The ideal wholesale NBN market

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CommsDay Wholesale/DC Summit
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Current NBNCo income projection (costs to be charged to RSPs)

Exhibit 9-2: Forecast Summary Financials (Nominal Dollars)

Summary Financials															
June YE	Total (FY2011 to Dec 2020)	Total (FY2011 to FY2021)	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2028	FY2040
Total Premises Passed - Fibre ('000s)	**11,492**	**12,202**	**18**	**39**	**341**	**1,307**	**2,912**	**4,625**	**6,279**	**7,838**	**9,283**	**10,783**	**12,202**	**13,467**	**15,435**
Total Connected - Fibre ('000s)	**8,060**	**8,513**	**1**	**4**	**54**	**487**	**1,515**	**3,036**	**4,341**	**5,594**	**6,695**	**7,607**	**8,513**	**10,010**	**11,464**
Premises Covered - Fixed Wireless & Satellite ('000s)	**968**	**974**	**165**	**174**	**320**	**374**	**752**	**907**	**921**	**934**	**948**	**961**	**974**	**1,055**	**1,181**
Total Connected - Fixed Wireless & Satellite ('000s)	**226**	**232**	**0**	**10**	**38**	**64**	**100**	**145**	**161**	**191**	**206**	**219**	**232**	**303**	**399**
Total Connected ('000s)	**8,286**	**8,745**	**1**	**14**	**92**	**551**	**1,615**	**3,181**	**4,502**	**5,785**	**6,901**	**7,827**	**8,745**	**10,313**	**11,863**
Total Revenue	**19,970**	**23,058**	**-**	**2**	**18**	**120**	**529**	**1,346**	**2,281**	**3,221**	**4,200**	**5,167**	**6,175**	**9,769**	**14,597**
Total Operating Expenditure	(24,819)	(26,394)	(337)	(521)	(1,093)	(1,777)	(2,903)	(3,628)	(3,394)	(3,351)	(3,201)	(3,037)	(3,151)	(2,437)	(3,351)
EBITDA	**(4,849)**	**(3,337)**	**(337)**	**(519)**	**(1,076)**	**(1,657)**	**(2,375)**	**(2,282)**	**(1,113)**	**(130)**	**999**	**2,130**	**3,024**	**7,332**	**11,246**
EBITDA Margin	(24)%	(14)%	NM	NM	NM	NM	(449)%	(170)%	(49)%	(4)%	24%	41%	49%	75%	77%
EBIT	(13,328)	(12,650)	(356)	(589)	(1,328)	(2,070)	(3,015)	(3,190)	(2,224)	(1,410)	(415)	591	1,355	5,544	9,499
Net Cash Interest (Funding Costs)	(2,099)	(2,580)	33	60	55	72	83	(1)	(176)	(344)	(615)	(786)	(961)	(188)	1,215
EBT	**(15,427)**	**(15,230)**	**(323)**	**(529)**	**(1,273)**	**(1,998)**	**(2,932)**	**(3,191)**	**(2,400)**	**(1,754)**	**(1,030)**	**(194)**	**394**	**5,356**	**10,715**
Total Capital Expenditure	(35,681)	(37,358)	(463)	(888)	(3,191)	(3,946)	(5,016)	(4,920)	(4,224)	(3,986)	(3,760)	(3,610)	(3,355)	(1,536)	(2,939)
Movement in Working Capital	(30)	(80)	38	193	495	241	98	(251)	(284)	(311)	(103)	(94)	(99)	(90)	(61)
Cash Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,607)	(3,214)
Levered Free Cash Flow	**(42,659)**	**(43,354)**	**(729)**	**(1,155)**	**(3,717)**	**(5,290)**	**(7,211)**	**(7,454)**	**(5,797)**	**(4,772)**	**(3,479)**	**(2,360)**	**(1,391)**	**3,911**	**6,248**
Government Funding			1,362	2,832	7,504	13,623	20,287	25,047	28,949	30,400	30,400	30,400	30,400	19,297	-
Debt Funding			-	-	-	-	523	2,008	3,816	6,619	10,023	12,267	13,653	1,678	-
Total Funding			**1,362**	**2,832**	**7,504**	**13,623**	**20,810**	**27,055**	**32,765**	**37,019**	**40,423**	**42,667**	**44,053**	**20,975**	**-**
Debt / EBITDA			0.0 x	0.0 x	0.0 x	0.0 x	(0.2)x	(0.9)x	(3.4)x	(50.9)x	10.0 x	5.8 x	4.5 x	0.2 x	0.0 x
Debt / Total Funding			0.0%	0.0%	0.0%	0.0%	2.5%	7.4%	11.6%	17.9%	24.8%	28.8%	31.0%	8.0%	NM

