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STOCK EXCHANGE ANNOUNCEMENT

26 August 2019

Chorus 2019 full year results & annual report

The following are attached in relation to Chorus' FY19 full year results and annual report:

1. Media Release
2. Investor Presentation
3. Annual Report (including audited financial statements)
4. NZX Financial Results Announcement
5. NZX Distribution Notice
6. Corporate Governance Statement
7. Letter to investors

Chief Executive Officer Kate McKenzie, and Chief Financial Officer David Collins, will discuss the FY19 full year results by webcast at 11.00am New Zealand time today. The webcast will be available at www.chorus.co.nz/webcast.

ENDS

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MEDIA RELEASE

26 August 2019

Chorus full year result for FY19**Fibre demand at record levels as rollout remains on track**

- EBITDA \$636m (FY18: \$653m) in line with guidance of \$625m to \$645m
- Peak communal rollout year delivered successfully with capital expenditure of \$804m slightly below guidance
- Fibre uptake at record level with 186,000 fibre installations in FY19
- Household data usage on copper and fibre connections across Chorus' network increased by 55GB to 265GB
- Strong year for broadband connections, with an increase of 9,000 lines
- Total fixed line connections reduced by 76,000, consistent with FY18
- Final fully imputed dividend 13.5 cents per share

Chorus has today reported earnings before interest, tax, depreciation and amortisation (EBITDA) of \$636m for the year ended 30 June 2019, in line with guidance.

Operating revenue for the period was \$970m (FY18: \$990m) and operating expenses were \$334m (FY18: \$337m). Depreciation and amortisation for the period was \$393m (FY18: \$387m), delivering earnings before interest and tax (EBIT) of \$243m (FY18: \$266m).

Net profit after tax (NPAT) was \$53m, reflecting reduced revenue and the increased interest costs of borrowing to fund the UFB rollout.

Chorus has also today announced that Kate McKenzie is to step down as CEO and Managing Director at the end of 2019 (see separate press release).

Speaking about the results, Ms McKenzie said as the original UFB programme nears completion, demand for fibre has reached record levels and more than half of Chorus' broadband connections are on fibre.

"When Chorus signed up to the original UFB project with the Government in 2011 we had a target of 20% for fibre uptake by 2020. We've well and truly smashed that target.

"This year demand for fibre was stronger than ever. We completed a record 186,000 fibre installations, and fibre uptake within our UFB areas grew from 45% to 53%. That is all the more impressive when you consider we built the network past another 176,000 homes and businesses during FY19."

Although the original UFB programme is nearing completion, Chorus is already making good progress taking fibre to some of the more than 300 towns included as part of the UFB2 extension. The completion of the original UFB programme also heralds the beginning of reducing capital expenditure.

Insatiable appetite for data

Demand for data on Chorus' network also continues to break records, reflecting the ever-increasing range of online streaming content and the proliferation of connected devices in the home. Monthly average household data usage on copper and fibre connections across

Chorus' network increased by 55GB to 265GB in FY19. Fibre customers used an average of 341GB.

"Pleasingly we've seen a growing proportion of customers opt for higher speed connections, with uptake of 1 gigabit per second plans increasing from 7% to 10% of our consumer connections in the period."

Fibre delivers peak performance

As data demands grow significantly, Chorus' ability to deliver consistent throughput at dedicated speeds is a significant advantage, Ms McKenzie says.

Chorus has seen peak time traffic across its network grow from 1,500Gbps in June 2018 to 1,900Gbps in June 2019. This is the equivalent of 380,000 simultaneous high-definition video streams.

"By the end of 2022, we will have made 1Gbps connections with no data cap constraints available to more than 1.3 million potential customers. We're already trialling next generation 10Gbps services with retailers."

Broadband line growth

Chorus had a strong year for broadband connections, with an increase of 9,000 lines. This was a significant jump from a gain of just 1000 lines in FY18, reflecting Chorus' ongoing initiatives to win broadband customers from cable and fixed wireless networks in Chorus areas, together with premises growth nationwide.

Customer experience

Chorus has continued its strong focus on providing excellent customer service. Chorus is on track to achieving an ambitious goal of connecting 75% of residential fibre orders in a single appointment. This "fibre in a day" initiative underpins Chorus' goal of making it as easy as possible for customers to have fibre connected to their home or business.

"While we had already made good progress in working with retailers and service companies to streamline our processes, this new initiative has challenged us to completely reconfigure our long-standing fibre installation process from two customer appointments to just one."

By the end of FY19, customer satisfaction had lifted from 7.5 out of ten to 7.7. However, where customers were part of the fibre in a day process, Chorus achieved 8.0 out of ten. Technicians also rated highly, with customer satisfaction scores of 8.5 out of ten.

Strategy focus

Chorus' overarching strategy remains simple, Ms McKenzie says.

"We want to keep connecting as many customers to fibre as fast as we can, while continuing to do everything we can to keep improving customer satisfaction."

"Despite some of the competitive challenges we face, particularly the decline in voice-only connections, we remain focussed on returning to modest EBITDA growth in FY20."

"Declining copper connection volumes present an opportunity for us to realise maintenance and capital expenditure savings in some areas. However, this doesn't mean we'll stop looking after the copper network. Faults on the copper network remain relatively infrequent, averaging about once every five years, and usually take less than 24 hours to repair."

"The Commission has indicated it will develop a copper withdrawal code for the industry by mid-2020. Naturally, we'll take a customer-centric approach and inform consumers well in advance and in accordance with the new code.

"While we're starting to plan for when we might start switching off parts of the copper network in our fibre areas, it will be on a street-by-street basis, subject to factors such as fibre uptake. In the interim, we believe retailers need to take care to avoid creating consumer confusion about the timeframes for copper switch-off. Some consumers appear to have been advised that they need to disconnect from the copper network when that isn't the case."

Dividend

Chorus will pay a final dividend of 13.5 cents per share, fully imputed, on 08 October 2019 to all shareholders registered at 5pm on 24 September 2019. A supplementary dividend will be paid to non-resident shareholders. A dividend reinvestment plan will apply for the final dividend at a discount rate of 3%. Applications to participate must be received by 5pm (NZ time) on 25 September 2019.

FY20 guidance

- **EBITDA:** \$625 - \$645 million
- **Gross capex:** \$660 - \$700 million
- **Dividend policy:** The Board expects to update the dividend policy once the Commerce Commission finalises the value of Chorus' regulated asset base and regulated revenue for fibre, currently due in June 2021. Until then, the Board expects to be able to provide shareholders with modest dividend growth, subject to no material adverse changes in circumstance or outlook.
- **FY20 dividend:** 24 cents per share, subject to no material adverse changes in circumstance or outlook.

ENDS

Chorus Chief Executive, Kate McKenzie, and Chief Financial Officer David Collins will discuss the full year results at a briefing in Wellington from 11.00am (NZ time). The webcast will be available at www.chorus.co.nz/webcast

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FY19 FULL YEAR RESULT

Disclaimer

This presentation:

- Is provided for general information purposes and does not constitute investment advice or an offer of or invitation to purchase Chorus securities.
- Includes forward-looking statements. These statements are not guarantees or predictions of future performance. They involve known and unknown risks, uncertainties and other factors, many of which are beyond Chorus' control, and which may cause actual results to differ materially from those contained in this presentation.
- Includes statements relating to past performance which should not be regarded as reliable indicators of future performance.
- Is current at the date of this presentation, unless otherwise stated. Except as required by law or the NZX Main Board and ASX listing rules, Chorus is not under any obligation to update this presentation, whether as a result of new information, future events or otherwise.
- Should be read in conjunction with Chorus' audited consolidated financial statements for the year to 30 June 2019 and NZX and ASX market releases.
- Includes non-GAAP financial measures such as "EBITDA". These measures do not have a standardised meaning prescribed by GAAP and therefore may not be comparable to similar financial information presented by other entities. They should not be used in substitution for, or isolation of, Chorus' audited consolidated financial statements. We monitor EBITDA as a key performance indicator and we believe it assists investors in assessing the performance of the core operations of our business.
- Has been prepared with due care and attention. However, Chorus and its directors and employees accept no liability for any errors or omissions.
- Contains information from third parties Chorus believes reliable. However, no representations or warranties (express or implied) are made as to the accuracy or completeness of such information.

Agenda

Kate McKenzie, CEO	> FY19 overview, fibre rollout and connections	4-9
David Collins, CFO	> Financial results	10-14
	> Capex: including FY20 guidance	15-20
	> FY20 EBITDA guidance and summary	21-22
	> Capital management, FY20 dividend, debt	23-27
Kate McKenzie, CEO	> Strategic focus: from build to operate	29-30
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	▪ A: Connection and market trends	39-40
	▪ B: Key RAB implementation parameters	41
	▪ C: UFB programme guidance and Crown securities	42

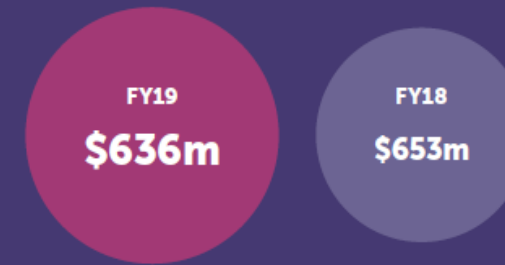
Fixed line connections



Broadband connections



EBITDA¹



Customer satisfaction



Fibre connections



Net profit after tax



Dividend



Employee engagement score²



1. Earnings before interest, income tax, depreciation and amortisation (EBITDA) is a non-GAAP profit measure. We monitor this as a key performance indicator and we believe it assists investors in assessing the performance of the core operations of our business.

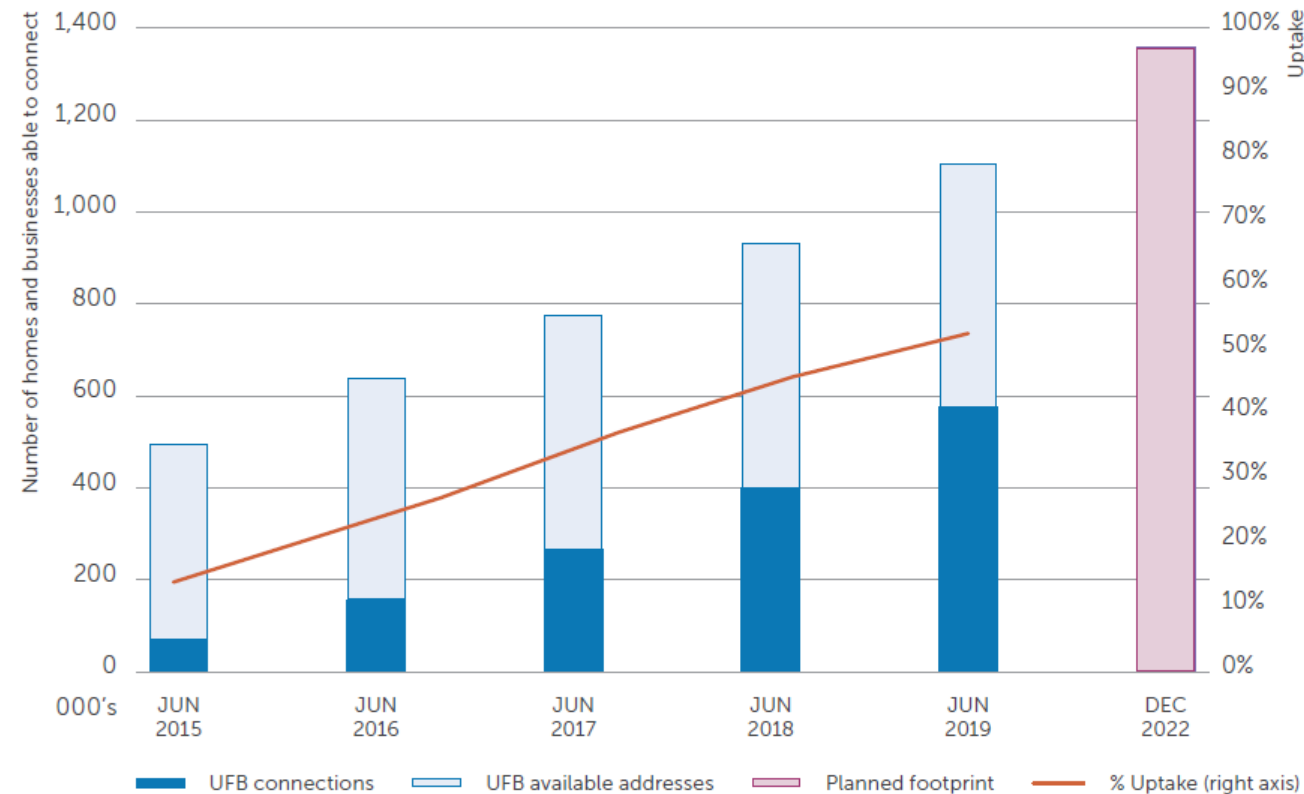
2. A new engagement survey provider means FY18 data isn't directly comparable.

3. Based on the mean response to "How likely are you to recommend your company as a place to work?"

4. Net Promoter Scores can range from -100 to 100 and are calculated by subtracting the percentage of detractors (0-6 engagement score) from the percentage of promoters (9-10 engagement score).

UFB rollout 80% complete: 842,000 premises passed

UFB rollout and uptake



> **Uptake increased from 45% to 53%**

- **584,000** connections in UFB area (FY18: 415,000)
- **1,108,000** customers able to connect (FY18: 932,000)
- fibre passed another **176,000** customers

Premises to pass by end of 2022

~1,054,000*

Customers able to connect

~1.36 million

Estimated communal capital expenditure to pass premises

\$2.26 to 2.37 billion

Crown funding (57:43 equity/debt)

up to \$1.33 billion

Capital expenditure required to connect premises

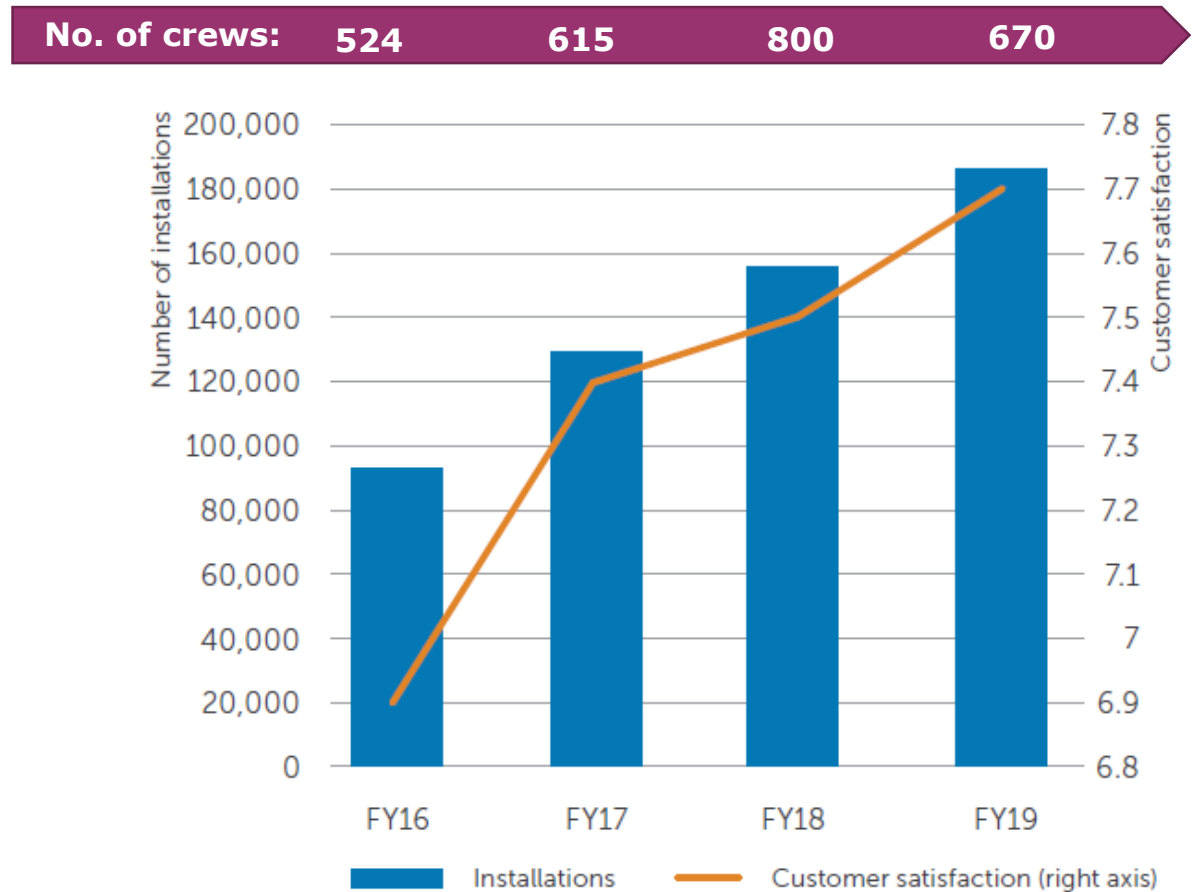
Subject to demand

* Includes estimated 43,000 greenfields premises for UFB1

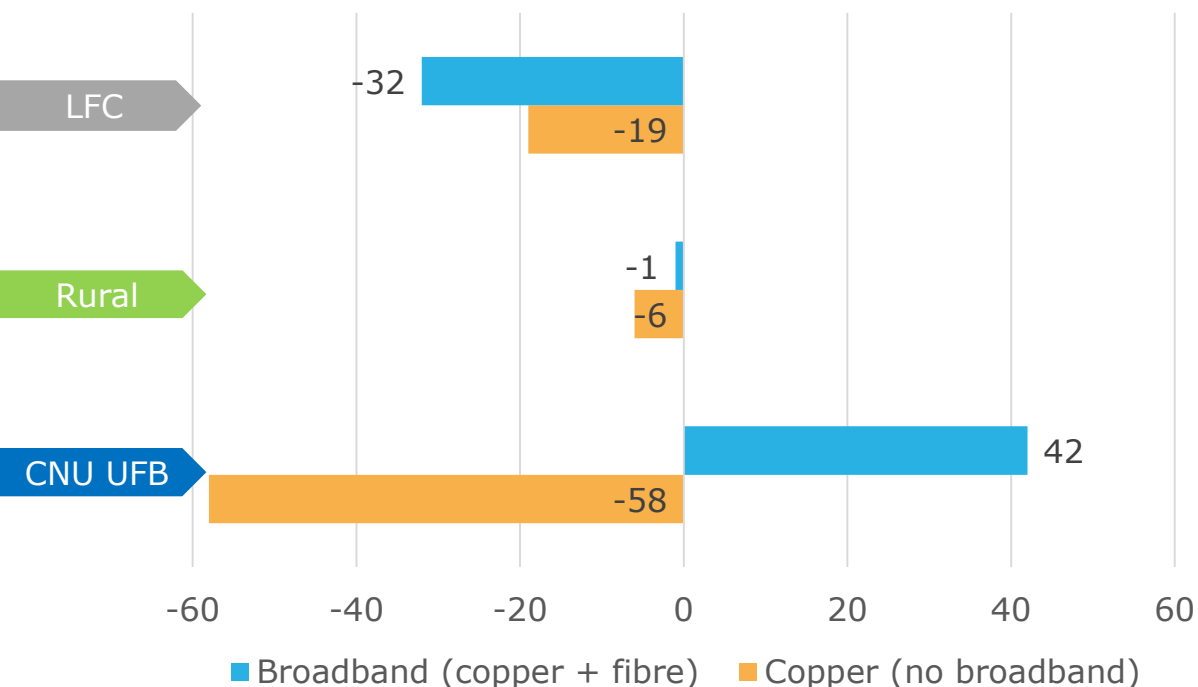
Lifting productivity and customer experience

FY19: 30k more fibre installations

- installation crews reduced from 800 to **670**
- lifted customer satisfaction from 7.5 to **7.7**
- 400,000 addresses categorised as requiring a single visit: 90% accuracy to date
- lead times down from 13 business days to **8 days**
- work in progress reduced from 30k to **23k**
- managed migration installations increased from 12k to **23k**, customer experience score of **8.0**



FY19 connection movements by Zone (indicative)



- LFCs growing broadband connections as retailers promote fibre
- unbundled copper migrating to LFC fibre; voice only connections to wireless
- new premises growth and VDSL vectoring upgrade offsetting wireless
- ongoing wireless voice competition
- premises growth, increasing broadband penetration and winback of offnet customers (cable/wireless) as fibre footprint grows
- retailers targeted their customers with wireless voice

	Chorus UFB zone*	Rural zone (non-UFB)	Local Fibre Company (UFB zone)
Total connections at 30 June**	1,092,000	199,000	143,000
Broadband connections	946,000	153,000	97,000
Copper (no broadband) connections	146,000	46,000	46,000

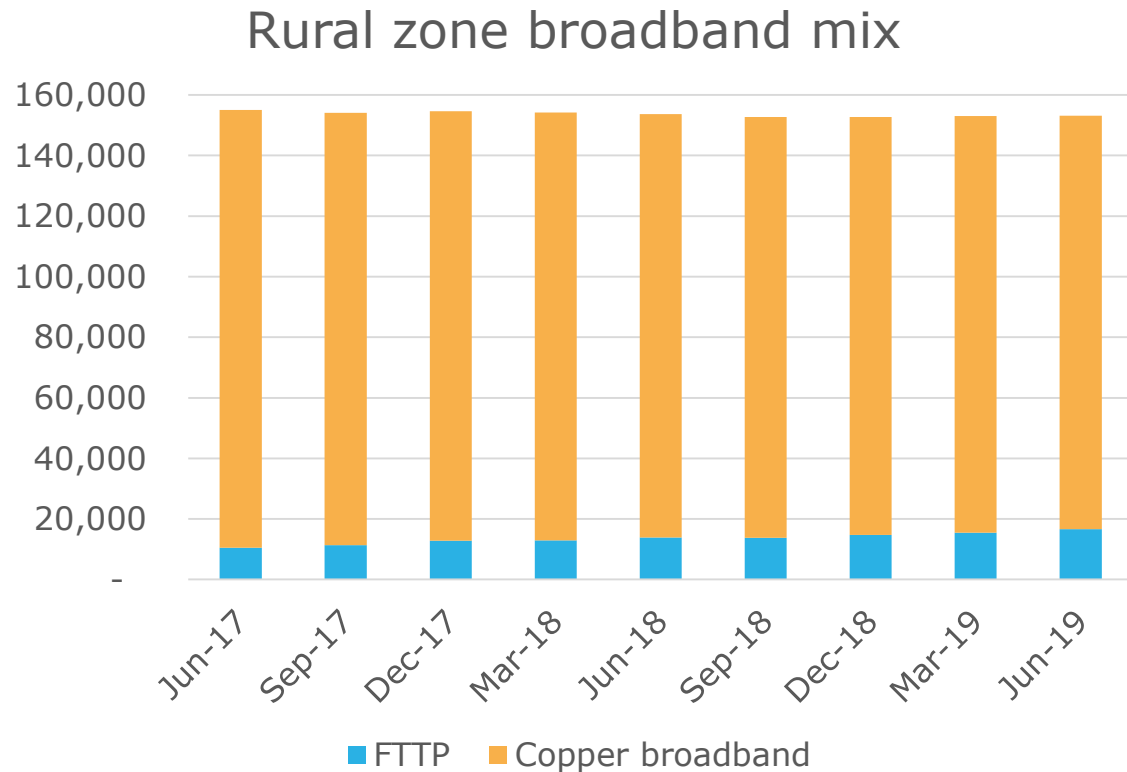
* Includes planned UFB1, 2 and 2+ coverage

**Excludes 16k fibre premium and data services (copper) connections

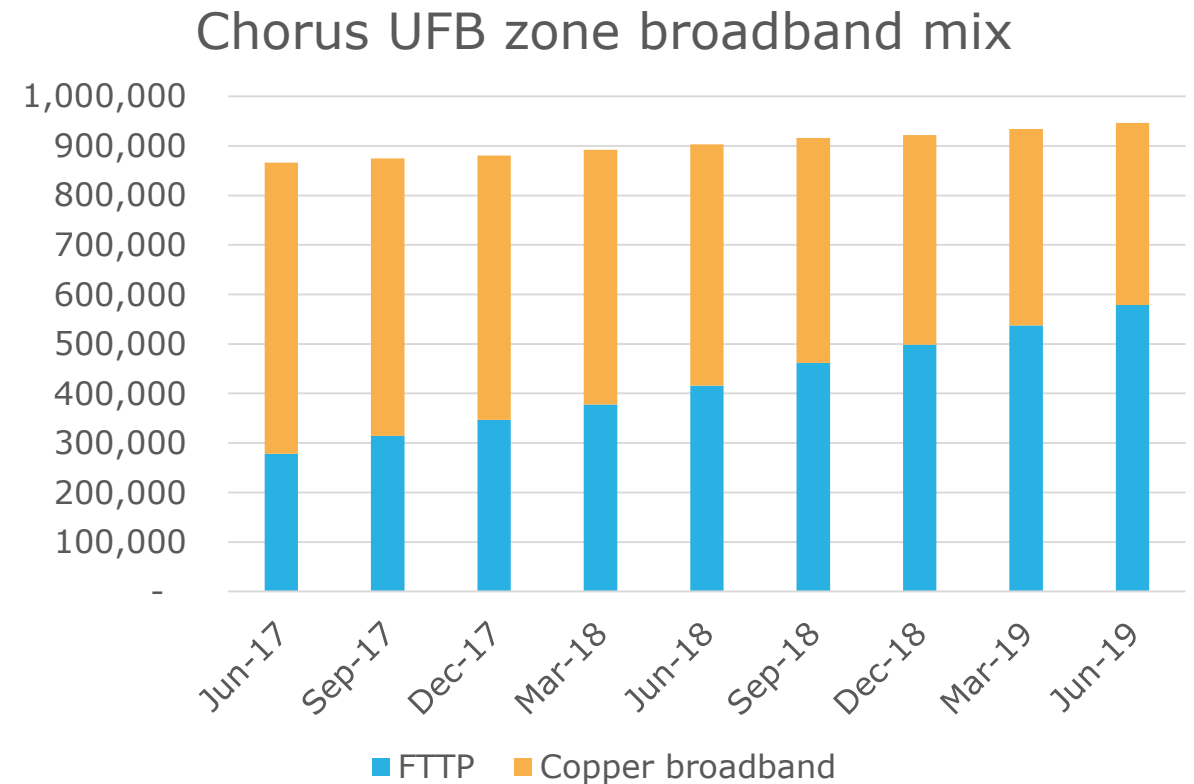
See Appendix A for FY19 connection movements by category

Chorus UFB and rural zones

17k fibre connections in rural zone

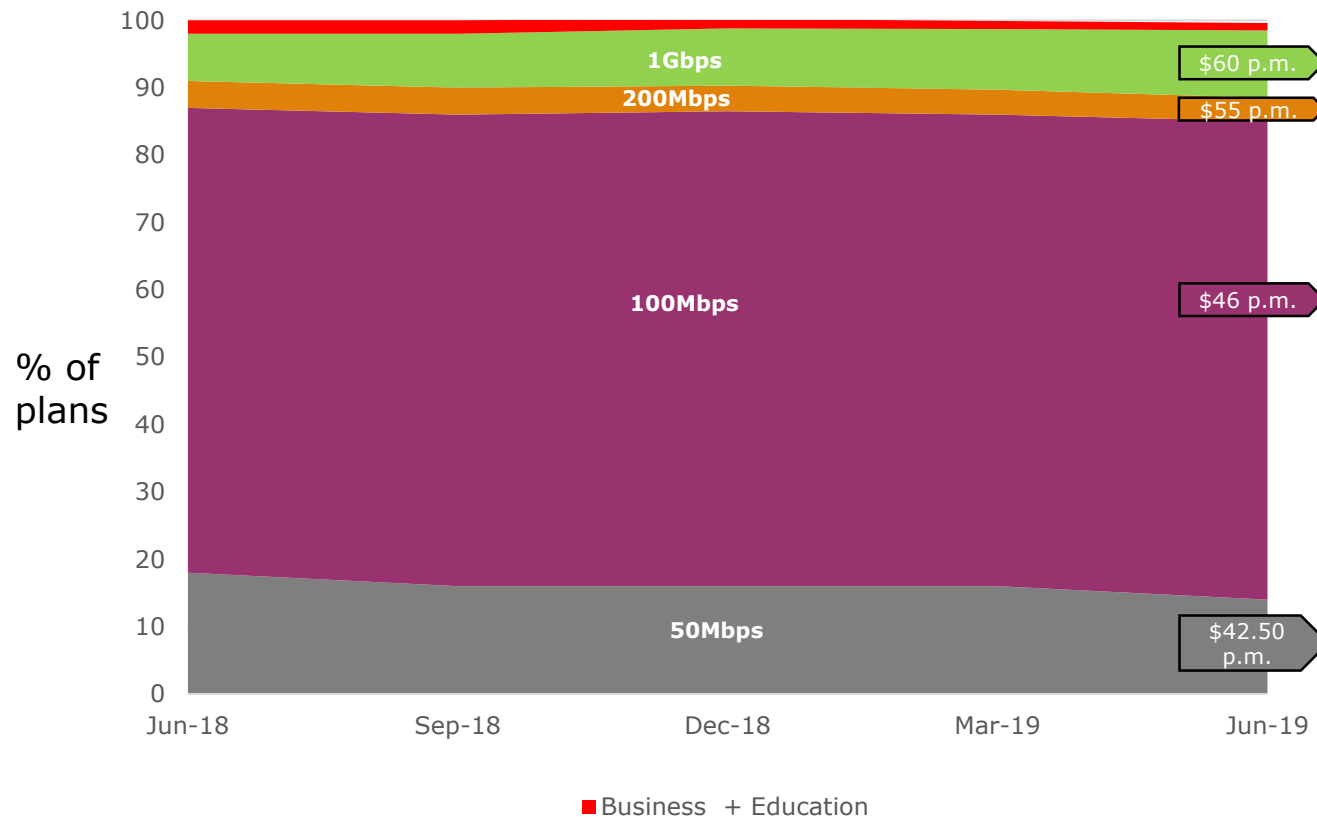


Fibre 61% of broadband in UFB zone



Active wholesaler campaigns driving ARPU growth

Total mass market fibre uptake by plan type



- > **166,000** mass market fibre connections added in FY19 (FY18: 141,000)
 - 71% of mass market fibre connections on 100Mbps
- > 1Gbps connections grew by 28k to 58k, now 10% of mass market fibre connections
 - ~15% of total orders are for 1Gbps; ~10% of new connections
 - 95%+ of Dunedin *Gigatown* connections retained on 1Gbps following end of sponsorship

Financial performance

David Collins, Chief Financial Officer

Income statement

	FY19 \$m	FY18 \$m
Operating revenue	970	990
Operating expenses	(334)	(337)
Earnings before interest, tax, depreciation and amortisation (EBITDA)	636	653
Depreciation and amortisation	(393)	(387)
Earnings before interest and income tax	243	266
Net interest expense	(165)	(144)
Net earnings before income tax	78	122
Income tax expense	(25)	(37)
Net earnings for the year	53	85

- > Reducing copper connections, mostly offset by fibre broadband growth
- > Tight cost control
- > Growing fibre asset & copper cable depreciation accelerated in our UFB fibre areas
- > NZ\$500m bond issued in Dec 2018; average interest rate on debt now 5.75%

Revenue

	FY19 \$m	FY18 \$m
Fibre broadband (GPON)	294	198
Fibre premium (P2P)	74	78
Copper based voice	106	133
Copper based broadband	344	421
Data services copper	18	27
Field Services	74	70
Value added network services	30	33
Infrastructure	24	23
Other	6	7
Total	970	990

> Revenue growing as fibre uptake and ARPU increases

> Customers moving from legacy services to lower priced UFB services

Copper revenues declining as customers migrate to Chorus fibre or competing fibre/wireless networks

> Increased subdivision demand

> Commercial co-lo growth offsetting reduced copper unbundling demand

Expenses

	FY19 \$m	FY18 \$m
Labour	74	73
Provisioning	6	6
Network maintenance	75	87
Other network costs	33	34
IT	50	54
Rent, rates and property maintenance	30	24
Regulatory levies	16	13
Electricity	17	15
Consultants	7	5
Insurance	3	3
Other	23	23
Total	334	337

- > CPI impact & lower capitalisation levels, partially offset by lower staff numbers & reduced one-off restructuring costs
- > Reduction reflects technology reducing unnecessary technician visits, fibre network performance, favourable weather, and fewer copper connections
- > New platforms enabling lower IT maintenance and support costs
- > Rateable values for network assets increasing with rollout
- > Increased funding provided for new regulatory framework
- > Higher electricity prices
- > Increase in external advice related to new regulatory framework

Reactive maintenance: Chorus network

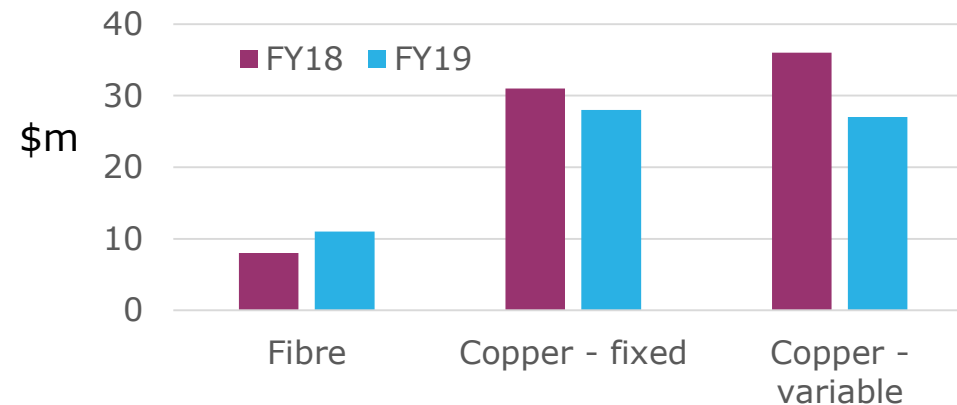
Key drivers for \$66m spend (FY18:\$75m)

- copper (fixed and variable) fault volumes reduced due to favourable weather in FY19 vs FY18, particularly in Auckland region, and reduction in total copper connections.
- copper (variable) fault volumes also reduced due to fewer copper connections and a decline in unnecessary technician visits.
- long run annual saving from full copper to fibre migration in Chorus UFB areas estimated at ~\$10m p.a.
- fibre maintenance increasing as share of connections grows, but fault rate is lower on fibre (although costlier to fix).

