

# CHORUS

**H1 FY19 RESULT PRESENTATION**

25 February 2019

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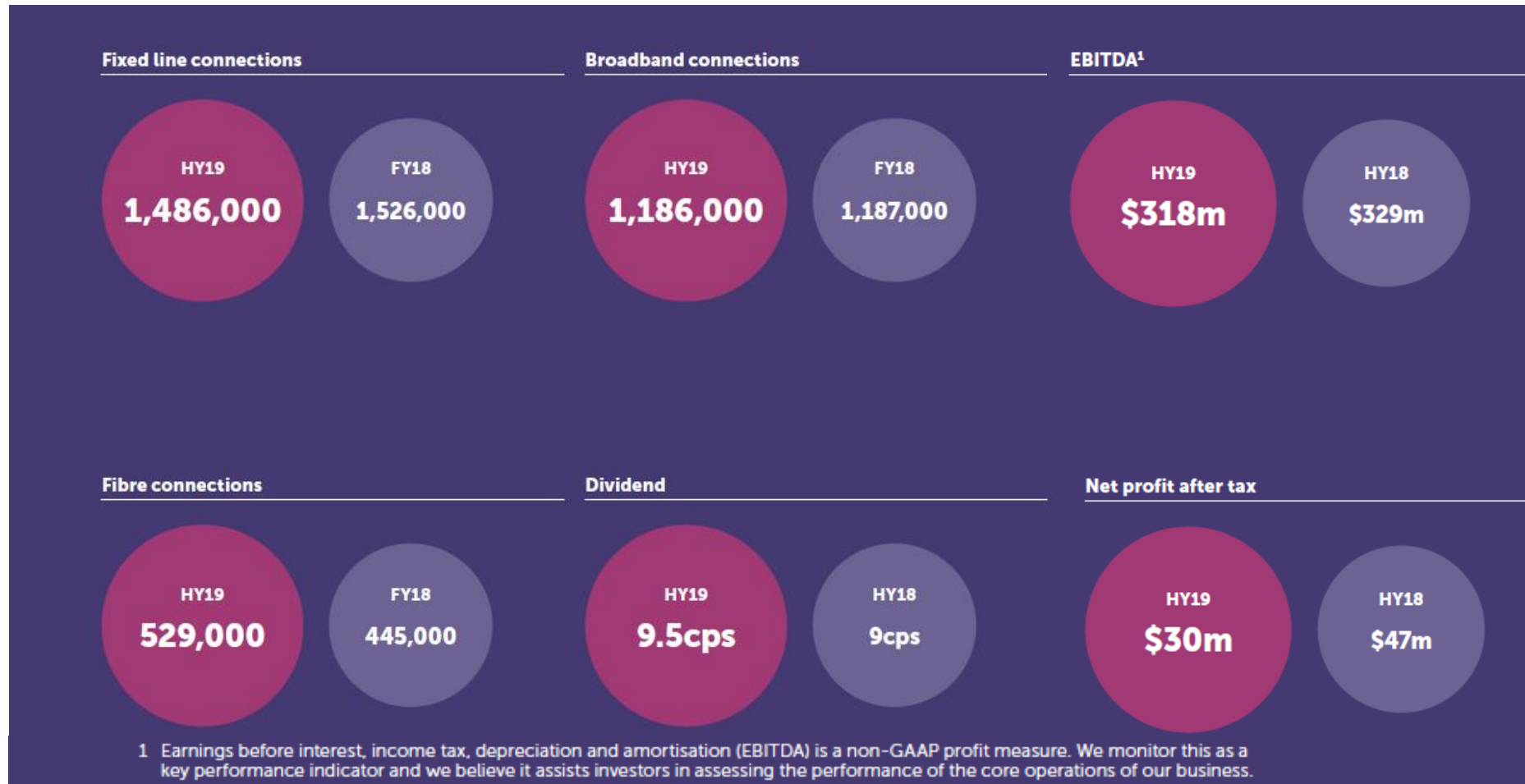
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# Agenda

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# H1 FY19 result overview



# Connection movements by Zone

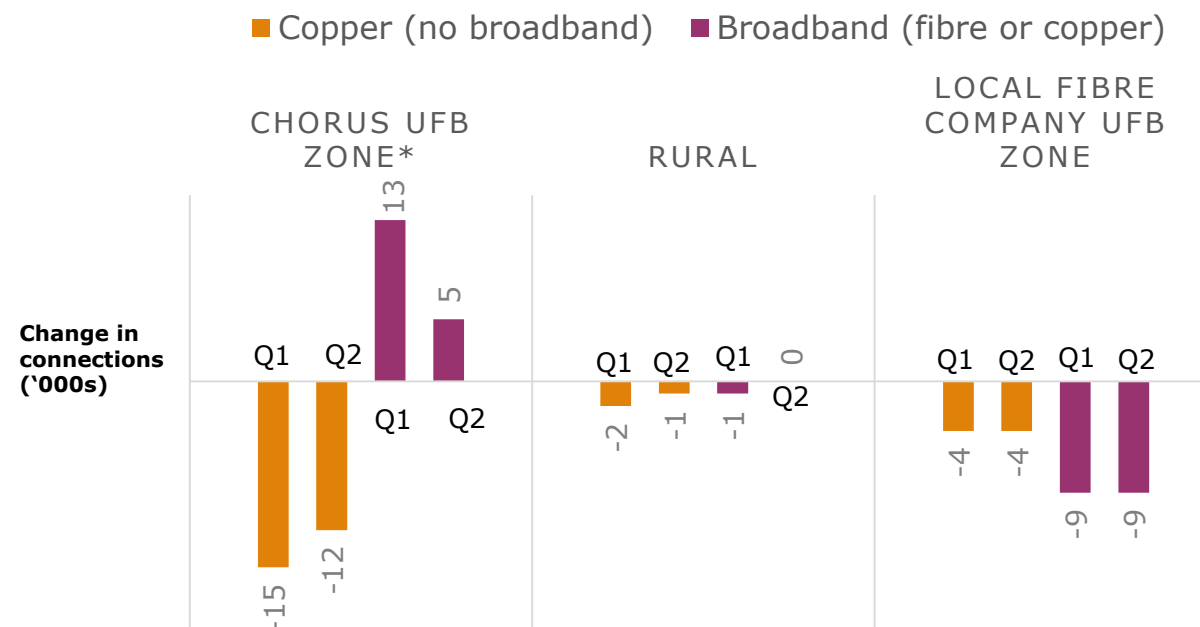
> **Total fixed line connections decreased by 40k to 1,486,000** (H1 FY18:-43k)

- copper lines with no broadband decreased by 38k, mostly in Chorus UFB areas
- 1k reduction in data services over copper

> **Total broadband connections decreased by 1k to 1,186,000** (H1 FY18:-5k)

- strong growth in Chorus UFB areas, offsetting reductions in LFC areas
- VDSL and vectoring upgrades helping limit rural wireless effect
- Note: disconnections typically higher in Q2

## INDICATIVE CONNECTION CHANGES BY ZONE



Total connections at 31 Dec**	1,099,000	202,000	168,000
Broadband connections	922,000	153,000	111,000
Copper (no broadband) connections	177,000	49,000	57,000

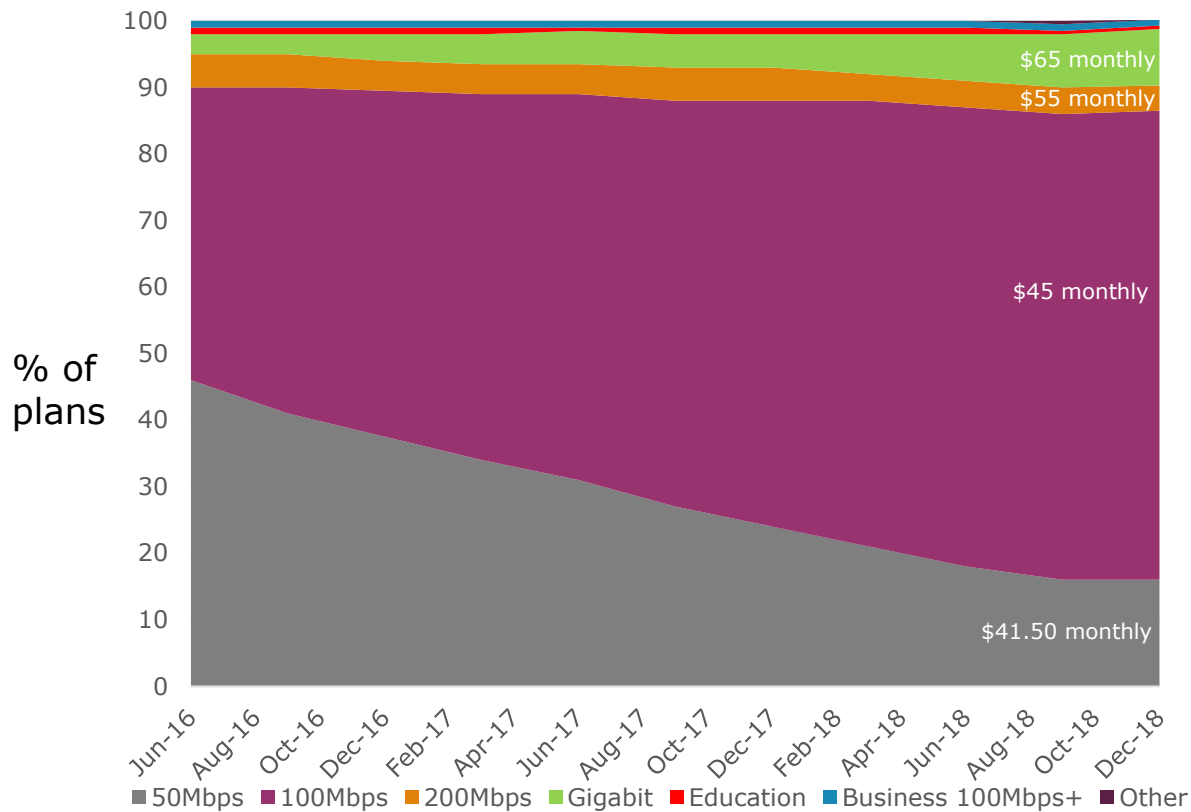
\* Includes planned UFB1, 2 and 2+ coverage