Source: NBN Co

There is a financial time-bomb in here

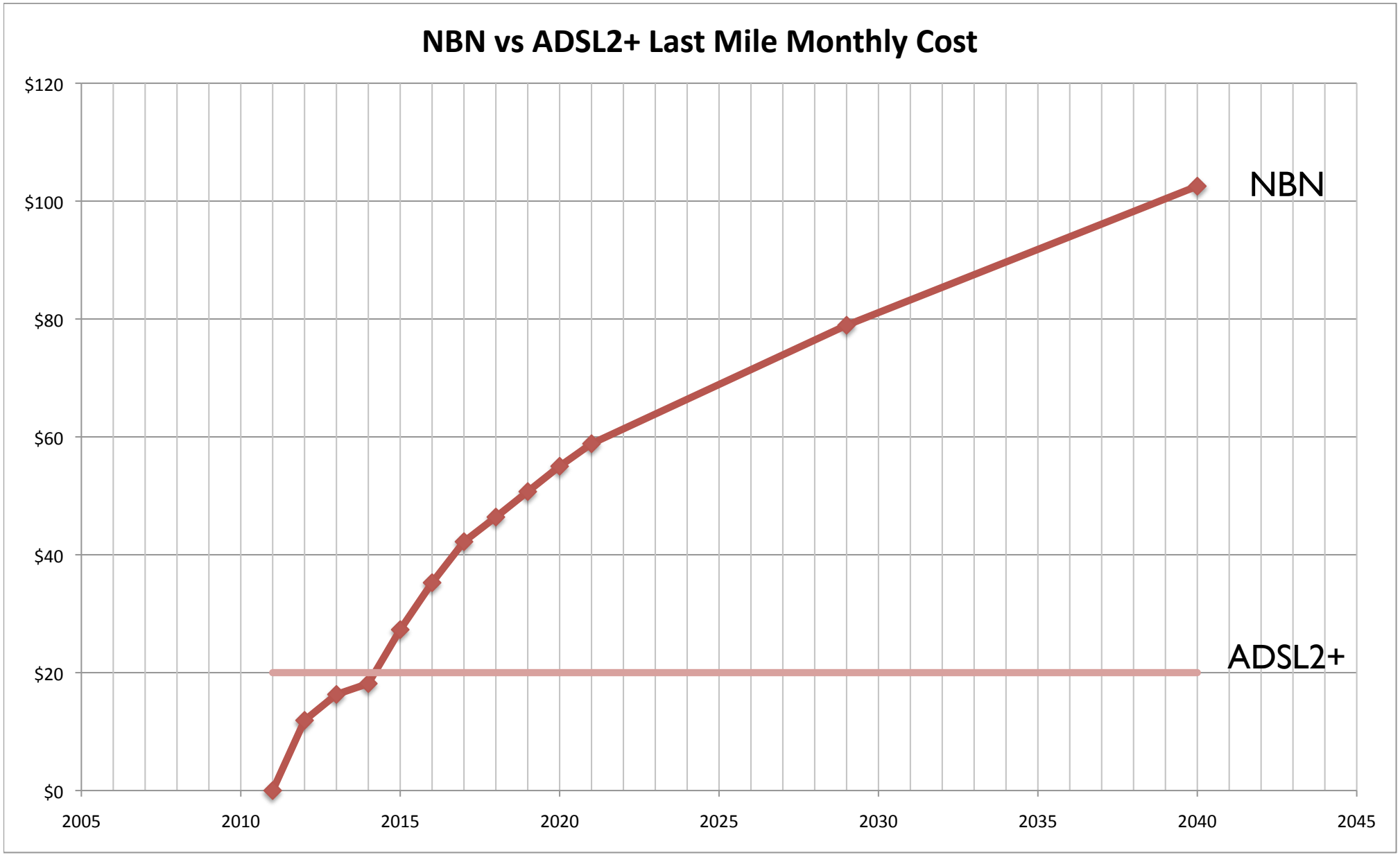
NBNCo Revenue Model from August 2012 Corporate Plan