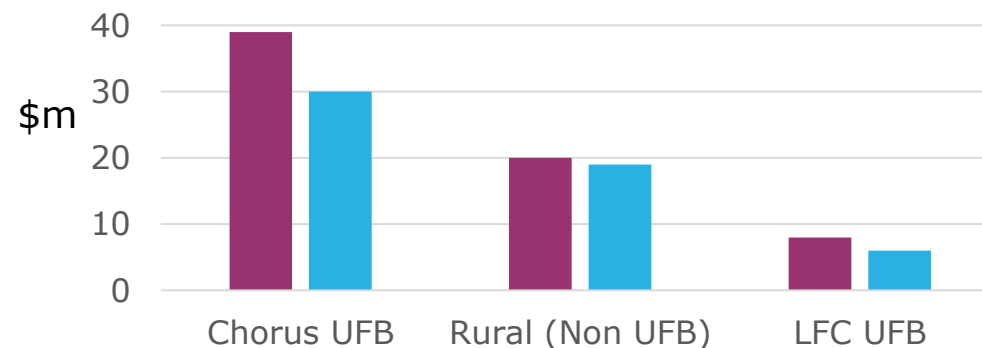
Note:

- reactive maintenance excludes spend on proactive maintenance and customer networks (i.e. premises wiring, no fault found, cancellations)
- 'fixed' faults: occur in parts of the network that affect multiple customers (e.g. cable between exchange and cabinet)
- 'variable' faults: only affect one customer (e.g. cable on customer property)

Reactive spend by type



Copper - reactive spend by area

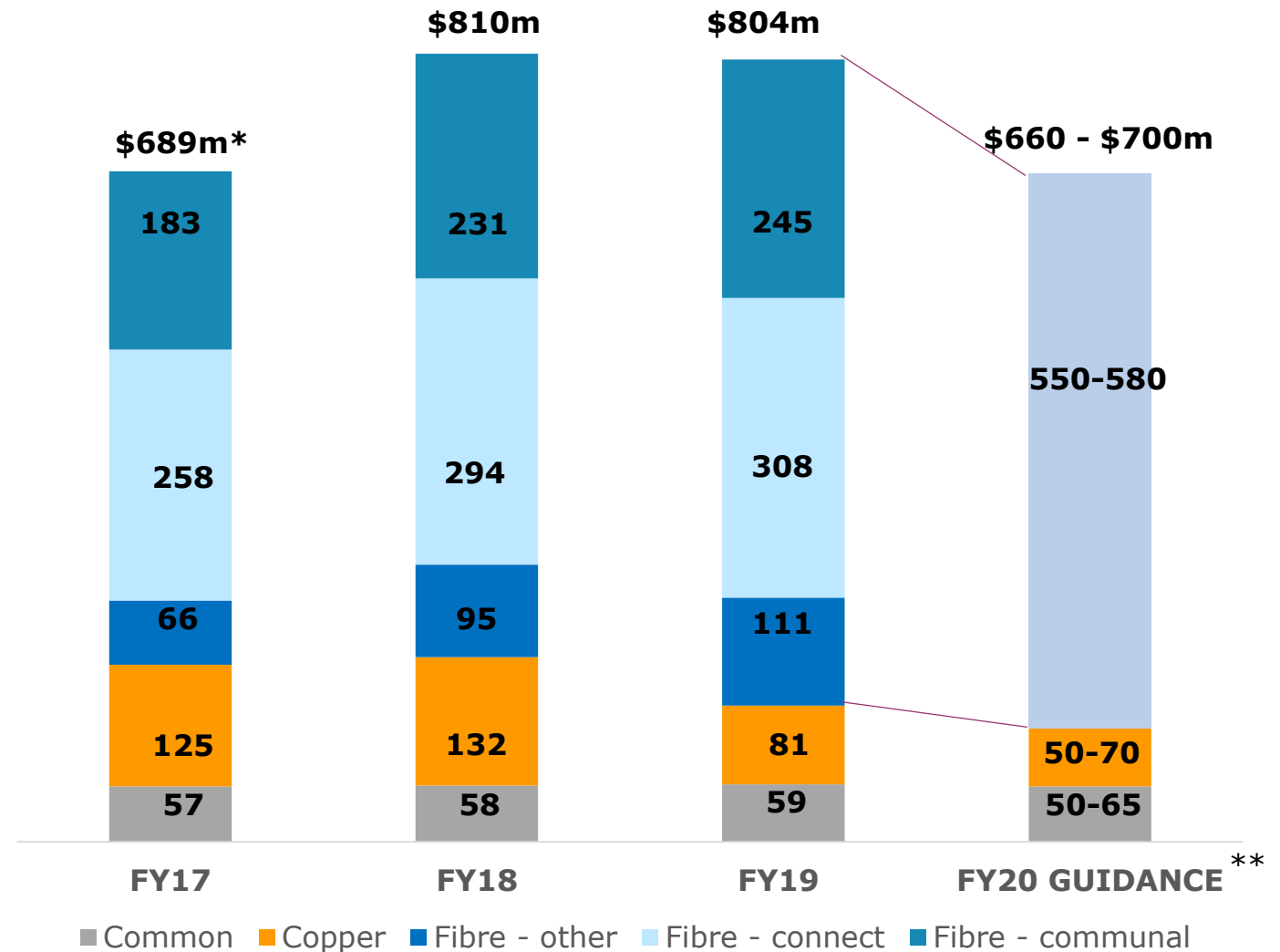


We've passed our capex peak

> FY19: \$804m gross capex

- below \$820m - \$860m range due to reduced copper spend and fibre connections mix

> FY20 guidance: \$660m - \$700m gross capex



*FY17 capex adjusted for NZ IFRS

**FY20 subtotals are not additive

Capex: Fibre

FY19: 124,000 brownfields premises passed; 186,000 installations

Fibre capex	FY19 \$m	FY18 \$m	
UFB communal	245	231	> includes \$105m UFB2 rollout (FY18: \$61m); \$75m WIP (FY18: \$77m)
Fibre connections & layer 2	308	294	> 186,000 installations (FY18: 156,000), including 14,000 UFB2
Fibre products & systems	17	17	
Other fibre connections & growth	65	65	> included \$8m UFB2 backhaul (FY18: \$3m) and \$10m pole replacement
Customer retention costs	29	13	> reflects incentive offers linked to fibre connection volumes
Subtotal	664	620	

- **Cost per UFB1 premises passed (CPPP): ~\$1,573** vs \$1,500 - \$1,600 guidance (FY18: \$1,568)
- Crown funding now claimed for ~33k UFB1 greenfields premises (18k in FY19) representing capex to date of ~\$37m recognised in prior years 'Other fibre connections & growth'

Capex: Fibre connections & layer 2

Connections capex of **\$308m** vs FY19 guidance of \$310-\$340m

- **Cost per UFB1 premises connected (CPPC): \$1,025*** vs \$1,000 - \$1,150 guidance (FY18: \$1,037)
* excludes layer 2 and includes standard installations, some non-standard single dwellings and service desk costs
- record year for fibre installations and backbones completed

Fibre connections & layer 2 capex	FY19 spend	FY18 spend
Layer 2 (long run programme average of \$100 per connection)	\$25m	\$32m
Premium business fibre connections	\$8m : 1,200 connections	\$11m : 1,400 connections
Single dwelling units and apartments connections	\$198m : 186,000 connections (FY19 estimate: 175k -195k)	\$163m : 156,000 connections
Backbone build: multi-dwelling units and rights of way	\$77m : 16,000 completed (FY19 estimate: 19,000)	\$88m : 13,100 completed
TOTAL SPEND	\$308m	\$294m

Note: we estimate ~60-65% of MDUs and RoWs requiring backbone build have been completed

Capex: Copper and Common

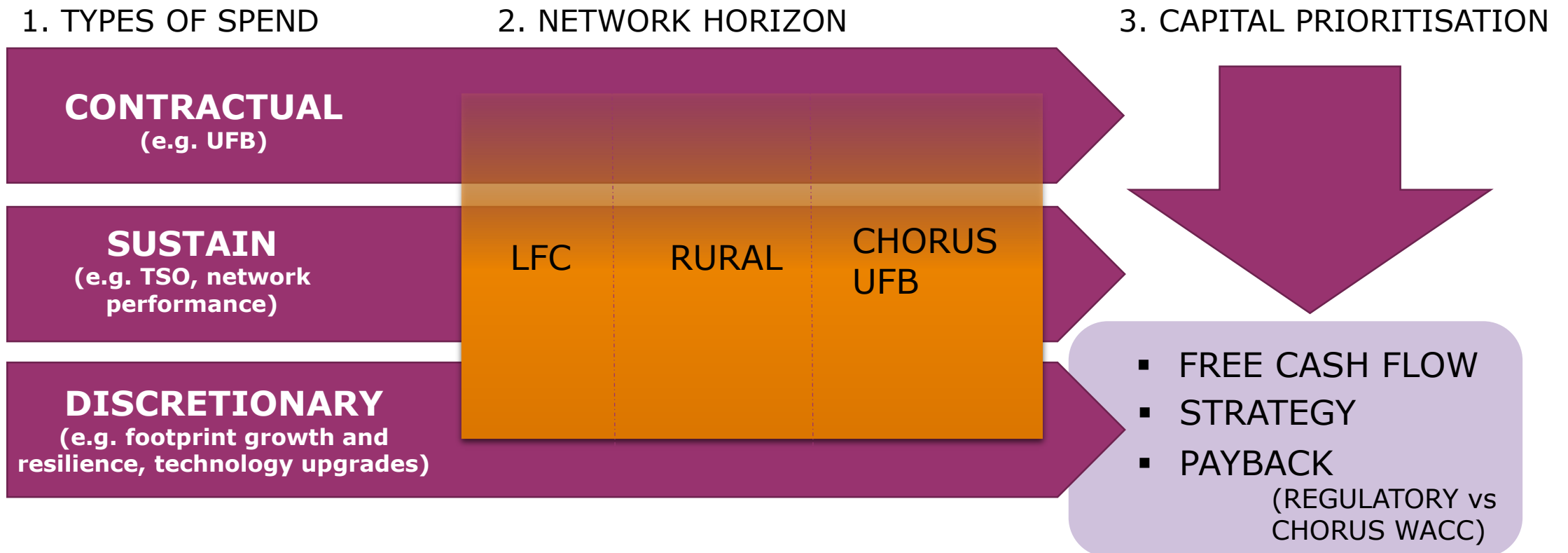
Copper capex	FY19 \$m	FY18 \$m
Network sustain	44	45
Copper connections	2	2
Copper layer 2	12	34
Product	1	4
Customer retention costs	22	47
Subtotal	81	132

- **network sustain** reflects replacement of legacy rural network, poles, proactive maintenance and roadworks projects
- **copper layer 2**: vectoring rollout completed FY18
- **customer retention costs** reducing as demand and retailer focus shifts to fibre

Common capex	FY19 \$m	FY18 \$m
Information technology	34	35
Building & engineering services	22	20
Other	3	3
Subtotal	59	58

- continued to invest in own IT platforms/technology including a new standalone billing platform

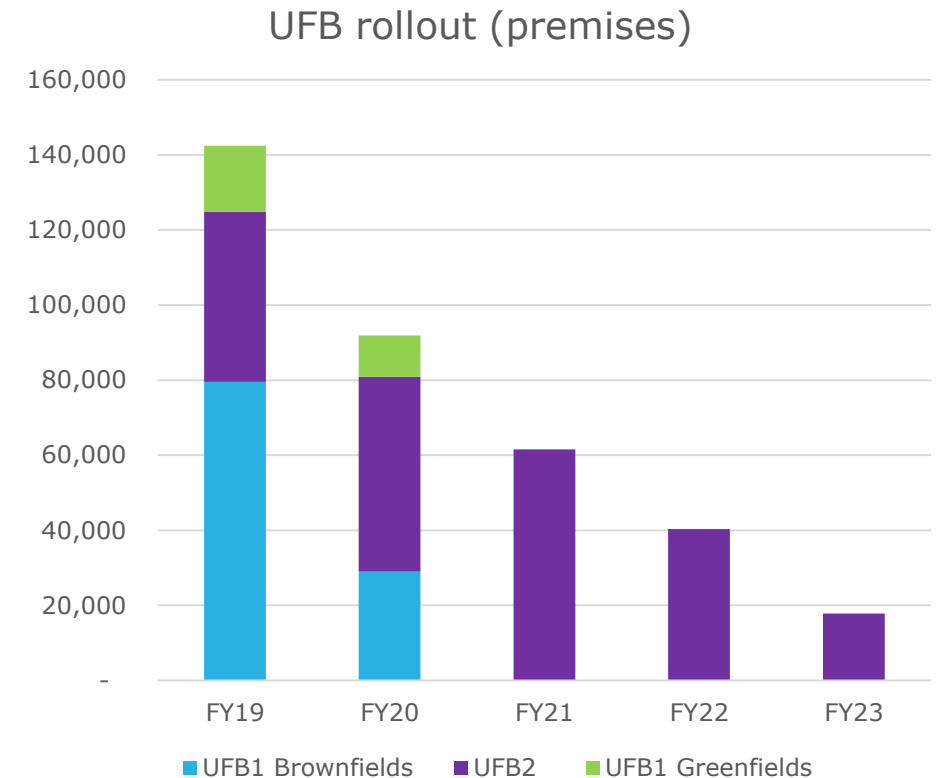
How we think about capex investment



FY20 gross capex guidance

> **\$660m - \$700m** gross capex reflects:

- **Fibre \$550m-\$580m**
 - \$260-\$280m fibre connections & layer 2
 - \$140-\$160m spend for UFB2/2+ communal
 - ~\$30m remaining for UFB1 communal (end Dec)
 - greenfields demand to grow; pole and transport (UFB2) spend continues
- **Copper \$50m-\$70m**
 - pole programme slows outside UFB areas
- **Common: \$50m-\$65m**
 - ongoing investment in IT platforms/technology



FY20 EBITDA guidance: \$625m to \$645m

Focus on return to modest EBITDA growth, subject to no material changes in expected regulatory environment or competitive outlook

Costs: We expect our initiatives to result in a continued reduction in FY20 total expenses

- **transformation** as we move from build to operate (*e.g. combining Customer Care and Network Field Management functions*)
- greater use of **digital functionality** to simplify processes and remove legacy systems (*e.g. new billing and assure platforms*)
- **optimising maintenance spend** as customers migrate from copper to fibre
- maintaining **tight control of general costs** to offset incremental spend on innovation activity, regulatory processes, and other transformation-related one-off costs

Revenue

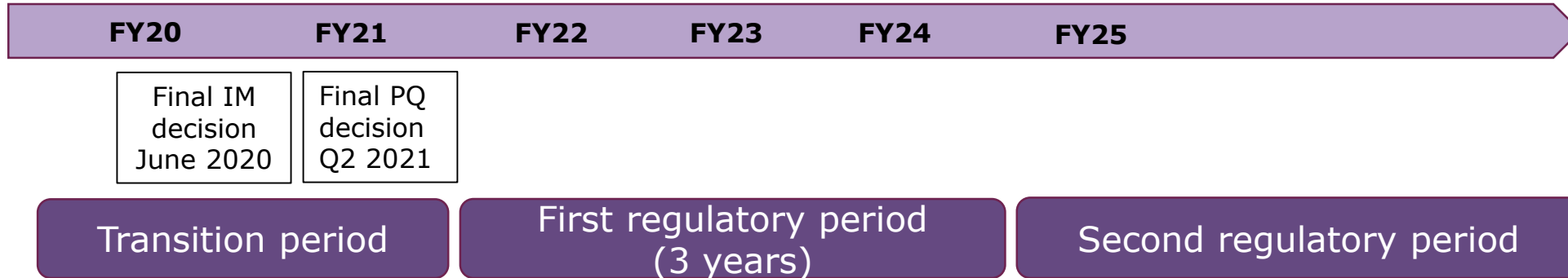
- **ARPU growth** as copper connections transition to fibre and customers migrate to higher spec plans (*e.g. 1Gbps, enhanced business plans*)
- expectation of continued **broadband growth** underpinned by increasing broadband penetration and premises growth
- commercialising new revenue opportunities

FY20 guidance summary

	FY20 guidance	FY19 result
UFB1 Cost Per Premises Passed (CPPP)	\$1,500 - \$1,600	\$1,573
UFB2* communal capex	\$140m - \$160m (based on estimated starting premises of 65,000 to 70,000 and premises handed over of 52,000 to 70,000)	\$105m 52k premises started; 45k premises handed over
UFB1 Cost Per Premises Connected (CPPC)	\$1,000 - \$1,150 (excluding layer 2 and including standard installations and some non-standard single dwellings and service desk costs)	\$1,025
Fibre connections & layer 2 capex	\$260m – \$280m (based on mass market 160,000 – 180,000 fibre connections, and 11,000 backbone builds and including service desk costs)	\$308m
FY20 Gross capex	\$660 – \$700m	\$804m
FY20 EBITDA	\$625 – 645m	\$636m

* combined UFB2 and 2+ rollout plans

Dividend policy: transition to regulated utility



- The Board expects to update the dividend policy once the Commerce Commission finalises the value of our regulated asset base and regulated revenue for fibre, currently due in June 2021, as part of the Final Price Quality determination.
- Until then, the Board expects to continue to be able to provide shareholders with modest dividend growth, subject to no material adverse changes in circumstance or outlook.
- The Board considers that a 'BBB' credit rating or equivalent credit rating is appropriate for a company such as Chorus.

FY19 final dividend

13.5 cps, fully imputed

- supplementary dividend of **2.4 cps** payable to non-resident shareholders
- **record date**: 24 September 2019
- **payment date**: 8 October 2019
- **Dividend Reinvestment Plan** applies with 3% discount to prevailing market price; open to New Zealand and Australian resident shareholders

FY20 dividend guidance

24 cps, subject to no material adverse changes in circumstances or outlook

Debt: ratings agencies

S&P threshold 4x ND/EBITDA on a sustained basis

	As at 30 June 2019 \$m
Borrowings	2,361
+ PV of CFH debt securities (senior)	155
+ Net leases payable	<u>247</u>
Sub total	2,763
- Cash	(273)
Total net debt	2,490
Net debt/EBITDA	3.92 times

- Financial covenants require senior debt ratio to be no greater than **4.75 times**

Moody's to review current 4.2x ND/EBITDA threshold in 2021

- > Moody's announced they expect to revise Chorus' current financial leverage tolerance threshold in 2021, following the Commission's final determination on the fibre price path for Chorus.
- > Moody's expect declining UFB capital spending, reducing cash outflows and execution risks, to place Chorus' risk profile more in line with other regulated utilities.
- > Moody's consider Vector the most comparable rated peer for Chorus, but note that Chorus' greater competition and technology risk suggest a tighter leverage tolerance threshold.

Regulatory outcomes need to acknowledge risk

Emerging Views paper suggested WACC below investor expectations

- 21 May paper implied one of the lowest WACCs for a NZ regulated utility
- key focus of legislation is a smooth transition for consumers and investors
- Commerce Commission has acknowledged importance of *real financial capital maintenance*: the ability to make a fair return on and of capital over the lifetime of the assets
- Crown Fibre Holdings, credit ratings agencies and European regulators have acknowledged a risk premium is appropriate for fibre network builders
- investors clear that build and financing risks need to be recognised at the time they were addressed, not in hindsight
- treatment of Crown financing has implications for other public-private partnerships

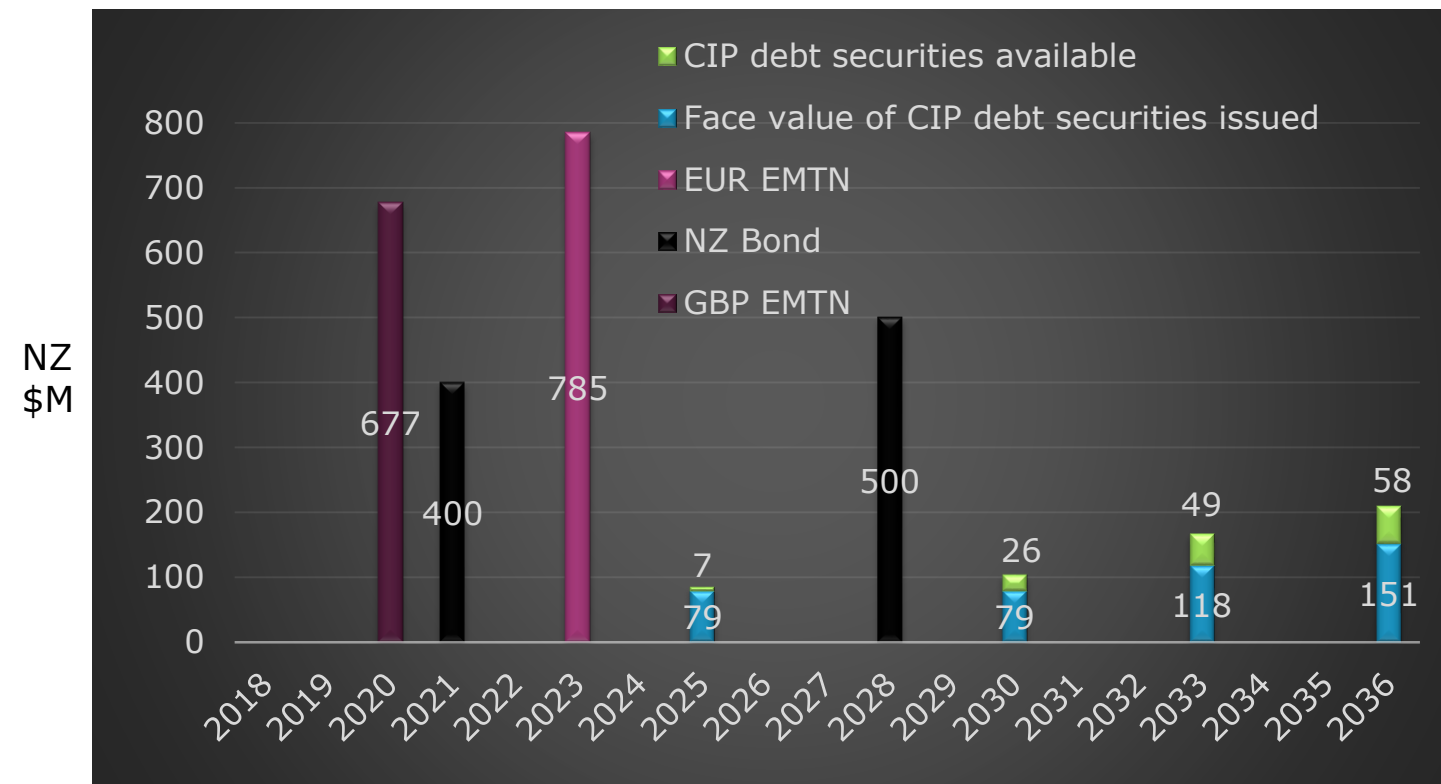
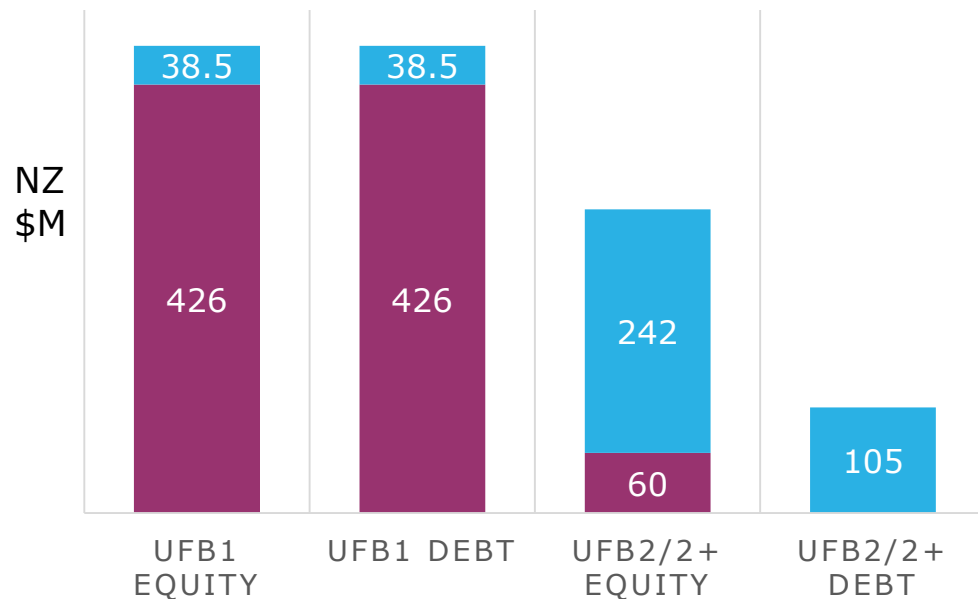
Crown financing and debt profile

- > up to \$1.33 billion CIP financing available by 2023 (57:43 equity/debt)
- > \$912m drawn at 30 June 2019

- > At 30 June, debt of \$2,361m comprised:
 - Long term bank facilities of \$550m undrawn;
 - NZ bond: \$400m and \$500m
 - Euro Medium Term Notes \$1,461m (NZ\$ equivalent at hedged rates)

AS AT 30 JUNE

■ drawn ■ undrawn



Changing gear: from build to operate

Kate McKenzie, Chief Executive Officer

WE'RE FOCUSED ON

CUSTOMER

Transform customer experience

DIGITAL

Nothing happens if it's not digital

PEOPLE

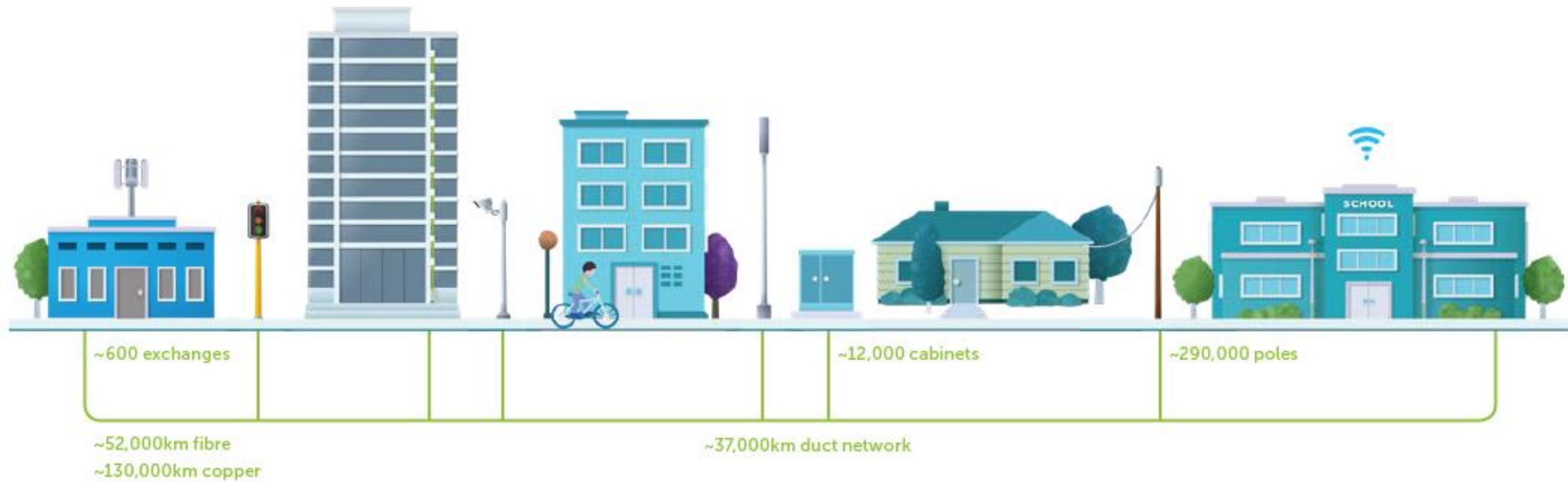
We're committed to enabling our people

OPTIMISATION

We improve by getting better at what we do

INNOVATION

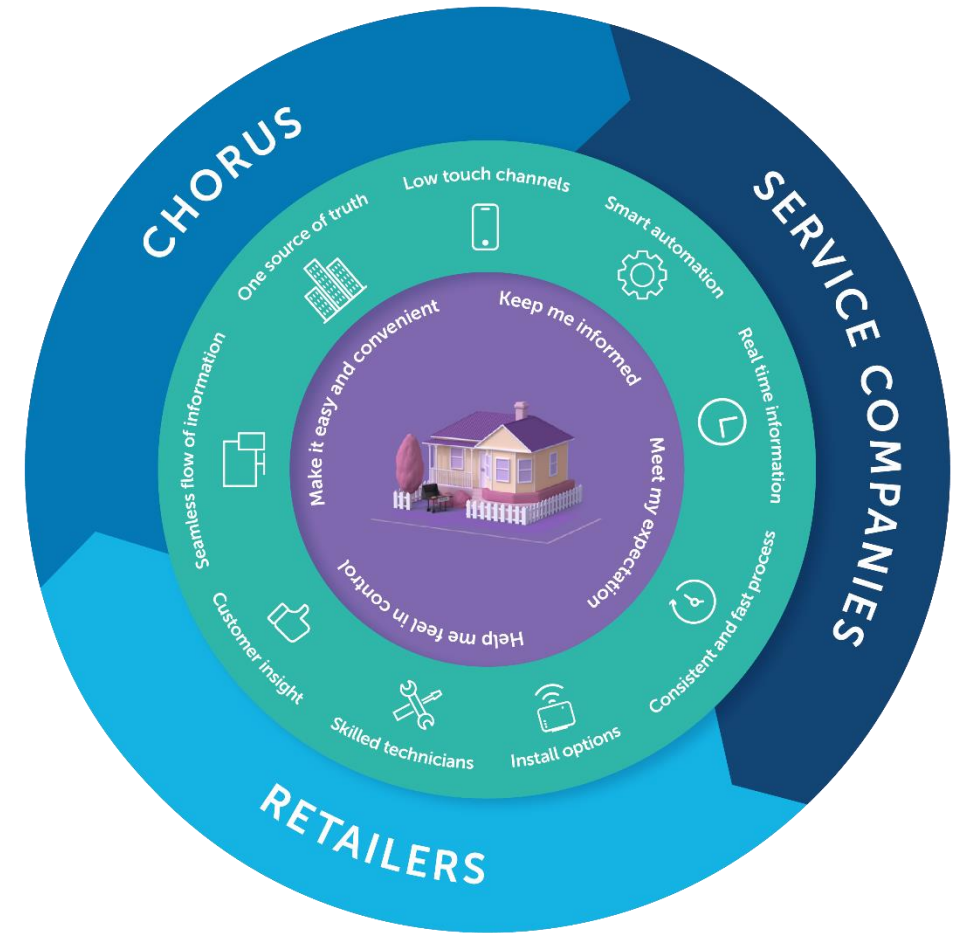
New revenue opportunities



Streamlining and simplification

Accelerating our transformation programme

- > **Assure:** new channel launched; identifying opportunities to solve faults proactively and remotely
- > **Intact connections:** make it easier and faster for customers to get service switched on
- > **Fibre connect:** keep refining our process; emphasis on reducing reschedules and cancellations
- > **Property developers:** manage growing premises volumes and lift developer experience
- > **Complex orders:** new channels for non-premises connections



Active wholesaler

71% of Kiwis agree fibre is best

> Honing our incentives and marketing

- improved data and analytics
- promoting higher speed plans
- testing copper-to-fibre messaging
- prezzy card trial

> Chorus led installations = better customer experience

- 40% connect within 6 months of installation; 60% connect after 12 months
- strong UFB2 response (e.g. Ohau 70% uptake)



Copper Connect

At Chorus, we are committed to ensuring every Kiwi has access to fast reliable...

[LEARN MORE](#)



Consumer

Mix it up

Work with us to promote better broadband options to your customers.

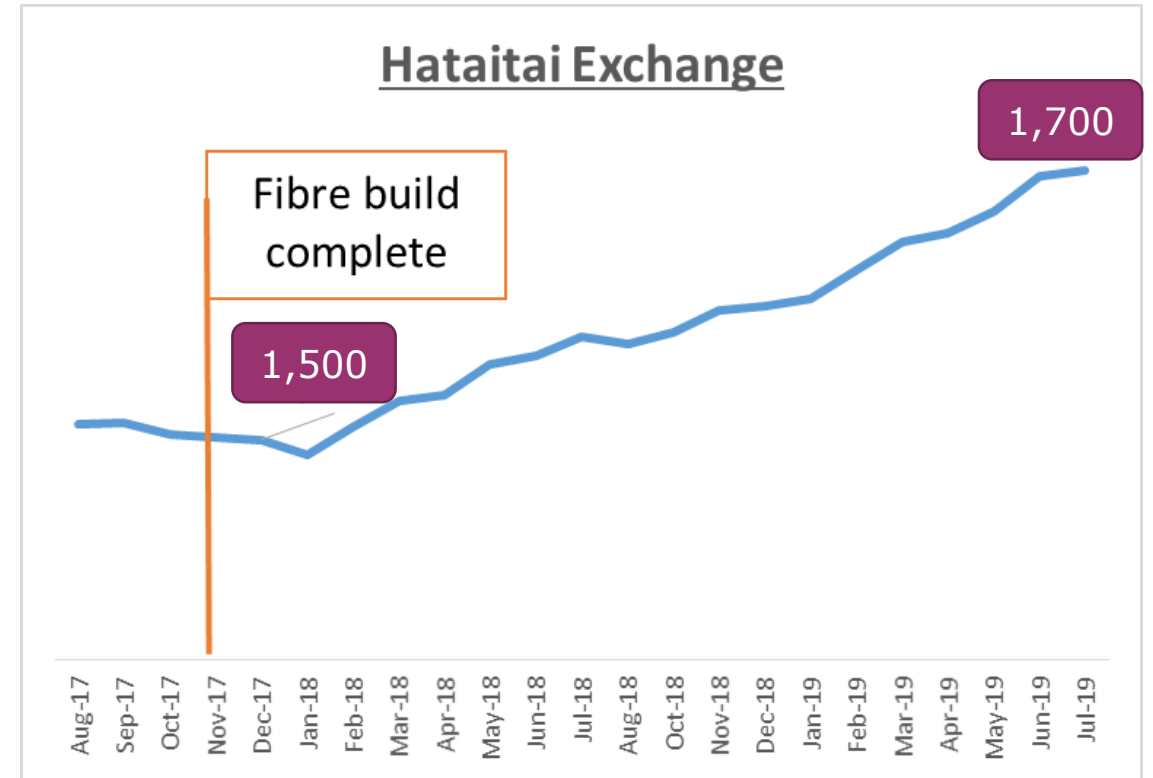
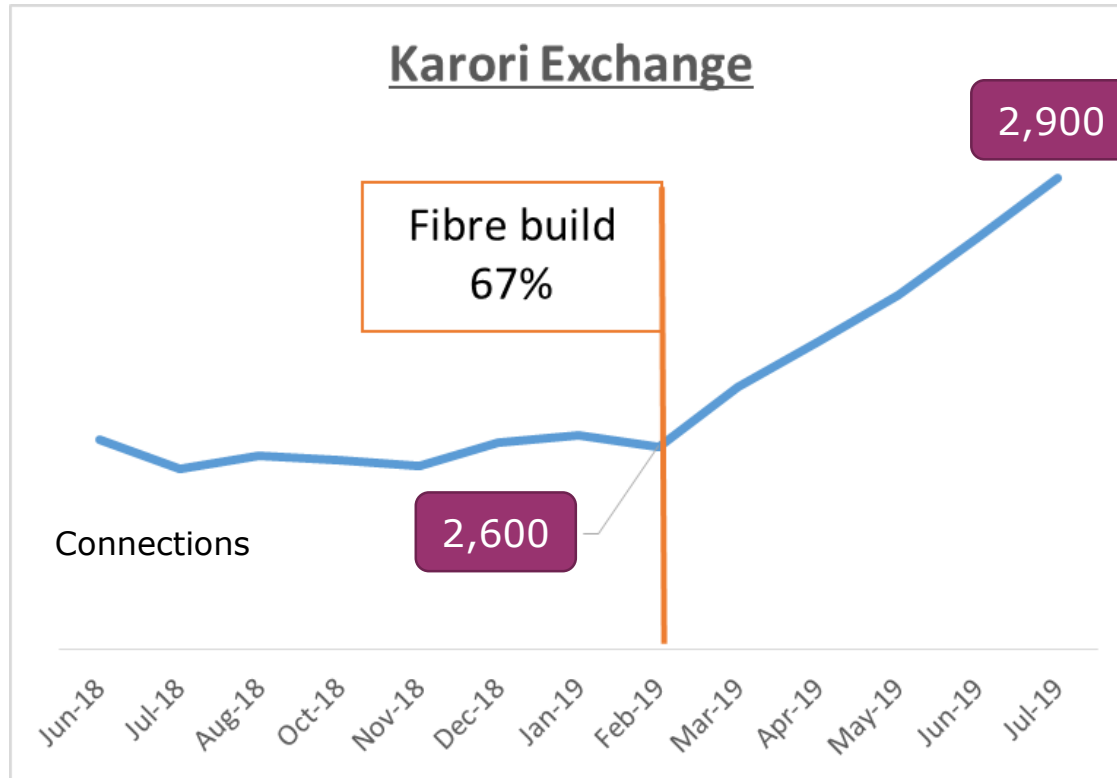
[READ MORE](#)



Ask your provider for the fastest fibre.

CHORUS
There's room for everyone

Fibre is winning back Wellington market share



New focus on business broadband segments



Business fibre starter

Work smarter with a reliable and fast broadband connection that gets things done. Our entry level business fibre broadband makes small business life easy.

Standard fault restoration: by 7pm next day
100Mbps: \$50 per month
1Gbps: \$70 per month



Small business fibre

Small Business Fibre is designed for SMEs that rely on cloud based services to power their business activities. It comes with the peace of mind that any fault with their broadband connection will be fixed fast.

Target: AM faults restored same day; PM faults by noon next day
100Mbps: \$55 per month
1Gbps: \$65 per month



Business fibre

An always on connection that delivers high levels of guaranteed bandwidth to support business critical applications like VoIP. What's more, the VLAN features allow you to customise your network.

AM faults restored same day; PM faults by noon next day
100Mbps: \$175 per month
1Gbps: \$210 per month



Business fibre premium

Our dedicated point-to-point fibre service that offers incredible performance and security and sets you up to scale for future growth with ease. Perfect for businesses with high bandwidth needs.

AM faults restored same day; PM faults by noon next day
100Mbps: \$380 per month*
1Gbps: \$395 per month*
(*plus service bandwidth)

Growing our portfolio

Moving from innovation to product phase

- **Edge Centre Colocation:** 3 sites open for data centre space; ~30% of space filled
- **Smart locations:** growing demand for non-building connections (e.g. CCTV)
- **10GPON:** trial with retailers to identify use cases
- **Fibre to desktop:** market identified; exploring channels to market
- **Wi-Fi ONT:** device being deployed as part of standard installation; considering Wi-Fi service options

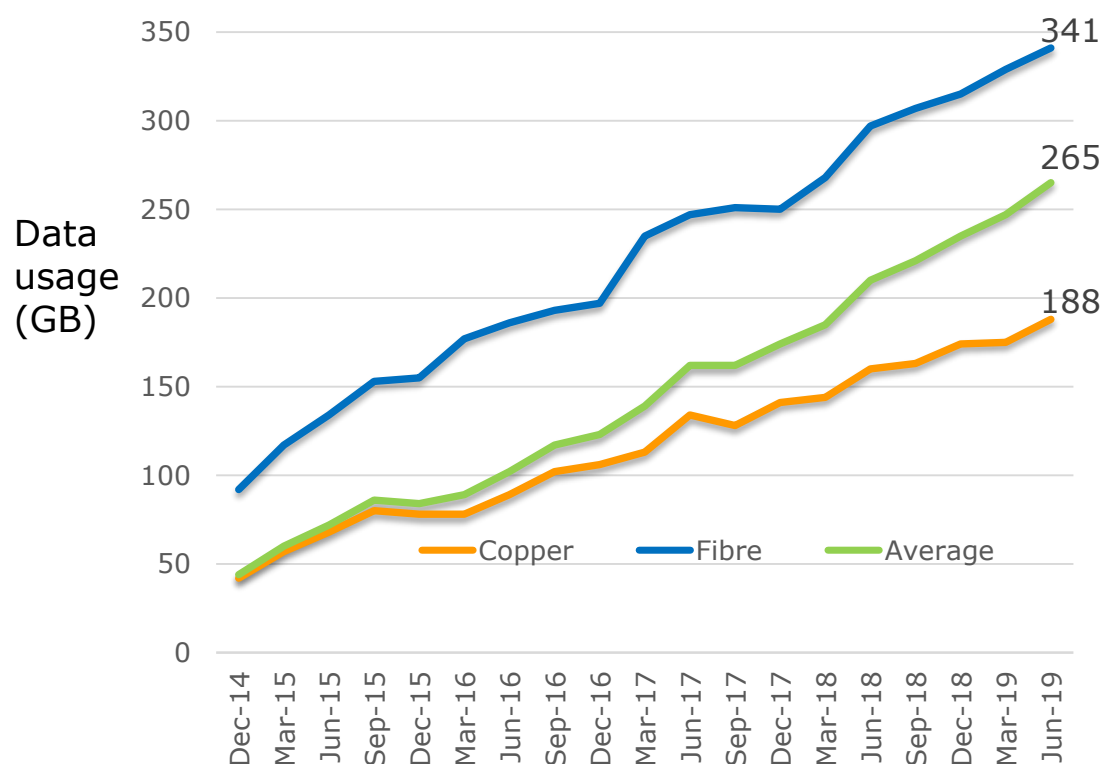


Technology evolution: fibre and 5G

	Fibre	5G
Deployment	<ul style="list-style-type: none"> Available across all major urban centres and connects many existing cellsites. 	<ul style="list-style-type: none"> Initially from suitable 'macro' towers. Requires infill sites then small cell deployment (~200m radius) for optimal service.
Technology	<ul style="list-style-type: none"> Light transmits data via fibre cable (10-100km) 1Gbps consumer and 10Gbps business plans available; 2-10Gbps consumer plans in trial. 	<ul style="list-style-type: none"> Fibre to cell tower/site, then radio waves to end user. Speed and performance vary on each cell subject to: number of users, data usage, distance and propagation path.
Capacity	<ul style="list-style-type: none"> Dedicated connection delivers consistent speed, unlimited data capacity, uncongested performance and very low latency. 	<ul style="list-style-type: none"> Capacity shared amongst users on each cell. Upload speeds lower than download due to power and high frequency challenges transmitting from mobile devices.
Spectrum	<ul style="list-style-type: none"> Light waves provide substantial potential bandwidth. Wi-Fi connects devices to fibre via free public spectrum. New Wi-Fi6 devices use 5G technology over short distances. 	<ul style="list-style-type: none"> 3.5 GHz spectrum for 5G usage currently very limited. Auction of new 3.5 GHz spectrum expected in 2020 for commercial allocation in 2022. Auction of mmWave spectrum (26 GHz) to follow and will require new cellsites.
Cost	<ul style="list-style-type: none"> Fibre already deployed. Low opex: no powered roadside equipment to maintain. 	<ul style="list-style-type: none"> Existing sites likely to require strengthening. Many more sites required, with fibre backhaul. Much higher opex than fibre: site leases and power to roadside equipment.