\*\*Excludes 17k fibre premium and data services (copper) connections

see Appendix A for connection trends by product category

# Fibre connections pass 500k

**Total mass market fibre uptake by plan type**

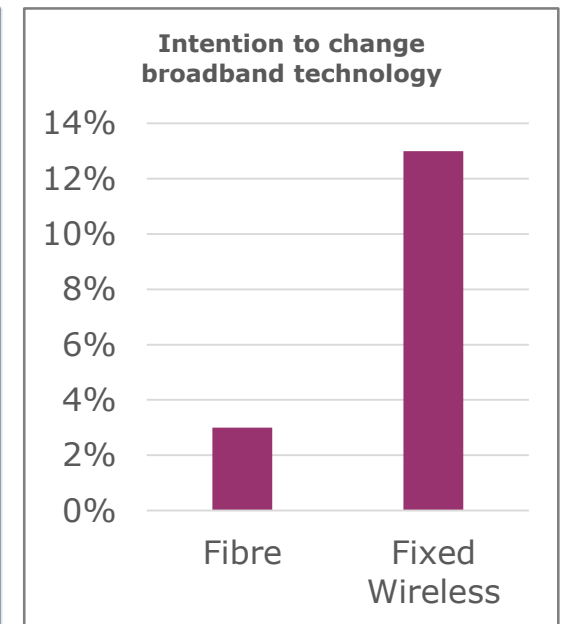
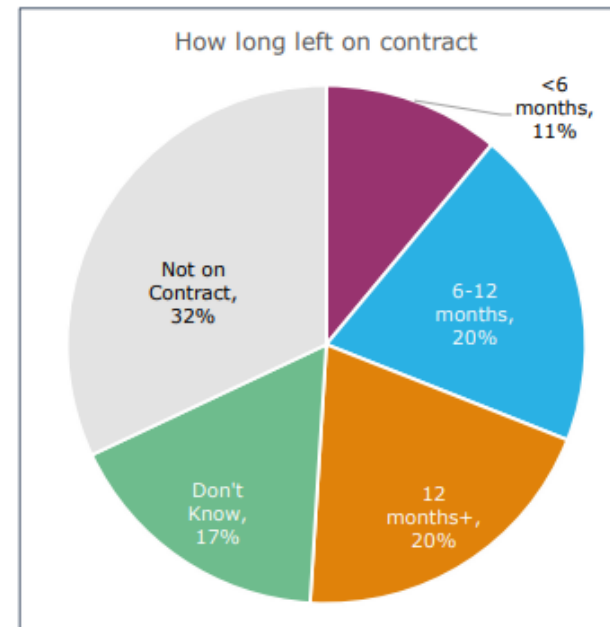


- > **84,000** mass market fibre connections added in H1
- 71% of mass market fibre connections on 100Mbps
- 44,000 connections on gigabit plans (FY18: 30,000)
- glide path announced for 1Gbps pricing:
  - Residential: \$60 from July 2019; \$56 from July 2020
  - Business: \$75 currently; \$70 from July 2019; \$66 from July 2020

# Active wholesaler strategy continues

## 10k proactive fibre installations in H1

- > **7k via Chorus door knocking; 3k in association with retailers**
- > **Total 21k installations since activity began in FY18**
  - ~14k have activated service to date
  - Chorus-led installations to date resulted in 40% uptake after 6 months; 70% after 12 months
  - off-net customer uptake slower at ~30% activation within 6 months, but with minimal effort and reflects contractual barriers to churn



Survey Questions:

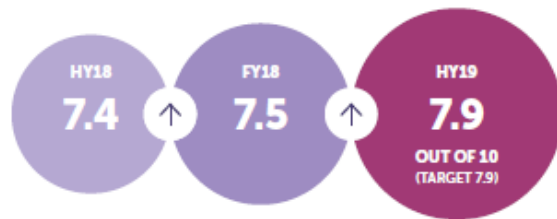
How long do you have left on your contract?

How likely are you to stop using [technology] as the main way to connect to the internet at home, in the next year? Showing: 8-10 on a 1-10 scale

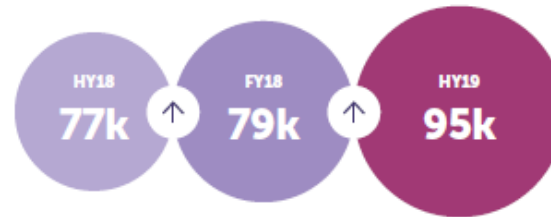
# Record fibre demand and customer satisfaction

Achieved **50%** 'fibre in a day' target

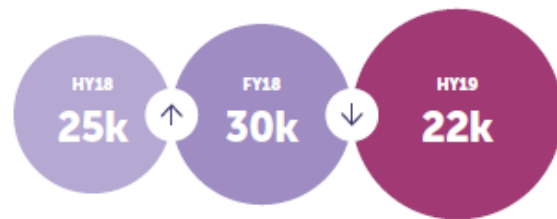
## Customer satisfaction



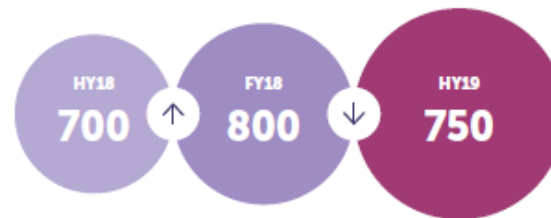
## Completed installations



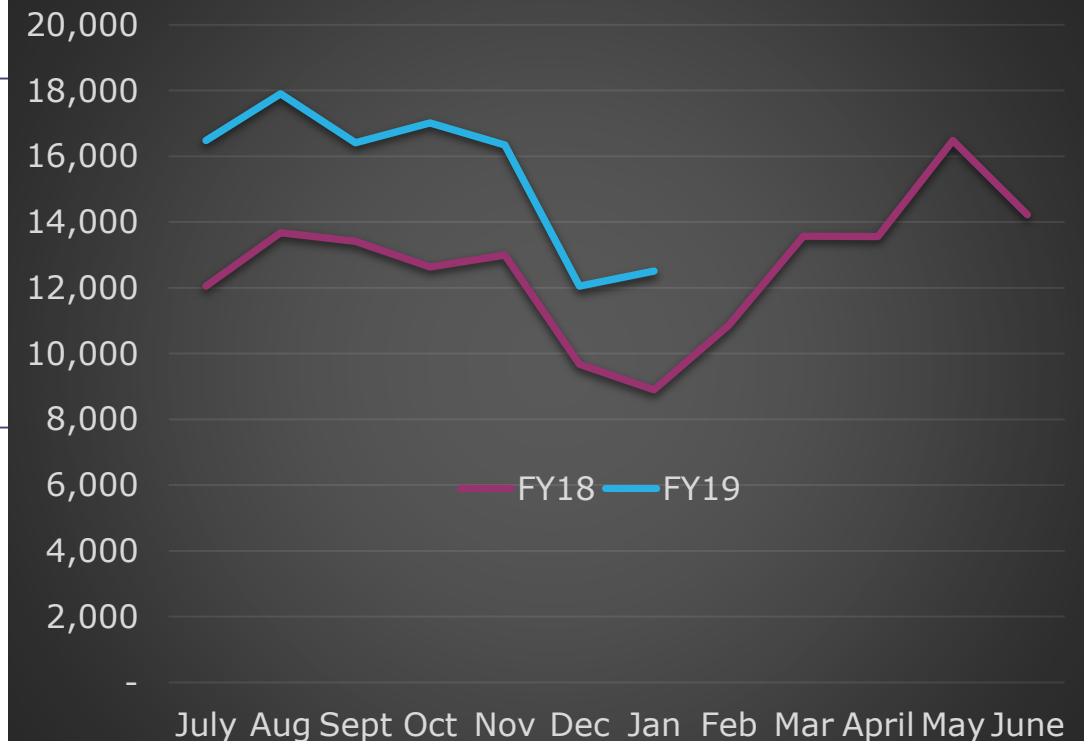
## Work in progress (fibre orders)