FY Ending June in:	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2029	2040
Fibre Passed (000's)	18	39	341	1307	2912	4625	6279	7838	9283	10783	12202	13467	15435
Fibre Connected (000's)	1	4	54	487	1515	3036	4341	5594	6695	7607	8513	10010	11464
Wireless/Sat Passed (000's)	165	174	320	374	752	907	921	934	948	961	974	1055	1181
Wireless/Sat Connected (000's)	0	10	38	64	100	145	161	191	206	219	232	303	399
Total Connected (000's)	1	14	92	551	1615	3181	4502	5785	6901	7826	8745	10313	11863
Total Revenue ($m)	0	2	18	120	529	1346	2281	3221	4200	5167	6175	9769	14597
Connected Percentage of Passed	1%	7%	14%	33%	44%	58%	63%	66%	67%	67%	66%	71%	71%
NBNCo Annual tail circuit Cost	$0	$143	$196	$218	$328	$423	$507	$557	$609	$660	$706	$947	$1,230
NBNCo Monthly Last Mile Cost	$0	$12	$16	$18	$27	$35	$42	$46	$51	$55	$59	$79	$103
ADSL2+ Monthly Last Mile Cost	$20	$20	$20	$20	$20	$20	$20	$20	$20	$20	$20	$20	$20
Implied Monthly Retail Price Differential (including GST):		-$4	-$2	$8	$17	$24	$29	$34	$39	$43	$65	$91	

Sources:

NBNCo Corporate Plan released 6 August 2012 (Data in boxed area)
iiNet annual results presentation August 2012 (ADSL2+ on-net monthly last mile cost)

I did some simple calculations...