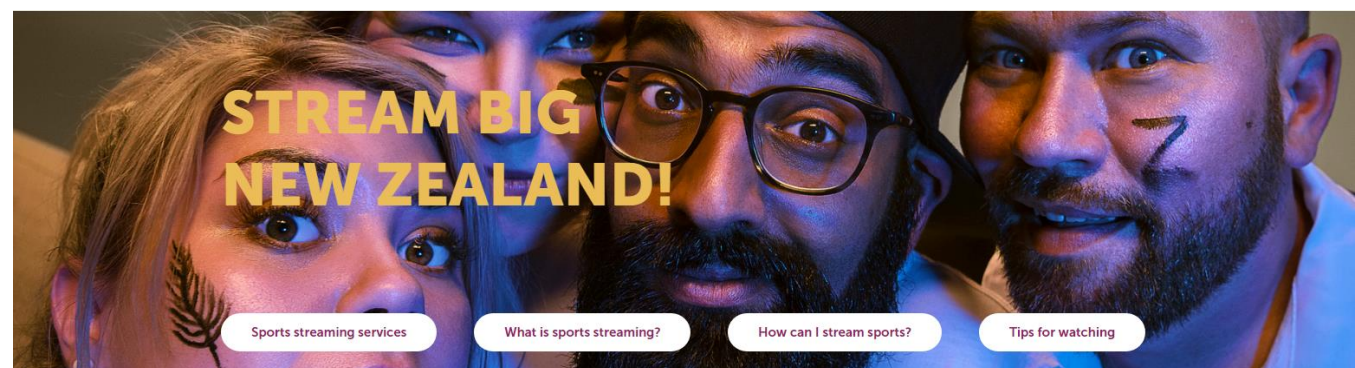
Unlimited data and streaming are the norm

**Monthly average data usage
per connection on our network**



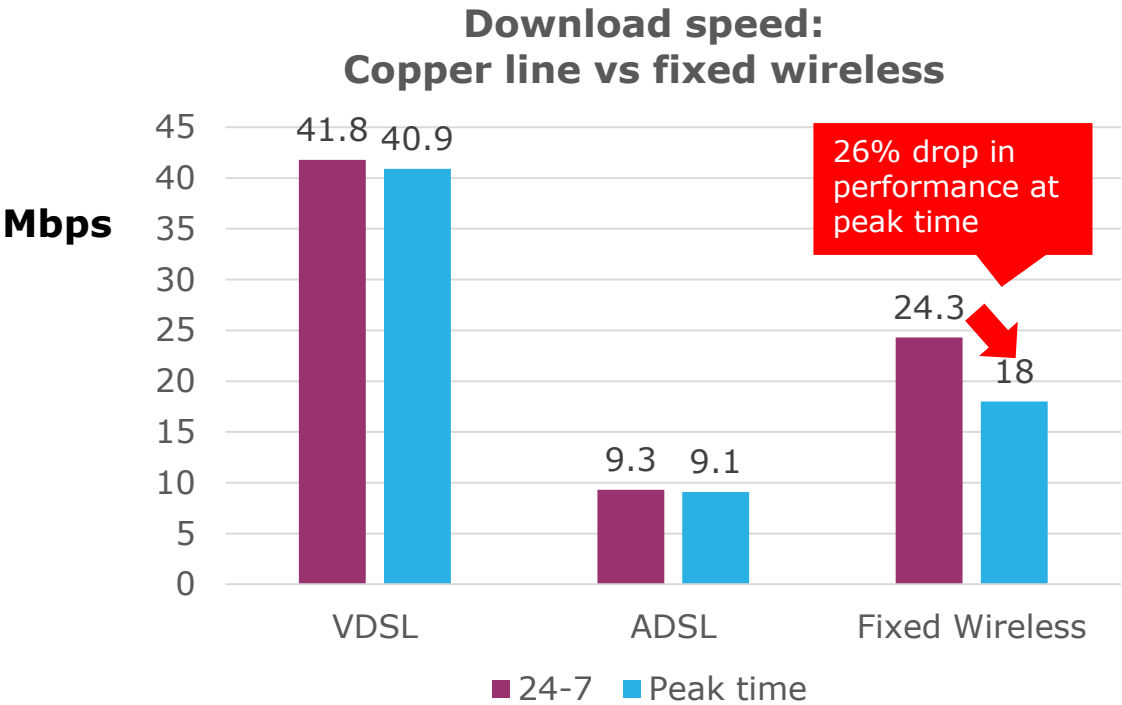
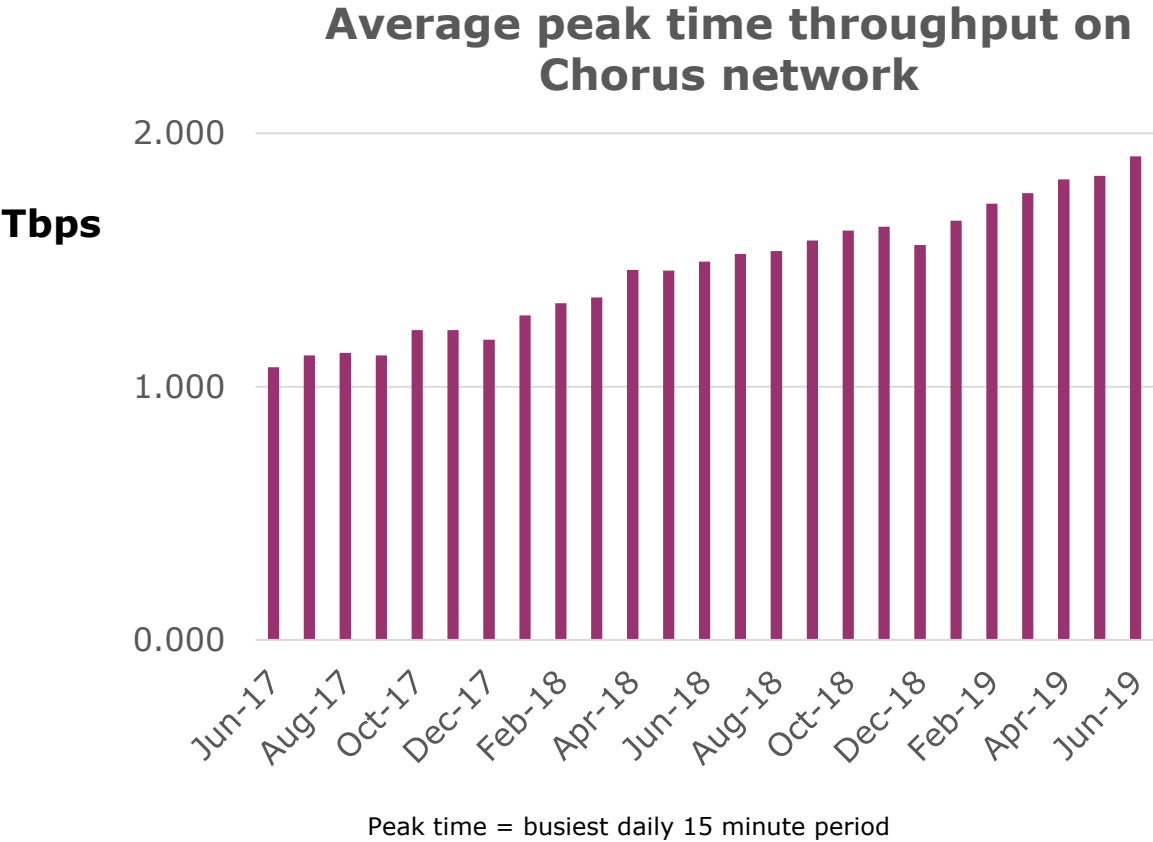
> **Growing catalogue and quality of streaming content is driving broadband uptake and usage higher**

- 2degrees bundle with Amazon Prime
- Stuff launched news and content portal: play stuff
- Sky TV focused on streaming services: *Sky Sport Now*
- new standalone Vodafone TV device to enable online content
- Spark Sport showing English Premier League, Rugby World Cup
 - Rugby World Cup expected to promote uptake of smart TV's and introduce traditional TV viewers to streaming
 - Chorus network capacity increased ~50% in FY19



77% increase in network traffic at peak time since June 2017

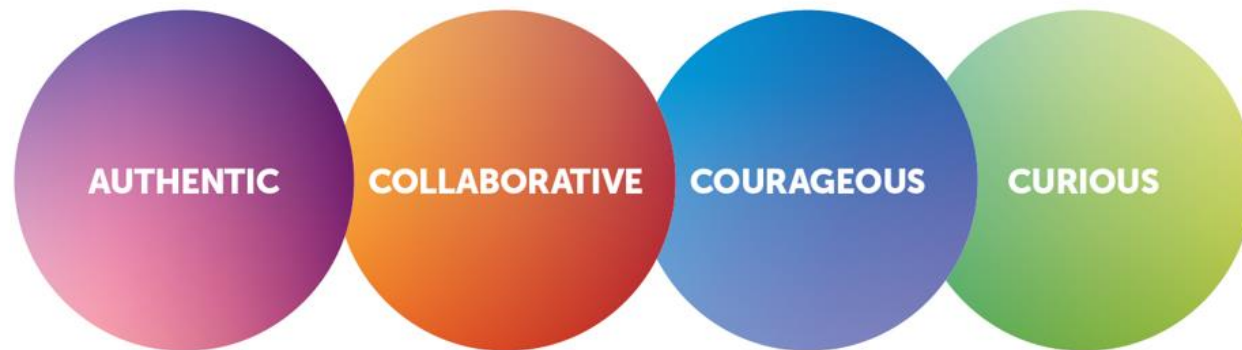
Fixed line network delivering consistent performance at peak time



Source: Commerce Commission, June 2019

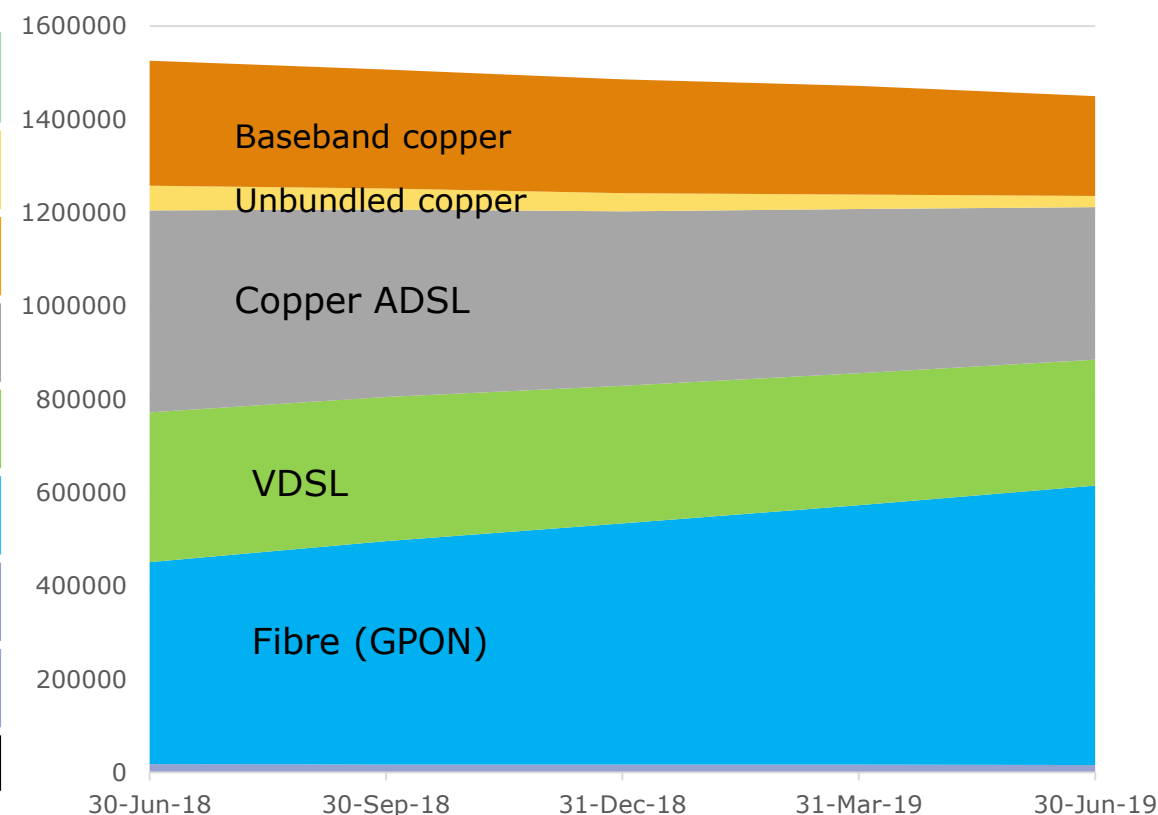
FY20: Our priorities

- regulatory outcomes that support a solid fibre utility
- focus on end-to-end streamlining and simplification
- invest in future capability
- optimise our non-fibre business
- create supplier partnerships fit for the future
- commercialise new revenue opportunities
- tap into broader connectivity opportunities



Appendix A: Connection and market trends

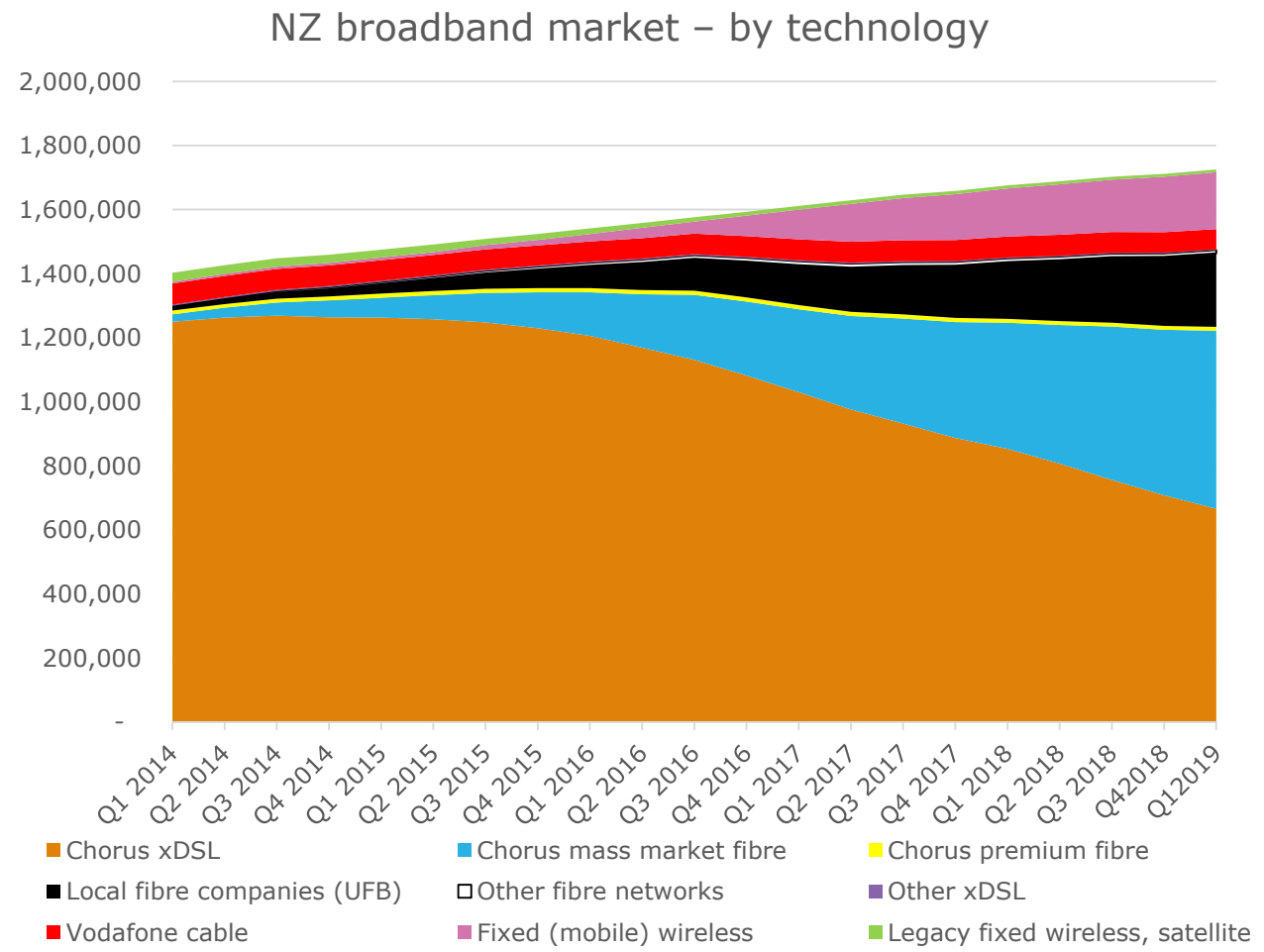
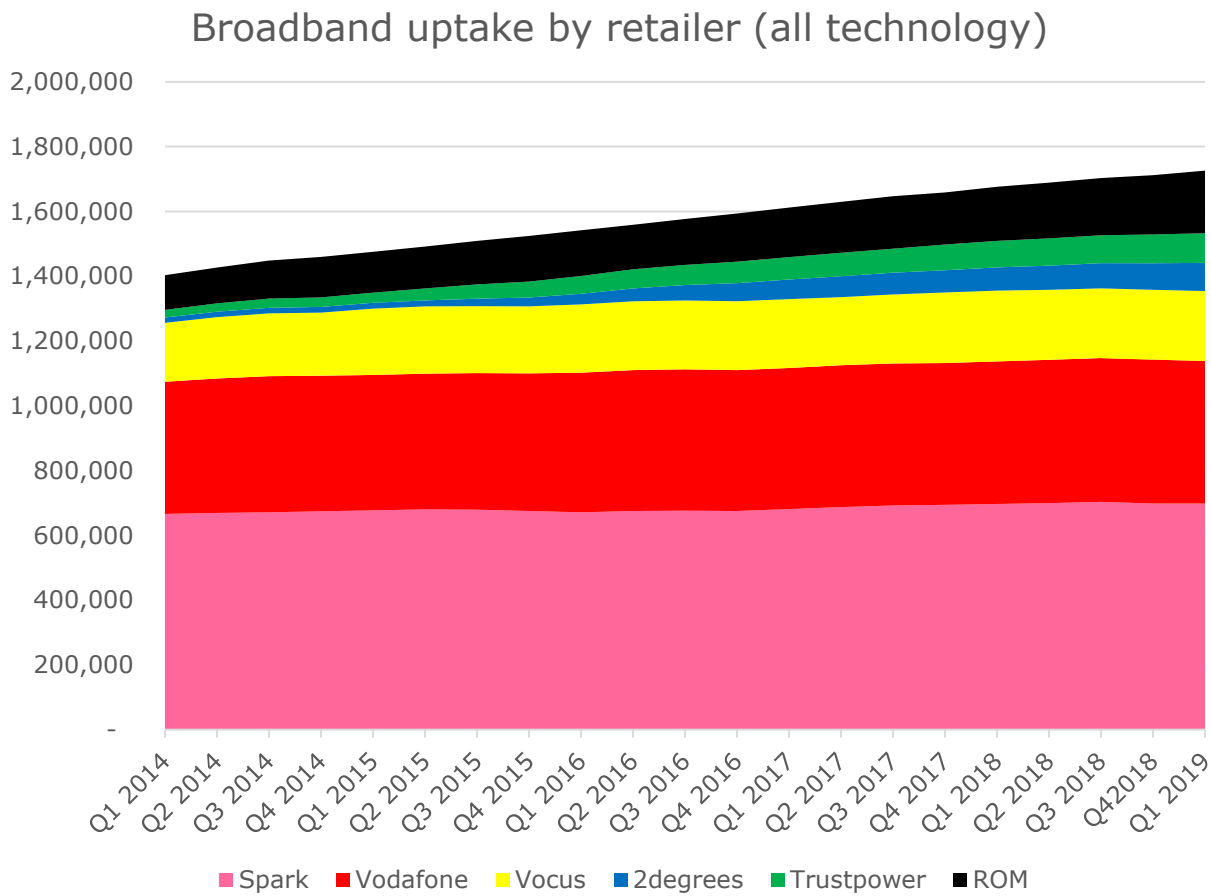
	30 June 2018	30 Sept 2018	31 Dec 2018	31 March 2019	30 June 2019
Unbundled copper (no broadband)	53,000	45,000	39,000	31,000	24,000
Baseband copper (no broadband)	268,000	255,000	244,000	233,000	214,000
Copper ADSL (includes naked)	433,000	402,000	374,000	352,000	327,000
VDSL (includes naked)	321,000	309,000	295,000	283,000	270,000
Fibre broadband (GPON)	433,000	479,000	517,000	556,000	599,000
Data services (copper)	6,000	5,000	5,000	5,000	5,000
Fibre premium (P2P)	12,000	12,000	12,000	12,000	11,000
Total connections	1,526,000	1,507,000	1,486,000	1,472,000	1,450,000



> **1,196,000 broadband connections comprises:**

- 599,000 fibre (GPON) connections
- 597,000 VDSL/ADSL (copper) connections

Appendix A: Connection and market trends (continued)



Appendix B: Key RAB implementation parameters

Parameters	Chorus view
Asset valuation	RAB to include all assets supporting fibre access services – but likely to exclude 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 principles for cost allocation for initial RAB valuation and for future periods. 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.

Appendix C: UFB programme guidance and Crown securities

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

■ 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

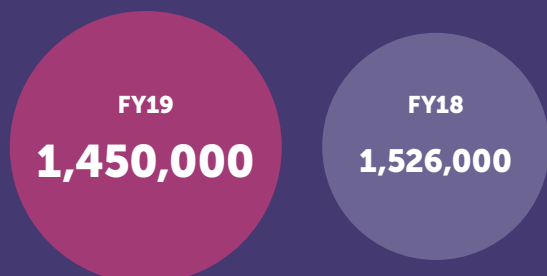


Annual Report 2019

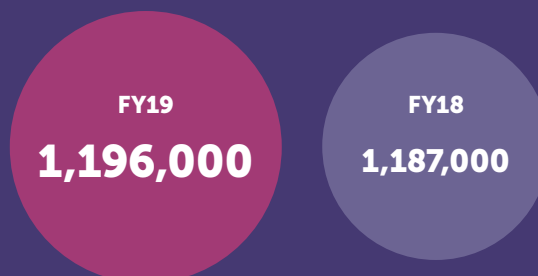
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FY19 results overview

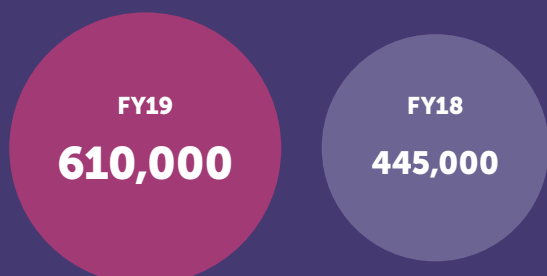
Fixed line connections



Broadband connections



Fibre connections



Net profit after tax



EBITDA¹



Customer satisfaction



Dividend



Employee engagement score²



¹ Earnings before interest, income tax, depreciation and amortisation (EBITDA) is a non-GAAP profit measure. We monitor this as a key performance indicator and we believe it assists investors in assessing the performance of the core operations of our business.

² A new engagement survey provider means FY18 data isn't directly comparable.

³ Based on the mean response to "How likely are you to recommend your company as a place to work?"

⁴ Net Promoter Scores can range from -100 to 100 and are calculated by subtracting the percentage of detractors (0-6 engagement score) from the percentage of promoters (9-10 engagement score).

Dear investors



Kate McKenzie
Chief Executive



Patrick Strange
Chair

We're on the fast-track to our goal of keeping New Zealand new, with the fibre rollout now 80% complete and more than half of our broadband connections on fibre.

When we signed up for the original ultra-fast broadband (UFB) contract with the Government in 2011, we had a target of 20% fibre uptake by 2020. This year, demand for fibre was stronger than ever. We completed a record 186,000 fibre installations, up from 156,000 last year, and fibre uptake within our UFB areas grew from 45% to 53%. That's all the more impressive when you consider we built the network past another 176,000 homes and businesses during FY19.

Demand for data also keeps growing, reflecting the ever increasing range of online streaming content and the proliferation of connected devices in the home. Monthly average household data usage on copper and fibre connections across our network increased by 55 gigabytes (GB) to 265GB. Fibre customers use an average of 341GB. Pleasingly, we've seen a growing proportion of customers opt for higher speed connections, with uptake of 1 gigabit per second (Gbps) plans increasing from 7% to 10% of our consumer connections in the period.

We completed a number of significant initiatives during the year as part of our ongoing transformation programme to optimise our business for a fibre-centric future. Despite some impact from individual retailer processes, we lifted overall customer satisfaction from 7.5 to 7.7 out of ten. This reflected our collaboration with our industry partners to redesign our processes and reduce the effort required by most fibre installations to just one customer appointment. Our people have been critical to embracing this kind of customer designed change. We achieved a score of 7.6 out of 10 in our annual engagement survey, consistent with the middle of our international 'technology' company benchmark, and a positive net promoter score of 28.

We were pleased to have legislation enacting a new regulatory framework for fibre passed by Parliament in November. We've begun assisting the Commerce Commission with the information it requires as it goes through the process of establishing the value of our regulated asset base and our allowable fibre revenues. The utility-style regime is expected to apply to our fibre access services from January 2022.

We had a strong year for broadband connections, with an increase of 9,000 lines. This was a significant jump from a gain of just 1,000 broadband lines in FY18 and reflects our ongoing initiatives to win broadband customers from cable and fixed wireless networks in our own fibre areas, together with premises growth nationwide. Although broadband connections grew, it was outweighed by the ongoing reduction in our copper lines and we ended FY19 with 76,000 less fixed line connections overall. This was consistent with connection losses in the prior year and reflects other fibre companies reducing our copper broadband connections in areas where we're not the Government's UFB partner, as well as large retailers migrating voice only customers onto their own wireless networks.

We're 80% of the way to our target of building our fibre network past approximately 1.36 million homes and businesses by the end of 2022. We've started taking fibre to some of the more than 300 smaller towns for the extension of the original UFB rollout (UFB2), where fibre promises to deliver even greater socio-economic benefits. The fibre rollout remains on time and on budget and, with copper investment reducing and a positive performance on connection costs, we were able to limit capital expenditure to \$804 million for the year. This was slightly below the lower end of our guidance range, of \$820 million to \$860 million, and heralds the beginning of reducing capital expenditure as we pass the peak of the UFB rollout schedule.

Reduced connection revenues meant we achieved EBITDA of \$636 million, within our guidance range, but down from \$653 million in FY18. This was partly offset by our transformation initiatives and a tight rein on costs, with operating expenses slightly lower than in FY18 despite increased regulatory and network related expenses. We achieved this by adopting new digital processes and tools to deliver benefits across our business, as well as for our retailers and their customers. New online tools, for example, helped reduce network maintenance costs by avoiding unnecessary technician visits.

Net profit after tax reduced to \$53 million, from \$85 million in FY18, largely because of increased interest costs and depreciation and amortisation. A fully imputed final dividend of 13.5 cents per share will be paid on 8 October 2019, bringing total dividends for FY19 to 23 cents per share.

This report is dated 26 August 2019 and is signed on behalf of the Board of Chorus Limited.

Keeping New Zealand new

As a utility network operator, we take a long term view. We want to make New Zealand better, keeping it at the cutting edge through our network infrastructure and the connectivity we provide. Our copper VDSL and fibre to the premises network makes

high-speed unlimited broadband available to ~90% of broadband capable lines nationwide. About 100 retailers use our infrastructure to deliver fixed line and mobile network services to their customers. By the end of 2022 we'll have fibre available to ~1.36 million customers.

WE'RE GOING TO

**KEEP
NEW ZEALAND
NEW**

WE'LL GET THERE BY

Creating an environment for our customers and our people that optimises today's business and allows us to innovate for growth

BECAUSE WE WANT TO

**MAKE
NEW ZEALAND
BETTER**

WE'RE FOCUSED ON

CUSTOMER

Transform customer experience

DIGITAL

Nothing happens if it's not digital

PEOPLE

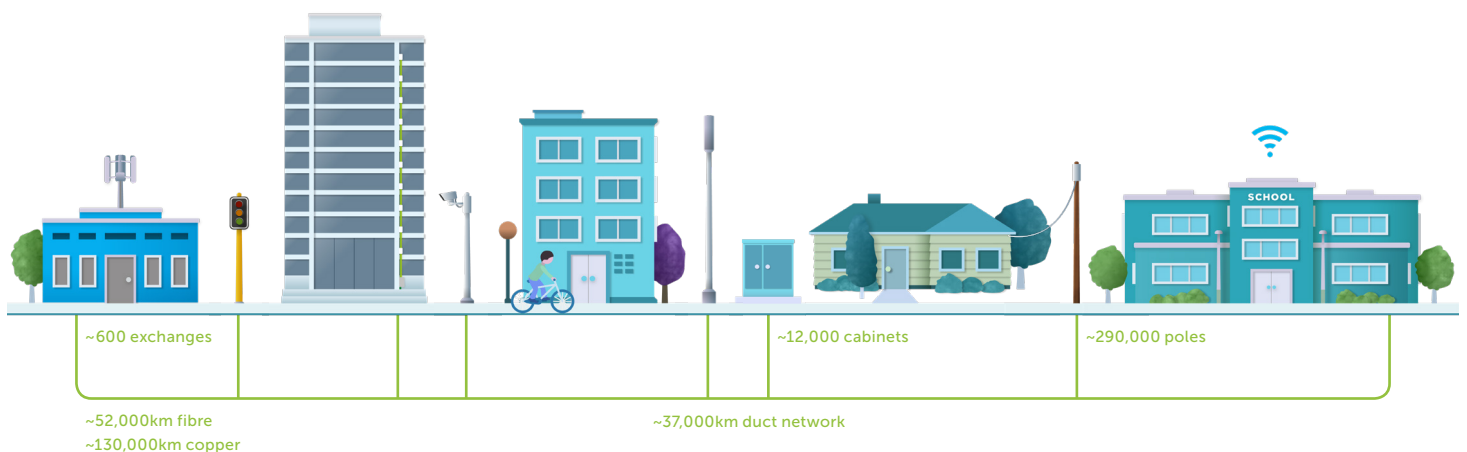
We're committed to enabling our people

OPTIMISATION

We improve by getting better at what we do

INNOVATION

New revenue opportunities



1.1 Designing a new customer experience

To ensure we maintain our leading network position and a sustainable business well into the future, we're focused on creating an environment for our customers and our people that optimises today's business and allows for us to innovate for growth.

In November 2017, we set ourselves an ambitious target of connecting 75% of new residential fibre orders in a single appointment. This 'fibre in a day' initiative underpinned our overarching goal of making it as easy as possible for customers to have fibre connected to their home, or business, where consent and additional communal network build wasn't required.

While we'd already made good progress in working with retailers and service companies to streamline our processes, this new initiative challenged us to completely reconfigure our long standing fibre installation process from two customer appointments to just one. This meant working even more collaboratively with our industry partners to redesign the customer experience from end-to-end, and breaking new ground in our use of digital tools.

In particular, we developed new capabilities involving smart data categorisation and machine learning. Multiple network databases and connection records were analysed so we could ultimately categorise which remaining premises would be complex or simple to connect. This predictive analysis identified about 400,000 simple installations and has achieved 90% accuracy to date, greatly improving our productivity and customer satisfaction score.

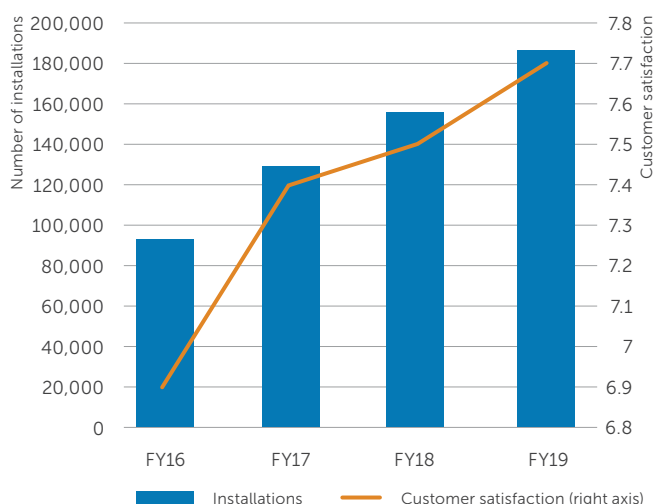
Although we lifted our overall customer satisfaction score¹ for fibre installations from 7.5 out of ten in June 2018 to 7.9 in December, it had reduced back to 7.7 by the end of FY19. This was below the target of 7.9 we'd set ourselves for the year. However, where customers were part of our fibre in a day process and required just one appointment, we achieved 8.0. This difference reflects the ongoing challenges of communication and coordination between multiple parties, and we continue to see significant variances in results between retailers. Our technicians are rated highly, with customer satisfaction scores of 8.5 out of ten.

The changes we made to our installation processes helped reduce nationwide lead times for new fibre connections. Customers wanting to install fibre in June 2019 could book a technician visit within eight business days, down from 13 days a year ago. This was despite the number of field crews reducing from about 800 to 670.

¹ Based on a rolling three-month average of scores from a survey of newly connected customers each month across a range of retail service providers.

Figure 1:

Fibre installations and customer experience



1.2 Building our digital capability

Installations weren't the only influencer of customer experience to benefit from our focus on simplifying systems and processes. We've continued to embrace the use of digital channels to help retailers, service companies and customers, gain much greater visibility of our network status, availability and provisioning. The ease with which information can now be accessed is evident in the exponential growth in usage from about one million requests a month in FY18 to 11 million a month this year.

We're now using these richer sources of network information to derive greater customer insights for product and planning purposes, as well as monitoring critical aspects of network performance during online events.

These digital channels can have far reaching benefits. Our online line testing tool, for example, is being used by retailers to review reports of faults from their customers so they can better pinpoint whether a fault is in our network, their network, or the customer's equipment. This has led to hundreds of unnecessary technician visits being avoided each month. The result is a virtuous circle of improved customer experience with faster resolution of faults, retailers avoiding unnecessary cost, and our technician workforce being more productive.

We hope to further improve the retailer and customer experience with the recent launch of a new assure channel. This will provide a simplified process and integrated tools to help speed up the diagnosis and resolution of faults. We're also using digital tools to automate operational processes, such as the previously manual transfer of fibre

order information between different systems. This has helped deliver more consistent customer outcomes and reduced offshore processing costs. We're exploring further opportunities to expand these technology solutions to other processing tasks.

The deployment of a standalone billing system was another milestone in our continuing separation from shared legacy IT systems. This will provide us with greater speed to market for new products and enables the decommissioning of other costly legacy systems.

1.3 An active wholesaler: growing broadband connections

Demand for broadband is growing, fuelled by the emergence of broadband as the fourth utility, together with the rollout of fibre and ongoing premises growth, particularly in New Zealand's largest city, Auckland. However, the continuing evolution of technology, market dynamics and industry regulation means we operate in an ever changing environment.

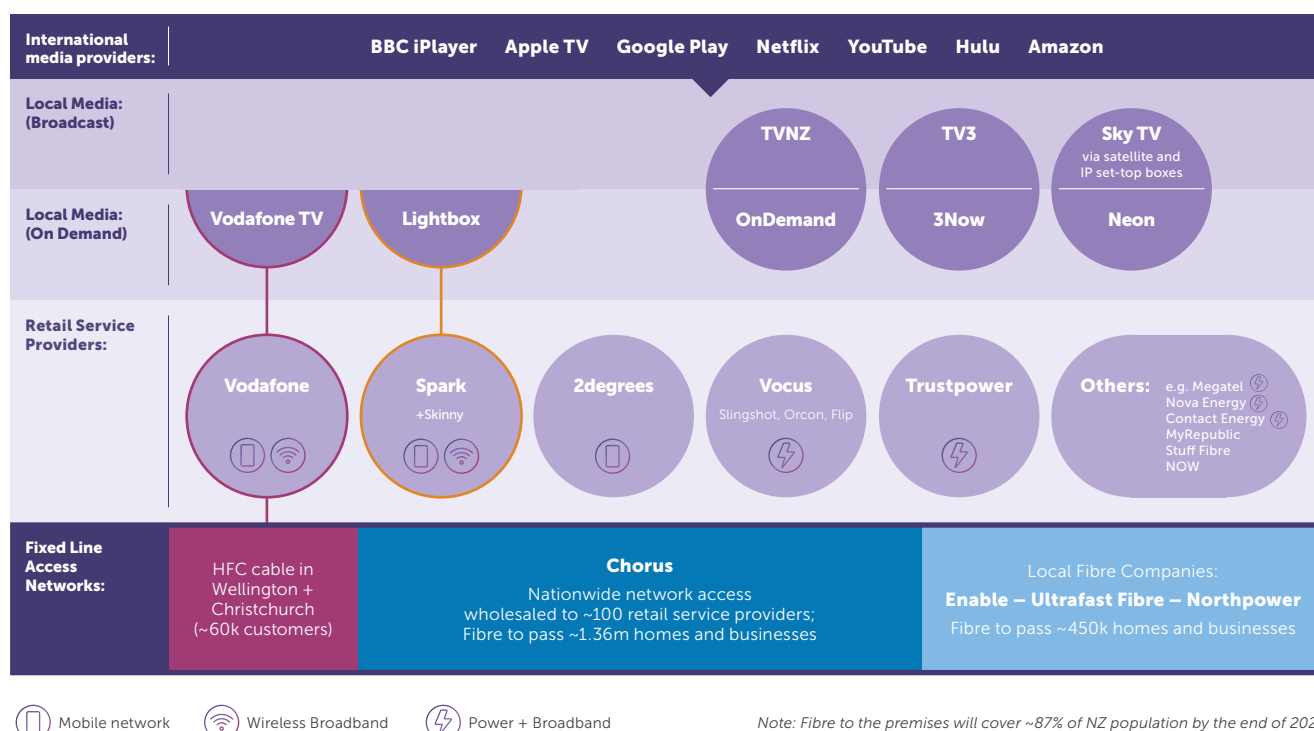
Wholesale-only fibre networks like ours have helped establish a competitive broadband market, with smaller retailers gaining market share in recent years. The bundling of electricity and broadband is becoming more common with another electricity retailer, Nova Energy, entering the market. The larger mobile network operators have responded to these market pressures by encouraging customers onto their own fixed wireless networks, reducing their wholesale network costs.

The ongoing rollout of our fibre network, together with the investment we've made in enhanced copper broadband technology, are helping us win customers back from fixed wireless and cable networks. However, the popularity of fibre broadband means other fibre companies continue to reduce our copper broadband connections in areas where we aren't the Government's UFB partner. Our voice only copper connections, for which we receive lower revenue than a broadband connection, also continue to decline as customers take up broadband or migrate to alternative fibre, mobile or fixed wireless networks.

Figure 2:

The New Zealand fixed line market

Rationalisation, new entrants and new business models are disrupting the NZ market.



We adopted an active wholesaler strategy several years ago to mitigate the risk of competing networks reducing our connections. This means that although we're a wholesaler, we implement our own in-market initiatives to raise consumer awareness of our copper and fibre network footprint. During FY19 some of these initiatives included:

- advertising campaigns, such as 'Stream big New Zealand', to promote the capability of our network for streaming services
- providing incentives to retailers to upgrade their customers to better broadband options on our network, or win customers back from other networks
- undertaking door knocking campaigns to promote free fibre installations in newly completed suburbs or to off-net addresses
- enhancing our 'front door' channels for subdivision developers and retirement villages

These initiatives have helped us to return our broadband connections to growth and raise customer awareness of the premium benefits of fibre broadband. In our UFB rollout areas, broadband connections grew by 42,000 connections in FY19. This reflects the degree to which premises growth and increasing broadband penetration, as broadband becomes the fourth utility, is helping offset ongoing line loss to the other local fibre company networks. Our market research shows that New Zealanders recognise fibre broadband as the premium technology for a broadband connection and this is evident in the continued strength of fibre demand.

Figure 3:

Summary of key market trends

Our market drivers	What we're focussed on
Large vertically integrated retailers are encouraging customers to use their own fixed wireless, cable and legacy fibre networks to reduce their wholesale network costs.	We're an active wholesaler, promoting our extensive fibre and VDSL broadband footprint through advertising, retailer campaigns and our own door knocking initiatives. Our network supports about 100 retailers.
Competing fibre companies have overbuilt our existing copper network with fibre as part of the Government's UFB programme.	We're optimising our business in these competing areas and maximising our broadband share in other areas experiencing premises growth, particularly Auckland.
Traditional voice only connections are declining with changing demographics and wireless service options.	We're commercialising new potential revenue streams identified by our innovation programme, such as data centres and smart city connectivity.
Technology keeps evolving, with 5G potentially enhancing the capability of mobile/wireless technologies as a fixed line alternative for lower data users.	We're continuing to connect customers to fibre and promote uptake of 1Gbps services. Fibre provides the best possible broadband performance, particularly at peak times when consumers stream large amounts of data. We see 5G as complementary technology, with many more cellsites requiring fibre backhaul.

1.4 Fibre delivers peak performance

As data demands continue to grow, our ability to deliver consistent throughput at dedicated speeds is a significant competitive advantage. By the end of 2022, we'll have made 1Gbps connections with no datacap constraints available to more than 1.3 million potential customers. We're already trialling next generation 10Gbps services with retailers.

Statistics New Zealand says 71% of New Zealand households were on unlimited broadband plans in 2018, up from 62% in 2017. Average monthly bandwidth demand on our network grew from 210GB per customer to 265GB through FY19. Usage for fibre customers was higher again at an average of 341GB per month. Most of this usage occurs around 9pm each night as more and more New Zealanders consume streaming video on demand services. Freeview's new streaming device, for example, removes the need for a TV aerial or satellite dish by transferring their content entirely onto broadband. Pay TV operator Sky TV is also continuing to make more of its content available online.