## Fibre installation crews

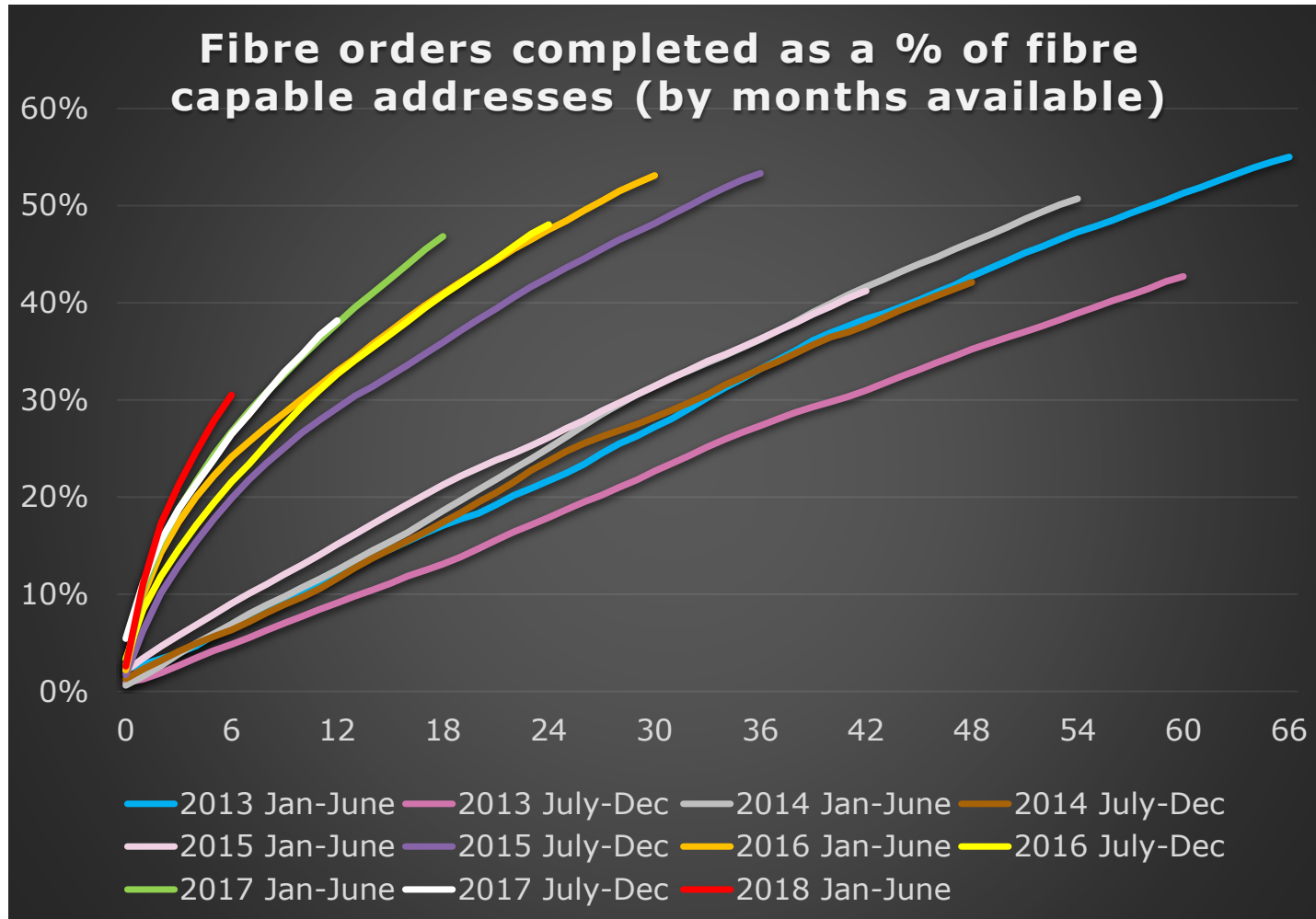


## Fibre installations





# Demand continues to accelerate in new build areas



> **Time taken to achieve 30% uptake has shortened from 2 to 3 years for initial UFB rollout years, to 6 months for most recent areas**

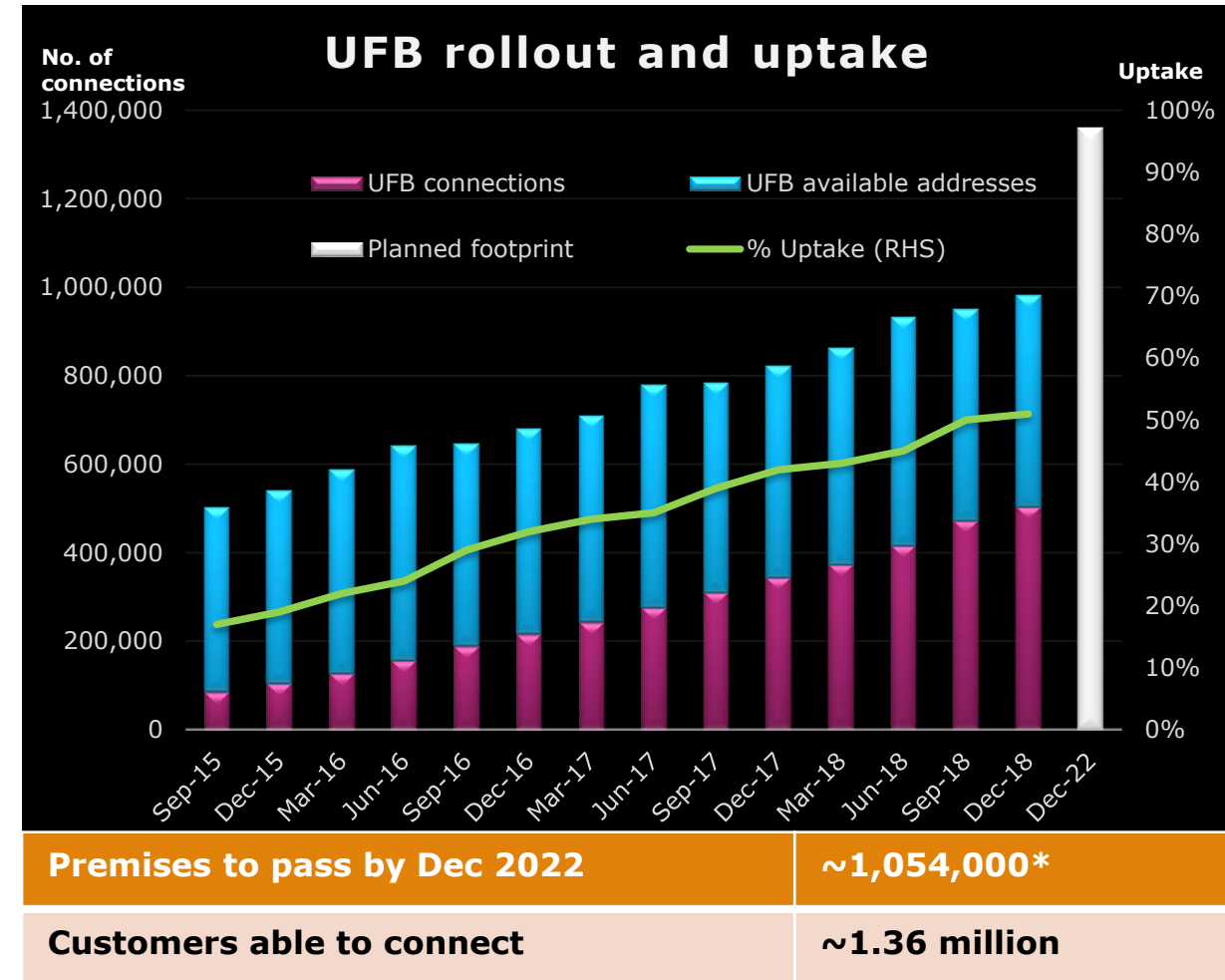
- step change occurred in 2015, coinciding with arrival of Netflix in NZ

> **Strong rate of uptake in UFB2 areas**

- Hokitika: 43%
- Horotiu: 52%

# UFB rollout and uptake

- > **51% UFB uptake at 31 Dec (30 June: 45%)**
  - **504,000** connections (30 June: 415,000)
  - **981,000** customers able to connect (30 June: 932,000)
  - **738,000** premises passed (30 June: 700,000)



\*Includes estimated 43k greenfields premises for UFB1

# Financial performance

David Collins, Chief Financial Officer

# Income statement

	H1 FY19 \$m	H2 FY18 \$m	H1 FY18 \$m	
Operating revenue	489	491	499	> Total connections decreasing
Operating expenses	(171)	(167)	(170)	
<b>Earnings before interest, tax, depreciation and amortisation (EBITDA)</b>	<b>318</b>	<b>324</b>	<b>329</b>	
Depreciation and amortisation	<u>(196)</u>	<u>(195)</u>	<u>(192)</u>	> Increasing as a result of long life assets
Earnings before interest and income tax	122	129	137	
Net interest expense	<u>(79)</u>	<u>(74)</u>	<u>(70)</u>	> \$500 million bond issued in December, Crown funding notional interest increasing
Net earnings before income tax	43	55	67	
Income tax expense	<u>(13)</u>	<u>(17)</u>	<u>(20)</u>	
<b>Net earnings for the period</b>	<b>30</b>	<b>38</b>	<b>47</b>	

# Revenue

	H1 FY19 \$m	H2 FY18 \$m	H1 FY18 \$m
Fibre broadband (GPON)	136	108	90
Fibre premium (P2P)	37	38	40
Copper based voice	56	64	69
Copper based broadband	181	202	219
Data services copper	10	13	14
Field Services	39	35	35
Value added network services	16	16	17
Infrastructure	12	11	12
Other	2	4	3
<b>Total</b>	<b>489</b>	<b>491</b>	<b>499</b>

> revenue growing as fibre uptake increases

> some churn to lower input fibre services or other networks

copper revenues declining as customers migrate to fibre or competing fibre/wireless networks. Annual increase in regulated copper line and broadband pricing in mid December.

> increase in chargeable network relocation and subdivision activity

# Expenses

	H1 FY19 \$m	H2 FY18 \$m	H1 FY18 \$m
Labour	37	34	39
Provisioning	3	2	4
Network maintenance	38	44	43
Other network costs	18	19	15
IT	26	27	27
Rents, rates and property maintenance	13	13	11
Regulatory levies	8	6	7
Electricity	9	7	8
Consultants	4	2	3
Insurance	2	2	1
Other	13	11	12
<b>Total</b>	<b>171</b>	<b>167</b>	<b>170</b>

> 6% reduction in staff numbers from H1 FY18; offset partially by CPI increases

> fault volumes reducing overall, helped by fewer extreme weather events and retailers using API tools to reduce unnecessary truck rolls

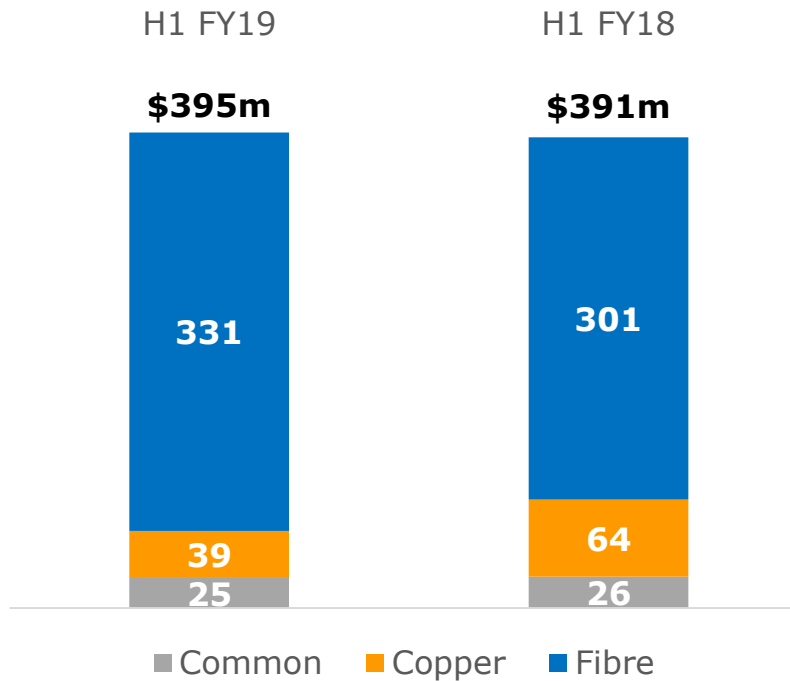
> increase in third party requests for network relocation activity