NBN vs ADSL2+ Last Mile Monthly Cost
$120
$100
$80
$60
$40
$20
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2005
2010
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2035
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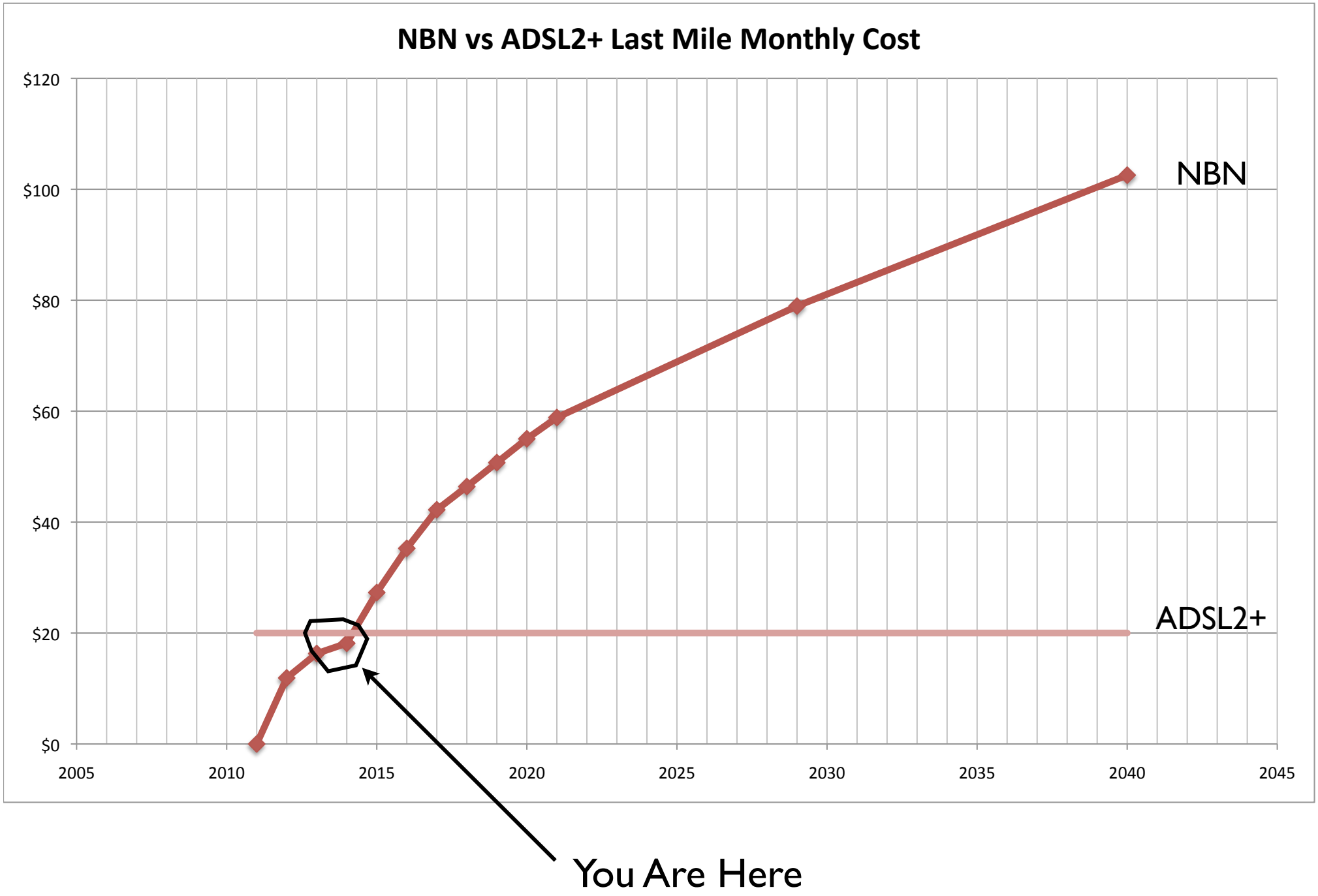
2045
NBN
ADSL2+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NBN
ADSL2+
You Are Here

If I had a blank sheet of paper...

... what would the NBN look like?

Access Cost Structure

Fixed monthly cost per user (any port speed)

No volume (CVC) charge (or far lower)
[e.g. $1/Mbit/mth not $20/Mbit/mth]

Overall costs designed to trend down over time - not up!

No artificial ‘added value’ wholesale charges in the model

Promote use of the network rather than suppressing demand with cost

How do we do this?

Only possible if we reduce the build cost

“Simplify, then add lightness”

