trading partners	OECD 2018 rank
Australia 2018	21	10th	35 / 36
AU post-build NBN	50	10th	18 / 36
5% gigabit	98	7th=	1 / 36
10% gigabit	145	3rd	1 / 36
20% gigabit	240	1st	1 / 36



# 4.2 Lessons for NBN from international neighbours

- ✦ Gigabit services  rankings
- ✦ Focus on usage; affordable
- ✦ Measure and plan for value; compare ourselves with others
- ✦ How?





# 5. Recommendations; maximise the value of NBN

- ✦ R1: Affordable gigabit - May 2020
- ✦ R2: Post- build NBN upgrades (vs debt repay, dividends in SOE)
- ✦ R3: Post-build focus on usage (vs access) - skills, services, SMEs, value
- ✦ R4: Plan/measure customer satisfaction (Corp Plan)
- ✦ R5: Plan/measure NBN vs International (Corp Plan)
- ✦ More in submission to NBN Parliamentary Inquiry Jan 2020) Data



Let's get our NBN..  
... used, improved, valued...

NBN1 is speed...

NBN2: Value is more than speed....

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Delete slides following this...  
...further thoughts...



“NBN is speed.... but Value is more than speed.”



# 5a. Where next with the NBN?

- ✦ Post-build SoE; how to enhance the network...
- ✦ NBN Development Plan; what are the options?
- ✦ Funding; NBN internal, more debt, co-investment
- ✦ Post speed Value; reliability, service, pricing, the last 25%, the last 10% (equity)



Moving toward the future - the old NBN goal (2016)

“ensuring that all Australians have access to very fast broadband as soon as possible, at affordable prices, and at least cost to taxpayers....

of at least 25 megabits per second to all premises

and at least 50 megabits per second to 90 per cent of fixed line premises”

*– NBN Statement of Expectations 24 Aug 2016*

Value is individual... value is social....



“NBN is speed.... but Value is more than speed.”

**The State of Broadband:**  
Broadband as a Foundation  
for Sustainable Development  
September 2019

**BROADBAND COMMISSION**  
OR SUSTAINABLE DEVELOPMENT



eg UNESCO/ITU 2025 Goals

**BROADBAND COMMISSION**  
FOR SUSTAINABLE DEVELOPMENT





# UNESCO / ITU 2025 Goals; Broadband for Sustainable Develpm't

- Speed - NBN plan / Price (2% of average income; GNI)
- Usage should reach 75%
- Skills - to use broadband, to access employment/new business
- Digital financial services - ie using the network
- SMEs using the network
- Gender equality





# Imagining the future...

- ✦ 2006; 100 Mb per month (45% dialup; < 1mbps)
- ✦ 2009; 4 Gb per month (40 X) (< 10mbps; fastest > 24mbps)
- ✦ 2019; 250 Gb per month (60 X) (50mbps; fastest 1gbps in 2020)
- ✦ 2025-30; 40-60X -> maybe 10TB per month (avg) per household (maybe 5-10 X; 250-500 mbps average; fastest 5-10gbps??)



# NBN is in good shape...

- ✦ Generating billions of dollars in revenue; in 2020 - \$4B, covering \$2.4B running costs; running a surplus...?? (not yet; EBITDA... EBIT)
- ✦ 6M customers already connected (with target 75% connected soon)
- ✦ “Completing access to all Australians (except 1%) by June 2020, on time and on budget” NBN Co CEO, Minister



“NBN1 is speed.... but NBN2 Value is more than speed....

– *valuemgmt*



# Value is future plans...

- ✦ what to invest profit in... upgrading (slowest) services... reliability...
- ✦ future products eg gigabit (May 2020), business services
- ✦ Upgrading services to faster speeds over time; urban, rural
- ✦ More fibre? A new SoE - Statement of Expectations?

Value changes over time... with new information...



“NBN1 is speed.... but NBN2 Value is more than speed....

*@valuemgmt*



# ...but NBN has challenges...

- ✦ Value is more than speed.
- ✦ Customer satisfaction; not reported, but lots of negative press, feedback
- ✦ Business customers (vs keeping telcos happy)
- ✦ what to spend surplus on?



# but Value is more than speed...

- ✦ Value is reliability; dropouts, speed level, congestion, service in disasters
- ✦ Value is service; answering queries, providing responses, information
- ✦ Value is pricing (value for Money); affordable
- ✦ Value is being on time; repairs, service calls, installation
- ✦ Value is financial, future cashflows, repay \$20B debt/interest, earn profit
- ✦ Value is customer satisfaction; current faults - 1% \* 6M customers; 60,000

...still far to go...



# Imagining the future...

- ✦ ... A maximum value NBN2 is more than speed ->
- ✦ NBN2 is affordable, used by nearly all (equity, skills)
- ✦ NBN2 has good service, high reliability, fair pricing, customer satisfaction...



# Estimating NBN customer satisfaction

Who	% Fibre Reach Inc FTTN, HFC	% Use	Satisfaction
China	91%	77% >100Mbps 91% use	Very high
South Korea	99%	36% FTTB 40%	High
Japan	99%	72%	High
NBN	93%	63%	Moderate
NZ	80%	45% 10% > 1Gbps	Moderate - Low
US	80%	25% > 100Mbps	Low