> rates increasing as fibre network expands

# Gross Capex

H1 FY19 gross capex of **\$395m** vs H1 FY18 \$391m

- Fibre capex increased to 84% of gross capex (H1 FY18:77%) as fibre connections spend grew and copper capex reduced



# Capex: common and copper

Common capex	H1 FY19 \$m	H2 FY18 \$m	H1 FY18 \$m
Information technology	17	18	17
Building & engineering services	7	11	9
Other	1	3	0
<b>Subtotal</b>	<b>25</b>	<b>32</b>	<b>26</b>

Copper capex	H1 FY19 \$m	H2 FY18 \$m	H1 FY18 \$m
Network sustain	19	29	16
Copper connections	1	1	1
Copper layer 2	6	18	16
Product	1	2	2
Customer retention costs	12	18	29
<b>Subtotal</b>	<b>39</b>	<b>68</b>	<b>64</b>

- > ongoing investment in poles, proactive maintenance and roadworks projects
- > reduced spend following end of ~\$20m VDSL vectoring rollout in FY18
- > reducing as incentives are more targeted and RSP focus shifts from VDSL to fibre uptake



# Capex: Fibre

- **Cost per UFB1 premises passed (CPPP): ~\$1,662** vs \$1,500 - \$1,600 guidance
- 38,000 premises passed (H1 FY18 32,000) included 13,000 UFB 2/2+ premises
- ~80,000 brownfields premises to be completed in H2 FY19

Fibre capex	H1 FY19 \$m	H2 FY18 \$m	H1 FY18 \$m
UFB communal	119	118	113
Fibre connections & layer 2	161	149	145
Fibre products & systems	7	7	10
Other fibre connections & growth	36	37	28
Customer retention costs	8	8	5
<b>Subtotal</b>	<b>331</b>	<b>319</b>	<b>301</b>

> UFB1 rollout \$78m; UFB2/2+ rollout \$41m

> 95,000 new installations in H1 FY19 (H1 FY18: 77,000)

> pole replacement programme and growing housing demand

> targeted RSP campaigns to drive fibre uptake and win back off-net connections

# Capex: Fibre connections & layer 2

## Connections capex of \$161m

- **Cost per UFB1 premises connected (CPPC): \$1,038\*** vs \$1,000 - \$1,150 guidance  
\* excludes layer 2 and includes standard installations, some non-standard single dwellings and service desk costs
- 95,000 single dwelling unit and apartment connections completed (includes 5,000 UFB2)
- Layer 2 spend reducing as UFB1 rollout comes to an end; ongoing spend for UFB2/2+, growth and bandwidth demand

Fibre connections & layer 2 capex	H1 FY19	H2 FY18	H1 FY18
Layer 2 (long run programme average of \$100 per connection)	\$9m	\$16m	\$16m
Premium business fibre connections	\$4m 600 connections	\$5m 600 connections	\$6m 800 connections
Single dwelling units and apartments connections	\$100m 95k connections	\$79m 79k connections	\$84m 77k connections
Backbone build: multi-dwelling units and rights of way * Estimated 55-60% requiring backbone build now completed	\$48m 9.5k completed	\$49m 7.3k completed	\$39m 5.8k completed
<b>TOTAL SPEND</b>	<b>\$161m</b>	<b>\$149m</b>	<b>\$145m</b>

# FY19 guidance - updated

	H1 FY19 update	Prior FY19 guidance
<b>FY19 EBITDA</b>	No change	<b>\$625 – 645m</b>
<b>FY19 Gross capex</b>	No change	<b>\$820 – \$860m</b>
<b>Fibre capex</b>	<b>\$685m - \$715m</b>	\$660m - \$690m
<b>Fibre connections &amp; layer 2 capex</b>	<b>\$310m - \$340m</b> (based on mass market <b>175,000-195,000</b> fibre connections, and <b>19,000</b> backbone builds and including service desk costs)	\$280 – \$310m (based on mass market 155,000 – 175,000 fibre connections, and 14,000 backbone builds and including service desk costs)
<b>Copper capex</b>	<b>\$75m - \$95m</b>	\$90m - \$110m
<b>Common capex</b>	No change	<b>\$55m - \$70m</b>
<b>UFB1 Cost Per Premises Passed (CPPP)</b>	No change	<b>\$1,500 - \$1,600</b>
<b>UFB2/2+ communal capex</b>	No change	<b>\$90m - \$110m</b> (based on estimated starting premises of 45,000 to 55,000 and premises handed over of 25,000 to 35,000)
<b>UFB1 Cost Per Premises Connected (CPPC)</b>	No change	<b>\$1,000 - \$1,150</b> (excluding layer 2 and including standard installations and some non-standard single dwellings and service desk costs)

# Capital management & FY19 dividend

## H1 FY19 interim dividend of **9.5cps**, fully imputed

- supplementary dividend of 1.68cps payable to non-resident shareholders
  - **record date:** 19 March 2019
  - **payment date:** 16 April 2019
  - **Dividend Reinvestment Plan** applies with 3% discount to prevailing market price; open to New Zealand and Australian resident shareholders
- > **FY19 dividend guidance of 23 cps**, subject to no material adverse changes in circumstances or outlook.
- > The Chorus Board considers that a 'BBB' credit rating or equivalent credit rating is appropriate for a company such as Chorus. It intends to maintain capital management and financial policies consistent with these credit ratings.
- > During the UFB build programme to 2020, the Board expects to be able to provide shareholders with modest dividend growth from a base of 20cps per share paid for FY16, subject to no material adverse changes in circumstances or outlook.

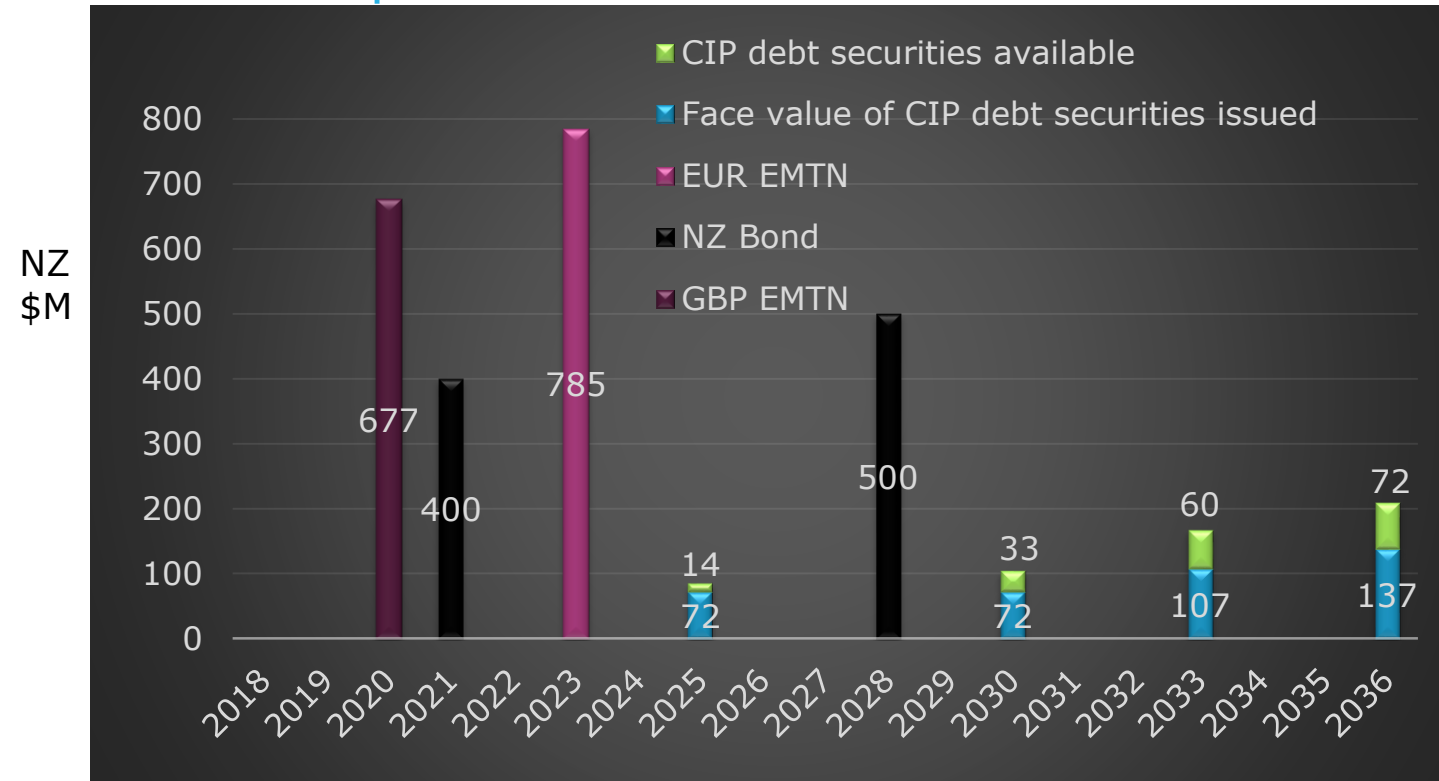
# Debt

	As at 31 Dec 2018 \$m
Borrowings	2,362
+ PV of CIP debt securities (senior)	137
+ Net leases payable	<u>238</u>
Sub total	2,737
- Cash	(281)
<b>Total net debt</b>	<b>2,456</b>
Net debt/EBITDA	3.82 times

- Financial covenants require senior net debt/EBITDA ratio to be no greater than **4.75 times**
- S&P rating down driver adjusted debt/EBITDA greater than 4x for a sustained period

- > At 31 Dec, debt of \$2,362m comprised:
  - Long term bank facilities of \$350m undrawn;
  - NZ bond: \$400m and \$500m
  - Euro Medium Term Notes \$1,462m (NZ\$ equivalent at hedged rates)

## Term debt profile



# Crown financing

\$800m received at 31 December from Crown Infrastructure Partners (CIP)

> up to \$1.33 billion available by 2023 (57:43 equity/debt)