We've seen peak time traffic across our network grow from 1,500Gbps in June 2018 to 1,900Gbps in June 2019. That's the equivalent of 380,000 simultaneous high-definition

video streams. Online games are also contributing to record spikes in network traffic whenever there is a software update. 4K content, which requires more bandwidth than high definition programming, is starting to become more widely available with the proliferation of 4K television sets. Olympic broadcasters are already promoting the next high definition 8K television broadcasts for 2020. Together, these kinds of technology developments and the uptake of more bandwidth hungry services support our own and independent forecasts that suggest average data usage by 2024 is likely to exceed 1,000GB a month.

Currently, wireless broadband retailers typically offer monthly datacaps of 120GB, with larger datacaps available in some areas where cellsite capacity allows. There are customers who do not currently use much data and for whom wireless networks may provide a viable network alternative. However, these networks rely on shared capacity and are more prone to congestion at peak times. Independent monitoring has indicated peak time fixed wireless speeds deteriorating by an average of 26%. We've seen growing evidence of customers returning to our network from wireless alternatives as their data usage grows or fibre becomes available.

Figure 4:

Monthly average data usage per connection on our network

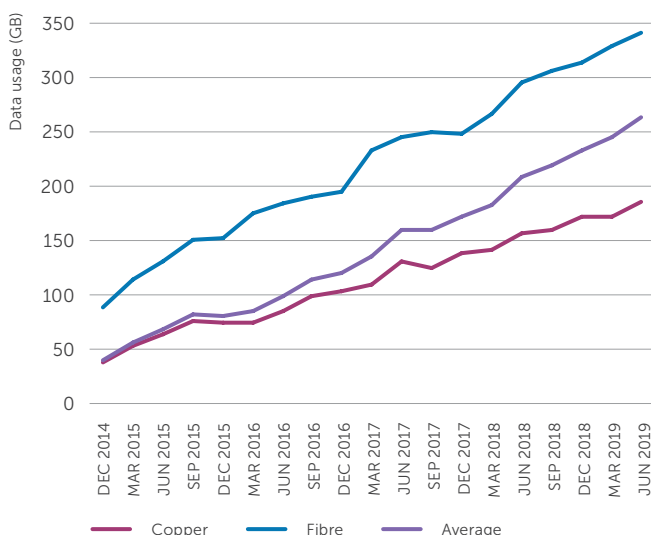
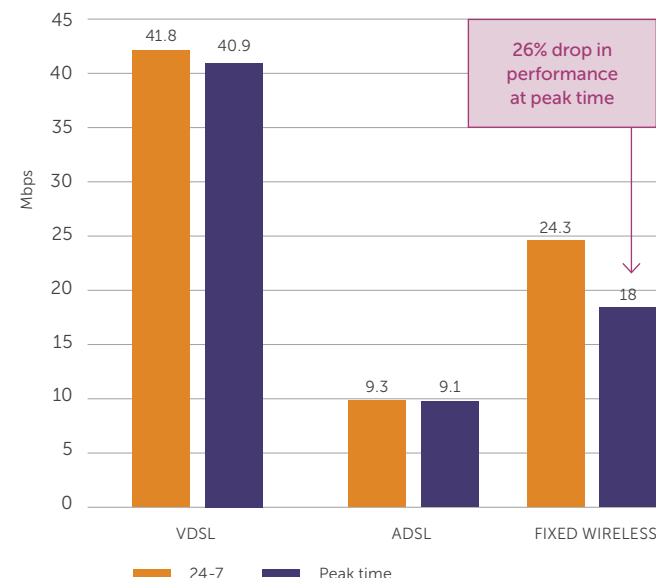


Figure 5:

Download speed: Copper line vs fixed wireless



Source: Commerce Commission, June 2019

There is much speculation about the potential future performance of 5G wireless technology and what it means for demand for fixed line networks. There have been initial 5G deployments in some countries overseas, although performance has reportedly been variable. Global 5G standards and consumer equipment are still evolving. The auction of 3.5 GHz spectrum is expected in New Zealand in early 2020, subject to Government negotiations with Māori, with national rights available for use from November 2022.

Vodafone has announced it will use its existing 3.5 GHz spectrum rights to deploy 5G services from December 2019. This will initially be in parts of Auckland, Wellington, Christchurch and Queenstown.

Initial deployments by mobile network operators are likely to be limited to existing cell towers, or sites, with the customer footprint limited accordingly. The deployment of smaller suburban cellsites is expected to be later in the future and subject to the economics of deploying the many more cellsites that would be required for widespread coverage. We, therefore, see a complementary future with 5G, because fixed line infrastructure will also be needed for backhaul and power to base stations, creating new commercial opportunities for our business.

1.5 Commercialising new services

Our innovation programme has identified a number of ways we can use our network infrastructure to provide new technology solutions for customers.

We've established three distributed data centres in exchange buildings in Auckland, Wellington and Christchurch and we're seeing a diverse mix of wholesale aggregators and IT service innovators take interest. The rise of the Internet of Things is driving the placement of computing and data analytics equipment as close as possible to where the data originates. Data processing can be done faster and more cost effectively by keeping the computing process local. Small cellsites, for example, could share network processing capability by locating one piece of equipment in a nearby exchange.

A related concept that is starting to emerge is fibre-to-the-desktop. When you have a reliable, high capacity transmission service like fibre, it means office electronics and servers no longer need to be located on-site in communications rooms. They could, for example, be located in a nearby exchange building and a third-party wholesaler might share the cost of that equipment across a range of users. We've trialled this concept in several office environments and have begun exploring its wider application.

Our fibre network has a significant role to play in bringing smart cities to life, by extending connectivity to a range of 'smart locations' outside of traditional premises. These locations include things like traffic lights, bus stops, cameras, ATMs, lifts, alarms and cell sites.

The proliferation of smart devices within homes means we have an emerging role to play in helping customers get the most out of their Wi-Fi. We've begun deploying a new Optical Network Terminal in homes that includes the ability to offer services using new Wi-Fi and residential gateway capability included in the device. We're consulting with retailers on potential service options, such as using Wi-Fi data from the device to identify, analyse and resolve customer experience issues.

The UFB rollout

We're the cornerstone partner in the Government's UFB initiative that will see a fibre to the premises network available to approximately 87% of New Zealanders by the end of 2022. Our part in the network rollout began in 2011 and will reach an estimated 1.36 million homes and businesses. At the end of FY19 we were 80% of the way through the rollout.

Building the communal fibre network past these homes and businesses is estimated to cost \$2.26 billion to \$2.37 billion, excluding the significant cost avoided by re-using our existing network assets such as ducts and poles. In addition to communal network costs, we're investing significant capital expenditure to connect each customer to the fibre network. The total cost of this will depend on the level of uptake over time.

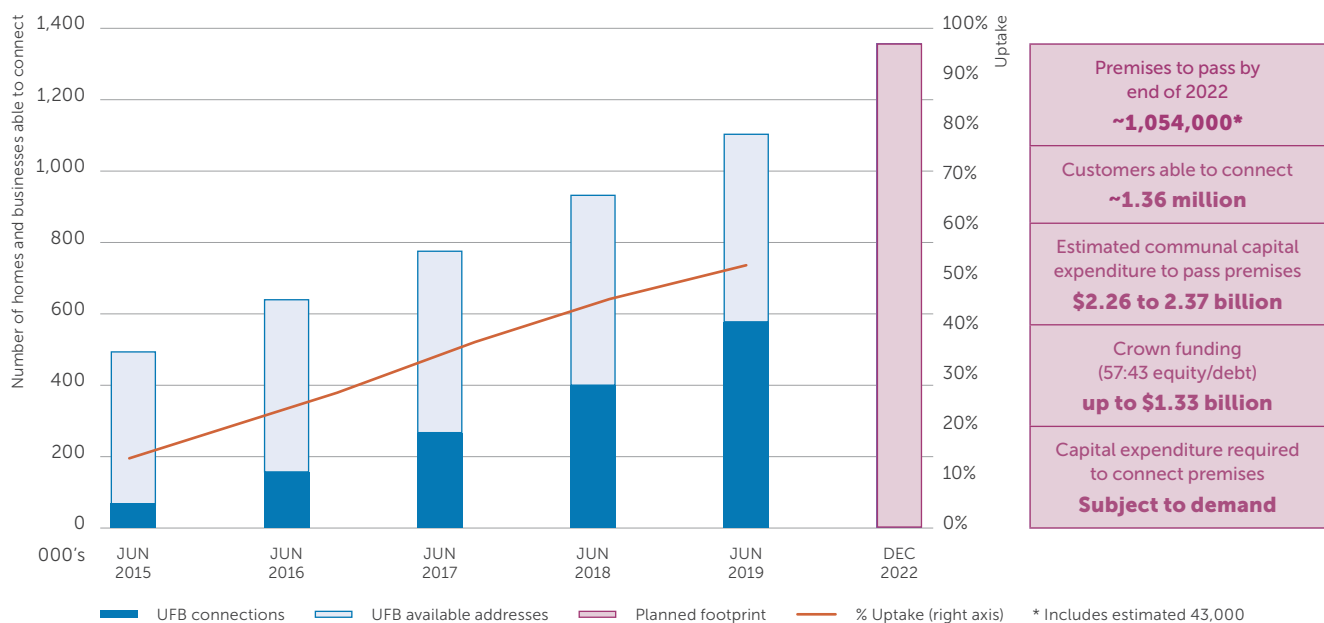
The Government is providing up to \$1.33 billion in financing. This financing was agreed to help make the business case for building the UFB network ahead of demand and acknowledging the significant risks involved, including our delivery and operational obligations, as well as the financial and step-in management remedies available to the Government.

We receive the Government financing as the network is built past premises according to our agreed deployment plan and we issue debt and equity securities in return. The debt will be redeemed in tranches from 2025 to 2036, while an increasing portion of the equity securities attract dividend payments from 2025 onwards. In the event that our credit rating fell below investment grade, we would require Crown Infrastructure Partners approval to pay a dividend on our ordinary shares and, after 2019, to continue accessing Government financing for the UFB2 rollout.

We have fixed price contracts in place for the communal network deployment and for subsequent connections to customers. These contracts are with our third party service company suppliers including Visionstream, Broadspectrum, Downer and Universal Communications Group (UCG). We work closely with our service company partners to maintain our workforce at sustainable levels so we can meet customer demand for fibre connections and deliver a good customer experience. Technicians must undergo induction training, including health and safety, before conducting any work on our behalf. We also undertake regular spot checks to ensure work meets our quality standards and customer experience expectations.

Figure 6:

UFB rollout and uptake



2.1 Health and safety

The health, safety and wellbeing of our people is paramount. This includes our direct employees and the thousands of people working on our behalf to build, connect and maintain our network. Our health and safety focus extends to anyone who is in, or in the vicinity of, our workplaces. We've established an open reporting culture and work with our contractors and suppliers to ensure their systems and procedures meet our health and safety expectations.

The number of hours worked, including our service companies, remained the same at 13 million for FY19. There was a reduction in the number of lost time injuries and injuries requiring medical treatment. The Lost Time Injury Frequency Rate (LTIFR) reduced from 1.16 in FY18 to 0.53 in FY19, while the Total Recorded Injury Frequency Rate (TRIFR) decreased from 3.10 to 2.67.

For FY20 we're focusing our efforts on the capabilities of our people, our critical risks, and continued collaboration with our service company partners to enhance health and safety practices.

2.2 Creating a fairer supply chain

We're committed to doing the right thing by people working on our behalf, including those workers who've come to New Zealand to build a better life for themselves and their families.

In April 2019, we released an independent review from MartinJenkins. We commissioned the review in October 2018 after potential breaches of employment law were identified amongst some small businesses subcontracted by two of our service companies, Visionstream and UCG.

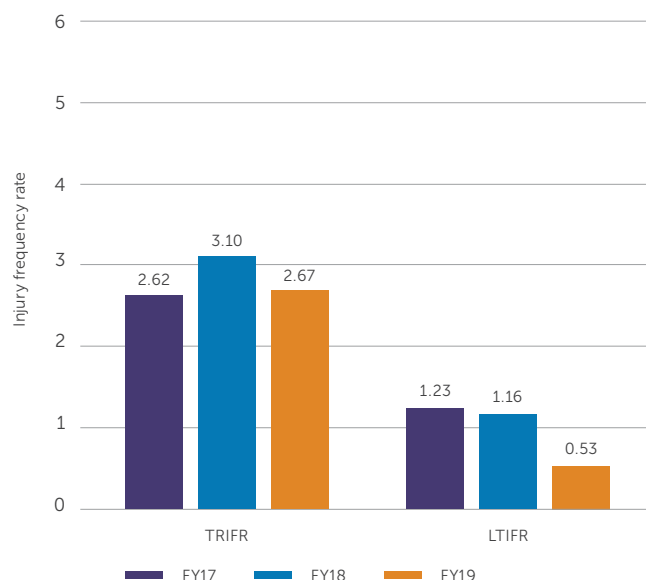
While there were no allegations that we, or our service companies, were in breach of labour standards, the Labour Inspectorate identified allegations ranging from poor labour standard practice (e.g. poor record keeping, non-payment of holiday pay) through to a small number of serious allegations of exploitation. These allegations centred on the treatment of migrant workers in our subcontractor workforce.

As soon as we were made aware of the Labour Inspectorate's concerns we worked closely with Visionstream and UCG to undertake our own independent audits of our workforce. The findings of these audits resulted in some subcontractors being stood down from working on our network, and others being given deadlines to improve their practices. Where subcontractors were stood down, we've done what we can to help transfer any affected workers to another subcontractor.

Some cases have been referred by the Labour Inspectorate to the Employment Relations Authority and we'll suspend companies from working on our network if they're found to have breached material employment laws.

Figure 7:

Injury frequency rates FY18 – FY19



LTIFR: number of lost time injuries + medical treatment injuries + restricted work injuries divided by total work hours x 1,000,000

Independent review findings

We were deeply disappointed that any workers helping build our fibre network could have been treated unfairly and we gave MartinJenkins a clear mandate to make recommendations on how to better protect workers throughout our supply chain. We asked them to look into how the issues emerged, how well we anticipated and responded to labour force risks, and whether these actions were adequate. We also asked for suggestions on how we could improve our approach to workforce management.

While the report found the vast majority of employment law breaches were low level, it identified that the way the supply chain is set up means it could still be vulnerable. It said:

- the use of migrant workers by Visionstream and UCG was expected and reasonable given the type of work and significant demand for labour in New Zealand.
- as the proportion of migrant workers increased, the model became more vulnerable to risk - this was not well understood or managed by Chorus, Visionstream, or UCG and a number of systemic improvements are required.
- when issues arose Chorus relied too heavily on the assurances given by service companies, which are not appropriate checks in a situation where there are large numbers of migrants.

MartinJenkins proposed four design principles to ensure a fair and appropriate supply chain:

- all workers engaged in the Chorus UFB supply chain should be able to earn a decent wage for a fair day's work
- suppliers must respect the labour rights of workers and take steps to ensure their supply chain is free from discrimination, harassment, corruption and bribery
- suppliers must handle all business dealings and transactions with the highest standards of integrity, transparency and honesty. Management systems must support good practice and clear accountability
- productivity improvements in the supply chain should strike the appropriate balance between the needs of the customers and the end workers

We and our service companies have committed to an extensive range of actions to implement these supply chain design principles. Some of the steps we've already taken include:

- publishing a Supplier Code of Practice to clearly outline our expectations of all suppliers and encouraging them to embrace international standards relating to human rights
- appointing an employee relations specialist to oversee service company audit programmes
- requiring service companies to appoint appropriate people to provide assurance and reporting on sub-contractor compliance with labour law obligations
- helping migrant workers transfer to new employers who meet employment standards

- setting up an independent whistleblower hotline
- establishing a fund for eligible workers unable to secure payments from their employer

We're also sharing our experiences and insights with government agencies and other businesses so they can better identify migrant labour issues. The Labour Inspectorate has acknowledged the leadership role we're taking and how our actions can be a model for other companies with subcontracted supply chains.

Transition from build to maintain

As we approach the end of the UFB rollout we are concentrating on the transition that will be required in the way we operate and maintain our network assets. Ten-year maintenance contracts for our predominantly copper-based network were agreed in 2009. We've now agreed shorter term contracts, from 1 July 2019 through to 31 March 2022, encompassing maintenance of our copper and fibre broadband networks, as well as any new fibre build outside of our planned UFB areas.

The contracts include our new Supplier Code of Practice and our tender process focused on identifying service company partners that will deliver the right mix of speed, quality and price. Given our ongoing programmes of network investment have meant a steady decline in network faults, we were conscious of the need to ensure service companies have enough volume and scope of work to provide sustainable services, as well as invest in people and infrastructure. This ultimately meant a reduction from three companies to two, with Visionstream now responsible for areas from Auckland northwards and Downer responsible for the rest of the country.

Contract scope	Maintenance of copper and fibre; fibre build outside UFB areas	Connecting premises to fibre	UFB1 network build	UFB2/2+ network build
Contractor	Downer Visionstream	Electronet UCG Visionstream	Broadspectrum Downer Electronet Visionstream	Broadspectrum Electronet Visionstream
Contract period	Until March 2022	Until September 2020	Until December 2019	Until December 2022

Regulatory environment

We operate our wholesale only network within the regulatory framework established by the Telecommunications Act. The Act was amended in 2011 to facilitate our demerger from Telecom New Zealand (now Spark). We're also subject to the requirements of four open access deeds of undertaking for copper, fibre and Rural Broadband Initiative services that focus on the provision of services on a non-discriminatory basis. This regime will remain in place outside of the revised utility model now being implemented by the Commerce Commission.

Approximately 46% of our FY19 revenues were from copper services with pricing and terms regulated by the Commerce Commission (the Commission) under the Act. The Commission set a five-year schedule of pricing for our regulated copper services in December 2015, following a detailed price review process. Our fibre services aren't currently regulated with most instead subject to contractual pricing and terms agreed with the Government as part of our UFB contracts.

3.1 Moving to a regulated utility model

In November 2018, the Telecommunications (New Regulatory Framework) Amendment Act passed into law with bipartisan political support. This marked the culmination of five years of policy review of the regulatory framework that applies to our business and the decision to transition to a utility-style framework for fibre access services.

Under the new framework our fibre investment will be regulated according to a utility style building block model from 2022. This model is already used to regulate other New Zealand utility businesses, such as electricity lines and gas networks. It is recognised as supporting private sector investment to meet network upgrades and increasing consumer demands through ongoing incentives to innovate, invest and improve efficiency for the long term benefit of customers.

Key features of the proposed regime are:

- deregulation of the copper network from 1 January 2020 in areas where fibre is available and the right to withdraw copper services, where this is appropriate, subject to a code being developed by the Commission.
- continued regulation of the copper network in areas where fibre is not available, with copper pricing adjusted for inflation.
- the regulated asset base (RAB) for fibre will include unrecovered losses incurred before 2022, with pre 2011 assets valued at depreciated historical cost and post 2011 assets at depreciated actual cost.
- Crown financing will be treated according to its actual cost to Chorus.
- key fibre prices will be frozen at 2020 pricing levels, adjusted for inflation, until 2022.
- unbundling of the fibre network in UFB1 areas on a commercial basis from 2020.

Figure 8:

New regulatory framework to replace UFB contractual framework by January 2022

87% of population where fibre will be available by end of 2022 →		Remaining 13% of population →
Fibre access network <ul style="list-style-type: none"> • Regulated asset base (RAB) with revenue cap to be determined by Commerce Commission • Price caps on contracted fibre products, with annual inflation adjustment, until 2022. Price caps then only apply to fibre voice service, a fibre broadband service and direct fibre. • Unbundled fibre (commercial price) to be available in UFB1 areas from 2020 and UFB2 areas from 2026 • Three years after new regime commences, the Commission can review the revenue cap model and anchor products, subject to specified conditions and statutory criteria 	Copper - where fibre is available: <ul style="list-style-type: none"> • Copper network to be deregulated and Telecommunications Service Obligation (TSO) removed • Chorus can withdraw copper service, subject to minimum consumer protection requirements being developed by the Commission and due by mid-2020 	Copper - where fibre is not available: <ul style="list-style-type: none"> • Copper remains regulated and TSO applies • Copper pricing capped at 2019 levels with CPI adjustments • Commission required to review pricing framework no later than 2025

The Commission is required to establish the key input methodologies that set the framework for determining the starting value of our regulated asset base, the regulatory weighted average cost of capital, cost allocations, and our maximum allowable revenue. It has been granted a one-time deferral from 1 January 2020 until 1 January 2022 to complete its implementation work. An indicative implementation timeline has been published for its various workstreams.

Indicative fibre regulation timeline

November 2019	Input methodologies draft decision due
June 2020	Input methodologies final decision due
Q4 2020	Draft price-quality path
Q2 2021	Final price-quality path

In May 2019, the Commission released an *Emerging Views Paper* setting out some of its initial thinking on key principles and parameters under the new framework. Some of the indications in the paper, particularly those relating to the potential weighted average cost of capital, were viewed negatively by investors. We and some of our institutional shareholders made submissions in response. The Commission expects to release its draft decision on the input methodologies in November 2019.

3.2 Commercial services for fibre unbundling

We've built our fibre network to enable unbundled fibre services by providing a second fibre to each premises. This means retailers can choose to use our passive infrastructure - fibre optic cables, ducts, and poles - and their own broadband electronics, to deliver services to customers. Unbundled services will be launched in our UFB1 areas from January 2020 and in UFB2 areas from 2026.

We've developed commercial terms for these services, including a monthly access charge of \$28.55 per month to cover access to the fibre between the premises and the splitter, as well as \$200 per month to access the feeder fibre from each splitter to a central network point. The pricing reflects the fact that passive infrastructure costs, known as layer 1, comprise most of our rollout investment, with broadband electronics, known as layer 2, representing a very small component.

The architecture of the fibre network, with most customers connected to street-based splitters, means the economics of fibre unbundling are different from copper unbundling, where exchange-based equipment could potentially serve much larger numbers of customers. This means fibre unbundling will most likely appeal to larger retailers. Our proposed pricing seeks to strike a fair balance between enabling fibre unbundling and ensuring a competitive playing field for all other retailers. The Commission has said that it will develop guidance on fibre equivalence and non-discrimination obligations following concerns from some retailers about our proposed pricing.

3.3 Other reviews

The Commission is developing a copper withdrawal code that it aims to have in place by mid-2020. This will detail the consumer protections and process that will regulate when we'll be permitted to stop providing copper services, in areas where an equivalent fibre service is available.

The Commission concluded its study of the backhaul market in June 2019, finding that further regulatory intervention wasn't currently necessary with charges having only a minor effect on nationwide retail broadband prices. We're reviewing our backhaul portfolio to address some anomalies and errors identified by the Commission. The Commission is required to undertake another review to consider the need for new regulated backhaul services before 2025.

Making New Zealand better

We take a long term view of our network infrastructure investments and our people take pride in delivering an asset for New Zealand's ongoing social and economic betterment. The broadband networks we build and maintain are aligned with the infrastructure-focused elements of the United Nations Sustainable Development Goals. Our networks enable sustainable cities and communities, decent work and economic growth, quality education, good health and well-being and climate action.

In 2012, Alcatel Lucent's Bell Labs estimated the rollout of fibre could contribute more than \$32 billion in economic benefits to New Zealand over 20 years. A 2017 Sapere Research Group study estimated the wider social benefits from fibre uptake at about \$2 billion annually. This was on top of a \$3 billion annual contribution business uptake could make to Gross Domestic Product.

The socio-economic benefits of gigabit access have grown with the UFB rollout target extended beyond the initial target of 75% of New Zealanders by 2020 to reach 87% of the population by the end of 2022. Our role in the extended fibre deployment will encompass more than 300 smaller towns and communities, some with as few as 50 premises.

This will build on the substantial investment we've already made in reducing the digital divide for rural communities, first through the Government's Rural Broadband Initiative (2011-2016), then our own investment in VDSL vectoring technology in FY18 to enable unlimited high-speed broadband for tens of thousands of rural homes. Our work on the Rural Broadband Initiative with Nokia was recognised on the world stage in FY19 with the *Broadband Delivering Social Impact* award at the Broadband World Forum.

Hospitals and medical centres were some of the priority customers connected by our rural and urban fibre rollout. Medical practitioners now use improved video conferencing capability to provide telemedicine consultations to their regional patients. This is reducing travel demands on doctors and patients, as well as improving the quality of patient monitoring.

The availability of fibre broadband has had a profound impact on the delivery of education in rural communities. Rural schools do not have access to as many resources as schools in urban areas and cannot always provide teachers for every subject. They rely on online classes to bridge that gap. We're now trialling how fibre cabling to individual classrooms can deliver greater capability and capacity per student, while reducing the cost of networking equipment for schools.

A divide also exists within urban and rural communities between those students that have broadband at home and those who don't. We continued our work with Network for Learning, a government education group, to solve the issue of students who are unable to access high-quality broadband at home. We activated Wi-Fi access points, connected to fibre, in more than 100 homes so students without broadband access in Lower Hutt could log in remotely to Rata Street School's online learning network. Feedback on the trial has been very positive and we're evaluating opportunities to extend its application to more schools.

Other groups or initiatives we supported during the year included:

- industry and government organisations such as TUANZ, InternetNZ, and the Local Government New Zealand conference.
- School Gateway Programmes, where we provide groups of students with onsite courses to learn about our network.
- Digital Journey, a social enterprise that delivers digital projects and initiatives to support the opportunity to use, understand and benefit from digital services.
- NZ Tech Week, with training seminars for elderly consumers to learn the benefits of broadband technology.
- Dunedin city residents with residential gigabit broadband services at entry level wholesale prices, as part of our Gigatown initiative.
- working with councils, business associations and community beautification groups, such as Keep New Zealand Beautiful, to have about 100 of our street cabinets illustrated by local artists.
- a range of community support, learning and art organisations that use subsidised space within our exchange buildings.

We believe we have an ongoing role to play in addressing the digital divide, whether it is between rural and urban areas, or between socio-economic groups within communities. We'll keep working with government to identify where our infrastructure and alternative technology solutions can help deliver better outcomes for New Zealand.

4.1 Our people

We're committed to building a culture that's inspiring for our employees and drives the desired brand experience for our customers. To help achieve this we have a new online platform that enables us to regularly monitor engagement. Our first survey assessment revealed a score of 7.6 out of 10, consistent with the middle of our international 'technology' company benchmark. This translates into an employee net promoter score of 28, showing our company values, culture and concern for wellbeing rate highly.

Employee benefits play a key part in shaping and embedding the right culture. During the year we introduced two new leave days for our people to use for their wellbeing and a group insurance programme. We continue to offer a volunteer day and in FY19 about 380 employees used this to undertake community activities such as tree planting and assisting hospices.

As our business and industry continues to evolve, we've been helping equip our people with the tools and skills needed to support the changes we're making in the way we operate. That's included programmes to foster design thinking and agile practices. These have helped increase collaboration across the organisation and deliver better customer outcomes. We're increasingly recruiting people with data-centred skills to support our focus on digital capabilities and opportunities. For more information on our people, see the *Diversity & inclusion* section on page 81.

4.2 Keeping communities connected

New Zealanders place great reliance upon the availability of our network both as a utility service for their daily lives and businesses, as well as a critical lifeline service in times of emergency. A large part of our everyday work is to ensure the 1.45 million connections on our network receive stable and reliable service. Our people and technicians often go the extra mile to keep communities connected when extreme events occur.

We kept the average duration of network interruptions to 18 hours across our fibre and copper network in FY19, down from 21 hours in FY18. We met our fibre service level targets as contracted with the Crown:

- Layer 1: actual downtime of 50 minutes vs limit of 120 minutes
- Layer 2: actual downtime of 1 minute vs limit of 30 minutes

Weather-related risks are considered by the Board as part of our evaluation of principal risks relating to network performance and availability. In line with the Task Force on Climate-related Financial Disclosure framework, we commissioned an external report in FY19 to consider the potential effects of climate change on our physical network.

This high-level desktop risk screening considered the location of our key network assets against several climate change scenarios, using published research and local and national datasets.

The report identified that exposure of existing assets is most likely to occur along the New Zealand coastline due to projected sea level rise. These areas are also expected to experience increased precipitation and storm events. Further analysis of the potential exposure to 0.5 metres in sea level rise, corresponding to projections to the year 2060 under representative concentration pathway 8.5H+, identified that in the medium term:

- five exchanges of varying size are at potential risk from coastal inundation. This includes South Dunedin where protection work is already planned.
- only 0.3% or ~260 kilometres of the total length of core fibre routes, are potentially at risk.
- less than 0.5% of all point assets (exchanges, sites, terminal enclosures, underground utility boxes, and poles) are potentially at risk. This increases to 5% of assets for a 100-year projection of three metres sea level rise.

The report is being used to further inform our existing network planning and management practices that incorporate experience from past extreme weather events. Future asset management plans will likely need to evolve as we learn more about the evolving effects of climate change.

For now, the substantial investment we've made in deploying the fibre network in recent years is already enhancing our future network resiliency for climate-related events. Fibre is less susceptible to water and lightning related faults than the cables and street-based electronics in the copper network. The fibre network has performed well in extreme weather events, including tornadoes and flooding. Moreover, some of the assets identified as being at risk are in areas where we are not the local fibre network provider and are, therefore, likely to have diminished network relevance for us in the future.

We therefore consider the potential near to medium term financial impact of climate change effects to be low.

Earthquakes remain a primary focus for our network resiliency planning given New Zealand's recent experience of several earthquakes above a 7 magnitude on the Richter scale. Network damage from these quakes was largely restricted to localised copper cables, with minimal damage to exchange buildings. We have a comprehensive insurance programme typical of large scale infrastructure utilities, covering all risks of physical damage and business interruption for above ground assets. Specific cover is provided for earthquake damage to underground cables in Auckland, Hamilton, Wellington and Dunedin. We undertake probability based loss estimate modelling to ensure that the policy limit covering material damage and business interruption is adequate.

4.3 Enabling climate action

New Zealanders' growing awareness of climate change and the proposed Government target of reducing greenhouse gas emissions to net zero by 2050, suggests there will be additional growth in the use of our broadband network as a means of reducing individuals' and organisations' carbon footprints.

Enhanced broadband connectivity opens up alternative business models and communications options that reduce the need for carbon emitting activity. We've realised these benefits for our own business through our investment in inter-office video conferencing to reduce regional travel and enhance employee collaboration. Virtual desktop connectivity also means we can provide our employees with flexible work options. The widespread availability of fibre means businesses and employees throughout most of New Zealand can adopt these technology solutions, greatly magnifying the potential environmental benefits.

As fibre uptake grows we expect our own business' carbon emissions to begin to reduce. Electricity is our largest source of emissions and the fibre network requires less electricity to operate than the existing copper network. For now, we're operating both networks in parallel, but our electricity usage should decline over time as copper broadband electronic equipment is removed from suburban cabinets and exchanges.

Vehicle related emissions should diminish further once the volume of orders for new fibre installations begins to reduce. The fibre network will also require less technician visits for provisioning and maintenance than the current copper network.

During FY19 we completed our programme to replace air conditioning units that relied on ozone depleting refrigerant.

We expect our investment in fibre to help us achieve an 80% reduction in our scope 1 and 2 emissions, from our FY12 base year, by 2030.

We've avoided a net cumulative 58 kilotonnes of carbon dioxide equivalent emissions (CO₂e) since FY12. Our FY19 emissions were 22 kilotonnes-CO₂e, 37% lower than in FY12, with reductions across all major sources. This included a reduction of 1 kilotonne of Scope 1 direct emissions, due to lower generator diesel consumption and fewer refrigerant losses.

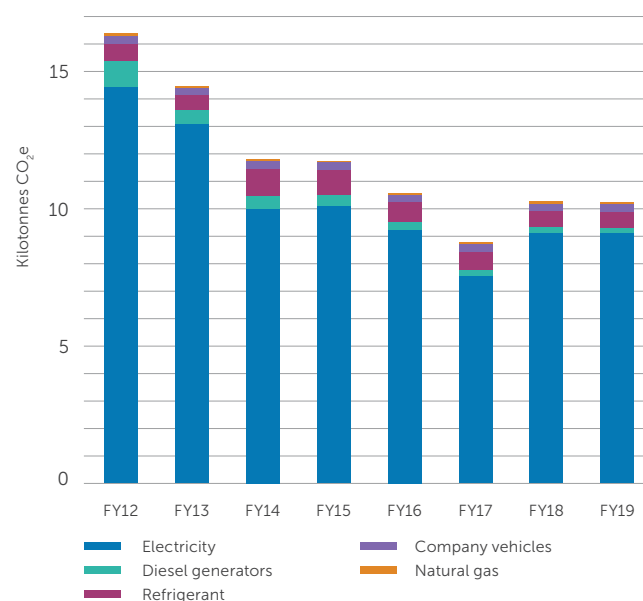
Scope 2 electricity emissions reduced by 5 kilotonnes from our FY12 base year. Network electricity consumption accounts for 87% of combined Scope 1 and 2 emissions. Emission reductions were mainly due to a greening national electricity grid, together with energy efficiency improvements. The national grid was 83% renewable this year, but more coal was used for power generation instead of natural gas in FY19. This resulted in higher carbon intensity, offsetting our electricity savings.

Scope 3 value chain emissions reduced by 7 kilotonnes from our FY12 base year, with half the reductions from service company fleet efficiencies. Our field service vehicle fleet accounts for 61% of measured Scope 3 emissions. Growing use of video conferencing systems helped limit our air travel and related emissions. Reduced electricity consumption by customers' network in our exchanges also assisted.

Our FY18 reporting achieved a B rating from CDP, a global organisation that collects self-reported environmental information.

Figure 9:

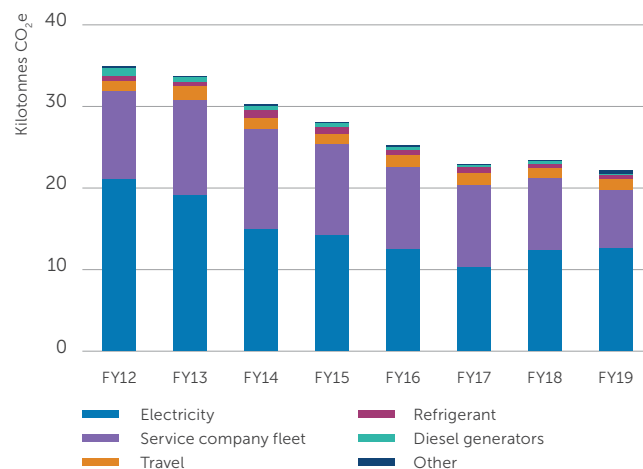
Scope 1 and 2 Emissions



Note: FY19 electricity emissions have been estimated in advance of the release of government electricity generation and emission data. Service company fleet emissions are included in Scope 3 value chain emissions because the vehicles are owned and operated by third parties.

Figure 10:

Scope 1, 2 and 3 Emissions



Note: This data excludes subcontractor vehicle emissions which were estimated to account for 5 to 10 kilotonnes-CO₂e.

4.4 Waste and recycling

We have an extensive waste minimisation process for network activities. Waste ducting from our fibre rollout is collected and re-used in the local manufacturing of new duct, while redundant metal network components are recovered for recycling. E-waste is processed to extract precious metals. In FY19 we worked with our suppliers to reduce soft plastic packaging for two of our high use provisioning products and this helped avoid 200,000 soft plastic bags entering the waste stream. No significant environmental incidents were recorded during FY19.

279 Tonnes
of **metal**
recovered
for recycling

279 Tonnes
of **ducting**
recovered
for recycling

10 Tonnes
of **e-waste**
diverted
from landfill

4.5 Cybersecurity and privacy

As a wholesale network operator our cybersecurity risks are different from those of retail service providers. We don't hold direct personal information of the consumers connecting to our network. For the limited information we hold, we adhere to the requirements of the New Zealand Privacy Act. The Telecommunications Information Privacy Code (2003) also stipulates that we must not collect telecommunications information except in limited exceptional circumstances.

Our Board receives cybersecurity reports every six months, with interim updates as required. We have detailed policies, processes, and registers to ensure cybersecurity is contemplated and addressed through technology selection, network delivery practices, and ongoing operations and protection of our IT systems. We undertake regular reviews, including external audits and ad-hoc reviews, to provide assurance and feedback on our assessments and controls. This includes testing our security incident responses and liaising with New Zealand's National Cyber Security Centre on advanced cyber threats.

There were no material cybersecurity incidents in FY19. We have insurances for key cybersecurity risks.

Outlook

Within six months' time we'll have completed the rollout of fibre across our original UFB contract areas. This means the intensity of our organisational focus on building the fibre network is now reducing, with annual rollout volumes slowing through to the end of 2022. As we continue the work already underway to reshape our business, our emphasis is shifting to what's required to maintain and operate our network.

Our overarching strategy remains simple. We'll keep connecting as many customers to fibre as fast as we can, while continuing to do everything we can to improve customer satisfaction. Digital platforms are the key to this and form a central part of our ongoing transformation programme focussed on streamlining our business. The pace of fibre uptake has encouraged us to accelerate some aspects of this programme, so we can optimise our operations earlier than previously expected.

For example, a new service company gateway will help us keep retailers and customers better informed about progress with their provisioning or fault-related activity. We're also consolidating and simplifying our management of customer interactions into a single system. Ultimately, we believe most premises already connected by fibre should be zero touch for activating broadband service and any service issues should largely be able to be resolved remotely.

Despite some of the competitive challenges we face, particularly the decline in voice only connections, we remain focussed on our aspiration of returning to modest EBITDA growth in FY20. Our modernisation activities will help remove legacy system constraints and merge some teams within our business. Declining copper connection volumes also present an opportunity for us to realise maintenance and capital expenditure savings in some areas. However, this doesn't mean we'll stop looking after the copper network. Faults on the copper network remain relatively infrequent, averaging about once every five years, and usually take less than 24 hours to repair.

The Commission has indicated it will develop a copper withdrawal code for the industry by mid-2020. Naturally, we'll take a customer-centric approach and inform consumers well in advance and in accordance with the new code. While we're starting to plan for when we might start switching off parts of the copper network in our fibre areas, that's still some time in the future and it will be on a street-by-street basis, subject to factors such as fibre uptake. In the interim, we believe retailers need to take care to avoid creating consumer confusion about the timeframes for copper switch-off. Some consumers appear to have been advised that they need to disconnect from the copper network when that isn't the case.

Strong fibre demand is expected to continue, supported by our migration programme and incentive campaigns, as well as the upcoming Rugby World Cup. This should drive further average revenue per user (ARPU) growth as customers increasingly recognise the benefits of higher speed plans. Commercialisation of our new data centre services and the promotion of business products with enhanced restoration times are other revenue priorities. We're also continuing to enhance our interaction with land developers given the ongoing growth in new premises nationwide.

We're positive about the future for fibre, but we also acknowledge that technology can change quickly in our industry. It's important that these risks are recognised and that investors have a fair opportunity to earn a return on, and of, the substantial investment we've made to bring fibre to New Zealand homes and business. This has occurred well ahead of most other countries in the world and we continue to invest ahead of demand to enable the network capacity and resilience needed for reliable high-speed broadband.

In Europe, regulators have acknowledged the risk involved in fibre investment by allowing a rate of return higher than that allowed for legacy network investment. Our investors were, therefore, surprised by the Commission's initial views on some of the parameters that will shape our allowable return on the fibre network. These parameters potentially implied one of the lowest cost of capital calculations for a regulated utility in New Zealand. Our focus is on providing clear evidence to the Commission through its ongoing processes to ensure our investors' concerns are fully and fairly reflected in future decisions.

We believe New Zealand's best interests are served by the continued development of vibrant retail competition for broadband and that open access wholesale networks are critical to this. A combination of a lack of competitive intensity, a lack of clarity for consumers, and cross-subsidies between mobile and fixed wireless services, may create structural advantages over other retailers. That's why, with the auction of the first blocks of 5G spectrum scheduled to occur in 2020, we've encouraged regulatory and government bodies to consider including allocation requirements that help ensure competition continues to emerge.