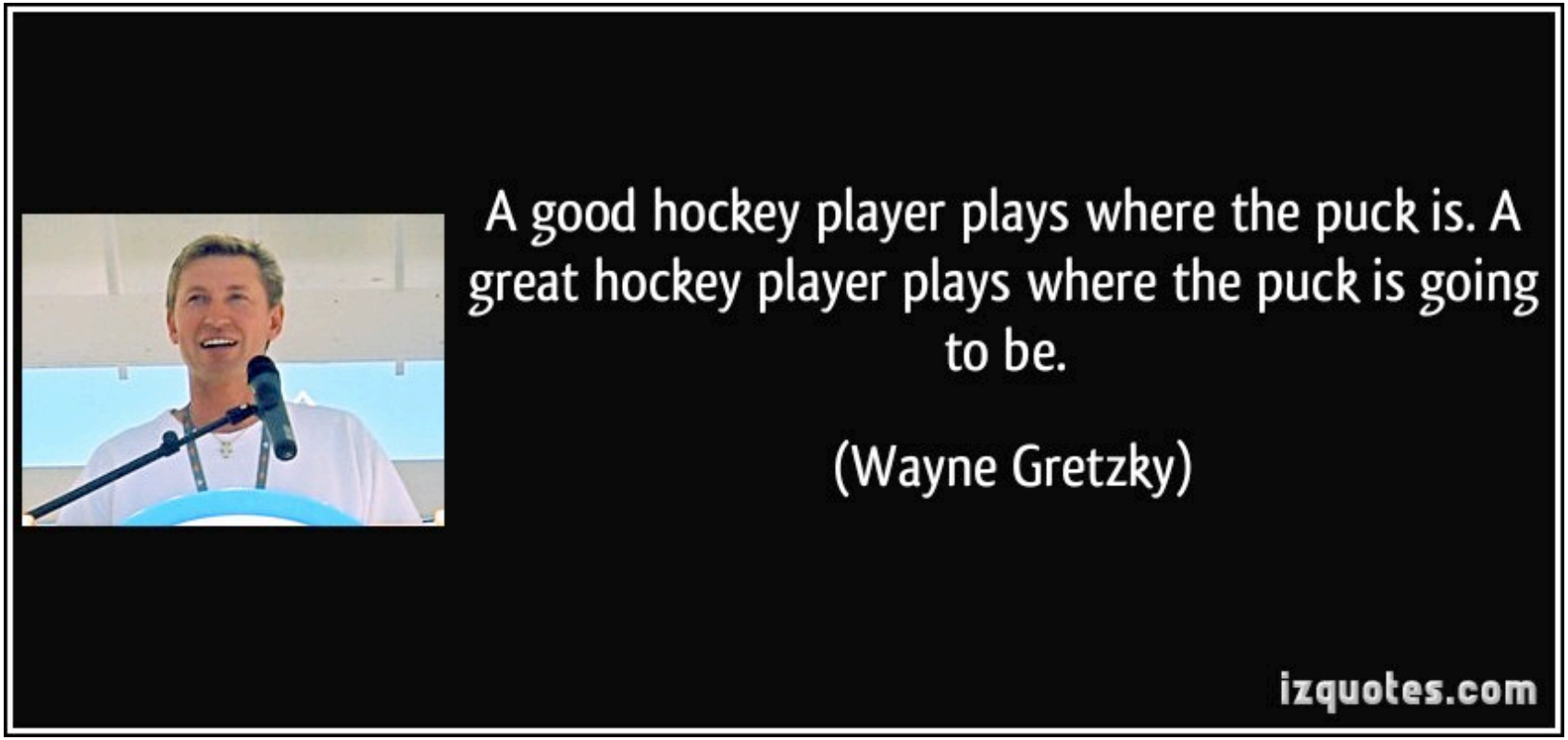
- Colin Chapman (Founder of Lotus)

No extra-cost QoS service in the network

QoS is something used when bandwidth is limited

QoS is *not* required in network with abundant bandwidth

It is always better to just have more lanes - fibre has unlimited lanes!



No Voice (PSTN) Ports - Broadband Only

Fixed Lines *are* going away... stop building more of them!