AS AT 31 DECEMBER

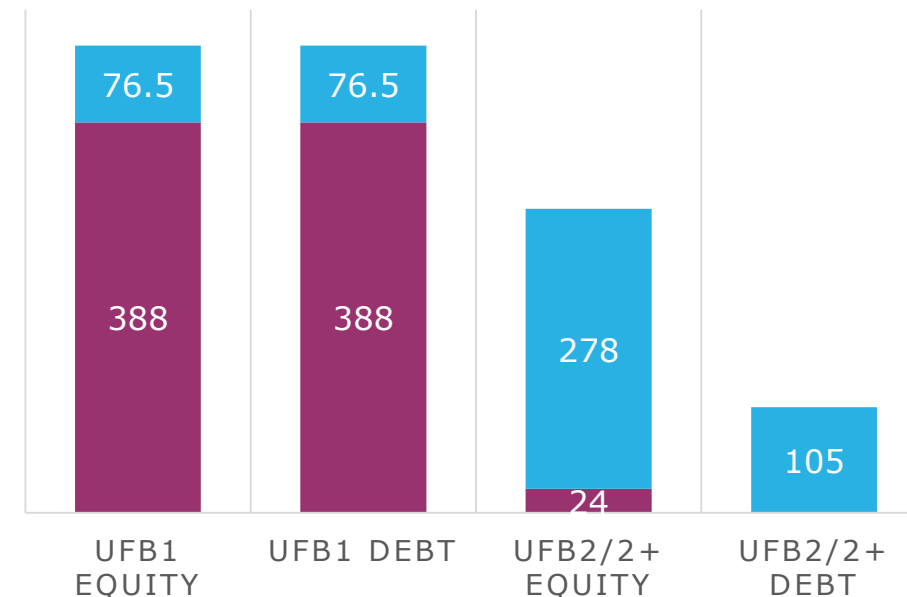
## ■ CIP equity securities

- unique class of security with no right to vote at shareholder meetings, but entitle the holder to a right to repayment preference on liquidation
- an increasing portion of the securities will attract dividend payments from 30 June 2025 onwards
- the dividend rate is based on 180 day NZ bank bill rate, plus 6% p.a. margin
- may be redeemed at any time by cash payment of total issue price or the issue of Chorus shares (at a 5% discount to the 20-day VWAP for Chorus shares)

## ■ CIP debt securities

- unsecured, non-interest bearing and carry no voting rights at shareholder meetings
- Chorus is required to redeem the securities in tranches from 30 June 2025 to 2036 by repaying the issue price to the holder

■ drawn ■ undrawn



# New start: transition to a regulated utility

Kate McKenzie, Chief Executive Officer

# Implementation of new fibre framework

## > Commerce Commission granted deferral until 1 January 2022

- Input methodologies: emerging views paper due in May; draft decision in November

### Transition period: 1 December 2019 to January 2022

UFB1 rollout contract ends Dec 2019

Chorus can charge up to the product price caps agreed with Crown Infrastructure Partners. Price caps 'frozen' until 2022, with annual CPI adjustment in July

- voice only: \$25
- 30/10Mbps: \$42.50
- 100/20Mbps: \$46
- 200/20Mbps: \$55
- 1Gbps: \$65
- Direct Fibre Access Service: \$355

Unbundled fibre (commercial price) to be available in UFB1 areas from January 2020.

### First regulatory period: 1 January 2022 to January 2025

Start of first regulatory period under new RAB framework

Price caps and CPI adjustments continue for voice service, broadband service (product to be confirmed) and Direct Fibre Access Service

Price caps are removed from other products

Unbundled fibre to be available in UFB2/2+ areas from January 2026



# Key implementation parameters

Parameters	Chorus view
Asset valuation	RAB to include all assets supporting fibre access services, including fibre in LFC areas. Valuation method defined by Act as actual cost incurred for post 2011 assets; book value for pre-existing. The Commission has acknowledged real financial capital maintenance as key principle underpinning the building block model.
Depreciation	Act requires straight line depreciation for initial RAB valuation.
Allocation of shared costs between fibre access and other services	No method prescribed in Act. The Commission will need to determine allocation for initial RAB valuation and then principles for cost allocation after the implementation date. Precedent is accounting based cost allocation, but more complexity for telco networks given high degree of asset sharing and rapidly growing fibre uptake.
Unrecovered losses	Act prescribes adding an asset to RAB to enable recovery of financial losses on investment prior to implementation. The Commission has proposed using a building block methodology.
Crown financing	Act requires actual cost of Crown financing to be considered in valuing the financial losses asset, but no method prescribed. Commission should recognise CIP financing was not costless given contractual terms and financing structure.
WACC	WACC to be set for loss calculation period <u>and</u> for post implementation period. Nature of Chorus/fibre business and international comparators support WACC uplift.

# Copper deregulated in fibre areas from January 2020

Fibre uptake is above 71% in 10 exchange areas

Exchange area (>1,000 connections)	Region	Fibre penetration: % of total Chorus connections	Fibre penetration: % of Chorus broadband connections
Whitby	Wellington	82%	83%
Corstorphine	Dunedin	74%	78%
Lynmore	Rotorua	73%	78%
Ngongotaha	Rotorua	73%	77%
Halfway Bush	Dunedin	73%	79%
North East Valley	Dunedin	72%	76%
Kelvin Grove	Palmerston North	71%	79%
Browns Bay	Auckland	71%	76%
Belmont	Wellington	71%	74%
Gleniti	Timaru	71%	77%

- within our UFB1 areas, there are ~350 nodes (approx. 200 customers) with fewer than 10 copper connections remaining

# Innovation

## Fibre to the desktop (Passive Optical LAN)

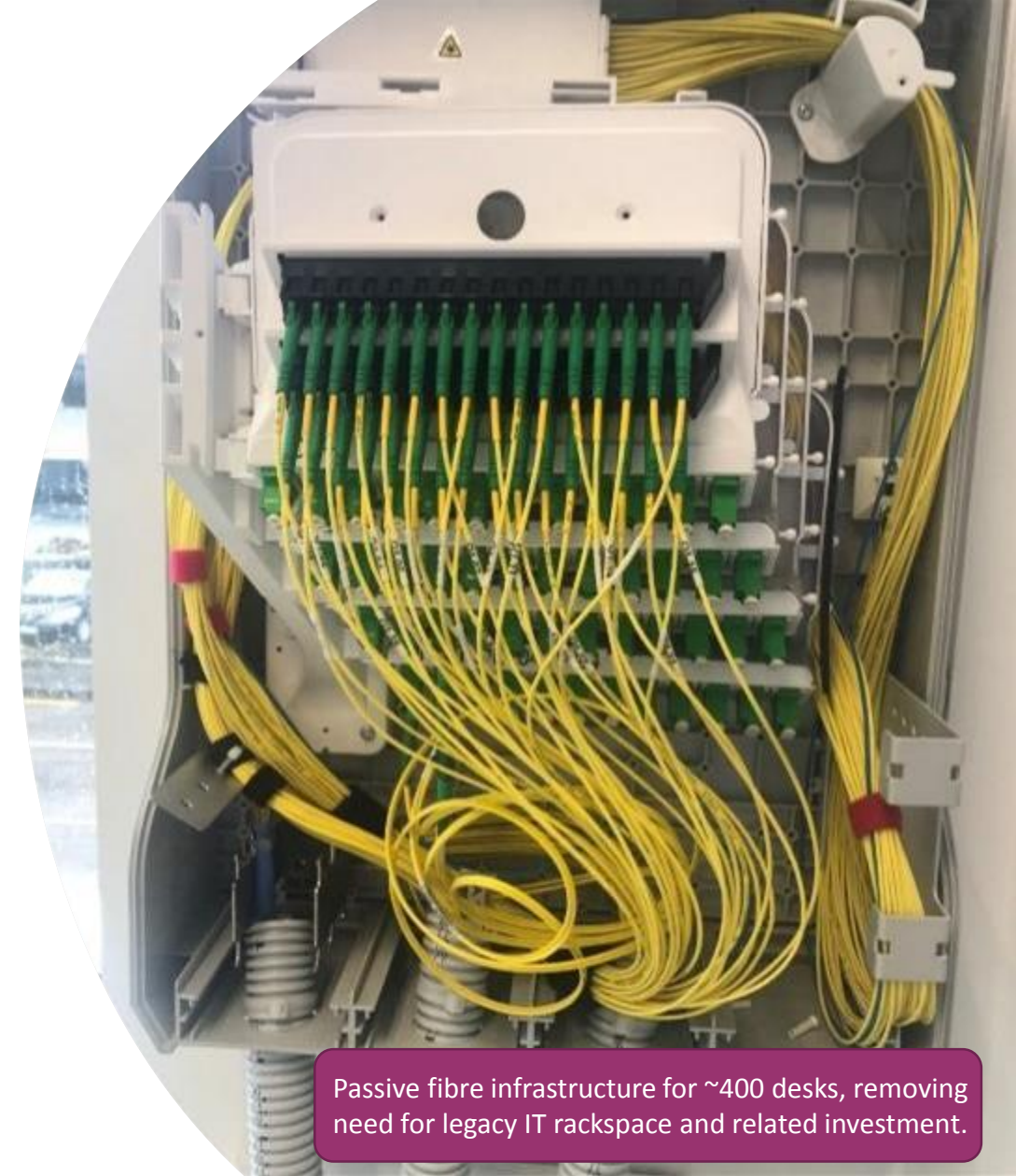
- concept trials in two schools and two new office premises (UCG, Network for Learning)

## Network edge computing

- data centre sites on track for Q3 completion
- end-to-end management interface selected

## Network capability

- trialling 10 Gigabit PON and wireless PON
- wi-fi capable ONT now being deployed