We agree with the Commission's preliminary mobile market review finding that 5G deployment will likely involve infrastructure sharing, given the use cases for 5G investment remain unclear. We've already begun trialling small cell deployments with mobile operators, building on the success of earlier innovation trials to identify alternative uses for our assets.

Infrastructure sharing at a wholesale level makes good economic sense for New Zealand, if it creates a more level playing field and fosters a healthier retail market. The UFB rollout is clear evidence of this. As our industry evolves, we'll keep exploring opportunities to leverage our infrastructure to help make New Zealand better.





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Management commentary

	2019 \$M	2018 \$M
Operating revenue	970	990
Operating expenses	(334)	(337)
Earnings before interest, income tax, depreciation and amortisation	636	653
Depreciation and amortisation	(393)	(387)
Earnings before interest and income tax	243	266
Net interest expense	(165)	(144)
Net earnings before income tax	78	122
Income tax expense	(25)	(37)
Net earnings for the year	53	85

In summary

We report earnings before interest, income tax, depreciation and amortisation (EBITDA) of \$636 million for the year ending 30 June 2019 (FY19), a decrease of \$17 million on the prior year (FY18). Net earnings decreased by \$32 million year on year.

Results for FY19 largely reflect the annualised revenue impact of declining copper connections, partly offset by increased fibre uptake and continued tight control of expenses.

Capital expenditure of \$804 million was below the FY19 guidance range of \$820 million to \$860 million. The

decrease from FY18 capital expenditure of \$810 million reflected significant reductions in copper capital expenditure, which more than offset increased spend on fibre connections.

We will pay a final dividend of 13.5 cents per share on 8 October 2019 and the dividend reinvestment plan will be available. For FY20, we expect to pay a dividend of 24 cents per share, subject to no material adverse changes in circumstances or outlook.

	Connections 30 Jun 2019	Connections 31 Dec 2018	Connections 30 Jun 2018
Fibre broadband (GPON)	599,000	517,000	433,000
Fibre premium (P2P)	11,000	12,000	12,000
Copper VDSL	270,000	295,000	321,000
Copper ADSL	327,000	374,000	433,000
Data services over copper	5,000	5,000	6,000
Unbundled copper	24,000	39,000	53,000
Baseband copper	214,000	244,000	268,000
Total fixed line connections	1,450,000	1,486,000	1,526,000

Revenue commentary

	2019 \$M	2018 \$M
Fibre broadband (GPON)	294	198
Fibre premium (P2P)	74	78
Copper based voice	106	133
Copper based broadband	344	421
Data services over copper	18	27
Value added network services	30	33
Infrastructure	24	23
Field services products	74	70
Other	6	7
Total revenue	970	990

Revenue overview

Our product portfolio encompasses a broad range of wholesale broadband, data and voice services across a mix of regulated, contracted, and commercial products. Revenues of \$970 million were down compared to revenue of \$990 million for the prior period. This largely reflects the continued reduction in total fixed line connections from FY18, as customers migrated to alternative fibre and wireless networks. Line losses in FY19 were predominantly voice only copper connections, with broadband connection growth higher than in FY18.

Fibre broadband (GPON)

Fibre broadband revenues continue to grow as customers migrate to our growing fibre network and broadband penetration increases. GPON Fibre connections grew by 38% to 599,000, with about 71% of connections on 100/20 Mbps plans compared to 69% in FY18.

Demand for 1 Gbps plans almost doubled during the year, growing to 58,000 connections, driven by growing consumer demand for high speed connections and our incentive campaigns to encourage retailers to promote higher speed plans.

Fibre premium (P2P)

Fibre premium (point to point) revenues reduced as customers migrated from legacy High Speed Network Service Premium and Bandwidth Fibre Access Service

connections to lower cost inputs, or alternative fibre networks. Direct Fibre Access Service and other backhaul connections grew to 5,300 and 1,700 connections respectively.

Copper based voice

Copper based voice revenues continue to decline as customers migrate from copper to either a fibre based connection on our network, or to alternative fibre and wireless networks. The pace of decline increased in FY19 as retailers promoted their wireless voice services, leading to a reduction of 54,000 baseband copper connections, up from 45,000 lines in FY18. Unbundled copper connections declined at the same rate as the prior year.

Data services over copper

Data services over copper connections continued to decline as retailers transition business customers from legacy services to cheaper fibre based services, either on our fibre network, or on alternative local and CBD fibre networks.

Copper based broadband

Copper based broadband revenues are declining as customers migrate from our ADSL and VDSL broadband services to either our fibre network, or alternative fibre and wireless networks. ADSL connections continued to reduce as retailers upgraded customers to better VDSL or fibre services. However, the number of VDSL connections declined because our ongoing fibre rollout enabled more VDSL customers to upgrade to fibre.

Value added network services

There was a slight decline in value added network services revenue. The main driver for this category is national data transport services, which provides network connectivity across legacy backhaul links and aggregation handover links.

Infrastructure

Infrastructure revenues remained flat year on year and relate to services that provide access to our network assets, such as renting exchange space for commercial co-location purposes. While there was ongoing growth in demand for commercial co-location, this was largely offset by a reduction in demand for unbundled copper access space.

Field services

Field services revenue increased by \$4 million relative to FY18, largely reflecting growth in revenue from new property developments work. Revenue in this category can vary depending on cost recovery for damage to our network and third party demand (e.g. provisioning, cable location services, maintaining retailer networks and network relocation requests).

Other

Other income largely consists of revenue generated from the provision of billing and network management services to Spark. This continued to decrease in line with a reduction in services provided. Other items include dividends received from electricity trusts that supply us with electricity and any other minor income.

Expenditure commentary

Operating expenses

	2019 \$M	2018 \$M
Labour	74	73
Network maintenance	75	87
Other network costs	33	34
Information technology	50	54
Rent and rates	13	9
Property maintenance	17	15
Electricity	17	15
Provisioning	6	6
Insurance	3	3
Consultants	7	5
Regulatory levies	16	13
Other	23	23
Total operating expenses	334	337

Operating expenditure of \$334 million is lower than FY18 by \$3 million. Significant savings were made in network maintenance (\$12 million) and information technology costs (\$4 million) as a result of specific cost reduction efforts. These were offset by small increases across a range of other operational and regulatory related cost lines.

Labour

Labour of \$74 million represents staff costs that are not capitalised. At 30 June 2019 we had 918 permanent and fixed term employees, a further 2% reduction from 30 June 2018 of 933 employees. This reflects our ongoing improvement of process and system workflows through the adoption of digital systems, together with reviews of our organisational structure as we begin to move from a build to a more operational focus. There were one-off restructuring costs of \$1.5 million in FY19.

Network maintenance

Network maintenance costs reduced by \$12 million (14%) from FY18. This was due to fewer network faults and technician visits as a result of a number of factors, including:

- fewer extreme weather events than in FY18 and notably dry conditions in the upper North Island;
- retailers using our new Application Programme Interface tools to better identify which faults don't require technician visits;
- underlying fault volumes decreased as a greater proportion of customers are connected to the newer fibre network and our total connection numbers reduced.

While the volume of technician visits reduced, the average cost per fault increased. This is because the mix of faults shifted from lower cost chargeable work at customer premises, to higher cost faults within our fibre and copper street network.

Other network costs

Other network costs relate to costs associated with service partner contract costs, engineering services, fibre access costs from third parties, warehousing costs, fibre order cancellation costs and the cost of network spares. The nature of other network costs tends to be more variable, with the value incurred in the year dependent on various project related activities.

Information technology

Information technology costs continued to reduce and were down a further \$4 million (7%) in FY19 as we maintained tight cost control to offset inflation. We continued to replace legacy shared systems with our own in-house solutions, including a new billing platform. These solutions are enabling lower IT maintenance and support costs.

Rent and rates

Rent and rates costs relate to the operation of our network estate including exchanges, radio sites and roadside cabinets. These costs include rates that are levied on network assets both above and below ground. Rates continue to increase because the UFB rollout results in higher rateable values for our network assets.

Property maintenance

Property maintenance costs have continued to increase as we complete previously deferred maintenance activity.

Electricity

Electricity costs were slightly higher in FY19 due to higher electricity prices. About 50% of our electricity requirements have been hedged, with a current end date of June 2020.

Consultants

Consultant costs increased by \$2 million (40%) as we received external advice related to the implementation of the new regulatory regime. Costs directly attributable to the final models used in submissions to the Commerce Commission (the Commission) have been capitalised.

Regulatory levies

Regulatory levies reflects the amount paid for the Telecommunications Development Levy and the Telecommunications Regulation Levy. We have allowed for \$3 million in FY19 in anticipation of the Commission establishing a levy regime to fund the implementation of the new regulatory framework.

Other

Other costs include expenditure on general costs such as advertising, telecommunications, travel, training and legal fees. Our cost control programme held expenses flat in FY19.

Depreciation and amortisation

	2019 \$M	2018 \$M	Estimated useful life (years)	Weighted average useful life (years)
Fibre cables	90	78	20	20
Ducts, manholes and poles	48	42	20-50	49
Copper cables	61	51	10-30	22
Cabinets	41	41	5-20	15
Property	15	15	5-50	25
Network electronics	60	65	2-25	9
Right of use assets	13	13	10-50	28
Other	–	–	2-10	6
Less: Crown funding	(25)	(22)		
Total depreciation	303	283		
Software	56	61	2-10	5
Other intangibles	–	–	6-35	22
Customer retention	34	43	0-4	2
Total amortisation	90	104		

The weighted average useful life represents the total useful life in each category weighted by the net book value of the assets.

During FY19, \$804 million of expenditure on network assets and software was capitalised. The 'UFB communal' and 'Fibre connections and fibre layer 2' included in 'fibre' capital expenditure was largely capitalised against the network assets categories of fibre cables (42%) and ducts, poles and manholes (40%). The average depreciation rate for UFB communal infrastructure spend is based on an estimated life of 39 years, reflecting the very high proportion of long life assets being constructed.

We considered the useful life of copper cables in Chorus UFB1 areas and, due to strong fibre uptake, depreciation of these cables is being accelerated at a rate of approximately \$11 million per annum, so they will be fully depreciated by 30 June 2025.

Software and other intangibles largely consist of the software components of billing, provisioning and operational systems, including spend on Spark-owned shared systems.

We expect that incremental costs incurred in acquiring new contracts with new and existing customers are recoverable. These costs are capitalised as customer retention assets. Capitalised customer retention assets are amortised against expenses when related revenues are recognised either upfront or over the life of the contract (currently estimated to be within a maximum of four years). In FY19, the amount of amortisation was \$34 million and there was no impairment in relation to the costs capitalised.

Our depreciation profile is expected to continue to change, reflecting the greater mix of longer dated UFB assets being built. The offset of Crown funding against depreciation is expected to continue to increase over time as the amount of funding received from the Crown accumulates, with the associated amortisation credit to depreciation increasing accordingly.

Finance income and expense

(Income)/expense	2019 \$M	2018 \$M
Finance income	(10)	(7)
Interest on syndicated bank facility	5	4
Interest on EMTN – GBP	53	53
Interest on EMTN – EUR	39	39
Interest on fixed rate NZD bonds	31	18
Other interest expense	26	22
Capitalised interest	(4)	(4)
Interest costs	150	132
Fair value adjustment on interest rate swaps not in hedge relationship	(3)	(3)
Ineffective portion of changes in fair value of cash flow hedges	6	5
Total finance expenses excluding CIP securities (notional) interest	153	134
CIP securities (notional) interest	22	17
Total finance expense	175	151

Interest costs increased by \$18 million year on year due to the issuance of a new \$500 million domestic bond in December 2018. The new bond helped reduce the weighted effective interest rate on debt to 5.75% (FY18: 5.96%). A portion of this bond has been held in term deposits to be utilised at a later date. This has led to a higher cash balance in FY19, and resulted in a \$3 million increase in finance income.

Other interest expense includes lease interest of \$20 million (FY18: \$18 million), \$3 million amortisation (FY18: \$3 million) arising from the difference between fair value and proceeds realised from the GBP Euro Medium Term Note (EMTN) interest rate swap reset in 2013 and a \$2 million one-off expense in FY19 for restructuring two forward dated interest rate swaps.

At a minimum, we aim to maintain 50% of our debt obligations at a fixed rate of interest. We have fully hedged the foreign exchange exposure on the GBP and EUR EMTNs with cross currency interest rate swaps. The floating interest on the GBP cross currency interest rate swaps has been fully hedged using interest rate swap instruments, along with a portion of the floating interest on the EUR cross currency interest rate swaps.

Ineffectiveness

The foreign exchange exposure on the EUR EMTN has been fully hedged and interest rate exposure partially hedged. For hedge accounting purposes the hedging relationship consists of a fair value hedge and two cash flow hedges.

The GBP EMTN hedging relationship was reset with a fair value of \$49 million on 9 December 2013 following the close out of the interest rate swaps relating to the EMTN. This amount is being amortised over the life of the derivative and flows as ineffectiveness in the income statement. As at 30 June 2019 a further \$2 million remains in the hedge reserve to be amortised in relation to this reset. In FY19, ineffectiveness of \$6 million (FY18: \$7 million) flowed through interest expense relating to the amortisation of this reset.

Taxation

The 2019 effective tax rate of 32% (FY18: 30%) is higher than the statutory rate of 28% due to permanent differences arising between accounting and taxable income due to the different treatment of Crown Infrastructure Partner (CIP) securities and Rural Broadband Initiative (RBI) funding and assets for tax. The accounting adjustments recognised in relation to CIP securities are non taxable as confirmed via binding rulings issued by Inland Revenue. RBI assets were funded by a non taxable government grant and RBI assets are not depreciated for tax. The accounting amortisation of RBI government grants and RBI accounting depreciation recognised in the profit and loss is added back as a permanent difference for tax.

Capital expenditure commentary

	2019 \$M	2018 \$M
Fibre	664	620
Copper	81	132
Common	59	58
Gross capital expenditure	804	810

Gross capital expenditure for the year to 30 June 2019 was \$804 million. This was \$16 million below the FY19 guidance range of \$820 million to \$860 million and \$6 million below FY18 gross capital expenditure spend. Increased fibre connection

capital expenditure was offset by reduced copper capital expenditure due to lower customer retention costs in FY19 and FY18 spend including about \$20 million of work to deploy VDSL vectoring technology.

Fibre capital expenditure

	2019 \$M	2018 \$M
UFB communal	245	231
Fibre connections and fibre layer 2 ¹	308	294
Fibre products and systems	17	17
Other fibre connections and growth	65	65
Customer retention	29	13
Total fibre capital expenditure	664	620

1 Layer 2 equipment, such as gigabit capable passive optical network ports, are installed ahead of demand as the UFB footprint expands.

Fibre capital expenditure includes spend specifically focused on fibre assets and represented about 83% of our FY19 gross capital expenditure spend, up from 76% in FY18.

The cost of the deployment of the UFB communal network for FY19 was \$245 million, including about \$105 million for the UFB2 rollout (FY18: \$60 million).

The average cost per UFB1 brownfields premises passed during the year was \$1,573. This was in the top half of FY19 guidance for an average cost of \$1,500 to \$1,600.

Fibre connections and layer 2 spend was \$308 million with fibre connections installed for 186,000 customers nationwide. This was an increase of 30,000 installations year on year and included 14,000 UFB2 connections.

About \$77 million was upfront investment for 'backbone' network to enable the connection of multiple customers located along rights of way and multi-dwelling units.

The average UFB1 cost per premises connected for standard residential premises and some non-standard single dwelling unit installations and service desk costs was \$1,025, excluding the long run average cost of layer 2 equipment. This was at the lower end of the expected FY19 cost range of \$1,000 to \$1,150.

Investment in other fibre connections and growth was flat at \$65 million.

Fibre customer retention costs increased by \$16 million, reflecting an increased focus on fibre product incentives.

Copper capital expenditure

	2019 \$M	2018 \$M
Network sustain	44	45
Copper connections	2	2
Copper layer 2	12	34
Product fixed	1	4
Customer retention	22	47
Total copper capital expenditure	81	132

Copper capital expenditure decreased by \$51 million from FY18.

Network sustain capital expenditure continued at FY18 levels because of an ongoing pole replacement programme outside our fibre areas and replacement of legacy rural network.

Copper layer 2 spend decreased following the conclusion of the VDSL vectoring technology rollout in FY18.

Customer retention costs decreased by \$25 million reflecting an increased focus on fibre product incentive offers and fewer technician visits for copper provisioning.

Common capital expenditure

	2019 \$M	2018 \$M
Information technology	34	35
Building and engineering services	22	20
Other	3	3
Total common capital expenditure	59	58

Common capital expenditure of \$59 million was consistent with the prior year.

Contributions to capital expenditure

We received \$9 million in contributions towards our gross capital expenditure. These contributions are included as part of Crown funding and represent instances where central or

local government authorities asked us to relocate or rebuild existing network.

Long term capital management

We will pay a final dividend of 13.5 cents per share on 8 October 2019 to all holders registered at 5.00pm 24 September 2019. The shares will be quoted on an ex-dividend basis from 23 September 2019. The dividends paid will be fully imputed, at a ratio of 28/72, in line with the corporate income tax rate. In addition, a supplementary dividend of 2.4 cents per share will be payable to shareholders who are not resident in New Zealand.

The dividend reinvestment plan will remain in place for the final dividend at a discount rate of 3%. Shareholders who have previously elected to participate in the dividend reinvestment plan do not need to take any further action. For those shareholders who wish to participate, election notices to participate must be received by 5.00pm (NZ time) on 25 September 2019.

The Board expects to update the dividend policy once the Commission finalises the value of our regulated asset base and regulated revenue for fibre, currently due in June 2021.

Until then, the Board expects to be able to provide shareholders with modest dividend growth, subject to no material adverse changes in circumstance or outlook.

For FY20, we expect to pay a dividend of 24 cents per share, subject to no material adverse changes in circumstance or outlook.

The Board considers that a 'BBB' 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. At 30 June 2019, we had a long term credit rating of BBB/stable outlook by Standard & Poor's and Baa2/stable by Moody's Investors Service.

The GBP EMTN of \$491 million is due for repayment in April 2020, and is therefore a current liability. Refinancing of this bond is planned for FY20. If refinancing was not achievable for any reason, undrawn bank debt facilities of \$550 million and cash balances of \$273 million are available as an alternative option to use for repayment.



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Independent auditor's report



To the shareholders of Chorus Limited

Report on the consolidated financial statements

Opinion

In our opinion, the accompanying consolidated financial statements of Chorus Limited (the 'company') and its subsidiaries (the 'Group') on pages 33 to 65:

- present fairly in all material respects the Group's financial position as at 30 June 2019, its financial performance and cash flows for the year ended on that date; and
- comply with New Zealand Equivalents to International Financial Reporting Standards (NZ IFRS) and International Financial Reporting Standards.

We have audited the accompanying consolidated financial statements which comprise:

- the consolidated statement of financial position as at 30 June 2019;
- the consolidated income statement, statements of other comprehensive income, changes in equity and cash flows for the year then ended; and
- notes, including a summary of significant accounting policies and other explanatory information.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (New Zealand) ('ISAs (NZ)'). We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of the Group in accordance with Professional and Ethical Standard 1 (Revised) Code of Ethics for Assurance Practitioners issued by the New Zealand Auditing and Assurance Standards Board and the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants ('IESBA Code'), and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code.

Our responsibilities under ISAs (NZ) are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report.

Our firm has also provided other services to the Group in relation to regulatory audit services, tax compliance services and other assurance and advisory services. Subject to certain restrictions, partners and employees of our firm may also deal with the Group on normal terms within the ordinary course of trading activities of the business of the Group. These matters have not impaired our independence as auditor of the Group. The firm has no other relationship with, or interest in, the Group.

Materiality

The scope of our audit was influenced by our application of materiality. Materiality helped us to determine the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and on the consolidated financial statements as a whole. The materiality for the consolidated financial statements as a whole was set at \$5.9 million, determined with reference to a benchmark of Group profit before tax. We chose the benchmark because, in our view, this is a key measure of the Group's performance.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements in the current period. We summarise below those matters and our key audit procedures to address those matters in order that the shareholders as a body may better understand the process by which we arrived at our audit opinion. Our procedures were undertaken in the context of and solely for the purpose of our statutory audit opinion on the consolidated financial statements as a whole and we do not express discrete opinions on separate elements of the consolidated financial statements.

The key audit matter

How the matter was addressed in our audit

Capitalisation of assets

Refer to Note 1 to the Financial Statements.

During the year ended 30 June 2019 the Group has spent \$711 million in network asset additions as it continues with its purpose of bringing better broadband to New Zealanders. Capitalisation of these costs and useful lives assigned to these assets are a key audit matter due to the significance of network assets to the Group's business, and due to the judgement involved in the:

Our audit procedures included:

- Examining that the controls to recognise capital projects in the fixed asset register and the approval of the asset life annual review are effective.
- Assessing the nature of costs incurred in capital projects by checking a sample of costs to invoice to determine whether the description of the expenditure met the capitalisation criteria.

The key audit matter	How the matter was addressed in our audit
Capitalisation of assets (continued)	
<ul style="list-style-type: none"> – decision to capitalise or expense costs relating to the network. This decision depends on whether the expenditure is considered to enhance network capability (and therefore capital), or to maintain the current operating capability of the network (and therefore an expense); – estimation of the stage of completion of assets under construction; and – estimation of the useful life of the asset once the costs are capitalised. There is also judgment when estimating asset lives due to the uncertainty of the impact of technological change. 	<ul style="list-style-type: none"> – Evaluating a sample of assets under construction in which no costs had been incurred in the final three months of the financial reporting period. We challenged the status of those assets under construction to determine whether they remained appropriately capitalised. – Assessing, on a sample basis, whether the accruals recorded for assets under construction were calculated in accordance with the progress of construction and the arrangements with external suppliers. – Assessing the useful economic lives of the assets, by comparing to our knowledge of the business and its operations and industry benchmarks.

Chorus funding

Refer to Notes 4, 6, 7 and 19 to the Financial Statements.

The CIP securities and interest rate derivatives are a key audit matter due to their significance to the Group's consolidated statement of financial position. There is complexity and judgement involved in determining the appropriate valuation and accounting treatment for the interest rate derivatives and the CIP securities.

Our audit procedures to assess the valuation and accounting treatment for the Group's interest rate derivatives and CIP securities included:

- Our financial instrument specialists re-valuing all interest rate derivatives using valuation models and inputs independent from those utilised by management.
- Evaluating the hedge effectiveness of the interest rate derivatives hedging the GBP and EUR denominated Euro Medium Term Notes. In both instances, our financial instrument specialists assessed the effectiveness of these hedges by independently modelling the future changes in the value of these instruments to assess whether the underlying derivatives were effective.
- Assessing the accounting treatment of the CIP securities. We read the underlying loan agreement and analysed the various features of the loan agreement to determine whether the CIP securities were a debt or equity instrument.
- Evaluating the valuation of the CIP securities. Our valuation specialists assessed the methodology used by management for determining the amounts allocated to debt and government grant.
- Assessing the inputs used in the valuation of the CIP securities. On a sample basis we compared interest rates and credit spreads to independent sources of information to determine an acceptable range of valuation inputs.

Revenue recognition

Refer to Note 9 to the Financial Statements.

Accuracy of revenue is considered to be a key audit matter due to the nature of the underlying billing processes that existed following the Chorus demerger from Spark in 2011.

There are certain legacy products where the billing is based on network consumption which cannot be easily linked to a physical end user connection. There is a risk that revenue billed on this basis may be disputed by Chorus' customers who have a different view of their consumption of the Chorus network.

Our audit procedures included:

- Evaluating the Group's recognition of revenue by assessing any revenue disputes recorded in the industry's dispute reporting tool by Chorus customers. We compared the disputes raised by Chorus customers to the revenue recorded by Chorus and checked a sample of settled disputes to the final settlement agreements.
- Independently confirming the accuracy of a sample of outstanding debtor balances with Chorus customers.
- Agreeing a sample of revenue adjustments recorded during the year to authorised credit notes.

Other information

The Directors, on behalf of the Group, are responsible for the other information included in the entity's Annual Report. Other information includes the Chorus Board and management overview, management commentary, disclosures relating to corporate governance and statutory information. Our opinion on the consolidated financial statements does not cover any other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Use of this independent auditor's report

This independent auditor's report is made solely to the shareholders as a body. Our audit work has been undertaken so that we might state to the shareholders those matters we are required to state to them in the independent auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the shareholders as a body for our audit work, this independent auditor's report, or any of the opinions we have formed.

Responsibilities of the Directors for the consolidated financial statements

The Directors, on behalf of the Group, are responsible for:

- the preparation and fair presentation of the consolidated financial statements in accordance with generally accepted accounting practice in New Zealand (being New Zealand Equivalents to International Financial Reporting Standards);
- implementing necessary internal control to enable the preparation of a consolidated set of financial statements that is fairly presented and free from material misstatement, whether due to fraud or error; and
- assessing the ability to continue as a going concern. This includes disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless they either intend to liquidate or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objective is:

- to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error; and
- to issue an independent auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs NZ will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error. They are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of these consolidated financial statements is located at the External Reporting Board (XRB) website at:

<http://www.xrb.govt.nz/standards-for-assurance-practitioners/auditors-responsibilities/audit-report-1/>

This description forms part of our independent auditor's report.

The engagement partner on the audit resulting in this independent auditor's report is Ed Loudon

For and on behalf of



KPMG
Wellington
26 August 2019

Income statement

For the year ended 30 June 2019

(Dollars in millions)	Notes	2019 \$M	2018 \$M
Operating revenue	9	970	990
Operating expenses	10	(334)	(337)
Earnings before interest, income tax, depreciation and amortisation		636	653
Depreciation	1	(303)	(283)
Amortisation	2	(90)	(104)
Earnings before interest and income tax		243	266
Finance income		10	7
Finance expense	4	(175)	(151)
Net earnings before income tax		78	122
Income tax expense	14	(25)	(37)
Net earnings for the year		53	85
Earnings per share			
Basic earnings per share (dollars)	17	0.12	0.20
Diluted earnings per share (dollars)	17	0.10	0.16

Statement of comprehensive income

For the year ended 30 June 2019

(Dollars in millions)	Note	2019 \$M	2018 \$M
Net earnings for the year		53	85
Other comprehensive income			
Items that will be reclassified subsequently to the income statement when specific conditions are met			
Movements in effective cash flow hedges	19	(45)	(3)
Amortisation of de-designated cash flow hedges transferred to Income statement	19	(2)	(1)
Movement in cost of hedging reserve	19	–	(3)
Other comprehensive income net of tax		(47)	(7)
Total comprehensive income for the year net of tax		6	78

The accompanying notes are an integral part of these financial statements.

Statement of financial position

As at 30 June 2019

(Dollars in millions)	Notes	2019 \$M	2018 \$M
Current assets			
Cash and call deposits	15	273	50
Income tax receivable		11	15
Trade and other receivables	11	140	154
Derivative financial instruments	19	3	3
Finance lease receivable	5	6	5
Total current assets		433	227
Non-current assets			
Derivative financial instruments	19	56	74
Trade and other receivables	11	7	7
Deferred tax receivable	14	101	82
Customer retention assets	3	61	42
Software and other intangibles	2	137	140
Network assets	1	4,823	4,439
Total non-current assets		5,185	4,784
Total assets		5,618	5,011
Current liabilities			
Trade and other payables	12	360	370
Income tax payable		2	3
Lease payable	5	8	6
Derivative financial instruments	19	197	19
Debt	4	491	–
Total current liabilities excluding Crown funding		1,058	398
Crown funding	7	25	21
Total current liabilities		1,083	419
Non-current liabilities			
Deferred tax payable	14	326	306
Derivative financial instruments	19	91	210
Lease payable	5	246	237
Debt	4	1,741	1,807
Total non-current liabilities excluding CIP and Crown funding		2,404	2,560
Crown Infrastructure Partners (CIP) securities	6	355	273
Crown funding	7	797	737
Total non-current liabilities		3,556	3,570
Total liabilities		4,639	3,989
Equity			
Share capital	16	638	590
Reserves	19	(83)	(36)
Retained earnings		424	468
Total equity		979	1,022
Total liabilities and equity		5,618	5,011

The accompanying notes are an integral part of these financial statements.

The financial statements are approved and signed on behalf of the Board.


Patrick Strange
 Chair


Kate McKenzie
 Chief Executive Officer and Managing Director

Authorised for issue on 26 August 2019

Statement of changes in equity

For the year ended 30 June 2019

(Dollars in millions)	Notes	Share capital \$M	Retained earnings \$M	Hedging-related reserves \$M	Total \$M
Balance at 1 July 2017		520	473	(29)	964
Comprehensive income					
Net earnings for the year		–	85	–	85
Other comprehensive income					
Changes in cash flow hedge reserve	19	–	–	(3)	(3)
Amortisation of de-designated cash flow hedges transferred to income statement	19	–	–	(1)	(1)
Movement in cost of hedging reserve	19	–	–	(3)	(3)
Total comprehensive income		–	85	(7)	78
Contributions by and (distributions to) owners:					
Dividends	16	–	(90)	–	(90)
Supplementary dividends		–	(10)	–	(10)
Tax credit on supplementary dividends		–	10	–	10
Dividend reinvestment plan	16	47	–	–	47
Issue of new shares	16	23	–	–	23
Total transactions with owners		70	(90)	–	(20)
Balance at 30 June 2018		590	468	(36)	1,022
Comprehensive income					
Net earnings for the year		–	53	–	53
Other comprehensive income					
Changes in cash flow hedge reserve	19	–	–	(45)	(45)
Amortisation of de-designated cash flow hedges transferred to income statement	19	–	–	(2)	(2)
Total comprehensive income		–	53	(47)	6
Contributions by and (distributions to) owners:					
Dividends	16	–	(97)	–	(97)
Supplementary dividends		–	(12)	–	(12)
Tax credit on supplementary dividends		–	12	–	12
Dividend reinvestment plan	16	48	–	–	48
Total transactions with owners		48	(97)	–	(49)
Balance at 30 June 2019		638	424	(83)	979

The accompanying notes are an integral part of these financial statements.

Statement of cash flows

For the year ended 30 June 2019

(Dollars in millions)	Notes	2019 \$M	2018 \$M
Cash flows from operating activities			
<i>Cash was provided from/(applied to):</i>			
Cash received from customers		966	1,002
Finance income		1	3
Payment to suppliers and employees		(339)	(350)
Taxation paid	14	(3)	(30)
Interest paid		(129)	(117)
Net cash flows from operating activities		496	508
Cash flows applied to investing activities			
<i>Cash was from/(applied) to:</i>			
Purchase of network and intangible assets		(806)	(766)
Capitalised interest paid		(4)	(4)
Net cash flows applied to investing activities		(810)	(770)
Cash flows from financing activities			
<i>Cash was provided from/(applied to):</i>			
Net outflow from leases		(21)	(15)
Crown funding (including CIP securities)		167	117
Issuance of share capital		–	23
Proceeds from debt		500	70
Repayment of debt		(60)	(10)
Dividends paid		(49)	(43)
Net cash flows from financing activities		537	142
Net cash flow		223	(120)
Cash at the beginning of the year		50	170
Cash at the end of the year	15	273	50

Reconciliation of net earnings to net cash flows from operating activities

(Dollars in millions)	2019 \$M	2018 \$M
Net earnings for the year	53	85
<i>Adjustment for:</i>		
Depreciation charged on network assets	328	305
Amortisation of Crown funding	(25)	(22)
Amortisation of software and other intangible assets	90	104
Deferred income tax	18	21
Ineffective portion of changes in fair value of cash flow hedges	6	5
Movement in cost of hedging reserve	–	3
Other	19	9
	489	510
<i>Change in current assets and liabilities:</i>		
Decrease/(increase) in trade and other receivables	14	(15)
(Decrease)/increase in trade and other payables	(10)	24
Decrease/(increase) in tax receivable	4	(11)
Decrease in tax liability	(1)	–
	7	(2)
Net cash flows from operating activities	496	508

The accompanying notes are an integral part of these financial statements.

Reconciliation of movements of liabilities to cash flows arising from financing activities

	Debt \$M	Crown funding \$M	CIP securities \$M	Lease payable (net) \$M	Share capital \$M	Retained earnings \$M
Balance at 1 July 2017	1,609	698	203	154	520	473
Movements from cash flows						
Payment of lease liabilities	–	–	–	(15)	–	–
Proceeds from funding	70	76	41	–	–	–
Proceeds from repayment of borrowings	(10)	–	–	–	–	–
Proceeds from issue of share capital	–	–	–	–	23	–
Dividends paid	–	–	–	–	–	(43)
Total changes from financing cash flows	60	76	41	(15)	23	(43)
Non-cash movements						
Movements in fair value (including foreign exchange rates)	135	–	–	–	–	–
Transaction costs and amortisation related to financing	3	(22)	17	–	–	–
Accruals	–	6	12	–	–	–
Dividend reinvestment plan	–	–	–	–	47	(47)
Impact of adopting NZ IFRS 9, 15, 16	–	–	–	47	–	–
Lease additions	–	–	–	52	–	–
Net earnings for the year	–	–	–	–	–	85
Balance at 30 June 2018	1,807	758	273	238	590	468
Movements from cash flows						
Payment of lease liabilities	–	–	–	(21)	–	–
Proceeds from funding	500	95	72	–	–	–
Repayment of borrowings	(60)	–	–	–	–	–
Dividends paid	–	–	–	–	–	(49)
Total changes from financing cash flows	440	95	72	(21)	–	(49)
Non-cash movements						
Movements in fair value (including foreign exchange rates)	(10)	–	–	–	–	–
Transaction costs and amortisation related to financing	(5)	(25)	22	–	–	–
Accruals	–	(6)	(12)	–	–	–
Dividend reinvestment plan	–	–	–	–	48	(48)
Lease additions	–	–	–	31	–	–
Net earnings for the year	–	–	–	–	–	53
Balance at 30 June 2019	2,232	822	355	248	638	424

The accompanying notes are an integral part of these financial statements.

Notes to the financial statements

Reporting entity and statutory base

Chorus includes Chorus Limited together with its subsidiaries.

Chorus is New Zealand's largest fixed line communications infrastructure business. It maintains and builds a network predominantly made up of fibre and copper cables, local telephone exchanges and cabinets.

Chorus Limited is a profit-orientated company registered in New Zealand under the Companies Act 1993 and a FMC Reporting Entity for the purposes of the Financial Markets Conduct Act 2013. Chorus Limited was established as a standalone, publicly listed entity on 1 December 2011, upon its demerger from Spark New Zealand Limited (Spark, previously Telecom Corporation of New Zealand Limited). The demerger was a condition of an agreement with Crown Infrastructure Partners Limited (previously Crown Fibre Holdings) to enable Chorus Limited to provide the majority of the Crown's Ultra-Fast Broadband (UFB). Chorus Limited is listed and its ordinary shares quoted on the NZX main board equity security market (NZX Main Board) and on the Australian Stock Exchange (ASX) and has bonds quoted on the NZX, ASX, and Luxembourg Stock Exchange debt markets. American Depositary Shares, each representing five ordinary shares (and evidenced by American Depositary Receipts), are not listed but are traded on the over-the-counter market in the United States.

These financial statements have been prepared in accordance with Generally Accepted Accounting Practice in New Zealand (NZ GAAP) and Part 7 of the Financial Markets Conduct Act 2013. They comply with New Zealand equivalents to International Financial Reporting Standards (NZ IFRS) as appropriate for profit-oriented entities, and with International Financial Reporting Standards.

These financial statements are expressed in New Zealand dollars. All financial information has been rounded to the nearest million, unless otherwise stated.

The measurement basis adopted in the preparation of these financial statements is historical cost, modified by the revaluation of financial instruments as identified in the specific accounting policies below and the accompanying notes.

Accounting policies and standards

Accounting policies that summarise the measurement basis used and are relevant to the understanding of the financial statements are provided throughout the accompanying notes.

The accounting policies adopted and methods of computation have been applied consistently throughout the periods presented in these financial statements.

Reclassification and re-statement of comparatives

Where management have reclassified items in the financial statements, the related comparative disclosures have been adjusted to provide a like-for-like comparison.

Accounting estimates and judgements

In preparing the financial statements management has made estimates and assumptions about the future that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the period. Actual results could differ from those estimates.

Estimates and assumptions are regularly evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The principal areas of judgement in preparing these financial statements are set out below.

Network assets (note 1)

Assessing the appropriateness of useful life and residual value estimates of network assets requires a number of factors to be considered such as the physical condition of the asset, expected period of use of the asset, technological advances, regulation and expected disposal proceeds from the future sale of the asset.

Customer retention assets (note 3)

Assessing the appropriateness of the period over which customer retention costs are amortised requires a number of factors to be considered such as the product the customer retention costs relate to, technological advances, retail service provider activities and regulation.

Leases (note 5)

Chorus assesses at lease commencement whether it is reasonably certain to exercise extension options where included in the contract, and where it is reasonably certain, the extension period has been included in the lease liability calculation.

CIP securities (note 6)

Determining the fair value of the CIP securities requires assumptions on expected future cash flows and discount rates based on future long dated swap curves.

Crown funding (note 7)

Exercising judgement when recognising Crown funding to determine if conditions of the funding contract have been satisfied. This judgement will be based on the facts and circumstances that are evident for each contract at the time of preparing the financial statements.

Financial risk management (note 20)

Credit valuations are adjusted to reflect credit risk as required by NZ IFRS 9: Financial Instruments. The effect of credit risk is quantified using an expected future exposure methodology where credit default swap prices are used to represent the probability of default.

Note 1 – Network assets

In the Statement of financial position, network assets are stated at cost less accumulated depreciation and any accumulated impairment losses. The cost of additions to network assets and work in progress constructed by Chorus includes the cost of all materials used in construction, direct labour costs specifically associated with construction, interest costs that are attributable to the asset, resource management consent costs and attributable overhead.

Repairs and maintenance costs are recognised in the income statement as incurred. If the useful life of the asset is extended or the asset is enhanced then the associated costs are capitalised.

Estimating useful lives and residual values of network assets

The determination of the appropriate useful life for a particular asset requires management to make judgements about, amongst other factors, the expected period of service potential of the asset, the likelihood of the asset becoming obsolete as a result of technological advances, the likelihood of Chorus ceasing to use the asset in our business operations and the effect of government regulation.

Where an item of network assets comprises major components having different useful lives, the components are accounted for as separate items of network assets.

Where the remaining useful lives or recoverable values have diminished due to technological, regulatory or market condition changes, depreciation is accelerated. The assets' residual values, useful lives, and methods of depreciation are reviewed annually and adjusted prospectively, if appropriate.

Depreciation is charged on a straight-line basis to write down the cost of network assets to their estimated residual value over their estimated useful life.

Estimated useful lives are as follows:

Fibre cables	20 years
Ducts, manholes and poles	20–50 years
Copper cables	10–30 years
Cabinets	5–20 years
Property	5–50 years
Network electronics	2–25 years
Right of use (leases)	10–50 years
Other	2–10 years

Other network assets include motor vehicles, network management and administration systems and radio infrastructure.

Any future adverse impacts arising from assessing the carrying value or lives of network assets could lead to future impairment losses or increases in depreciation charges that could affect future earnings.

An item of network assets and any significant part is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Where network assets are disposed of, the profit or loss recognised in the income statement is calculated as the difference between the sale price and the carrying value of the asset.

Leased assets and corresponding liabilities are recognised as 'right of use' assets, and depreciated over the life of the lease.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions.

Land and work in progress are not depreciated. Work in progress is reviewed on a regular basis to ensure that costs represent future assets.

Note 1 – Network assets (cont.)