Many PSTN alternatives exist

Cellular Network PSTN adaptors

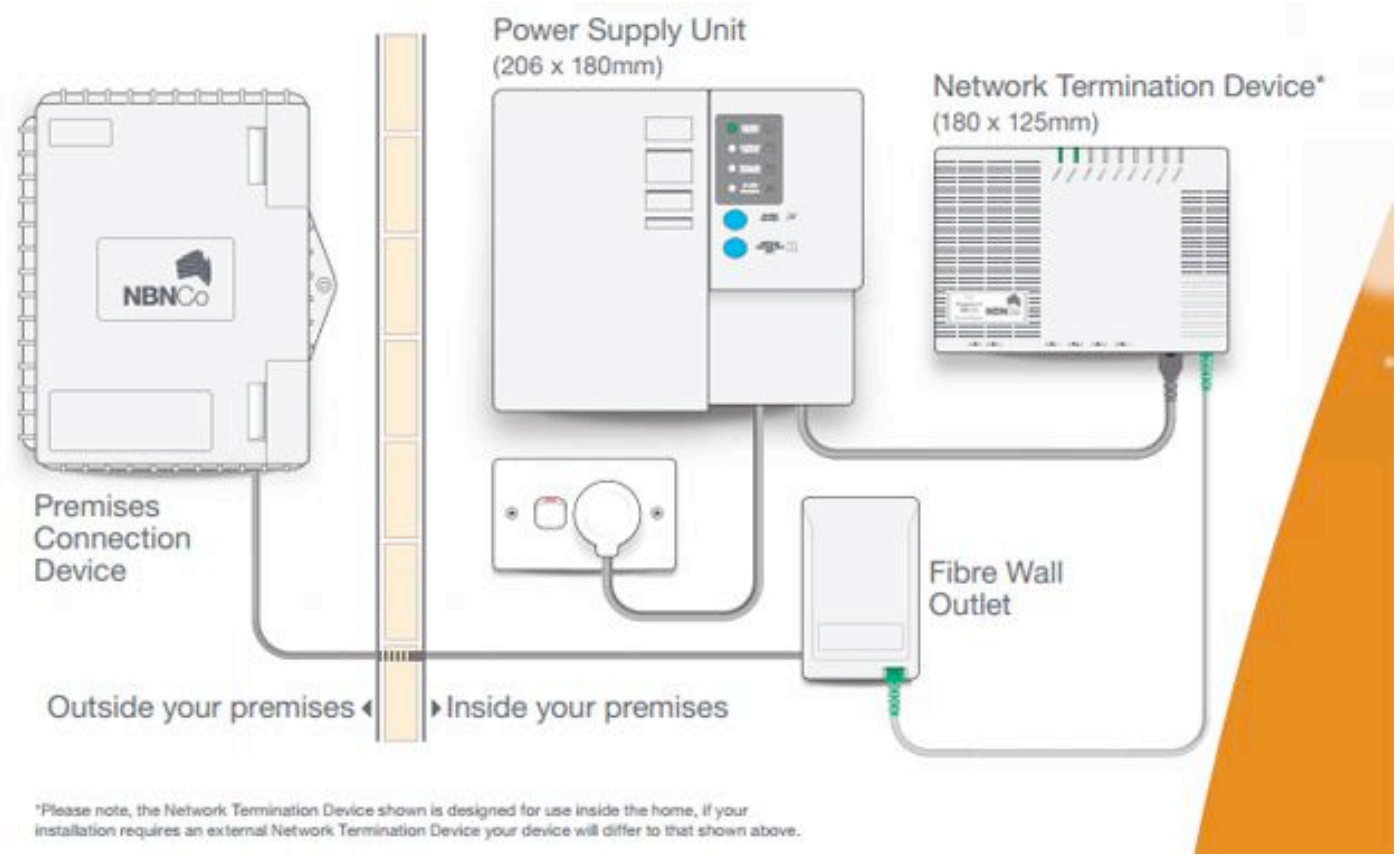
Voice ports in RSP supplied routers

ATA VoIP boxes

VoIP Handsets

PSTN # ported/forwarded to mobile phone service

Simplify the customer's Network Termination Unit installation



Deliver a single ethernet port

rather than

4 x Ethernet + 2 x PSTN + Battery

Huge simplification outcomes for NBNCo

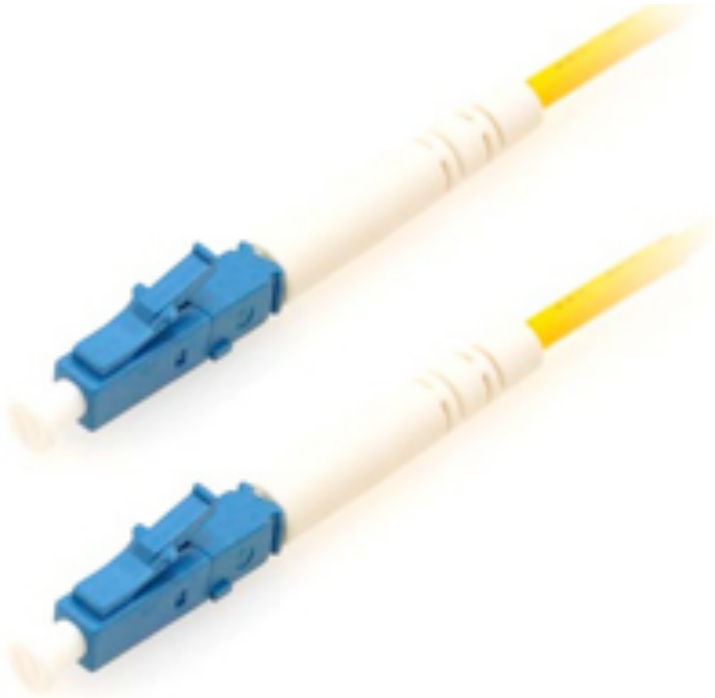
Not just a major cost saving and major installation time saving...