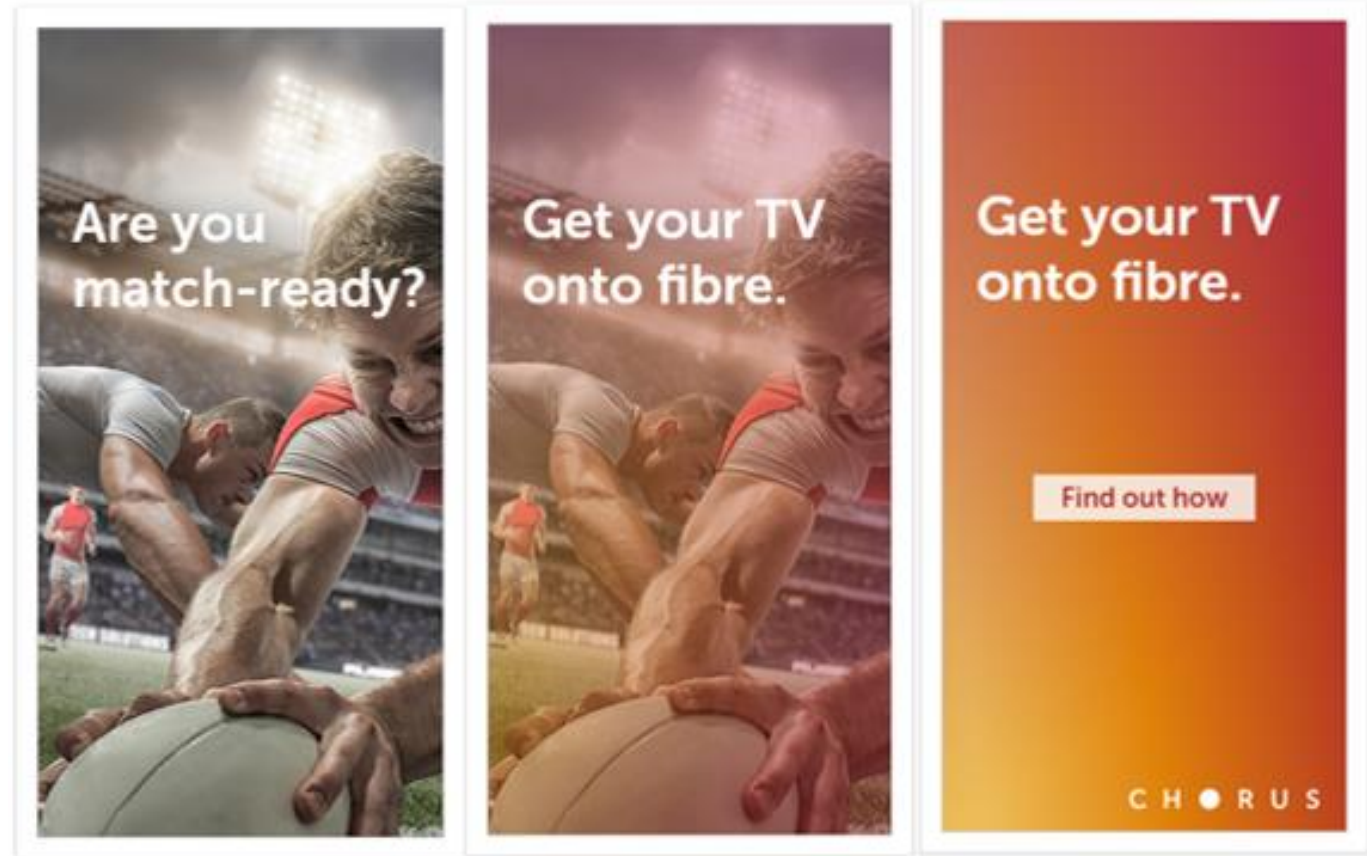


Passive fibre infrastructure for ~400 desks, removing need for legacy IT rackspace and related investment.

# Stream big

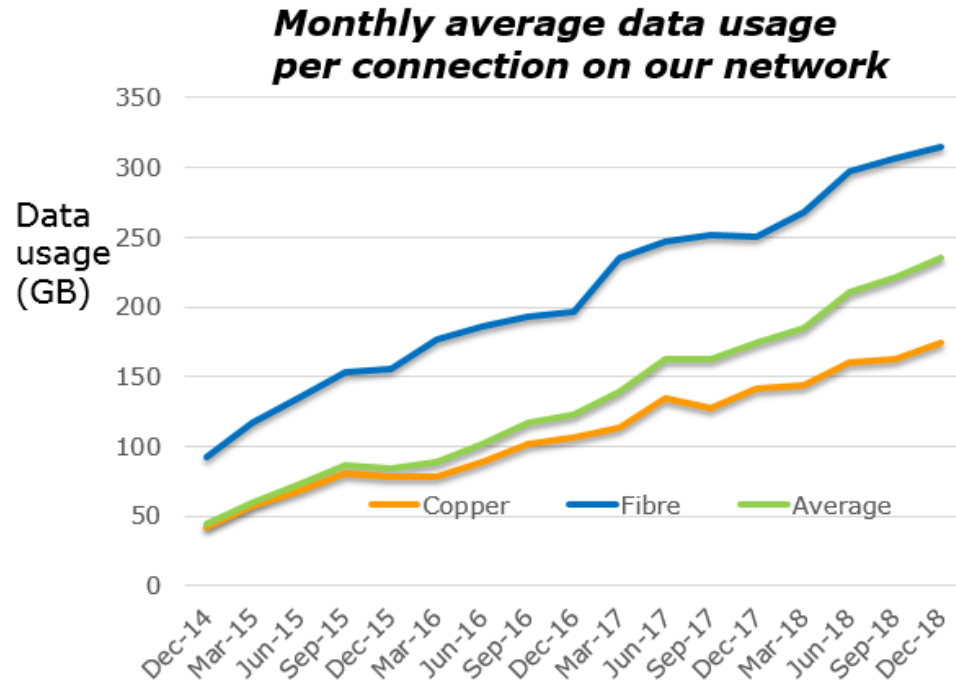
## Shift to online delivery steps up

- new Freeview *smartvu* device streams channels without need for TV aerial or satellite dish
- Vodafone leveraging Sky Sport via their Vodafone TV platform
- Spark launching sports streaming service

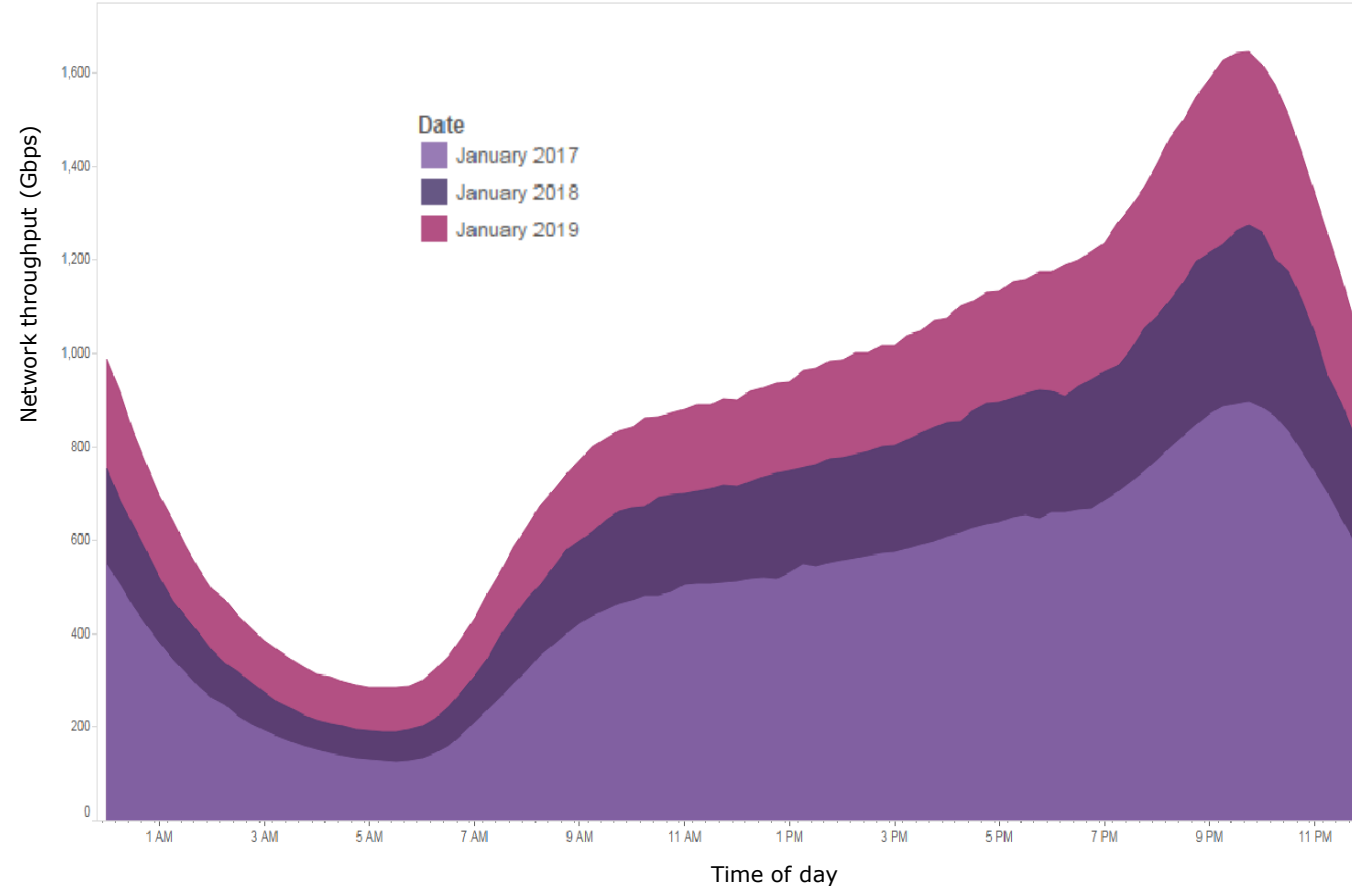


# Data demand isn't slowing

- > Monthly average data usage per connection on our network grew to **235GB** from **210GB** (June 2018)
  - **315GB** on fibre (June:297GB)
  - **174GB** on copper (June:160GB)