30 June 2019	Fibre cables \$M	Ducts, manholes, and poles \$M	Copper cables \$M	Cabinets \$M	Property \$M	Network electronics \$M	Right of use assets \$M	Other \$M	Work in progress \$M	Total \$M
Cost										
Balance at 1 July 2018	1,782	2,228	2,384	620	404	1,735	261	5	207	9,626
Additions	–	–	–	–	–	–	–	–	711	711
Disposals	(1)	–	(7)	–	(6)	(38)	(2)	–	–	(54)
Transfers from work in progress	263	270	17	41	20	81	16	–	(708)	–
Other	–	–	–	–	2	–	–	–	5	7
Balance at 30 June 2019	2,044	2,498	2,394	661	420	1,778	275	5	215	10,290
Accumulated depreciation										
Balance at 1 July 2018	(538)	(557)	(1,934)	(395)	(251)	(1,475)	(35)	(2)	–	(5,187)
Depreciation	(90)	(48)	(61)	(41)	(15)	(60)	(13)	–	–	(328)
Disposals	1	–	7	–	5	38	(2)	–	–	49
Other	–	–	–	–	(1)	–	–	–	–	(1)
Balance at 30 June 2019	(627)	(605)	(1,988)	(436)	(262)	(1,497)	(50)	(2)	–	(5,467)
Net carrying amount	1,417	1,893	406	225	158	281	225	3	215	4,823

30 June 2018	Fibre cables \$M	Ducts, manholes, and poles \$M	Copper cables \$M	Cabinets \$M	Property \$M	Network electronics \$M	Right of use assets \$M	Other \$M	Work in progress \$M	Total \$M
Cost										
Balance at 1 July 2017	1,560	2,007	2,369	583	391	1,673	228	5	124	8,940
Additions	–	–	–	–	–	–	–	–	721	721
Disposals	–	(4)	–	(2)	(6)	(30)	–	–	–	(42)
Transfers from work in progress	222	225	15	39	17	92	28	–	(638)	–
Other	–	–	–	–	2	–	5	–	–	7
Balance at 30 June 2018	1,782	2,228	2,384	620	404	1,735	261	5	207	9,626
Accumulated depreciation										
Balance at 1 July 2017	(460)	(515)	(1,883)	(354)	(239)	(1,443)	(22)	(2)	–	(4,918)
Depreciation	(78)	(42)	(51)	(41)	(15)	(65)	(13)	–	–	(305)
Disposals	–	–	–	–	5	33	–	–	–	38
Other	–	–	–	–	(2)	–	–	–	–	(2)
Balance at 30 June 2018	(538)	(557)	(1,934)	(395)	(251)	(1,475)	(35)	(2)	–	(5,187)
Net carrying amount	1,244	1,671	450	225	153	260	226	3	207	4,439

There are no restrictions on Chorus' network assets or any network assets pledged as securities for liabilities. At 30 June 2019 the contractual commitments for acquisition and construction of the network assets was \$264 million (30 June 2018: \$448 million).

Note 1 – Network assets (cont.)

Depreciation

	2019 \$M	2018 \$M
Depreciation charged on network assets	328	305
Crown funding	(25)	(22)
Total depreciation	303	283

Chorus receives funding from the Crown to finance the capital expenditure associated with the development of the UFB network, rural broadband services and other services. Where funding is used to construct assets, it is offset against depreciation over the life of the assets.

Refer to note 7 for information on Crown funding.

Property exchanges

Chorus has leased exchange space and commercial co-location space owned by Spark which is subject to lease arrangements (included within right of use assets). Chorus in turn leases exchange space and commercial co-location space owned by Chorus to Spark under a finance lease arrangement.

For sites that it does not own, Chorus recognises its share of the assets based on occupancy percentage, as well as a liability for the future payments due. For sites that it does own, Chorus derecognises the share of the asset used by Spark, as well as recognising a receivable for the future receipts due.

Impairment

The carrying amounts of non-financial assets including network assets, software and other intangibles and customer retention assets are reviewed at the end of each reporting period for any indicators of impairment.

If any such indication exists, the recoverable amount of the asset is estimated. An impairment loss is recognised in earnings whenever the carrying amount of an asset exceeds its estimated recoverable amount. Should the conditions that gave rise to the impairment loss no longer exist, and the assets are no longer considered to be impaired, a reversal of an impairment loss would be recognised immediately in earnings. In the period to 30 June 2019, there was no impairment in relation to the costs capitalised. (30 June 2018: no impairment).

The recoverable amount is the greater of an asset's value in use and fair value less costs to sell. Chorus' assets do not generate independent cash flows and are therefore assessed from a single cash-generating unit perspective. In assessing the recoverable amount, the estimates of future cash flows are discounted to their net present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the business.

Capitalised interest

Finance costs are capitalised on qualifying items of network assets and software assets at an annualised rate of 6% (30 June 2018: 6%). Interest is capitalised over the period required to complete the assets and prepare them for their intended use. In the current year finance costs totalling \$4 million (30 June 2018: \$4 million) have been capitalised against network assets and software assets.

Right of use assets

	Fibre cables \$M	Ducts, manholes, and poles \$M	Property \$M	Total \$M
Balance 1 July 2017 (net)	6	21	179	206
Additions	3	7	23	33
Depreciation charge	–	(2)	(11)	(13)
Balance at 30 June 2018	9	26	191	226
Additions	1	10	5	16
Relinquishments	–	–	(4)	(4)
Depreciation charge	(1)	(2)	(10)	(13)
Balance at 30 June 2019	9	34	182	225

Right of use assets are the present value of leases held by Chorus as a lessee, as defined in the accounting policies (previously recognised as finance and operating leases). Leases are capitalised at the present value of the minimum lease payments at inception of the lease.

Chorus has applied a single discount rate to a portfolio of leases across the two main portfolios of leases ('Property' and 'Ducts, manholes, and poles') due to the long term usage nature of the underlying assets used to service the same network. This is reflective of the longer term nature of infrastructure assets. The nature of these assets are similar enough that borrowing rates on commercial debt would not change asset to asset. The incremental borrowing rate is reviewed annually.

Note 2 – Software and other intangibles

Software and other intangible assets are initially measured at cost. The direct costs associated with the development of network and business software for internal use are capitalised where project success is probable and the capitalisation criteria is met. Following initial recognition, software and other intangible assets are stated at cost less accumulated amortisation and impairment losses. Software and other intangible assets with a finite life are amortised from the date the asset is ready for use on a straight-line basis over its estimated useful life which is as follows:

Software	2–10 years
Other intangibles	6–35 years

Other intangibles mainly consist of land easements.

Where estimated useful lives or recoverable values have diminished due to technological change or market conditions, amortisation is accelerated.

There are no restrictions on software and other intangible assets, or any intangible assets pledged as securities for liabilities.

30 June 2019	Software \$M	Other intangibles \$M	Work in progress \$M	Total \$M
Cost				
Balance at 1 July 2018	694	6	28	728
Additions	–	–	53	53
Transfers from work in progress	58	–	(58)	–
Balance at 30 June 2019	752	6	23	781
Accumulated amortisation				
Balance at 1 July 2018	(587)	(1)	–	(588)
Amortisation	(56)	–	–	(56)
Balance at 30 June 2019	(643)	(1)	–	(644)
Net carrying amount	109	5	23	137
30 June 2018	Software \$M	Other intangibles \$M	Work in progress \$M	Total \$M
Cost				
Balance at 1 July 2017	639	6	36	681
Additions	–	–	59	59
Disposals	(12)	–	–	(12)
Transfers from work in progress	67	–	(67)	–
Balance at 30 June 2018	694	6	28	728
Accumulated amortisation				
Balance at 1 July 2017	(538)	(1)	–	(539)
Amortisation	(61)	–	–	(61)
Disposals	12	–	–	12
Balance at 30 June 2018	(587)	(1)	–	(588)
Net carrying amount	107	5	28	140

At 30 June 2019 the contractual commitment for acquisition of software and other intangible assets was \$36 million (30 June 2018: \$11 million).

Note 2 – Software and other intangibles (cont.)

Amortisation

	Note	2019 \$M	2018 \$M
Amortisation charged on software and intangible assets		56	61
Amortisation charged on customer retention assets	3	34	43
Total amortisation		90	104

Refer to note 3 for information on customer retention assets.

Note 3 – Customer retention assets

Customer retention costs are incremental costs incurred in acquiring new contracts with new and existing customers that Chorus expects are recoverable, and are capitalised as customer retention assets. Following initial recognition, customer retention assets are stated at cost less accumulated amortisation and impairment losses. Customer retention assets have a finite life and are amortised from the month that costs are capitalised on a straight-line basis over the average connection contract life which is as follows:

New connections and migrations	0–4 years
Customer incentives	1 year

In the period to 30 June 2019, there was no impairment in relation to the costs capitalised (30 June 2018: no impairment).

30 June 2019	New connections and migrations \$M	Customer incentives \$M	Total \$M
Cost			
Balance at 1 July 2018	96	–	96
Additions	49	5	54
Balance at 30 June 2019	145	5	150
Accumulated amortisation			
Balance at 1 July 2018	(54)	–	(54)
Amortisation	(34)	(1)	(35)
Balance at 30 June 2019	(88)	(1)	(89)
Net carrying amount	57	4	61
30 June 2018	New connections and migrations \$M	Customer incentives \$M	Total \$M
Cost			
Balance at 1 July 2017	38	–	38
Additions	58	–	58
Balance at 30 June 2018	96	–	96
Accumulated amortisation			
Balance at 1 July 2017	(11)	–	(11)
Amortisation	(43)	–	(43)
Balance at 30 June 2018	(54)	–	(54)
Net carrying amount	42	–	42

Note 3 – Customer retention assets (cont.)

Amortisation of customer retention assets

Customer retention assets are amortised to the income statement, either as amortisation expense or operating revenue, based on the nature of the specific costs capitalised.

	Note	2019 \$M	2018 \$M
Amortised to amortisation expense	2	34	43
Amortised to operating revenue		1	–
Total Customer retention assets amortisation		35	43

Note 4 – Debt

Debt is included as a non-current liability except for those with maturities less than 12 months from the reporting date, which are classified as current liabilities.

Debt is initially measured at fair value, less any transaction costs that are directly attributable to the issue of the instruments. Debt is subsequently measured at amortised cost using the effective

interest method. Some borrowings are designated in fair value hedge relationships, which means that any change in market interest and foreign exchange rates result in a change in the fair value adjustment on that debt.

The weighted effective interest rate on debt including the effect of derivative financial instruments was 5.75% (30 June 2018: 5.96%).

	Due date	2019 \$M	2018 \$M
Syndicated bank facility	May 2022	–	60
Euro medium term notes GBP	Apr 2020	491	507
Euro medium term notes EUR	Oct 2023	858	852
Fixed rate NZD Bonds	May 2021	400	400
Fixed rate NZD Bonds	Dec 2028	500	–
Less: Facility fees		(17)	(12)
Total debt		2,232	1,807
Current		491	–
Non-current		1,741	1,807

Syndicated bank facilities

As at 30 June 2019 Chorus had \$550 million committed syndicated facilities on market standard terms and conditions (30 June 2018: \$350 million). In March 2019 the \$350 million May 2020 facility was extended to May 2022 and at the same time a new tranche of \$200 million was arranged. The amount undrawn of the syndicated

bank facilities that are available for future operating activities is \$550 million (30 June 2018: \$290 million). The syndicated bank facilities are held with bank and institutional counterparties rated - A to AAA, based on rating agency Standard & Poor's ratings.

Euro Medium Term Notes (EMTN)

Face value	Interest rate	2019 \$M	2018 \$M
GBP 260 million	6.75%	491	507
EUR 500 million	1.125%	858	852

Chorus has in place cross currency interest rate swaps to hedge the foreign currency exposure to the EMTN. The cross currency interest rate swaps entitle Chorus to receive GBP and EUR principal and GBP and EUR fixed coupon payments for NZD principal and NZD floating interest payments.

For the GBP cross currency interest rate swaps the floating interest rate exposure on the NZD interest payments have been hedged using interest rate swaps.

The EUR cross currency interest rate swaps are partially hedged for the NZD interest payments using interest rate swaps (notional amount \$450 million).

Note 4 – Debt (cont.)

The following table reconciles EMTN at hedged rates to EMTN at spot rates as reported under NZ IFRS. EMTN at hedged rates is a non-GAAP measure and is not defined by NZ IFRS.

	2019 EUR \$M	2018 EUR \$M	2019 GBP \$M	2018 GBP \$M
EMTN (at carrying value)	858	852	491	507
Impact of fair value hedge	(12)	12	–	–
Impact of hedged rates used	(61)	(79)	186	170
EMTN at hedged rates	785	785	677	677

The fair value of EMTN, calculated based on the present value of future principal and interest cash flows, discounted at market interest rates at balance date, was \$518 million (30 June 2018: \$558 million) compared to a carrying value of \$491 million (30 June 2018: \$507 million) for the GBP EMTN, and \$882 million

(30 June 2018: \$875 million) compared to a carrying value of \$858 million (30 June 2018: \$852 million) for the EUR EMTN. This fair value has been determined using Level 2 of the fair value hierarchy as described in note 20.

Fixed Rate NZD Bonds

	Interest rate	2019 \$M	2018 \$M
Fixed rate NZD Bonds - May 2021	4.12%	400	400
Fixed rate NZD Bonds - December 2028	4.35%	500	–
Total Fixed rate NZD Bonds		900	400

On 6 December 2018 Chorus issued a \$500 million bond at a fixed interest rate for five years of 4.35%. The bond will mature in December 2028, with an interest rate reset in December 2023.

The exposure of the floating rate at reset date has been hedged using interest rate swaps (see note 19).

At 30 June 2019, Chorus has \$900 million of unsecured, unsubordinated debt securities (30 June 2018: \$400 million).

Schedule of maturities

	2019 \$M	2018 \$M
Current	491	–
Due one to two years	400	567
Due two to three years	–	400
Due four to five years	858	–
Due over five years	500	852
Total due	2,249	1,819
Less: Facility fees	(17)	(12)
	2,232	1,807

No debt has been secured against assets. However, there are financial covenants and event of default triggers, as defined in the various debt agreements. During the current year Chorus complied with the requirements set out in its financing agreements (30 June 2018: complied).

Refer to note 20 for information on financial risk management.

Note 4 – Debt (cont.)

Finance expense

	2019 \$M	2018 \$M
Interest on syndicated bank facility	5	4
Interest on EMTN – GBP	53	53
Interest on EMTN – EUR	39	39
Interest on fixed rate NZD bonds	31	18
Fair value adjustment on interest rate swap not in hedge relationship	(3)	(3)
Ineffective portion of changes in fair value of cash flow hedges	6	5
Other interest expense	26	22
Capitalised interest	(4)	(4)
Total finance expense excluding CIP securities (notional) interest	153	134
CIP securities (notional) interest	22	17
Total finance expense	175	151

Other interest expense includes \$20 million lease interest expense (30 June 2018: \$18 million), \$3 million of amortisation arising from the difference between fair value and proceeds realised from the swaps reset (30 June 2018: \$4 million) and a \$2 million one-off cost to restructure two interest rate swaps (refer to note 19).

The GBP EMTN hedging relationship was reset with a fair value of \$49 million on 9 December 2013 following the close out of the interest rate swaps relating to the EMTN. This amount is being amortised over the life of the derivative and flows as

ineffectiveness in the income statement. As at 30 June 2019 a further \$2 million remains in the hedge reserve to be amortised in relation to this reset (30 June 2018: \$8 million). In FY19, ineffectiveness of \$6 million (30 June 2018: \$7 million) flowed through interest expense relating to the amortisation of this reset.

Note 5 – Leases

Chorus is a lessee and lessor of certain network assets under lease arrangements. For all leases Chorus recognises assets and liabilities in the statement of financial position, except those determined to be short-term or low value. On inception of a new lease, the lease payable is measured at the present value of the remaining lease payments, discounted at Chorus' incremental borrowing rate at that date. Practical expedients

within NZ IFRS 16: Leases have been applied to allow a single discount rate to a portfolio of leases with similar characteristics. Lease costs are recognised through interest expense over the life of the lease. The corresponding right of use asset incurs depreciation over the estimated useful life of the asset.

Lease liabilities

	2019 \$M	2018 \$M
Liabilities		
Maturity analysis – contractual discounted cash flows		
Less than one year	8	6
Between one and five years	30	23
More than five years	216	214
Total lease payable	254	243
Current	8	6
Non-Current	246	237

Note 5 – Leases (cont.)

	2019 \$M	2018 \$M
<i>Amounts recognised in Income statement:</i>		
Interest on lease payable	20	18
<i>Amounts recognised in Statement of cash flows:</i>		
Principle payments (net)	(2)	(1)
Lease interest (net)	(19)	(14)

Extension options

Most leases contain extension options exercisable by Chorus up to one year before the end of the non-cancellable contract period. Where practicable, Chorus seeks to include extension options in new leases to provide operational flexibility. The extension options held are exercisable only by Chorus and not by

the lessors. Chorus assesses at lease commencement whether it is reasonably certain the extension options will be exercised, and where it is reasonably certain, the extension period has been included in the lease liability calculation. Chorus reassesses whether it is reasonably certain to exercise the options if there is a significant event or significant change in circumstances within its control.

	Lease liabilities recognised (discounted) 2019 \$M	Potential future lease payments not included in lease liabilities (discounted) 2019 \$M	Lease liabilities recognised (discounted) 2018 \$M	Potential future lease payments not included in lease liabilities (discounted) 2018 \$M
Fibre cables	10	–	9	–
Ducts, manholes and poles	35	1	28	1
Property	209	–	206	–
Total lease payable	254		243	

Other leases

Chorus also leases IT equipment with contract terms of one to three years. These leases are of low value. Chorus has elected not to recognise right of use assets and lease liabilities for these leases.

Lease receivable

Chorus has leased exchange space and commercial co-location space owned by Spark. Chorus in turn leases exchange space and commercial co-location space to Spark under finance lease arrangements. The term of the leases vary from three to ten years and include rights of renewal. The full term has been used in the calculation of finance lease receivables as it is likely due to the specialised nature of the buildings that the leases will be renewed to the maximum term. The payable and receivable under these finance lease arrangements are net settled in cash.

Lease income from lease contracts in which Chorus acts as a lessor is as below:

	2019 \$M	2018 \$M
Finance leases		
Finance income on the net investment in the lease	8	8

The following table sets out a maturity analysis of lease payments receivable:

	2019 \$M	2018 \$M
Less than one year	6	5
One to two years	4	15
Total lease payments	10	20

Non-current lease payables are shown net of non-current lease receivable.

Note 6 - Crown Infrastructure Partners (CIP) securities

Ultra-Fast Broadband (UFB)

Chorus receives funding from the Crown to finance construction costs associated with the development of the UFB network. For the first phase of the UFB network build (UFB1) Chorus receives funding at a rate of \$1,118 for every premises passed (as certified by CIP), in return Chorus issues CIP equity securities, CIP debt securities and CIP warrants. The equity and debt securities have an issue price of \$1 and are issued on a 50:50 basis. For each premises passed, \$559 of equity securities and \$559 of debt securities are issued and Chorus receives \$1,118 funding in return. CIP warrants are issued for nil value. The total committed funding available for Chorus over the period of UFB1 network construction is expected to be \$929 million. As at 30 June 2019, there have been approximately 761,000 premises passed and tested by CIP under UFB1 (30 June 2018: 685,000).

For the second phase of the UFB network build (UFB2 and UFB2+), there are five different funding rates applied, at an average rate of \$1,828 for every premises passed (as certified by CIP). In return for the CIP funding, CIP equity and debt securities will be issued on very similar terms as UFB1 securities. Chorus can elect the mix of securities to be issued (up to a maximum of \$189 million equity securities for UFB2). There are no CIP warrants in relation to UFB2 and UFB2+ funding. The total committed funding available for Chorus for the second phase is expected to be \$407 million. As at 30 June 2019, for UFB2 there have been 36,000 premises and for UFB2+ there have been nil premises, passed and tested by CIP (30 June 2018: UFB2 2,000; UFB2+ nil).

The CIP equity and debt securities are recognised initially at fair value plus any directly attributable transaction costs. Subsequently, they are measured at amortised cost using the effective interest method. The fair value is derived by discounting the equity securities and debt securities per premises passed by the effective rate based on market rates. The difference between funding received and the fair value of the securities is recognised as Crown funding. Over time, the CIP debt and equity securities increase to face value and the Crown funding is released against depreciation and reduces to nil.

CIP equity securities

CIP equity securities are a class of non-interest bearing security that carry no right to vote at meetings of holders of Chorus ordinary shares, but entitle the holder to a preferential right to repayment on liquidation and additional rights that relate to Chorus' performance under its construction contract with CIP.

Dividends will become payable on a portion of the CIP equity securities from 2025 (2030 for UFB2 and UFB2+) onwards, with the portion of CIP equity securities that attract dividends increasing over time.

CIP equity securities can be redeemed by Chorus at any time by payment of the issue price or issue of new ordinary shares (at a 5% discount to the 20-day volume weighted average price) to the holder. In limited circumstances CIP equity securities may be converted by the holder into voting preference or ordinary shares.

The CIP equity securities are required to be disclosed as a liability until the liability component of the compound instrument expires.

CIP debt securities

CIP debt securities are unsecured, non-interest bearing and carry no voting rights at meetings of holders of Chorus ordinary shares. Chorus is required to redeem the CIP debt securities in tranches from 2025 (2030 for UFB2 and UFB2+) to 2036 by repaying the face value to the holder.

The principal amount of CIP debt securities consists of a senior portion and a subordinated portion. The senior portion ranks equally with all other unsecured, unsubordinated creditors of Chorus, and has the benefit of any negative pledge covenant that may be contained in any of Chorus' debt arrangements. The subordinated portion ranks below all other Chorus indebtedness but above ordinary shares of Chorus. The initial value of the senior portion is the present value (using a discount rate of 8.5%) of the sum repayable on the CIP debt securities, and the initial subordinated portion will be the difference between the issue price of the CIP debt security and the value of the senior portion.

CIP warrants

Chorus issues CIP warrants to CIP for nil consideration along with each tranche of CIP equity securities. Each CIP warrant gives CIP the right, on a specified exercise date, to purchase at a set strike price a Chorus share to be issued by Chorus. The strike price for a CIP warrant is based on a total shareholder return of 16% per annum on Chorus shares over the period December 2011 to June 2036.

At 30 June 2019, Chorus had issued a total 12,544,286 warrants which had a fair value and carrying value that approximated zero (30 June 2018: 10,705,346 warrants issued). The number of fibre connections made by 30 June 2020 impacts the number of warrants that could be exercised. Because fibre connections already exceed 20% before 30 June 2020, the number of warrants that would be able to be exercised is 12,544,286 (30 June 2018: 10,705,346).

Note 6 – CIP Securities (cont.)

At 30 June 2019, the component parts of debt and equity instruments including notional interest were:

	2019			2018		
	CIP debt securities \$M	CIP equity securities \$M	Total CIP securities \$M	CIP debt securities \$M	CIP equity securities \$M	Total CIP securities \$M
Fair value on initial recognition						
Balance at 1 July	132	91	223	102	68	170
Additional securities recognised at fair value	22	38	60	30	23	53
Balance at 30 June	154	129	283	132	91	223
Accumulated notional interest						
Balance at 1 July	26	24	50	18	15	33
Notional interest	10	12	22	8	9	17
Balance at 30 June	36	36	72	26	24	50
Total CIP securities	190	165	355	158	115	273

The fair value of CIP debt securities at balance date was \$248 million (30 June 2018: \$187 million) compared to a carrying value of \$190 million (30 June 2018: \$158 million). The fair value of CIP equity securities at balance date was \$235 million (30 June 2018: \$145 million) compared to a carrying value of \$165 million (30 June 2018: \$115 million). The fair value has been calculated using discount rates from market rates at balance date and using Level 2 of the fair value hierarchy as described in note 20.

Key assumptions in calculations on initial recognition

On initial recognition, the discount rate between 4.64% to 8.49% (30 June 2018: 5.16% to 9.84%) for the CIP equity securities and 3.42% to 6.16% (30 June 2018: 4.62% to 6.84%) for the CIP debt securities used to discount the expected cash flows is based on the NZ swap curve. The swap rates were adjusted for Chorus specific credit spreads (based on market observed credit spreads for debt issued with similar credit ratings and tenure). The discount rate on the CIP equity securities is capped at Chorus' estimated cost of (ordinary) equity.

Note 7 – Crown funding

Funding from the Crown is recognised at fair value where there is reasonable assurance that the funding is receivable and all attached conditions will be complied with. Crown funding is then recognised in earnings as a reduction to depreciation expense on a systematic basis over the useful life of the asset the funding was used to construct.

	2019				2018			
	UFB \$M	RBI \$M	Other \$M	Total \$M	UFB \$M	RBI \$M	Other \$M	Total \$M
Fair value on initial recognition								
Balance at 1 July	548	242	51	841	471	242	46	759
Additional funding recognised at fair value	80	–	9	89	77	–	5	82
Balance at 30 June	628	242	60	930	548	242	51	841
Accumulated amortisation of funding								
Balance at 1 July	(41)	(30)	(12)	(83)	(29)	(22)	(10)	(61)
Amortisation	(15)	(8)	(2)	(25)	(12)	(8)	(2)	(22)
Balance at 30 June	(56)	(38)	(14)	(108)	(41)	(30)	(12)	(83)
Total Crown funding	572	204	46	822	507	212	39	758
Current				25				21
Non-current				797				737

Note 7 – Crown funding (cont.)

Ultra-Fast Broadband (UFB)

Chorus receives funding from the Crown to finance construction costs associated with the development of the UFB network. During the period Chorus has recognised funding for 109,784 (UFB1 75,860; UFB2 33,924) premises where the premises were passed and tested by CIP as at 30 June 2019 (30 June 2018: 114,077, UFB1 112,124; UFB2 1,953).

This brings the total number of premises passed and tested by CIP at 30 June 2019 to approximately 797,000 (30 June 2018: 687,000). The total number of premises passed (including those

that have not been tested by CIP) was approximately 842,000 at 30 June 2019 (30 June 2018: 700,000).

Continued recognition of the full amount of the Crown funding is contingent on certain material performance targets being met by Chorus. The most significant of these material performance targets relate to compliance with certain specifications under user acceptance testing by CIP. Performance targets to date have been met.

Note 8 – Segmental reporting

An operating segment is a component of an entity that engages in business activities from which it may earn revenues and incur expenses and for which operating results are regularly reviewed by the entity's chief operating decision maker and for which discrete financial information is available.

Chorus' Chief Executive Officer (CEO) has been identified as the chief operating decision maker for the purpose of segmental reporting.

Chorus has determined that it operates in one segment providing nationwide fixed line communications infrastructure. The determination is based on the reports reviewed by the

CEO in assessing performance, allocating resources and making strategic decisions.

All of Chorus' operations are provided in New Zealand, therefore no geographic information is provided.

Three Chorus customers met the reporting threshold of 10 percent of Chorus' operating revenue in the year to 30 June 2019. The total revenue for the year ended 30 June 2019 from these customers was \$433 million (30 June 2018: \$489 million), \$197 million (30 June 2018: \$203 million) and \$109 million (30 June 2018: \$116 million).

Note 9 – Operating revenue

Revenue is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties. Chorus recognises revenue when it transfers control of a product or service to a customer.

Chorus services provided to customers	Nature, performance obligation and timing of revenue
Fibre and copper connections	Providing access to the Chorus fixed lines network to enable connections to the internet. Chorus recognises revenue as it provides this service to its customers at a point in time. Unbilled revenues from the billing cycle date to the end of each month are recognised as revenue during the month the service is provided. Revenue is deferred in respect of the portion of fixed monthly charges that have been billed in advance.
Value added network services	Providing enhanced access to the Chorus fixed line network to enable internet access, through backhaul and handover links services to connect across wider areas and to higher quality levels. Recognition is same as described for fibre and copper connections above.
Infrastructure	Providing physical storage and site-sharing rental services for co-location of third party or shared assets. This is billed and recognised on a monthly basis.
Field services	Providing services in the field to protect, strengthen, and increase the available network – for example, installation services, wiring and consultation services. This is billed and recognised as the service is provided. Revenue from installation of connections is recognised upon completion of the connection.

Note 9 – Operating revenue (cont.)

Revenue by service

	2019 \$M	2018 \$M
Fibre broadband	294	198
Fibre premium	74	78
Copper based voice	106	133
Copper based broadband	344	421
Data services copper	18	27
Value added network services	30	33
Infrastructure	24	23
Field services products	74	70
Other	6	7
Total operating revenue	970	990

Note 10 – Operating expenses

	2019 \$M	2018 \$M
Labour	74	73
Network maintenance	75	87
Other network costs	33	34
Information technology	50	54
Rent and rates	13	9
Property maintenance	17	15
Electricity	17	15
Provisioning	6	6
Insurance	3	3
Consultants	7	5
Regulatory levies	16	13
Other	23	23
Total operating expenses	334	337

Labour

Labour of \$74 million (30 June 2018: \$73 million) represents net employee costs related to non-capital expenditure.

Pension contributions

Included in labour costs are payments to the New Zealand Government Superannuation Fund of \$350,000 (30 June 2018: \$360,000) and contributions to KiwiSaver of \$3.1 million (30 June 2018: \$3.3 million). At 30 June 2019 there were 16 employees in New Zealand Government Superannuation Fund (30 June 2018: 18 employees) and 840 employees in KiwiSaver (30 June 2018: 877 employees). Chorus has no other obligations to provide pension benefits in respect of employees.

Charitable and political donations

Other costs include charitable donations to the Consumer Foundation of \$21,000; and smaller contributions to several other smaller charities of \$20,000 (30 June 2018: Consumer Foundation of \$89,000). Chorus has not made any political donations (30 June 2018: nil).

Note 10 – Operating expenses (cont.)

Auditor remuneration

Included in other expenses are fees paid to auditors:

	2019 \$000's	2018 \$000's
Audit and review of statutory financial statements	537	504
Regulatory audit and assurance work	268	308
Tax compliance services ¹	50	40
Other assurance services ²	23	4
Other services ³	59	–
Total other services	400	352
Total fees paid to the auditor	937	856

1. Balance of GST review, tax treatment of interest rate swaps closed out and other sundry tax assistance.

2. Relates to attendance at the Annual Shareholders Meeting and assurance relating to EMTN refresh comfort letters (30 June 2018: Relates to attendance at the Annual Shareholders Meeting).

3. Other services included preparation and presentation of hedge accounting training and assistance in documenting current state process (30 June 2018: nil).

Note 11 – Trade and other receivables

Trade and other receivables are initially recognised at the fair value of the amounts to be received, plus transaction costs (if any).

They are subsequently measured at amortised cost (using the effective interest method) less impairment losses.

	2019 \$M	2018 \$M
Trade receivables	96	98
CIP receivable	–	18
Other receivables	23	23
Prepayments	28	22
Trade and other receivables	147	161
Current	140	154
Non-current	7	7

Trade receivables are non-interest bearing and are generally on terms of 20 working days or less.

Chorus maintains a provision for impairment losses when there is objective evidence of its customers being unable to make required payments and makes provision for doubtful debt where debt is more than 60 days overdue. There have been no

significant individual impairment amounts recognised as an expense. Trade receivables are net of allowances for disputed balances with customers.

The ageing profile of trade receivables is as follows:

	2019 \$M	2018 \$M
Not past due	84	92
Past due 1–30 days	12	5
Past due 31–60 days	–	1
	96	98

Chorus has a concentrated customer base consisting predominantly of a small number of retail service providers. The concentrated customer base heightens the risk that a dispute with a customer, or a customer's failure to pay for services, will have a material adverse effect on the collectability of receivables.

Any disputes arising that may affect the relationship between the parties will be raised by relationship managers and follow a dispute resolution process. Chorus has \$12 million of accounts receivable that are past due but not impaired (30 June 2018: \$6 million). The carrying value of trade and other receivables approximate the fair value. The maximum credit exposure is limited to the carrying value of trade and other receivables.

Note 12 – Trade and other payables

Trade and other payables are initially recognised at fair value less transaction costs (if any). They are subsequently measured at amortised cost using the effective interest method. Trade and other payables are non-interest bearing and are normally settled within 30 day terms. The carrying value of trade and other payables approximate their fair values.

	2019 \$M	2018 \$M
Trade payables	94	89
Accruals	187	198
Personnel accrual	20	20
Revenue billed in advance	59	63
Trade and other payables	360	370
Current	360	370
Non-current	–	–

Note 13 – Commitments

Network infrastructure project agreement

Chorus is committed to deploying infrastructure for premises in the UFB candidate areas awarded to Chorus, to be built according to annual build milestones and to be complete by no later than December 2019 for UFB1 and December 2022 for UFB2 and UFB2+. In total it is expected that the communal infrastructure will pass an estimated 1,053,600 premises. Chorus has estimated that it will cost \$2.3 to \$2.4 billion to build the communal UFB network by the end of 2022.

Capital expenditure

Refer to note 1 and note 2 for details of capital expenditure commitments.

Lease commitments

Refer to note 5 for details of lease commitments.

Note 14 – Taxation

This note provides an analysis of the group's income tax expense and shows which amounts are recognised in the income statement, other comprehensive income or directly in equity and how tax expense is affected by non taxable items. Tax expense for the current year comprises current and deferred tax. Tax expense is recognised in the income statement, except to the extent it relates to items recognised in other comprehensive income or directly in equity. In these cases tax expense is recognised in other comprehensive income or directly in equity.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial

reporting purposes and the amount used for taxation purposes. The amount of the deferred tax is based on the expected manner of realisation of the carrying amount of assets and liabilities, using the tax rates enacted or substantially enacted at reporting year end. A deferred tax asset is recognised only to the extent it is probable it will be utilised.

The movement in the deferred tax assets and liabilities is presented below. The deferred tax assets and liabilities are not offset as Chorus is not a consolidated group for tax purposes.

Note 14 – Taxation (cont.)

Current tax expense

	2019 \$M	2018 \$M
Recognised in income statement		
Net earnings before tax	78	122
Tax at 28%	22	35
<i>Tax effect of adjustments</i>		
Other non-taxable items	3	2
Tax expense reported in income statement	25	37
<i>Comprising:</i>		
Current tax expense		
– Current year	4	11
– Adjustments in respect of prior periods	2	5
Deferred tax expense		
– Current year	21	25
– Adjustments in respect of prior periods	(2)	(4)
	25	37
Recognised in other comprehensive income		
Movement in hedging related reserves	65	10
Tax at 28%	(18)	(3)
Tax expense reported in other comprehensive income	18	3
<i>Comprising:</i>		
Deferred tax expense	18	3
	18	3

As at 30 June 2018 \$3 million current tax and \$4 million deferred tax arising on the adoption of NZ IFRS 9 and NZ IFRS 15 was recognised directly in opening equity.

Deferred tax asset

	Fair value portion of derivatives \$M	Changes in fair value of hedging reserves \$M	Finance leases \$M	Total \$M
Balance at 1 July 2017	3	12	42	57
Recognised in the income statement	(1)	-	23	22
Recognised in other comprehensive income	-	3	-	3
Balance at 30 June 2018	2	15	65	82
Recognised in the income statement	(2)	-	3	1
Recognised in other comprehensive income	-	18	-	18
Balance at 30 June 2019	-	33	68	101

Deferred tax liability

	EMTN debt securities \$M	Network, software, customer retention and other intangible assets \$M	Other \$M	Total \$M
Balance at 1 July 2017	6	261	(4)	263
Recognised in the income statement	(2)	40	5	43
Balance at 30 June 2018	4	301	1	306
Recognised in the income statement	(2)	19	3	20
Balance at 30 June 2019	2	320	4	326

Imputation credits

The group has \$103 million of imputation credits as at 30 June 2019 (30 June 2018: \$137 million).

Note 15 – Cash and call deposits

Cash and call deposits are held with bank and financial institutions counterparties rated at a minimum of A+, based on rating agency Standard & Poor's ratings.

There are no cash or call deposit balances held that are not available for use.

The carrying values of cash and call deposits approximate their fair values. The maximum credit exposure is limited to the carrying value of cash and call deposits.

Cash and call deposits denominated in foreign currencies are retranslated into New Zealand dollars at the spot rate of exchange at the reporting date. All differences arising on settlement or translation of monetary items are taken to the Income statement.

Cash flow

Cash flows from derivatives in cash flow and fair value hedge relationships are recognised in the Statement of cash flows in the same category as the hedged item.

For the purposes of the Statement of cash flows, cash is considered to be cash on hand, in banks and cash equivalents, including bank overdrafts and highly liquid investments that are readily convertible to known amounts of cash which are subject to an insignificant risk of changes in values.

Note 16 – Equity

Share capital

Movements in Chorus Limited's issued ordinary shares were as follows:

	2019 Number of shares (millions)	2018 Number of shares (millions)
Balance 1 July	429	411
Dividend reinvestment plan	10	12
Issue of new shares	–	6
Balance at 30 June	439	429

Chorus Limited has 439,288,154 fully paid ordinary shares (30 June 2018: 429,641,197 fully paid ordinary shares).

The issued shares have no par value. The holders of ordinary shares are entitled to receive dividends as declared from time to time, and are entitled to one vote per share at meetings of Chorus Limited. Under Chorus Limited's constitution, Crown approval is required if a shareholder wishes to have a holding of 10% or more of Chorus Limited's ordinary shares, or if a shareholder who is not a New Zealand national wishes to have a holding of 49.9% or more of ordinary shares.

On 9 October 2018 and 16 April 2019 fully imputed dividends of 13 cents per share and 9.5 cents per share respectively was paid to shareholders. These two dividend payments totalled \$97 million (30 June 2018: 21.5 cents, \$90 million).

Eligible shareholders (those resident in New Zealand or Australia) can choose to have Chorus Limited reinvest all or part of their dividends in additional Chorus Limited shares. For the year ended 30 June 2019, 9,646,957 shares with a total value of \$48 million (30 June 2018: 12,333,060 shares, \$47 million) were issued in lieu of dividends. There was no underwriting of the dividend reinvestment plan in the current year (30 June 2018: the dividend reinvestment plan was underwritten for the October 2017 issue, to the value of \$51 million for 13,692,543 new shares of which 6,306,472 new shares were issued for \$23 million).

Chorus Limited issues securities to CIP based on the number of premises passed. CIP securities are a class of security that carry no right to vote at meetings of holders of Chorus Limited ordinary shares but carry a preference on liquidation. Refer to note 6 for additional information on CIP securities.

Should Chorus Limited return capital to shareholders, any return of capital that arose on demerger is expected to be taxable as Chorus Limited had zero available subscribed capital on demerger.

Employee share plans

Employee equity building scheme

Chorus operates an employee equity building scheme to provide employees the opportunity to become familiar with the shareholder experience. Chorus and eligible employees contribute together to purchase shares on market. The shares are then held by the Trustee (Trustees Executors Limited) and vest to participating employees after a three year period.

No new offer to employees was made in the year ended 30 June 2019 so there were nil shares purchased for the employee share plan (30 June 2018: nil). At 30 June 2019 the scheme holds 72,219 shares on behalf of 539 employees (30 June 2018: 176,978 shares, 636 employees), as part of existing plans.

Chorus intends to terminate the scheme in the year ended 30 June 2020.

Note 16 – Equity (cont.)

Long-term performance share scheme

Chorus operates a long-term performance share scheme for selected key management personnel.

In August 2016 Chorus issued a three year grant. The shares have a vesting date of 22 September 2019 and an expiry date of 22 September 2020. The grant has an absolute performance hurdle (Chorus' actual total shareholder return equalling or being greater than 9.8% per annum compounding) ending on the vesting date, with provision for monthly retesting in the following twelve month period.

In August 2017 Chorus issued a three year grant. The shares have a vesting date of 8 September 2020 and an expiry date of 8 September 2021. The grant has an absolute performance hurdle (Chorus' actual total shareholder return equalling or being greater than 10.6% per annum compounding) ending on the vesting date, with provision for monthly retesting in the following twelve month period.

In August 2018 Chorus issued a three year grant. The shares have a vesting date of 27 August 2021 and an expiry date of 27 February 2022. The grant has an absolute performance hurdle (Chorus' actual total shareholder return equalling or being greater than 10.4% per annum compounding) ending on the vesting date, with provision for monthly retesting in the following six month period.