This removes need for 6 virtual networks inside each NTU

No custom NTU/Switch software

Avoids permanent single vendor lock-in

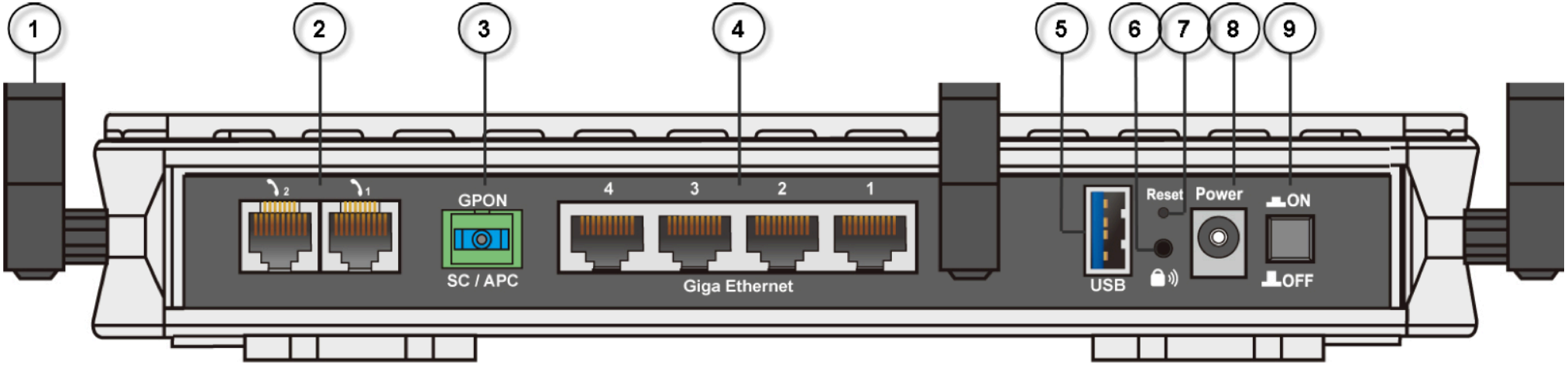
Allows multi-vendor network hardware deployment



Then Lighten

NBN could also offer <u>just the fibre port</u> to RSP's

Rear Ports



RSP can supply GPON router direct to end user


WARNING

GPON Shared Segment Access Control

Customer identification and access control via standard protocols

Security architecture comparable to DOCSIS

User data secured via AES-128 encryption

Points of Interconnect

Revert to 7 Dual/Redundant Points of Interconnect

121 POI model only adds *avoidable* additional costs to consumers

No change to NBNCo build costs

121 POI's creates risk of *high impact major outages*
(no failover if a POI is damaged or destroyed)

Positive consequences of this approach

Large cumulative drop in cost

Reduction in build timeframe

Can bring in second-source hardware supplier

What if its *still* too expensive?

Subsidise the build

This really *is* ‘nation building’ - like a road system

Fill any remaining gap with government subsidy/support

Minimise gap - but don’t expect *consumers* to directly fill

Summary

Simplify, then add lightness

Audit the entire network process end to end for savings

- Think laterally about *every* network component
- Reduce complexity - simplify all access interfaces
- Remove components we can do without

Bring in second source hardware supplier - competitive tension

The Prize?

Fibre outcomes on a Copper budget