- > Traffic at peak time has almost doubled since 2017

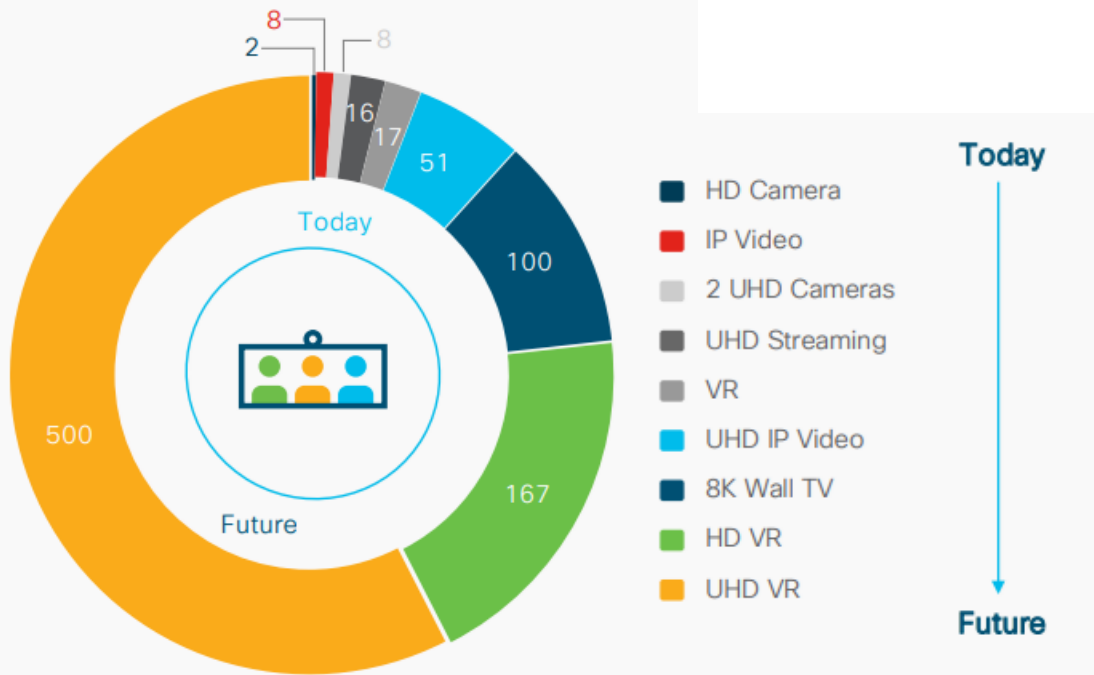




# 1,000 Gigabytes per month by 2023...

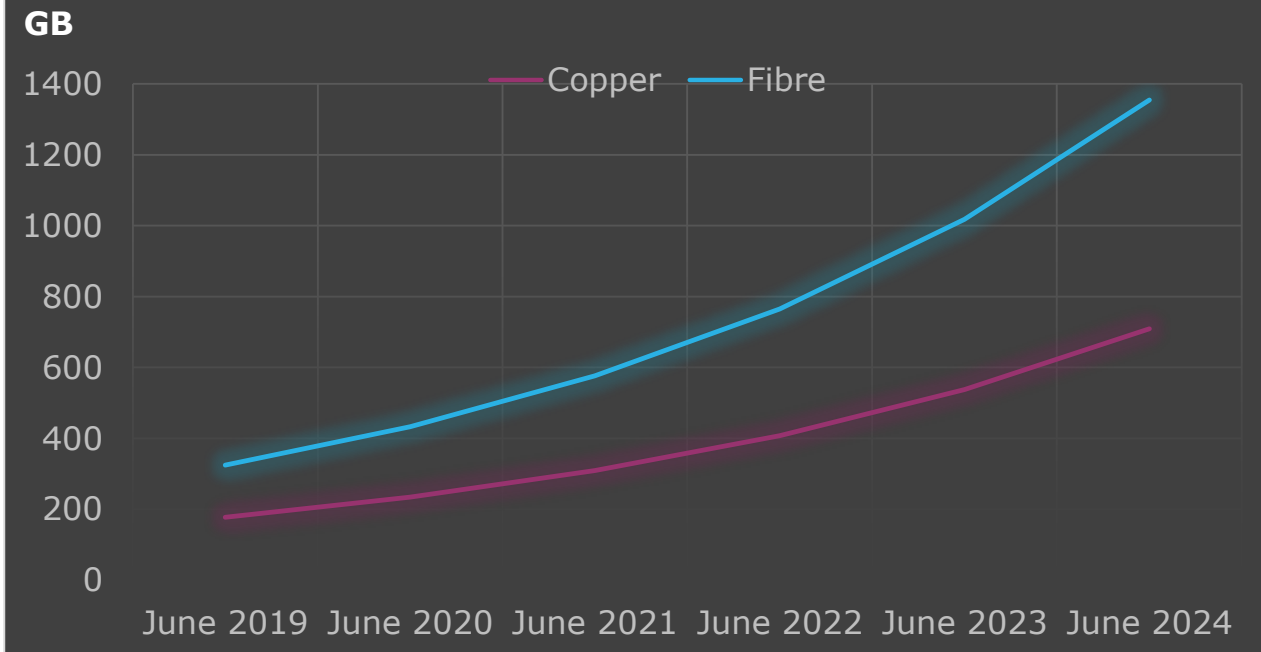
Video content and 4K, 8K to drive usage

Application requirements in Mbps



Source: Cisco VNI, Forecast and Trends, 2017-2022

Chorus forecast: average monthly broadband usage (GB)

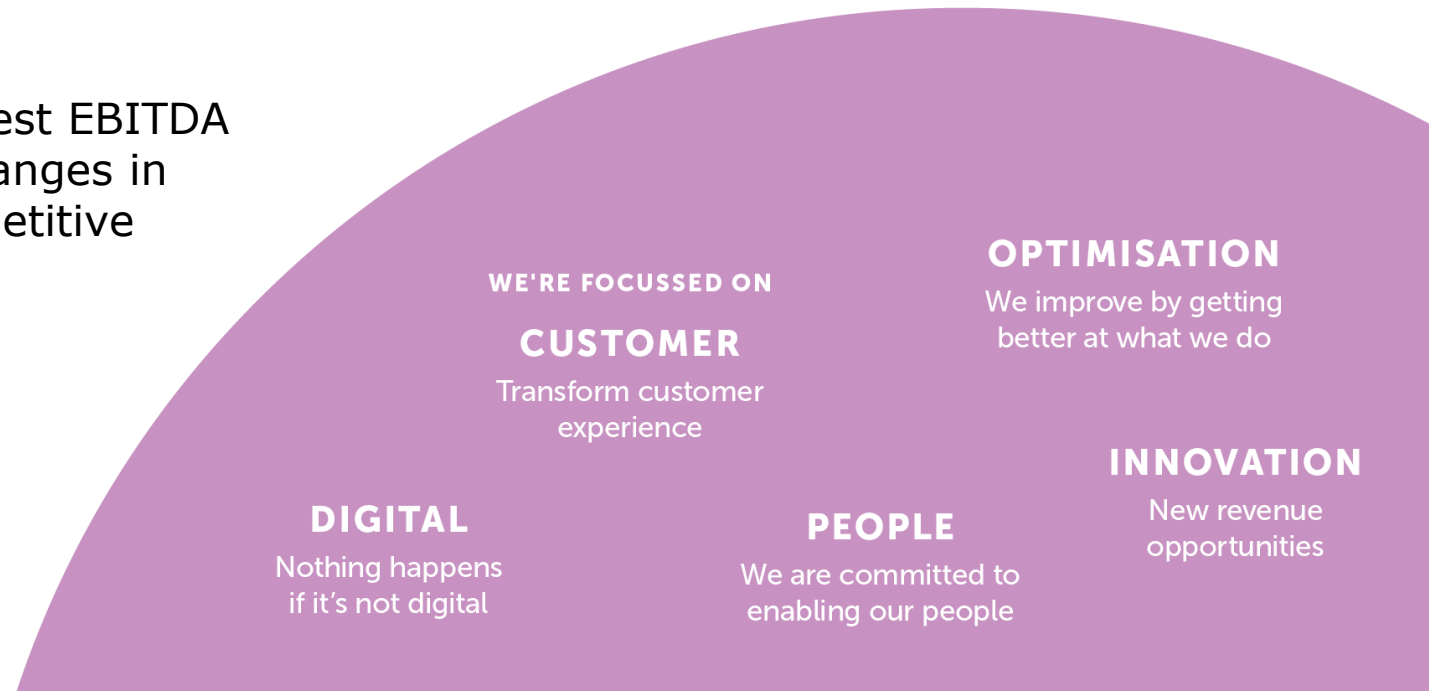


# Our focus for H2

- connecting more customers to fibre, while continuing to lift satisfaction levels
- growing broadband connections and enhancing our product portfolio
- continuing to shape our business for a fibre future

To achieve our objective to return to modest EBITDA growth in FY20, subject to no material changes in expected regulatory environment or competitive outlook

MEMBER OF  
**Dow Jones**  
**Sustainability Indices**  
In Collaboration with RobecoSAM