The shares are held by a nominee (Chorus LTI Trustee Limited) on behalf of the participants, until after the shares vest when the nominee is directed to transfer or sell the shares. Or if the shares do not vest they may be held or sold by the nominee. The shares carry the same rights as all other shares.

Participants have been provided with interest-free limited recourse loans to fund the 380,026 shares purchased under the LTI scheme (30 June 2018: 481,907 shares).

The LTI scheme is an equity settled scheme and treated as an option plan for accounting purposes. Each tranche of each grant was valued separately. The absolute performance hurdle was valued using the Black Scholes valuation model.

The combined option cost for the year ended 30 June 2019 of \$334,000 has been recognised in the Income statement (30 June 2018: \$268,000).

Significant assumptions used in the valuation models are:

- 1) A volatility of the Chorus share price of 21%,
- 2) That dividends will be paid over the term of the scheme, and
- 3) An absolute TSR performance threshold percentage.

The Chorus Board have approved a different long-term performance share scheme for key senior management from 1 July 2019, based on issuing share-rights instead of issuing shares. The new scheme will be of similar value, and have similar terms and conditions to the existing scheme. The existing grants will continue until their vesting date.

Reserves

Refer note 19 for information on the cash flow hedge reserve and cost of hedging reserve.

Note 17 – Earnings per share

The calculation of basic earnings per share at 30 June 2019 is based on the net earnings for the year of \$53 million (30 June 2018: \$85 million), and a weighted average number of ordinary

shares outstanding during the period of 435 million (30 June 2018: 422 million), calculated as follows:

	2019	2018
Basic earnings per share		
Net earnings attributable to ordinary shareholders (\$ millions)	53	85
Denominator – weighted average number of ordinary shares (millions)	435	422
Basic earnings per share (dollars)	0.12	0.20
Diluted earnings per share		
Net earnings attributable to ordinary shareholders (\$ millions)	53	85
Weighted average number of ordinary shares (millions)	435	422
Ordinary shares required to settle CIP equity securities (millions)	88	94
Ordinary shares required to settle CIP warrants (millions)	13	11
Denominator – diluted weighted average number of shares (millions)	536	527
Diluted earnings per share (dollars)	0.10	0.16

The number of ordinary shares that would have been required to settle all CIP equity securities and CIP warrants on issue at 30 June has been used for the purposes of the diluted earnings per share calculation.

Net tangible assets per security

Net tangible assets per security as at 30 June 2019 was \$1.64 (30 June 2018: \$1.78).

Note 18 – Related party transactions

Transactions with related parties

Certain Chorus Directors have relevant interests in a number of companies that Chorus have transactions with in the normal course of business. A number of Directors are also non-executive Directors of other companies. Any transactions undertaken with

these entities are in the ordinary course of business. Chorus has loans to employees and nominees receivable at 30 June 2019 of \$1.5 million (30 June 2018: \$1.6 million) as outlined in the employee share plans section of note 16. All loans outstanding are interest-free limited recourse loans.

Key management personnel compensation

	2019 \$000's	2018 \$000's
Short term employee benefits	8,316	8,013
Termination benefits	302	1,539
Other long term benefits	–	590
Share based payments	334	268
	8,952	10,410

This table includes gross remuneration of \$1.1 million (30 June 2018: \$1.1 million) paid to Directors and \$7.9 million (30 June 2018: \$9.3 million) paid to key management personnel for the year.

Refer to note 16 for details of long term incentives.

Note 19 – Derivative

Chorus uses derivative financial instruments to reduce its exposure to fluctuations in foreign currency exchange rates, interest rates and the spot price of electricity. The use of hedging instruments is governed by the treasury policy approved by the Board. Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured to fair value with an adjustment made for credit risk in accordance with NZ IFRS 9: Financial Instruments. The fair values are estimated on the basis of the quoted market prices for similar instruments in an active market or quoted prices for identical or similar instruments in inactive markets. Where quoted prices are not available, the fair value of financial instruments is valued using models where all significant inputs are observable.

The method of recognising the resulting remeasurement gain or loss depends on whether the derivative is designated as a hedging instrument. If the derivative is not designated as a hedging instrument, the remeasurement gain or loss is recognised immediately in the Income statement.

Finance expense includes any unrealised ineffectiveness arising from the Euro Medium Term Notes (EMTN) hedge relationship. Following the close out of the cross currency interest rate swaps and interest rate swaps relating to the GBP EMTN, the hedge relationship was reset in December 2013 with a fair value of \$49 million. The unamortised balance of this original fair value at 30 June 2019 is \$2 million (30 June 2018: \$8 million). As long as the hedge remains effective, any future gains or losses will be processed through the hedge reserve; however, the initial fair value will flow to finance expense in the income statement at some time over the life of the derivatives as ineffectiveness. The remaining unamortised balance will be recognised in the period to April 2020, when the GBP EMTN matures. For the year ended 30 June 2019, a debit of \$6 million ineffectiveness was recognised within finance expense in the Income statement (30 June 2018: \$7 million).

In conjunction with the EUR EMTN 500 million issued in October 2016, Chorus entered into cross currency interest rate swaps to hedge the foreign currency and foreign interest rate risks on the EUR EMTN. These swaps have an aggregate principal of EUR 500 million on the receive leg and NZD 785 million on the pay leg. Using the cross currency interest rate swap, Chorus will pay NZD floating interest rates and receive EUR nominated fixed interest with coupon payments matching the underlying notes. Chorus designated the EMTN and cross currency interest rate swaps into three part-hedging relationships; a fair value hedge of EUR benchmark interest rates, a cash flow hedge of margin and a cash flow hedge of the principal exchange. For the year ended 30 June 2019, there were no unrealised losses recognised in finance expense (30 June 2018: \$2 million credit). The cost of hedging (the fair value of the change in currency basis spread) recognised in the cost of hedging reserve, for the year ended 30 June 2019 was nil (30 June 2018: \$3 million credit).

Chorus maintained one interest rate swap (IRS) which expired on 10 May 2019 that was not designated for accounting purposes in a hedging relationship. The fair value re-measurement of unrealised gains or losses on interest rate swaps that are not held in a hedging relationship are recognised immediately in finance expense in the Income statement. For the year ended 30 June 2019, \$3 million credit was recognised in finance expense (30 June 2018: \$3 million). As at 30 June 2019 Chorus does not hold any IRS not in a designated hedging relationship.

Note 19 – Derivative (cont.)

Chorus have entered into forward dated interest rate swaps which are all held in effective hedging relationships and their unrealised gains or losses are recognised in the cash flow hedge reserve. Two forward dated interest rate swaps with a combined face value of \$500 million were restructured during the period in conjunction with the resettable fixed rate bond issued on 6 December 2018, to hedge interest rate exposure from December 2023. This restructure incurred a one off cost during the period of \$2 million, recognised in finance expense.

As part of the restructure, the original hedge relationship was discontinued. On termination of this hedge relationship, a net present value of \$14 million continued to be recognised in the cash flow hedge reserve. This amount will remain in the cash flow hedge reserve as the hedged item still exists and the amount will be amortised over the original hedge period (2020-2026). The unamortised balance at 30 June 2019 is \$14 million.

Hedge accounting

Chorus designates certain derivatives as either:

- Fair value hedges (of the fair value of recognised assets or liabilities or firm commitments); or
- Cash flow hedges (of highly probable forecast transactions).

At inception each hedge relationship is formalised in NZ IFRS 9 compliant hedge documentation.

Cash flow hedge reserve

The cash flow hedge reserve comprises the effective portion of the cumulative net change in the fair value of cash flow hedging instruments related to hedged transactions that have not yet affected the Income statement.

For cash flow hedges, the effective portion of gains or losses from remeasuring the fair value of the hedging instrument is recognised in other comprehensive income and accumulated in the cash flow hedge reserve.

Chorus has a 1:1 hedge ratio and sources of ineffectiveness are driven by credit value adjustment of derivatives, except for the GBP EMTN relationship as explained earlier.

Cash flow hedges

For cash flow hedges the effective part of the changes in fair value of the hedging derivative are deferred in other comprehensive income and are transferred to the Income statement when the hedged item affects the Income statement. Any gain or loss relating to the ineffective portion of the hedging instrument in cash flow hedge relationships are recognised in the Income statement.

Hedge accounting is discontinued when the hedge instrument expires or is sold, terminated, exercised, or no longer qualifies for hedge accounting.

Once hedging is discontinued, any cumulative gain or loss previously recognised in Other comprehensive income is recognised in the Income statement either:

- at the same time as the forecast transaction; or
- immediately if the transaction is no longer expected to occur.

Accumulated gains or losses are subsequently transferred to the income statement when the hedged item affects the income statement, or when the hedged item is a forecast transaction that is no longer expected to occur. Alternatively, when the hedged item results in a non-financial asset or liability, the accumulated gains and losses are included in the initial measurement of the cost of the asset or liability.

A reconciliation of movements in the cash flow hedge reserve follows:

	2019 \$M	2018 \$M
Balance at 1 July	27	23
Changes in cash flow hedges	63	4
Amortisation of de-designated cash flow hedges transferred to income statement	2	1
Tax expense	(18)	(1)
Closing balance at 30 June	74	27

Fair value hedges

Under a fair value hedge, the hedged item is revalued at fair value in respect of the hedged risk. This revaluation is recognised in the income statement to offset the mark-to-market revaluation of the hedging derivative.

Once hedging is discontinued, the fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised through the Income statement from that date through to maturity of the hedged item. If the hedged item is derecognised any corresponding fair value hedge adjustment is immediately recognised in the Income statement.

To hedge the interest rate risk and foreign currency risk on the EUR EMTN, Chorus uses cross currency interest rate swaps. For hedge accounting purposes these swaps were aggregated and designated as two cash flow hedges and a fair value hedge. Chorus hedges a portion of the EUR EMTN for Euro fixed rate interest to Euro floating rate interest via a fair value hedge. In this case the change in the fair value of the hedged risk is also attributed to the carrying value of the EMTN (refer to note 4).

Cost of hedging reserve

The cost of hedging reserve captures changes in the fair value of the cost to convert foreign currency to NZD of Chorus' cross currency interest rate swaps on the EUR EMTN.

A reconciliation of movements in the cost of hedging reserve follows:

	2019 \$M	2018 \$M
Balance at 1 July	9	6
Change in currency basis spreads (when excluded from the designation)	–	4
Tax expense	–	(1)
Closing balance at 30 June	9	9

Hedging instruments used (pre-tax):

				Life to date values					Year to date values recognised during the year			
				Carrying amount of the hedging instrument					Hedge effectiveness in reserves	Hedge effectiveness	Hedge ineffectiveness	
				Nominal amount of the hedging instrument \$M	Assets \$M	Liabilities \$M	Change in value used for calculating hedge effectiveness \$M	Cost of hedging reserve \$M	Cash flow hedge (OCI) \$M	Cash flow hedge reclassified to the Income statement \$M	Fair value hedge (Income statement gain) \$M	Recognised in the Income statement loss \$M
30 June 2019	Currency	Maturity years	Average rate									
Cash flow hedges												
Cross currency interest rate swaps	NZD:GBP	1	Floating	677	–	(179)	(63)	–	29	(16)	–	(6)
Interest rate swaps	NZD	1	4.89%	676	–	(18)	(18)	–	(15)	–	–	–
Interest rate swaps (including forward dated)	NZD	1-7	2.87%	750	–	(42)	(42)	–	(35)	–	–	–
Restructured interest rate swaps (forward starting)	NZD	9	4.41%	500	–	(49)	(33)	–	(33)	–	–	–
Forward exchange rate contracts	NZD:USD	1-2	0.6933	32	1	–	1	–	1	3	–	–
Forward exchange rate contracts	NZD:SEK	1-2	5.8879	51	–	–	–	–	–	–	–	–
Electricity futures	NZD	1-2	NA	NA	2	–	2	–	2	–	–	–
Fair value and cash flow hedges												
Cross currency interest rate swaps	NZD:EUR	4	Floating	785	56	–	67	(12)	16	(17)	(24)	–
Total hedged derivatives				3,471	59	(288)	(86)	(12)	(35)	(30)	(24)	(6)
Current				–	3	(197)	–	–				
Non-current				–	56	(91)	–	–				

Note 19 – Derivative financial instruments (cont.)

Hedging instruments used (pre-tax):

30 June 2018	Life to date values								Year to date values recognised during the year			
	Carrying amount of the hedging instrument								Hedge effectiveness in reserves	Hedge effectiveness	Hedge ineffectiveness	
	Currency	Maturity years	Average rate	Nominal amount of the hedging instrument \$M	Assets \$M	Liabilities \$M	Change in value used for calculating hedge effectiveness \$M	Cost of hedging reserve \$M	Cash flow hedge (OCI) \$M	Cash flow hedge reclassified to the Income statement \$M	Fair value hedge (Income statement gain) \$M	Recognised in the Income statement loss \$M
Cash flow hedges												
Cross currency interest rate swaps	NZD:GBP	2	Floating	677	2	(150)	(34)	–	(38)	46	–	(7)
Interest rate swaps	NZD	2	4.89%	676	–	(33)	(33)	–	(11)	–	–	–
Interest rate swaps (including forward starting)	NZD	1–8	3.25%	1,150	–	(18)	(18)	–	(18)	–	–	–
Forward exchange rate contracts	NZD:USD	1–2	0.7189	54	–	–	–	–	–	–	–	–
Forward exchange rate contracts	NZD:SEK	1–2	5.8288	87	5	–	5	–	5	2	–	–
Fair value and cash flow hedges												
Cross currency interest rate swaps	NZD:EUR	5	Floating	785	70	(25)	60	(12)	(85)	84	(5)	2
Total hedged derivatives				3,429	77	(226)	(20)	(12)	(111)	132	(5)	(5)
Unhedged derivatives												
Interest rate swap	NZD	1	3.68%	250	–	(3)	–	–	–	–	–	–
Total derivatives				3,679	77	(229)	(20)	(12)	(111)	132	(5)	(5)
Current				–	3	19	–	–				
Non-current				–	74	210	–	–				

All hedging instruments can be found in the derivative finance assets and liabilities, in the Statement of financial position. Items taken to the Income statement have been recognised in finance expenses (refer note 4).

Credit risk associated with derivative financial instruments is managed by ensuring that transactions are executed with counterparties with high quality credit ratings along with credit exposure limits for different credit classes. The counterparty credit risk is monitored and reviewed by the Board on a regular basis.

Note 20 – Financial Risk Management

Chorus' financial instruments consist of cash, short-term deposits, trade and other receivables (excluding prepayments), investments and advances, trade payables and certain other payables, syndicated bank facilities, EMTN, fixed rate NZD bonds, derivative financial instruments and CIP securities. Financial risk management for currency and interest rate risk is carried out by the treasury function under policies approved by the Board. Chorus' risk management policy approved by the Board, provides the basis for overall financial risk management.

Chorus does not hold or issue derivative financial instruments for trading purposes. All contracts have been entered into with major creditworthy financial institutions. The risk associated with these transactions is the cost of replacing these agreements at the current market rates in the event of default by a counterparty.

Currency risk

Chorus' exposure to foreign currency fluctuations predominantly arise from the foreign currency debt and future commitment to purchase foreign currency denominated assets. The primary objective in managing foreign currency risk is to protect against the risk that Chorus assets, liabilities and financial performance will fluctuate due to changes in foreign currency exchange rates. Chorus enters into foreign exchange contracts and cross currency interest rate swaps to manage the foreign exchange exposure.

Note 20 – Financial Risk Management (cont.)

Chorus has issued GBP 260 million and EUR 500 million foreign currency debt in the form of EMTN. For the GBP EMTN Chorus has in place cross currency interest rate swaps under which Chorus receives GBP 260 million principal and GBP fixed coupon payments for \$677 million principal and floating NZD interest payments. For the EUR EMTN Chorus has in place cross currency interest rate swaps under which Chorus receives EUR 500 million principal and EUR fixed coupon payments for \$785 million principal and floating NZD interest payments. The exchange gain or loss resulting from the translation of EMTN denominated in foreign currency to NZD is recognised in the Income statement. The movement is offset by the translation of the principal value of the related cross currency interest rate swap.

As at 30 June 2019, Chorus did not have any significant unhedged exposure to currency risk (30 June 2018: no significant unhedged exposure to currency risk). A 10% increase or decrease in the exchange rate, with all other variables held constant, has minimal impact on profit and equity reserves of Chorus.

Electricity price risk

In the normal course of business, Chorus is exposed to a variety of financial risks which include the volatility in electricity prices. Chorus has entered into electricity swap contracts to reduce the exposure to electricity spot price movements. Chorus has designated the electricity contracts as cash flow hedge relationships.

A 10% increase or decrease in the spot price of electricity, with all other variables held constant, has minimal impact on profit and equity reserves of Chorus.

Interest rate risk

Chorus has interest rate risk arising from the cross currency interest rate swap converting the foreign debt into a floating rate NZD obligation. Where appropriate, Chorus aims to reduce the uncertainty of changes in interest rates by entering into interest rate swaps to fix the effective interest rate to minimise the cost of net debt and manage the impact of interest rate volatility on earnings. The interest rate risk on the entire GBP cross currency interest rate swaps and a portion of the EUR cross currency interest rate swaps have been hedged using interest rate swaps.

Interest rate repricing analysis

	Within 1 year \$M	1–2 years \$M	2–3 years \$M	3–4 years \$M	4–5 years \$M	Greater than 5 years \$M	Total \$M
30 June 2019							
Floating rate							
Cash and deposits	273	–	–	–	–	–	273
Debt	–	–	–	–	335	–	335
Fixed rate							
Debt (after hedging)	877	400	–	–	250	500	2,027
CIP securities	–	–	–	–	–	355	355
Leases (net settled)	(5)	(1)	2	2	2	165	165
	1,145	399	2	2	587	1,020	3,155
30 June 2018							
Floating rate							
Cash and deposits	50	–	–	–	–	–	50
Debt	–	–	–	–	–	535	535
Fixed rate							
Debt (after hedging)	250	677	400	–	–	–	1,327
CIP securities	–	–	–	–	–	273	273
Leases (net settled)	(5)	(5)	(1)	2	2	170	163
	295	672	399	2	2	978	2,348

Note 20 – Financial risk management (cont.)

Sensitivity analysis

A change of 100 basis points in interest rates with all other variables held constant, would increase or decrease equity (after hedging) and earnings after tax by the amounts shown below:

	2019 \$M Profit/(loss)	2019 \$M Equity (increase) /decrease	2018 \$M Profit/(loss)	2018 \$M Equity (increase) /decrease
100 basis point increase	1	(12)	3	(50)
100 basis point decrease	(1)	14	(3)	45

Credit risk

In the normal course of business, we incur counterparty credit risk from financial instruments, including cash, trade and other receivables, finance lease receivables and derivative financial instruments.

Chorus has certain derivative transactions that are subject to bilateral credit support agreements that require us or the counterparty to post collateral to support the value of certain derivatives. As at 30 June 2019 no collateral was posted.

The maximum exposure to credit risk at the reporting date was as follows:

	Notes	2019 \$M	2018 \$M
Cash and call deposits	15	273	50
Trade and other receivables	11	119	139
Derivative financial instruments	19	59	77
Lease receivable	5	6	5
Maximum exposure to credit risk		457	271

Refer to individual notes for additional information on credit risk.

Chorus enters into derivative transactions under the International Swaps and Derivatives Association (ISDA) master agreements. The ISDA agreements do not meet the criteria for offsetting in the Statement of financial position. This is because Chorus does not currently have any legally enforceable right to offset recognised amounts.

Under the ISDA agreements the right to offset is enforceable only on the occurrence of future events such as a default on the bank loans or other credit events. The potential net impact of this offsetting is shown below. Chorus does not hold and is not required to post collateral against its derivative positions.

Net derivatives after applying rights of offset under ISDA agreements:

	2019 \$M	2018 \$M
Derivative assets	59	77
Derivative liabilities	(288)	(229)
Net amount	(229)	(152)

Note 20 – Financial risk management (cont.)

Liquidity risk

Liquidity risk is the risk that we will encounter difficulty raising liquid funds to meet commitments as they fall due or foregoing investment opportunities, resulting in defaults or excessive debt costs. Prudent liquidity risk management implies maintaining sufficient cash and the ability to meet its financial obligations. Chorus' exposure to liquidity risk based on contractual cash flows relating to financial liabilities is summarised below:

	Carrying amount \$M	Contractual cashflow \$M	Within 1 year \$M	1–2 Years \$M	2–3 Years \$M	3–4 Years \$M	4–5 Years \$M	5+ Years \$M
30 June 2019								
Non derivative financial liabilities								
Trade and other payables	360	360	360	–	–	–	–	–
Leases (net settled)	254	442	9	14	17	16	16	370
Debt	2,232	2,578	575	451	35	35	881	601
CIP securities	355	426	–	–	–	–	–	426
Derivative financial liabilities								
Interest rate swaps	109	127	22	8	8	8	13	68
<i>Cross currency interest rate swaps:</i>								
Inflows	–	(1,401)	(522)	(10)	(10)	(10)	(849)	–
Outflows	123	1,612	722	32	32	32	794	–
Electricity contracts	2	(2)	(2)					
<i>Forward exchange contracts:</i>								
Inflows	1	(59)	(59)	–	–	–	–	–
Outflows	–	58	58	–	–	–	–	–
30 June 2018								
Non derivative financial liabilities								
Trade and other payables	370	370	370	–	–	–	–	–
Leases (net settled)	243	451	9	9	13	16	16	388
Debt	1,807	1,973	66	573	431	12	12	879
CIP securities	273	383	–	–	–	–	–	383
Derivative financial liabilities								
Interest rate swaps	54	55	23	19	13	–	–	–
<i>Cross currency interest rate swaps:</i>								
Inflows	–	(1,498)	(44)	(551)	(10)	(10)	(10)	(873)
Outflows	101	1,575	67	520	38	38	38	874
Electricity contracts	–	1	1	–	–	–	–	–
<i>Forward exchange contracts:</i>								
Inflows	–	(89)	(68)	(21)	–	–	–	–
Outflows	4	92	70	22	–	–	–	–

The gross (inflows)/outflows of derivative financial liabilities disclosed in the table represent the contractual undiscounted cash flows relating to derivative financial liabilities held for risk management purposes and which are usually not closed out prior to contractual maturity. The disclosure shows net cash flow amounts for derivatives that are net cash settled and gross cash inflow and outflow amounts for derivatives that have simultaneous gross cash settlement (for example, forward exchange contracts).

Chorus manages liquidity risk by ensuring sufficient access to committed facilities, continuous cash flow monitoring and maintaining prudent levels of short term debt maturities.

At balance date, Chorus had available \$550 million under the syndicated bank facilities (30 June 2018: \$290 million).

Capital risk management

Chorus manages its capital considering shareholders' interests, the value of our assets and credit ratings. The capital Chorus manages consists of cash and debt balances.

The Chorus Board's broader capital management objectives include maintaining an investment grade credit rating with headroom. In the longer term, the Board continues to consider a 'BBB' rating appropriate for a business like Chorus.

Note 20 – Financial risk management (cont.)

Hedge accounting

Chorus designates and documents the relationship between hedging instruments and hedged items, as well as the risk management objective and strategy for undertaking various hedge transactions. At hedge inception (and on an ongoing basis), hedges are assessed to establish if they are effective in offsetting changes in fair values or cash flows of hedged items.

Hedge accounting is discontinued if:

- (a) the hedging instrument expires or is sold, terminated, or exercised;
- (b) the hedge no longer meets the criteria for hedge accounting; or
- (c) the hedge designation is revoked.

Hedges are classified into two primary types: cash flow hedges and fair value hedges. Refer to note 19 for additional information on cash flow and fair value hedge reserves.

Fair value

Financial instruments are either carried at amortised cost, less any provision for impairment losses, or fair value. The only significant variances between instruments held at amortised cost and their fair value relates to the EMTN.

For those instruments, recognised at fair value in the statement of financial position, fair values are determined as follows:

Level 1: Quoted market prices – financial instruments with quoted prices for identical instruments in active markets.

Level 2: Valuation techniques using observable inputs – financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets. Where quoted prices are not available, the fair value of financial instruments is valued using models where all significant inputs are observable.

Level 3: Valuation techniques with significant non-observable inputs – financial instruments valued using models where one or more significant inputs are not observable.

The relevant financial assets and financial liabilities and their respective fair values are outlined in note 19 and are all Level 2 (30 June 2018: Level 2).

Cross currency interest rate swaps, interest rate swaps and forward-dated interest rate swaps

Fair value is estimated by using a valuation model involving discounted future cash flows of the derivative using the applicable forward price curve (for the relevant interest rate and foreign exchange rate) and discount rate.

Electricity swaps

Fair value is estimated on the ASX forward price curve that relates to the derivative.

Note 21 – Contingent liabilities

Chorus has an outstanding legal dispute with Creative Development Solutions (CDS). CDS has lodged a claim against Chorus in the High Court claiming breach of a non disclosure agreement and several other causes of action. Chorus denies it has any liability to CDS and a trial commences on 2 September 2019 to determine this. It is too uncertain to reasonably estimate any potential exposure Chorus has should it be found liable or any estimate on reimbursement possible, as this is dependent on several variable outcomes as indicated by legal experts.

There are no other contingent liabilities at 30 June 2019.

Note 22 – Post balance date events

Dividends

On 26 August 2019 Chorus declared a dividend in respect of year ended 30 June 2019. The total amount of the dividend is \$59 million, which represents a fully imputed dividend of 13.5 cents per ordinary share.

CIP securities and Crown funding

Two call notices were issued since 30 June 2019 to CIP in respect to 8,462 premises (UFB1) and 11,994 premises (UFB2) with a total aggregate issue price of \$30 million. These premises were not passed and tested by 30 June 2019 so are not accrued for in these financial statements.





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Our Board



Patrick Strange
BE (Hons), PhD

Chair
Director since 6 April 2015
Independent

Patrick has spent 30 years working as a senior executive and director in both private and listed companies, including more than six years as Chief Executive of Transpower where he oversaw Transpower's \$3.8 billion of essential investment in the National Grid. Patrick is currently chair of Auckland International Airport, a director of Mercury NZ, and on the Board of Essential Energy Australia.

Patrick is chair of our Nominations and Corporate Governance Committee.



Jon Hartley
BA Econ Accounting (Hons), Fellow ICA (England & Wales), Associate ICA (Australia), Fellow AICD

Deputy Chair
Director since 1 December 2011
Independent

Jon is a chartered accountant and fellow of the Australian Institute of Company Directors.

He has held senior roles across a diverse range of commercial and not for profit organisations in several countries, including as chair of SkyCity, deputy chair of ASB Bank and Sovereign Assurance Company, director of Mighty River Power, a trustee of World Vision New Zealand, CEO of Brierley New Zealand and Solid Energy, and CFO of Lend Lease in Australia.

Jon is currently chair of Timberlands, VisionFund International and the Wellington City Mission.

Jon is on our Audit and Risk Management Committee and our Nominations and Corporate Governance Committee.



Mark Cross
BBS (Accounting & Finance), CA

Director since 1 November 2016
Independent

Mark has extensive corporate finance experience, both as a professional director and consultant, and during his earlier investment banking career.

Mark has held senior positions with Deutsche Bank in London and Australia, and prior to that at Lloyds Corporate Finance/Southpac Corporation in Australia and New Zealand.

Mark is currently chair of Milford Asset Management, MFL Mutual Fund and Superannuation Investments, and a director of Z Energy. He is also a former director of Genesis Energy and Argosy Property.

Mark is a member of Chartered Accountants Australia and New Zealand and a chartered member of the Institute of Directors.

Mark is on our Audit and Risk Management Committee.



Prue Flacks
LLB, LLM

Director since 1 December 2011
Independent

Prue is a professional director with experience across a range of industries.

Prue was formerly a commercial lawyer and a partner in the national law firm Russell McVeagh for 20 years. Her expertise included corporate and regulatory matters, corporate finance, capital markets and business restructuring.

Prue is currently a director of Bank of New Zealand and Mercury NZ, and chair of Queenstown Airport Corporation. She is a chartered member of the Institute of Directors.

Prue is chair of our People, Performance and Culture Committee and on our Nominations and Corporate Governance Committee.

Our Board and management are committed to ensuring our people act ethically, with integrity and in accordance with our policies and values.



Murray Jordan
MProp

Director since
1 September 2015
Independent

Murray has extensive experience in the management of highly customer focused organisations and in navigating extremely complex environments, including as managing director of Foodstuffs North Island, one of New Zealand's largest companies.

Murray has also previously held various general manager positions at Foodstuffs and management roles in the property investment and development sectors. He is a director of Metcash Limited, an ASX listed company, SkyCity and Stevenson Group, and a Board trustee of Starship Foundation.

Murray is on our People, Performance and Culture Committee.



Jack Matthews
BA Philosophy, College of William and Mary

Director since 1 July 2017
Independent

Jack is an experienced director who has held a number of senior leadership positions within the media, telecommunications and technology industries in Australia and New Zealand.

Jack has extensive telecommunications industry experience having been CEO of TelstraSaturn during the period they deployed their HFC network in New Zealand, as well as a former director of Crown Fibre Holdings, the Crown agency overseeing the rollout of New Zealand's fibre infrastructure network.

Formerly, Jack was CEO of Fairfax Media's Metro Division, CEO of Fairfax Digital and Chief Operating Officer of Jupiter TV (Japan).

Jack is currently the chair of MediaWorks, a director of Plexure Group, and a former director of The Network for Learning, APN Outdoor Group and Trilogy International.

Jack is on our People, Performance and Culture Committee.



Kate McKenzie
BA, LLB

Managing Director
since 20 February 2017
Non-independent

Kate is currently CEO of Chorus and has an extensive communications infrastructure background including many years with Telstra in Australia where she was Chief Operations Officer for three years, responsible for Telstra's field services, IT and network architecture and operations. Prior to that, Kate held other senior positions at Telstra including Group Managing Director, Innovation, Products and Marketing, Group Managing Director, Wholesale, and Group Managing Director, Regulatory, Public Policy and Communications.

Prior to joining Telstra, Kate was a CEO in the NSW Government of the Departments of Commerce, Industrial Relations and the Workcover Authority.

Kate is currently on the Board of Allianz, having previously been on the Boards of Foxtel, Sydney Water, Reach, CSL and Workcover. She is also a member of Chief Executive Women and has had a long history of involvement in promoting the interests of indigenous communities.



Anne Urlwin
BCom, FCA, CFInstD, MAICD, FNZIM, ACIS

Director since
1 December 2011
Independent

Anne has extensive directorship experience across many sectors, including energy, health, construction, regulatory services, internet infrastructure, research, banking, forestry and the primary sector, as well as education, sports administration and the arts.

Anne is a director of Tilt Renewables, City Rail Link, Southern Response Earthquake Services, Steel & Tube Holdings, OnePath Life (NZ), and Summerset Group Holdings. Anne is also independent chair of the Ngāi Tahu Te Rūnanga Audit and Risk Committee, the former chair of commercial construction group Naylor Love Enterprises, Lakes Environmental, the New Zealand Blood Service, internet domain name registry operator NZRS and a former director of Meridian Energy.

Anne is chair of our Audit and Risk Management Committee.

Corporate governance framework

As a New Zealand company listed on the NZX our corporate governance policies and practices meet or exceed the standards of that market. We have adopted and fully followed the recommendations set out in the NZX Corporate Governance Code.

Although we have an ASX “foreign exempt” listing status¹ we also continue to take the ASX Corporate Governance Code into account in our governance practices and policies.

Our Board regularly reviews and assesses our governance policies, processes and practices to identify opportunities for enhancement.

Our corporate governance practices are outlined on the following pages and in our Corporate Governance Statement available at www.chorus.co.nz/governance.

Key corporate governance documents are also available at www.chorus.co.nz/governance.

Our Board’s role

Our Board is appointed by shareholders and has overall responsibility for strategy, culture, health and safety, governance and performance.

Board membership

Our Board’s skills, experience and composition support effective governance and decision making, positioning it to add value.

Supported by the Nominations and Corporate Governance Committee (NCGC) our Board regularly assesses its composition utilising a skills matrix and annual evaluation processes. Training is provided or recruitment undertaken if new or additional skills or experience is required. This ensures diversity of thought, skills and expertise and that our Board remains aligned with our strategic direction.

As at 30 June 2019 we had eight directors (seven independent directors and the managing director).

Directors are not appointed for specified terms. However, the NZX listing rules require directors to retire at least once every three years.

We recognise that women and ethnic minorities are still under-represented in the leadership of New Zealand businesses and our Board remains actively conscious of this in its succession planning. More information on our approach to diversity is set out later in this report.

¹ An ASX foreign exempt listing is based on the principle of substituted compliance. This means our primary obligation is to comply with the NZX listing rules (as our home exchange). As a result we do not need to follow or report against compliance with the ASX Corporate Governance Code.

Summary ¹ of our Board's roles and responsibilities:	
Culture	<ul style="list-style-type: none"> • Leading culture "from the top" so our culture is consistent with our values
Strategy & performance	<ul style="list-style-type: none"> • Engaging in ongoing strategy development • Overseeing capital allocation • Approving, and reviewing performance against, our strategy and business plans (including capital expenditure and operating budgets)
Financial oversight & reporting	<ul style="list-style-type: none"> • Overseeing our accounting and reporting systems and, where appropriate, approving our financial and other reporting • Overseeing and monitoring the performance of internal and external auditors • Overseeing our control and accountability systems • Overseeing long term capital management (balance sheet and dividends) • Setting, monitoring and reviewing our internal audit plan
Risk management	<ul style="list-style-type: none"> • Adopting and reviewing Chorus' risk management framework, including setting the risk appetite • Regularly reviewing principal risk reporting
Health & safety	<ul style="list-style-type: none"> • Setting the strategy, culture and expectations in relation to health and safety
Board composition & performance	<ul style="list-style-type: none"> • Reviewing and evaluating Board, Board committee and individual director performance • Appointing members to Board committees
Governance	<ul style="list-style-type: none"> • Overseeing corporate governance, including reviewing key governance documents • Carrying out the functions specifically reserved to our Board and its committees under Board approved policies and committee charters • Monitoring compliance with our continuous disclosure obligations
People	<ul style="list-style-type: none"> • Reviewing and approving remuneration and people strategies, structures and policies • Appointing and removing our CEO, CFO and General Counsel & Company Secretary • Assessing the measurable objectives set for, and progress towards achieving, our diversity and inclusiveness goals
Significant transactions	<ul style="list-style-type: none"> • Approving major capital expenditure and business activities outside the limits delegated to management

¹ Summary primarily drawn from our Charter but also from other supporting governance documents.

Figure 11:

Director tenure

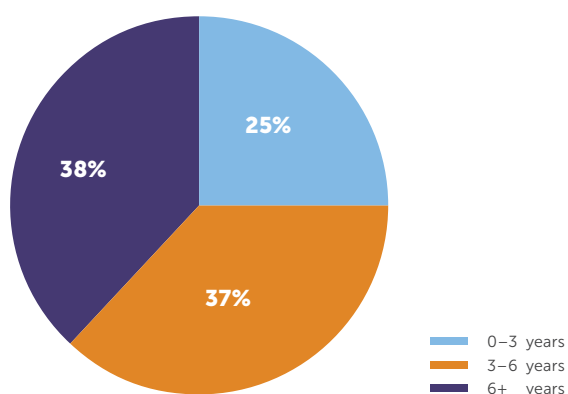
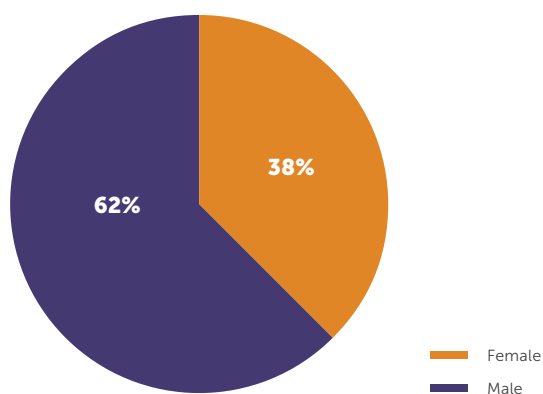


Figure 12:

Board gender diversity



Director	Appointed	Last elected at ASM
Prue Flacks	2011	2017
Jon Hartley	2011	2017
Anne Urlwin	2011	2018
Murray Jordan	2015	2018
Patrick Strange	2015	2018
Mark Cross	2016	2016
Jack Matthews	2017	2017
Kate McKenzie	2017	2017








Mark Cross is retiring by rotation and standing for re-election at our 2019 ASM.

Our Board has determined that collectively its directors have a broad range of managerial, financial, accounting and industry skills and experience in the key areas set out on the following page.

As the Chorus business evolves, so too does the Board. Chorus' beginnings were focused on infrastructure build

and project management. With the success of the build, we are increasingly focused on connecting customers and their experience as well as future connectivity and innovation opportunities. The Board considers it is important to balance both specialist expertise and the ongoing need for strong general commercial expertise.

The following table reflects the strengths of the current Board based on a mix of key skills and experiences as are currently relevant for Chorus.

Skill/experience	Description	Combined Board
Capital markets and investment	Experience in, and understanding of, capital markets, market regulation, capital investment and the investor experience	
Communications connectivity and technology	Understanding, expertise and/or experience in communications connectivity, adopting new technologies, leveraging and implementing technologies	
Governance – financial, audit, legal, listed company	Experience with, and a commitment to, high corporate governance standards including in listed companies Understanding financial business drivers, and/or experience implementing or overseeing financial accounting, external reporting and internal financial controls	
Physical infrastructure and operations including contracting, safety and risk	Experience in leading, and/or understanding of, physical infrastructure operations, including contracting Commitment and experience in management of workplace safety Experience anticipating and identifying key risks and monitoring the effectiveness of risk management frameworks and controls	
Governance – executive experience in large businesses	Executive experience in leading large businesses, developing and implementing strategy and strategic objectives, assessing business plans and driving execution	
Infrastructure regulation	Understanding the current and developing regulatory environment, complexities and actual and potential impacts Expertise identifying and managing legal, regulatory, public policy and corporate affairs issues	
Customer experience	Experience in customer-led transformation, customer focus and/or customer centric organisations	

 Substantial experience
  Moderate experience
  Some experience

Appointment

Our Board may appoint additional directors to our Board or to fill a casual vacancy.

The independence, qualifications, skills and experience needed for the future and those of existing Board members are reviewed before appointing new directors. External advisors are also engaged to identify potential candidates.

To be eligible for selection, candidates must demonstrate appropriate qualities and satisfy our Board they will commit the time needed to be fully effective in their role.

Appropriate checks are undertaken before a candidate is appointed or recommended for election as a director, including as to the person's character, experience, education, criminal record and bankruptcy history.

Shareholders may also nominate candidates for appointment to our Board. In addition, under the agreements entered into with CIP relating to our UFB programme, CIP is entitled to nominate one person as an independent director (they have never used this right). Should this occur, our Board must consider this nomination in good faith, but the appointment (and removal) of any such person as a director is to be made by shareholders in the same way as other directors.

We have written agreements with each non-executive director setting out the terms of their appointment, including obligations and responsibilities, compliance with our policies (including code of ethics and securities trading) and ongoing professional development.

Director induction and professional development

Our director induction programme ensures new directors are appropriately introduced to management and our business, acquaints directors with relevant industry knowledge and familiarises them with key governance documents and stakeholder relationships.

Our directors are expected to continue ongoing professional development to ensure they maintain appropriate expertise to effectively perform their duties.

We hold dedicated Board education sessions covering a range of topical matters, both technical and cultural.

Visits to our operations, briefings from key management, industry experts and key advisers, together with educational and stakeholder visits, are also arranged for our Board.

Review and evaluation of Board performance

Our Board uses internally and externally facilitated performance and evaluation processes overseen by our NCGC. As part of this process our chair meets with directors individually to discuss performance.

Our Board also formally engages in annual:

- Reviews of our Board chair and deputy chair, and chairs of our standing Board committees;
- Confirmations of our Board chair and deputy chair, and chairs of our standing Board committees; and
- Performance discussions of individual directors standing for re-election.