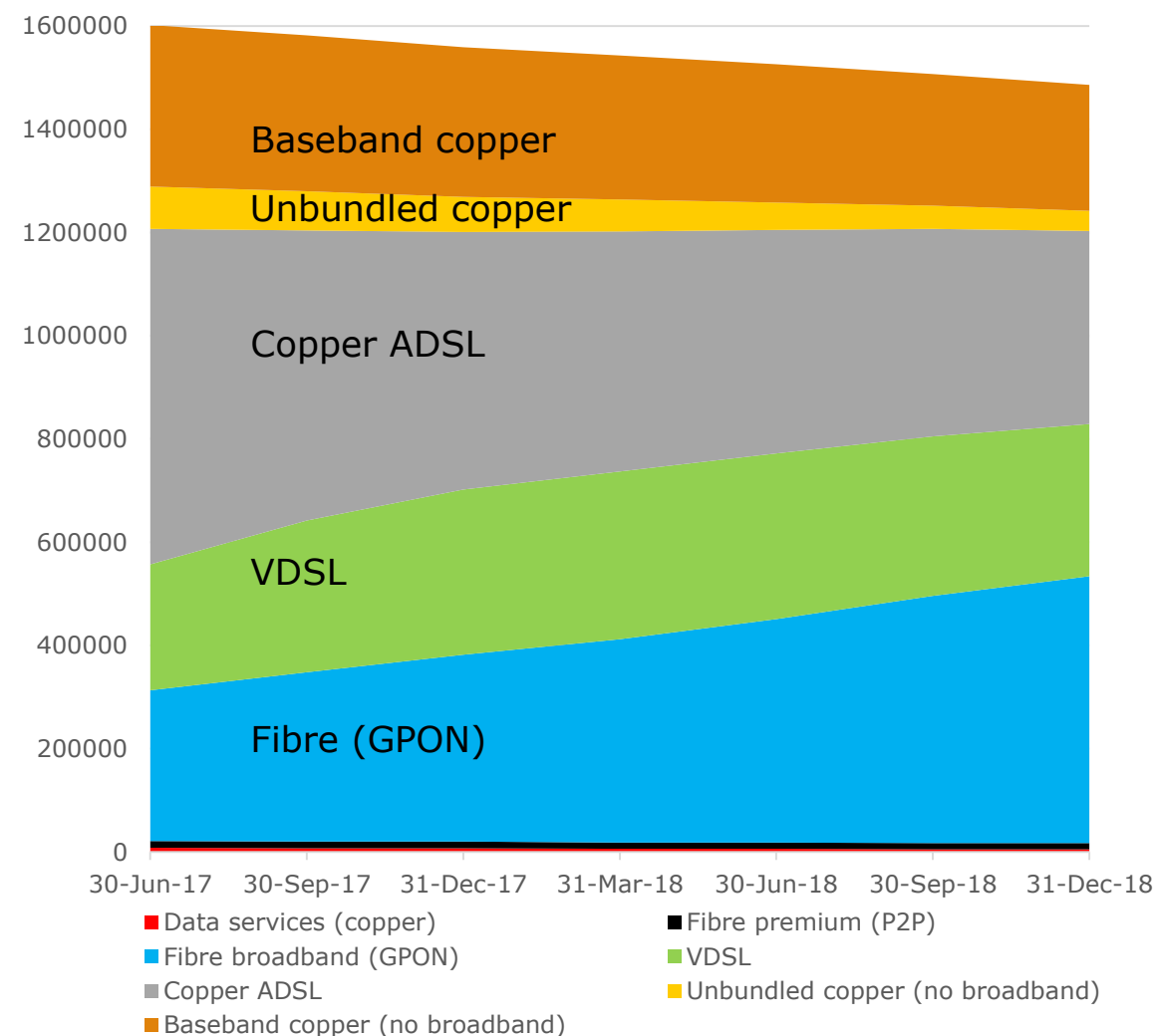


# Appendices



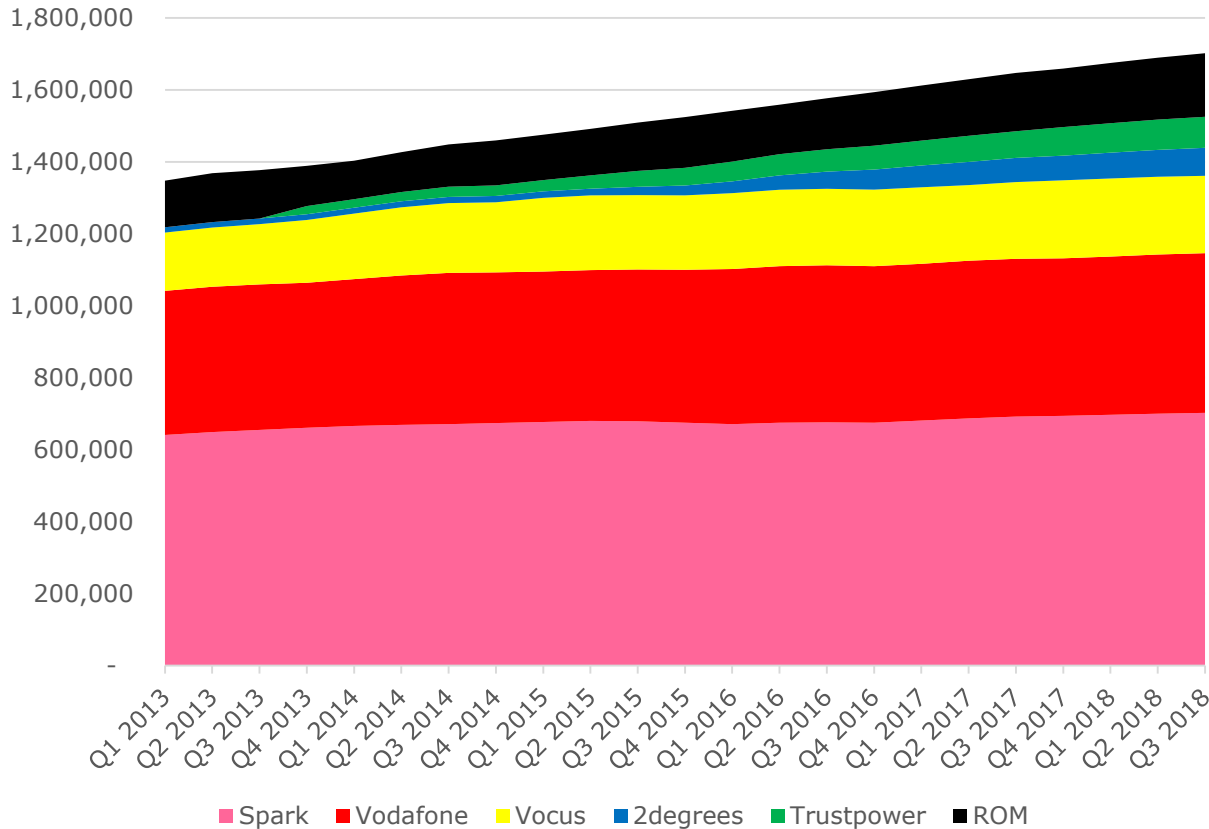
# Appendix A: Connection trends

	31 Dec 2017	31 March 2018	30 June 2018	30 Sept 2018	31 Dec 2018
Unbundled copper	68,000	62,000	53,000	45,000	39,000
Baseband copper (no broadband)	290,000	279,000	268,000	255,000	244,000
Fibre broadband (GPON)	362,000	394,000	433,000	479,000	517,000
VDSL (includes naked)	320,000	325,000	321,000	309,000	295,000
Copper ADSL (includes naked)	499,000	465,000	433,000	402,000	374,000
Data services (copper)	7,000	6,000	6,000	5,000	5,000
Fibre premium (P2P)	13,000	12,000	12,000	12,000	12,000
<b>Total connections</b>	<b>1,559,000</b>	<b>1,543,000</b>	<b>1,526,000</b>	<b>1,507,000</b>	<b>1,486,000</b>



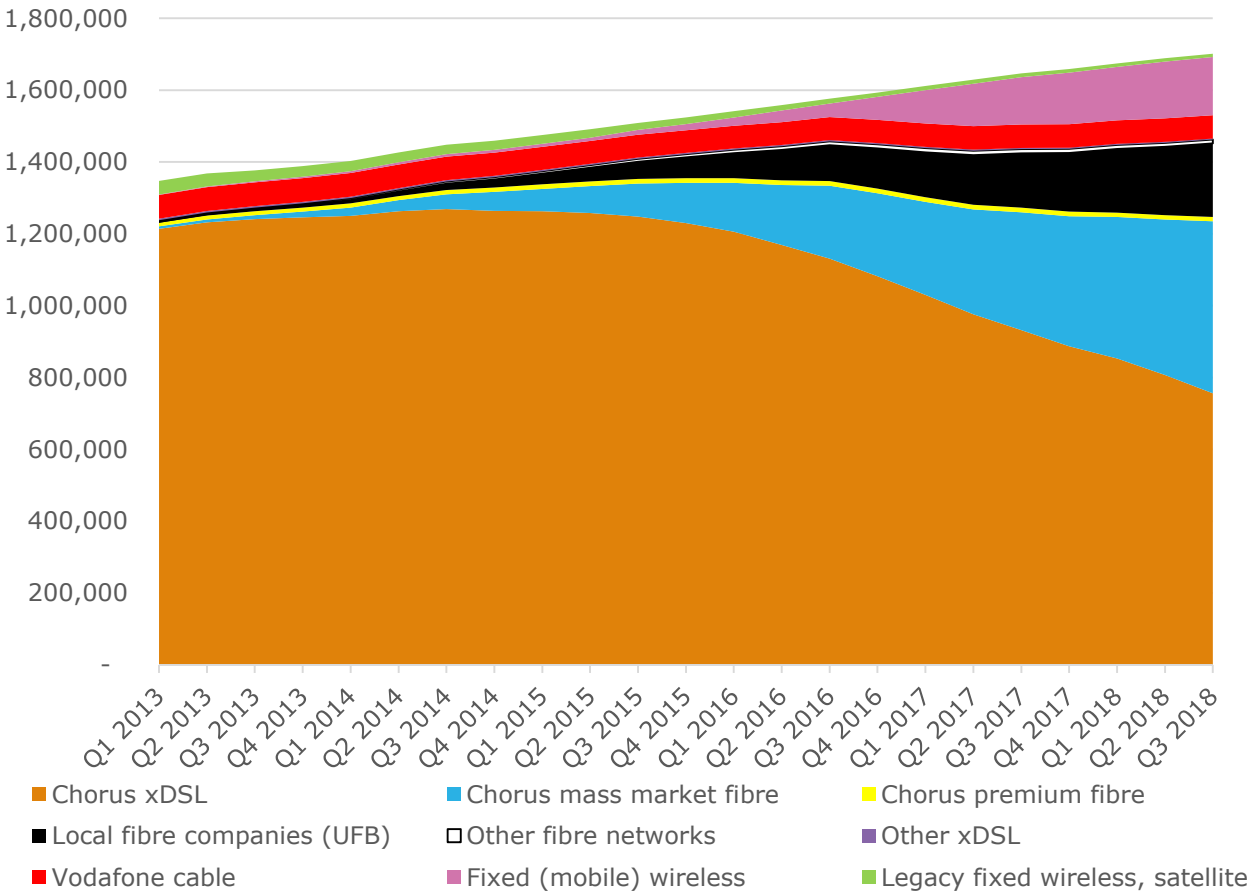
# Appendix B: NZ market trends

Broadband uptake by retailer (all technology)



Source: IDC

NZ broadband market – by technology



Source: IDC

# Appendix C: UFB programme overview

## FY19 is peak communal build year

- ~120,000 brownfields premises across UFB1 and UFB2
- expect to claim another ~18k UFB1 greenfields premises already passed in prior years

Programme guidance		Notes
UFB1 communal	\$1.75 - \$1.8 billion	Tracking towards the top end of guidance and excludes growth (e.g. additional splitter investment)
UFB1 cost to connect (CPPC)	\$1,050 - \$1,250	For a standard residential connection, including layer 2 and service desk costs, and in 2011 dollars. Tracking towards the top half of the range.
UFB2* communal	\$505 - \$565 million	Combined guidance range for UFB2 and 2+
UFB2* cost to connect	\$1,650 - \$1,850	In 2017 dollars and including layer 2, backbone costs for MDUs and rights of way with 10 or fewer premises and service desk costs

\* combined UFB2 and 2+ rollout plans