In addition to Board performance reviews, our Board takes a forward focused approach to future Board capability, composition and the potential contribution of each existing director.

An external review of Board, individual director, and standing Board committee performance commenced in the reporting period.

Independent advice

A director may, with our chair's prior approval, obtain independent professional advice (including legal advice) and request the attendance of advisers at Board and Board committee meetings.

Independence

All our directors are independent directors except for Kate McKenzie, our CEO and managing director.

For a director to be considered independent our Board must affirmatively determine he or she does not have a disqualifying relationship as set out in our Board charter. These disqualifying relationships reflect those set out in the NZX listing rules and NZX and ASX corporate governance codes.

Our Board has not set financial materiality thresholds for determining independence but considers materiality in the context of each relationship and from the perspective of the parties to that relationship.

Delegation of authority

Our Board has overall responsibility for strategy, culture, health and safety, governance and performance.

Implementation of our Board approved strategy, business plan and governance frameworks, and responsibility for developing our culture and health and safety practices, is delegated by the Board to management through the CEO.

As such our CEO (with the support of her executive team) is responsible for Chorus' day-to-day management, operations and leadership, reporting to the Board on key performance, management and operational matters.

Our CEO sub-delegates authority to her executive team and they sub-delegate their authority to other Chorus employees within specified financial and non-financial limits.

Formal policies and procedures govern the parameters and operation of these delegations.

Three standing Board committees also assist our Board in carrying out its responsibilities. Some Board responsibilities, powers and authorities are delegated to those committees.

Other committees may be established and specific responsibilities, powers and authorities delegated to those committees and/or to particular directors.

Board committees

Board committees assist our Board by focusing on specific responsibilities in greater detail than is possible for the Board as a whole. Each standing Board committee has a Board approved charter and chair. Committee members are appointed by our Board.



Audit and Risk Management Committee (ARMC)

Role	Our ARMC assists our Board in overseeing our risk and financial management, accounting, audit and financial reporting
Members	Anne Urlwin (chair), Jon Hartley, Mark Cross
Independence	All committee members are independent directors
Responsibilities	<ul style="list-style-type: none"> Overseeing the quality and integrity of external financial reporting, financial management and internal controls Regularly reviewing principal risk reporting Recommending to our Board the appointment, and if necessary removal, of the external auditor Assessing the adequacy of the external audit and independence of the external auditor Reviewing and monitoring the internal audit plan and reporting Overseeing the independence and objectivity of the internal audit function Reviewing compliance with applicable laws, regulations and standards

People Performance and Culture Committee (PPCC)

Role	Our PPCC assists our Board in overseeing people, culture and related policies and strategies
Members	Prue Flacks (chair), Murray Jordan, Jack Matthews
Independence	All committee members are independent directors
Responsibilities	<ul style="list-style-type: none"> Reviewing people and remuneration strategies, structures and policies Approving annual remuneration increase guides and budgets Reviewing candidates for, and the performance and remuneration of, our CEO Approving, on the recommendation of our CEO, the appointment of our CEO's executive direct reports (except our CFO and General Counsel & Company Secretary whose appointment is approved by our Board) Reviewing our CEO's performance evaluation of her executive direct reports Developing and annually reviewing and assessing diversity and its reporting Overseeing recruitment, retention and termination policies and procedures for senior management Making recommendations (including proposing amendments) to our Board with respect to senior executive (including CEO) incentive remuneration plans Annually reviewing non-executive director remuneration

Nominations and Corporate Governance Committee (NCGC)

Role	Our NCGC assists our Board in overseeing and promoting continuous improvement of corporate governance at Chorus
Members	Patrick Strange (chair), Jon Hartley, Prue Flacks
Independence	All committee members are independent directors
Responsibilities	<ul style="list-style-type: none"> Identifying and recommending suitable candidates for appointment to our Board and Board committees Reviewing the size, independence, qualifications, skills, experience and composition of our Board Developing, reviewing and making recommendations to our Board on corporate governance principles Establishing, developing and overseeing a process for the annual review and evaluation of Board, Board committee, and individual director performance Developing and reviewing Board succession planning (including for the Board chair) Monitoring compliance with our codes of ethics and managing breaches of the Director Code of Ethics Reviewing and overseeing director induction and ongoing professional development

Board and Board committee meeting attendance in the year ended 30 June 2019

	Regular Board meetings	Other Board meetings ¹	ARMC	PPCC	NCGC	DDC ⁴
Total number of meetings held	8	2	4	5	1	5
Patrick Strange ²	8	2			1	
Jon Hartley	8	2	3		1	
Mark Cross	8	2	4			
Prue Flacks	8	2		5	1	
Murray Jordan	8	2		5		
Jack Matthews	8	2		5		
Anne Urlwin	8	2	4			5
Kate McKenzie ³	8	2				5

Notes:

- Includes dedicated Board education, and strategy and business planning, meetings. Directors also have at least two health and safety site visits each year.
- Patrick, as Board chair, typically attends Board committee meetings. As he is not a formal member of those committees that attendance is not noted in the table.
- Kate McKenzie is not a member of any of the Board committees but attended all committee meetings as CEO and an observer.
- A Due Diligence Committee was established to oversee our NZX \$500 million bond issued in December 2018.

Managing risk

Like all businesses, we are exposed to a range of risks. Our risk management activities aim to ensure we identify, prioritise and manage key risks so we can execute our strategies and achieve our goals.

Risk management

No business can thrive without taking on risk. Effective risk management is about informed risk taking and appropriate and active management of risks.

We seek to understand and respond to our current and future business environment, and to actively seek and robustly evaluate opportunities and initiatives which protect and achieve our business strategies. We strive to understand, meet and appropriately balance stakeholders' expectations to deliver value to shareholders and a sustainable environment for Chorus in the long term.

Our Board

Our Board is ultimately responsible for risk management governance:

- Annually setting risk appetite and tolerances and reviewing principal risks;
- Approving and regularly reviewing our Managing Risk Policy and supporting framework;
- Promoting a culture of proactively managing risk; and
- Through our ARMC, providing risk oversight and monitoring.

Risk appetite

Our risk appetite sets our tolerable levels of risk. It forms a dynamic link between strategy, target setting and risk management and sets boundaries for day-to-day decision making and reporting.

Principal risks

Principal risks are our key risks. These are assessed on a risk profile identifying likelihood of occurrence and potential severity of impact. Current principal risk categories are identified via a comprehensive enterprise risk management framework encompassing financial and non-financial risks. They include, anticipating and responding to:

- Customer/market risks: customer service and experience; revenue growth and market changes;
- Operational risks: e.g. network and IT quality, availability and resilience; delivering effective and quality outcomes (including with service partners); labour market risks;
- People & culture: e.g. health & safety; engagement; capability; talent and change management;
- Regulatory risks and broader societal expectations: e.g. working within the regulatory and legal environment, and broader societal expectations;
- Capital management: e.g. working within appropriate capital management settings.

Our climate change risks are reviewed as part of our operational risks (see the Enabling Climate Action section on page 14 and 15).

Risk management processes

Our Managing Risk Policy sets out how we manage our risks, including by:

- Having a single risk management framework;
- Providing the CEO and executive team with discretion to manage risk within the guidance provided in our framework;
- Balancing the level of control implemented to mitigate identified risks with our commitment to comply with external regulation and governance requirements and Chorus' value and growth aspirations; and
- Meeting good practice standards for risk management processes and related governance.

The risk and control environment



Principal risks are owned by relevant executives. This promotes integration into operations and planning and a culture of proactive risk management. Notwithstanding individual ownership, our CEO and executive hold collective responsibility for considering how risk and events interrelate and for managing our overall risk profile.

Principal risks are reported to our ARMC quarterly and, if necessary, also by exception. Principal Risk owners support the regular reporting from the Manager of Risk & Business Assurance by providing “deep dives” on the risks they own. Our ARMC reports to our Board.

Principal risks are assessed with each responsible executive and collectively with the executive team before being reported to the ARMC. This allows for constructive challenge and debate. Underlying risk assessment and monitoring practices are undertaken by each principal risk owner with assistance from our Manager Risk & Business Assurance.

Our Board also receives management and other internal and external reporting over risk positions and risk management operation (including from internal audit plans approved by the ARMC) through our overall governance framework.

Our risks are not static. Our CEO and executive regularly seek to identify emerging risks in line with our strategic direction and risk management framework.

Before our Board approves the financial statements, our CEO and CFO provide a certificate as to the appropriateness of those financial statements

Internal audit

We operate a co-sourced internal audit model with our Manager Risk & Business Assurance supported by external advisors PricewaterhouseCoopers to provide additional resource and specialist expertise as required.

The responsibilities of our internal audit function include:

- Assisting our ARMC and Board in their assessment of internal controls and risk management;
- Developing an internal audit plan for review and approval by the ARMC each year;
- Executing the plan and reporting progress against it, significant changes, results and issues identified; and
- Escalating issues as appropriate (including to our ARMC and/or Board chairs).

Our executive team and ARMC monitor key outstanding internal audit issues and recommendations as part of regular reporting and review, including the timeliness of resolution.

Our ARMC has direct and unrestricted access to our internal audit function, including meeting them without management.

Our Manager Risk & Business Assurance has a management reporting line to our General Counsel & Company Secretary and a direct reporting line to our ARMC.

External auditor

Our Board and ARMC monitor the ongoing independence and quality of our external auditor. Our ARMC also meets with our external auditor without management present.

Our ARMC charter and External Auditor Independence Policy amongst other things:

- Prohibit the provision of certain non-audit services by our external auditor;
- Require ARMC approval of all audit and permitted non-audit services;
- Require our client services partner and lead/engagement partner to be rotated every five years (with a five year cooling off period) and other audit partners to be rotated every seven years (with a two year cooling off period);
- Require our ARMC to review our external auditor’s fees half yearly (including the ratio of fees for audit vs. non-audit services); and
- Impose restrictions on the employment of former external audit personnel.

The non-audit services undertaken by our external auditor KPMG in the year to 30 June 2019 are set out in note 10 of the financial statements in this report. Those services were provided in accordance with our ARMC charter and External Auditor Independence Policy and did not affect KPMG’s independence, including because:

- They were approved only where we were satisfied they would not have a material bearing on KPMG’s external audit procedures; and
- They did not involve KPMG acting in a managerial or decision-making capacity.

KPMG confirm their independence via independence declarations every six months.

Our external auditors attend our ASM each year.

Acting ethically

Codes of ethics

Directors and employees are expected to act honestly and with high standards of personal integrity. Codes of ethics for our directors and employees set the expected minimum standards for professional conduct. These codes facilitate behaviours and decisions that are consistent with our values, business goals and legal and policy obligations, including in respect of:

- Conflicts of interest;
- Gifts and personal benefits;
- Anti-bribery and corruption;
- Use of corporate property, opportunities and information;
- Confidentiality;
- Compliance with laws and policies; and
- Reporting unethical behaviour.

We have communicated our codes of ethics and provided training to our directors and employees. Our people are also encouraged to report any unethical behaviour. All reported breaches are investigated.

Other policies reinforce the behaviours we expect at Chorus, including:

- **Bribery & gifts:** Acceptance of bribes, or gifts/other benefits which could be perceived as influencing decisions, are prohibited under our codes of ethics policies. Our Gifts and Entertainment Policy sets out the parameters within which gifts and entertainment may be accepted and our approval processes for gifts and entertainment over \$150.
- **Anti-bullying, Harassment and Discrimination:** Our Anti-bullying, Harassment and Discrimination Policy reinforces our commitment to a psychologically and physically safe working environment including our zero tolerance approach to bullying, harassment and discrimination.
- **Whistle blowing and fraud:** Our Whistle Blowing and Fraud policies allow for confidential reporting of serious misconduct or wrongdoing and suspected fraud or corruption.

While we did not receive any reports of serious instances of unethical behaviour by our employees in the year to 30 June 2019, we did unfortunately receive reports of alleged unethical behaviour by some sub-contractors used by our service company partners. As noted earlier in this report, we, and an independent reviewer, fully investigated these allegations. We, with our service company partners, have announced the steps we are taking aimed at creating consistently fair conditions, in line with employment laws, for all workers in the Chorus supply chain and are committed to doing the right thing by people working on our behalf.

Trading in Chorus securities

All non-executive directors are encouraged to hold Chorus shares. It is the Board's intention that each director will, subject to chair discretion, hold at a minimum, shares equal in value to one year's, post-tax, director base fees, accumulated over the first 3 years in office.

All trading in Chorus securities by directors and employees must be in accordance with our Securities Trading Policy. That policy prohibits trading in Chorus securities while in possession of inside information and requires, amongst other things:

- Directors to notify, and obtain consent from, the chair (or in the chair's case, the ARMC chair) before trading; and
- Employees identified as potentially coming across market sensitive information ("restricted persons"), to obtain consent from our General Counsel & Company Secretary (or in our General Counsel & Company Secretary's case, our Board chair) before trading.

Trading in Chorus shares or NZX listed bonds by directors is disclosed to our Board, the NZX and ASX. Trading by "senior managers" is disclosed to the NZX.

Market disclosures

We are committed to providing timely, factual and accurate information to the market consistent with our legal and regulatory obligations.

We have a Board approved Disclosure Policy and a CEO approved Market Disclosure Policy setting out our disclosure practices and processes in more detail.

Our disclosure policies are designed to ensure:

- Roles of directors, executives and employees are clearly set out.
- Appropriate reporting and escalation mechanisms are established.
- There are robust and documented confidentiality protocols in place where appropriate.
- Only authorised spokespersons comment publicly, within the bounds of information which is either already publicly known or non-material.

Our approach to tax

We take our tax obligations seriously and work closely with Inland Revenue to ensure we meet our tax obligations.

We obtain external advice and Inland Revenue's views (through informal correspondence, determinations or rulings) in respect of unusual or material transactions.

As we operate only in New Zealand all our tax is paid in New Zealand at the prevailing corporate tax rate (currently 28%). We have paid all taxes we owe and all tax compliance obligations are up to date.

Stakeholder engagement

Shareholder engagement

We are committed to fostering constructive relationships with shareholders that encourage engagement with us, including by:

- Communicating effectively with them;
- Giving ready access to balanced and understandable information;
- Making it easy for shareholders to participate in general meetings; and
- Maintaining an up to date website providing information about our business.

Our investor relations programme is designed to further facilitate two-way communication with shareholders, provide them and other market participants with an understanding of our business, governance and performance and an opportunity to express their views. As part of this programme we enable investors and other interested parties to ask questions and obtain information, meet with investors and analysts and undertake formal investor presentations. Our annual and half year results presentations are made available to all investors via webcast.

Annual meetings are held in a main centre and webcast to enable shareholders to view and hear proceedings online.

We enable shareholders to vote by proxy ahead of meetings without having to physically attend or participate in those meetings and adopt the one share one vote principle, conducting voting at shareholder meetings by poll.

Because of the ownership restrictions contained in our constitution, there may be rare circumstances where, in the event that the restriction is breached, our Board may prohibit the exercise of voting rights. More information on our ownership restrictions is included later in this report and in our constitution.

We consider that shareholders should be entitled to vote on decisions which would change the essential nature of our business.

Shareholders are also able to ask questions of, and express their views in respect of, our Board, management and auditors (including via appointed proxies) at and before annual meetings.

We encourage shareholders to communicate with us and our share registrar electronically, including by providing email communication channels and online contact details and instructions on our website.

Stakeholder survey

We conduct an annual survey of a diverse group of stakeholders to gauge perceptions of our performance and identify any matters that may require further attention. These stakeholders include investors and analysts, business leaders, central and local government, media, and telecommunications industry organisations.

Diversity and inclusion

Our *Belonging* strategy aims to build an inclusive culture which strengthens our collective capability, allowing us to attract, identify and retain diverse talent, while leveraging the diversity of our people.

Based on the annual review of effectiveness of our Diversity and Inclusion (D&I) policy and our measurable diversity metrics and objectives, our Board considers that overall we are making progress towards achieving our D&I objectives and that we have performed well against the policy generally. We continue to consciously focus on this as we support a culture of inclusion at Chorus.

We have four key pillars or areas of focus for the work in diversity and inclusion: flexible and adaptable workforce; diverse leadership; wellbeing, and; inclusive culture.

Belonging Strategy Focus Areas

Flexible & adaptable workforce

1

Flexible working arrangements including the technology and infrastructure to enable them are made available to our people where possible, supporting an agile culture

We are open and adaptable in our approach to requests for flexible working arrangements, always ensuring business and customer experience objectives will be delivered

Diverse leadership

2

We provide targeted development opportunities to support diversity in leadership

Our remuneration and reward strategy promotes pay equity

We focus on gender diversity in leadership roles

We focus on ethnic diversity in leadership roles, in particular greater Maori, Pasifika and Asian representation

Wellbeing

3

We build a resilient health and safety culture by providing a work environment that is “psychologically safe” with a zero-tolerance approach to bullying, harassment and discrimination

We are a safe place in which to raise these issues

Our culture encourages employees to maintain or adopt a healthy lifestyle

Our approach to wellbeing is holistic and caters for diversity through four pillars – physical, career, financial and emotional

Inclusive culture

4

Our culture is inclusive of all people

We encourage and value different approaches and perspectives, actively using diversity of thought to make high quality decisions and increase our ability to innovate

We celebrate diversity by participating in significant national events, with a focus on understanding the diverse cultures and ethnicities at Chorus

1

Flexible and adaptable workforce

Flexible work is considered a key enabler of workforce participation for diverse talent groups. *Flex@Chorus*, our approach to flexible working, was launched in January 2019 to give our employees greater access to flexible working arrangements.



8.3 I am satisfied with our flexible working policy ≥ 8.8 (Top 10% in the Technology benchmark*).

8.5 My work schedule is flexible enough to accommodate my family or personal life ≥ 8.6 (Top 10% in the Technology benchmark*).

* Chorus engagement survey data is provided by Peakon who are able to provide industry sector benchmarks for data comparison. Achieving a score that compares within the top 10% of the industry benchmark is considered best in class.

Figure 13: Gender pay gap

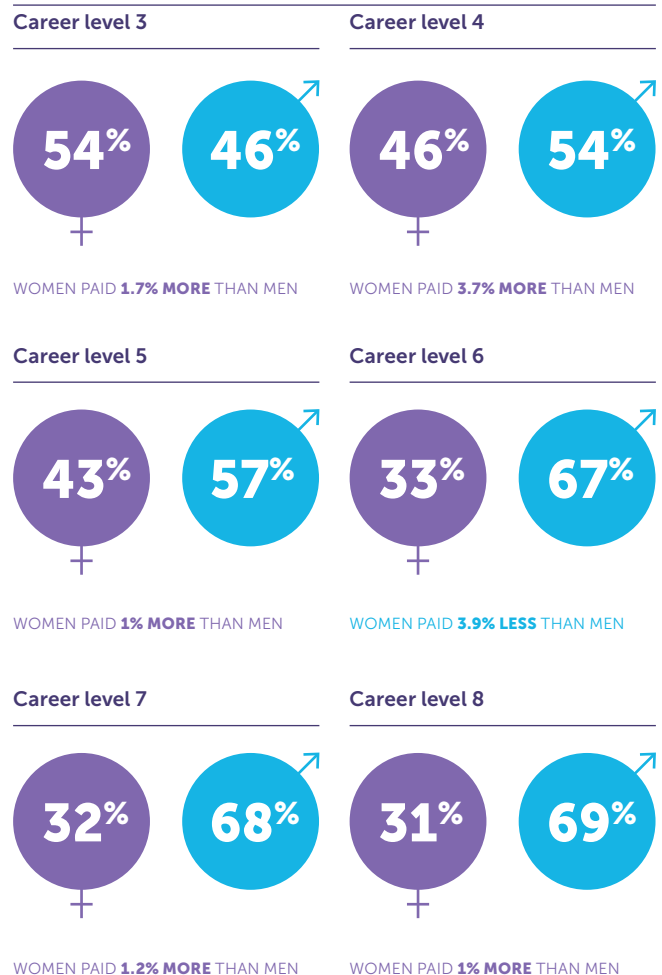
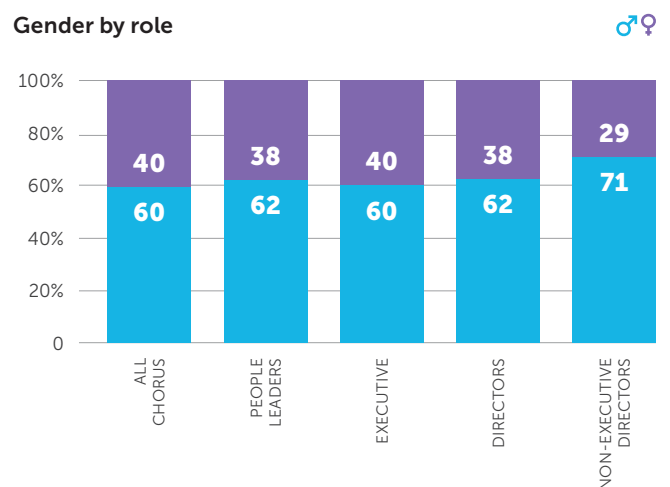


Figure 14:



Diverse leadership

We're proud to be close to realising a 40:40:20 gender ratio¹ in our people leader population as endorsed by the Board in May 2019. Overall gender diversity remained static at 60:40 (male to female) across Chorus, while the proportion of women in leadership roles increased by 3% to 38%. This means our people leaders are close to having a gender ratio reflective of the wider organisation. Women continue to be under-represented at senior levels but they make up 53% of our employee population, in our most junior roles.

The gender pay balance is affected by this higher representation of women in junior roles and lower representation in senior roles. We're committed to closing our gender pay gap by 2022 and have reduced it from 13.3% in 2018 to 11.6% this year. We're pleased to report that, at equivalent levels in the organisation, there is no gap greater than 3.9%.

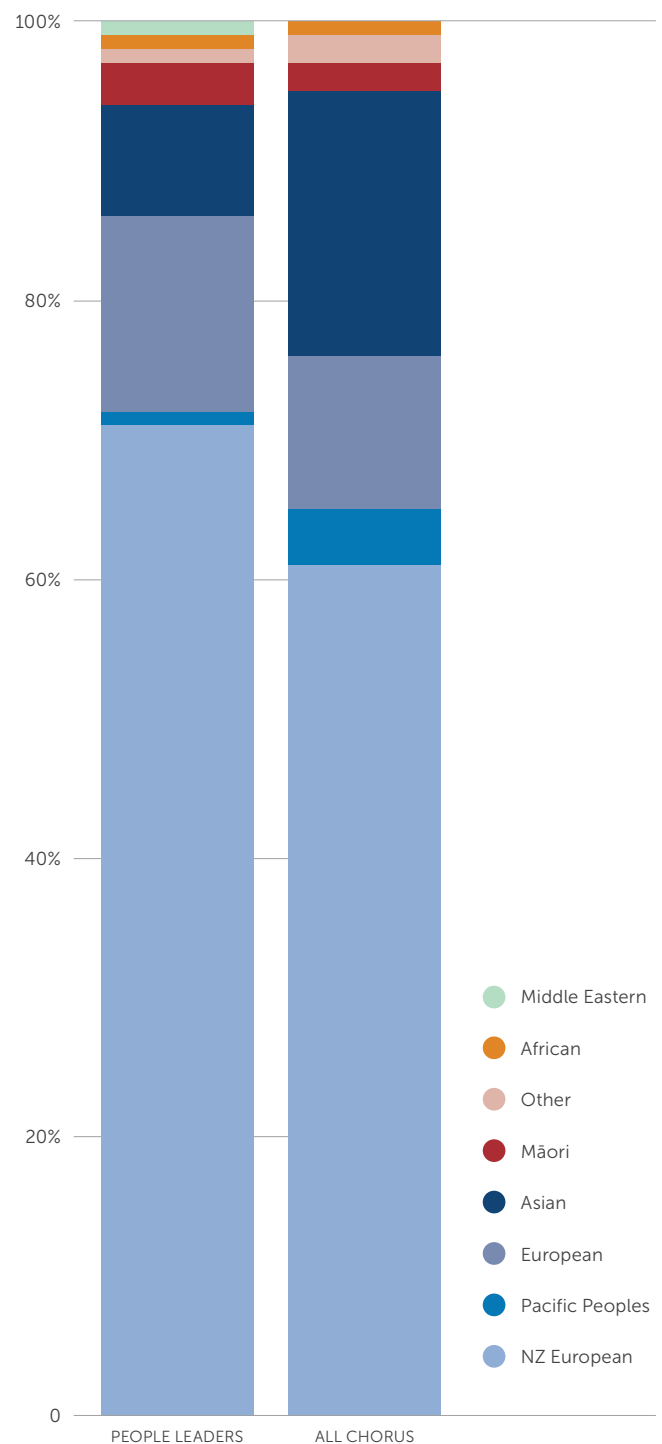
We had five male and three female directors at 30 June 2019 consistent with the prior year. Non-executive directors were also the same as the previous year at 30 June 2019 with five male and two female non-executive directors. Our executive (officers or senior managers) comprising our CEO and her leadership team, had six male and four female members at 30 June 2019 (30 June 2018: six male and four female).

People identifying themselves as Maori, Asian or Pacific peoples continue to be under-represented in the people leader population at Chorus, when compared to the general New Zealand population based on 2013 census data. Ethnicity data for both 2019 and 2018 has been updated to include Filipino employees in the Asian category (previously reported under Pacific Peoples).

38% Women working in leadership roles increased 3%

Figure 15:

Ethnicity by role



¹ 40% men, 40% women, 20% of any/either gender.

3

Wellbeing

The wellbeing of Chorus employees remains a priority and FY19 saw a focus on mental wellbeing. A Mental Health First Aid certification programme was introduced in partnership with St John and 20% of employees received certification.

In January 2019 we launched wellbeing days, with two additional days of leave available to all permanent employees to use as they wish, to support their personal wellbeing. This initiative received overwhelmingly positive support from our people.

20%

of employees
received St John
mental health
certification

8.3

Chorus really cares about
my mental wellbeing ≥ 8.2
(Top 10% in the Technology
benchmark).

8.1

Working here, I feel that I
can live a physically healthy
lifestyle ≥ 8.1 (Top 10% in the
Technology benchmark).

4

Inclusive culture

Established in 2017, the UP women's leadership programme is in its third year and continues to increase confidence and presence in our women leaders, encouraging them to step into more senior roles. Women's networks are now established across the business and, from the success of these, further networks continue to develop.

We proudly received Rainbow Tick certification in 2019. This recognises Chorus as a workplace that understands, values and welcomes sexual and gender diversity. Being selected as finalists in the New Zealand Rainbow Excellence Awards was further recognition of our work to build an inclusive culture. We were honoured to be awarded the Partner's Life Emerging Award for organisations early in the journey of support for the rainbow community.

8.5

People from all backgrounds
are treated fairly at Chorus
 ≥ 9.1 (Top 10% in the
Technology benchmark).

8.0

I am treated like a valued
member of Chorus ≥ 9.1
(Top 10% in the Technology
benchmark).

7.7

Overall engagement
score for Rainbow
Community is just above
the Chorus population.

8.3

Overall result for the
Organisational Fit
dimension is the same
as the Chorus population.

Remuneration and performance

Our remuneration model

Our remuneration model is designed to enable the achievement of our strategy, whilst ensuring that remuneration outcomes align with employee and shareholder interests.

Remuneration is governed by the Board, assisted by the PPCC. The PPCC supports the Board by overseeing our remuneration strategy and policy.

Figure 16:

Our remuneration policy is designed around six guiding principles:

Remuneration principles	What does this mean?
1 Fair to all - employees and shareholders, sharing in the success of Chorus.	= Commitment to pay equity and alignment with our shareholders' expectations.
2 Supports a Performance focused culture.	= Rewards aligned with performance.
3 Valued by our people.	= We have a diverse workforce and aim to provide an appropriate suite of rewards that provide value, now and in the future.
4 Simple to understand and administer.	= Simplicity promotes understanding, clarity and fairness perception.
5 Market — aligned with our competitors.	= We ensure we are not over or underpaying our people through robust market analysis that guides our decisions on remuneration.
6 Point of difference — how we know it is Chorus.	= Supports our vision, mission, values, purpose and employee value proposition.

For FY19 all employees had fixed remuneration, targeted at the market median and the potential to earn a Short Term Incentive (STI).

The CEO and members of the executive leadership team also had the potential to earn a Long Term Incentive (LTI). Both STI and LTI are deemed at risk because the outcome is determined by performance against a combination of pre-determined financial and non-financial objectives.

Fixed remuneration

Fixed remuneration (not at risk) consists of base salary and other benefits including KiwiSaver. Fixed remuneration is adjusted each year based on data from independent remuneration specialists. Employees' fixed remuneration is based on a matrix of their own performance and their current position when compared to the market.

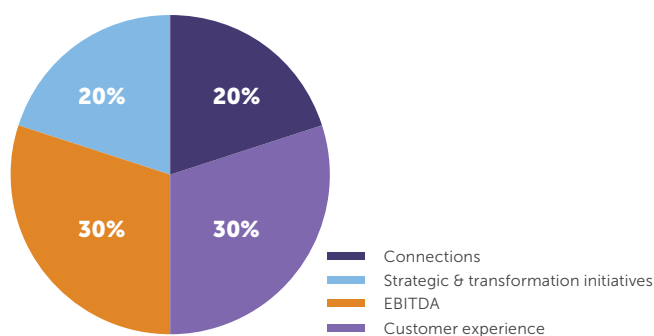
Short term incentive

Short term incentive payments (STIs) are an at risk component set as a percentage of fixed remuneration, from 5% to 30% based on the complexity of the role (the CEO's STI is a higher percentage of fixed remuneration as set out later in this report). STI payments are determined following a review of Company and individual performance and paid out at a multiplier of between 0x and 1.75x for the CEO and executive leadership team, and between 0x and 2.8x for all other employees.

Company performance goals are set and reviewed annually by our Board to ensure appropriate focus on areas which will enhance shareholder value over the longer term. A focus on the customer experience continued to be a feature for the FY19 STI measures.

Figure 17:

FY19 STI Goals



FY20 STI goals	
EBITDA	Increased to 40% to align with objective of modest growth
Customer experience	Reduced to 20% following completion of major customer projects in FY19
Connections	Maintained at 20%, but with focus shifted from total connections (FY19) to revenues, to better reflect higher value of broadband connections over voice only lines
Strategic and transformation initiatives	No change.

Fundamental to the Chorus STI structure is a gateway goal. The philosophy of the gateway goal is to provide a preliminary threshold of financial success and affordability, before any other measures can be considered for potential STI payments. If the gateway goal is not achieved, then no STI is payable.

Individual performance goals for all employees are tailored to their role, with 70% of the goals based on what they achieve and 30% based on how they perform their role, which includes a health and safety component for all people leaders.

As an example of how the STI is calculated, an employee with fixed remuneration of \$80,000 and an STI element of 10% may receive between \$0 and \$22,400 (0x to 2.8x their STI percentage) depending on the level of company performance and their individual performance.

During the course of FY19 we conducted a review of our total reward strategy. The review focused on strengthening the alignment of our remuneration strategy to performance and delivery of long term sustainable returns for shareholders. The anticipated result is that only our most senior employees will be eligible for a STI in FY20. The Board strongly believe that this model will drive the performance culture required to deliver value for shareholders.

Long term incentives

We offer long term incentives (LTI) under an executive LTI share scheme to reward and retain key executives. The LTIs are an at risk payment designed to align the interests of executives and shareholders and encourage longer term decision making.

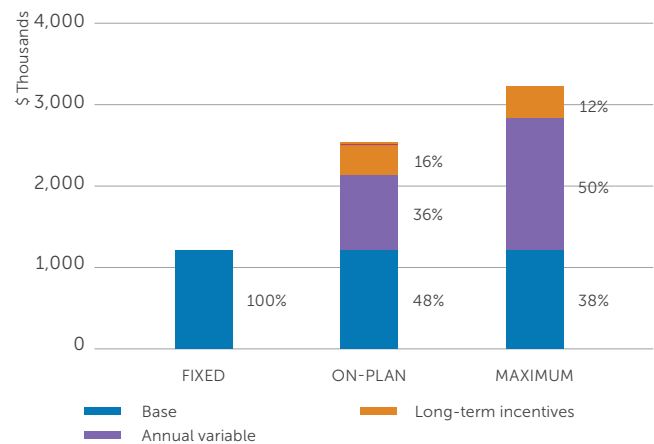
The LTI is described in more detail in Note 16 of the financial statements on page 56.

Chief Executive remuneration

CEO remuneration consists of fixed remuneration, an STI and an LTI. In addition to participating in the Executive LTI scheme, on her appointment the Board granted Kate McKenzie a one time LTI ('Extended LTI') to recognise and reward the potential to add significant shareholder value through an increase in total shareholder return over and above that rewarded by the executive LTI scheme. Our CEO continues to have a significant portion of her remuneration linked to performance and at risk. Total remuneration for our CEO continues to be determined using a range of external factors, including advice from external remuneration specialists and is reviewed annually by the Board, on advice from the PPCC.

CEO remuneration performance pay

The scenario chart below demonstrates the elements of the CEO remuneration design in the year ended 30 June 2019.



CEO remuneration for FY18 and FY19 was:

		Fixed remuneration	Pay for performance	Total remuneration	
		Salary	STI	LTI	
Kate McKenzie	FY19	1,224,000	844,560 ¹	–	2,068,560
	FY18 ²	1,200,000	1,019,475 ³	–	2,219,475

1 STI for FY19 performance period (paid FY20).

2 Kate McKenzie became CEO on 20 February 2017.

3 STI for FY18 performance period (paid FY19).

Other benefits paid to Kate McKenzie: Company Kiwisaver contributions: FY19: \$67,372 (FY18: \$47,220)

Five year summary of CEO remuneration:

CEO		Total remuneration	% STI awarded against maximum	% STI extension awarded against maximum	% LTI awarded against maximum	% LTI replacement awarded against maximum	Span of LTI performance period
Kate McKenzie	FY19	2,068,560	53%	–	–	–	–
	FY18	2,219,475	65%	–	–	–	–
Mark Ratcliffe	FY18	–	–	–	89%	–	FY15 – FY18 ¹
	FY17	1,981,987	48%	–	100%	100%	FY15 – FY17
	FY16	2,249,276	75%	100%	70%	–	FY13 – FY15
	FY15	1,877,143	57%	100%	69%	–	FY12 – FY14

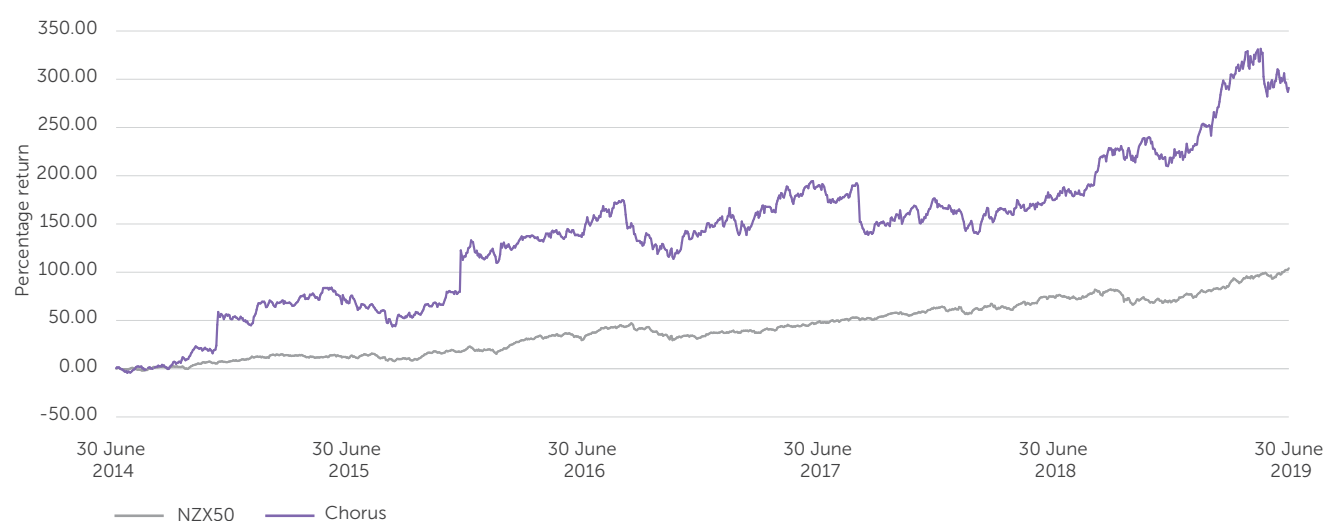
1. Three year grant made 1 July 2015.

The table below outlines the CEO's STI, LTI and extended LTI schemes for the performance period ending 30 June 2019¹:

	Description	Performance measures	Percentage achieved
STI	Set at 75% of base remuneration. Based on key financial and non-financial performance measures.	<ul style="list-style-type: none"> Company performance – see figure 17 on page 86 for weightings. Individual performance – based on business fundamentals (both financial and non-financial), connections, customer experience and strategic initiatives. 	92%
LTI	Three-year grant made September 2017, equivalent to 33% of base remuneration.	Chorus TSR performance over grant period must exceed 10.6% on an annualised basis, compounding.	Assessed September 2020 with possible retesting up to September 2021.
	Three-year grant made September 2018, equivalent to 33% of base remuneration.	Chorus TSR performance over grant period must exceed 10.4% on an annualised basis, compounding.	Assessed September 2021 with possible retesting up to March 2022
Extended LTI	One-time four-year grant calculated by reference to the increase in TSR over and above that rewarded by the executive LTI scheme capped at NZ\$2,000,000.	Annualised TSR performance over grant period must exceed average cost of equity over the period plus 1%.	Assessed February 2021.

¹ The STI payments for FY19 will be paid in FY20.

Total Shareholder Return (TSR) performance



The graph above shows Chorus' TSR performance against the NZX50 between 30 June 2014 and 30 June 2019.

Median pay gap

The median pay gap represents the number of times greater the CEO remuneration is to an employee paid at the median of all Chorus employees. At 30 June 2019, the CEO's base salary at \$1,224,000, was 12.9 times that of the median employee at \$95,228 per annum.

The CEO's total remuneration, including STI, was 20.4 times the total remuneration of the median employee (including STI) at \$104,971

Employee remuneration range for the year ended 30 June 2019

The table opposite shows the number of employees and former employees who received remuneration and other benefits in excess of \$100,000 during the year ended 30 June 2019.

During the year, certain employees received contributions towards membership of the Marram Trust (a community healthcare and holiday accommodation provider), received contributions toward their Government Superannuation Fund (a legacy benefit provided to a small number of employees) and, if a member, received contributions of 3% of gross earnings towards their KiwiSaver accounts. These amounts are not included in these remuneration figures. Any benefits received by employees that do not have an attributable value are also excluded.

The remuneration paid to, and other benefits received by, Kate McKenzie in her capacity as CEO are detailed on page 87, and are excluded from the table opposite.

The Living Wage in FY19 was \$20.55 per hour. Chorus does not have any permanent employee earning less than the current living wage.

Remuneration range \$ (Gross)	Number of employees in the year ended 30 June 2019	
	REM only	REM including benefits
Actual Payment		
1,010,001–1,020,000	–	1
890,001–900,000	1	–
870,001–880,000	1	1
840,001–850,000	–	1
750,001–760,000	1	–
590,001–600,000	–	1
560,001–570,000	–	1
510,001–520,000	1	–
490,001–500,000	1	1
480,001–490,000	1	–
460,001–470,000	1	1
410,001–420,000	1	1
390,001–400,000	1	2
380,001–390,000	1	1
370,001–380,000	1	1
360,001–370,000	1	1
340,001–350,000	1	–
320,001–330,000	1	1
310,001–320,000	2	2
300,001–310,000	2	2
290,001–300,000	6	6
280,001–290,000	4	4
270,001–280,000	5	5
260,001–270,000	3	3
250,001–260,000	4	4
240,001–250,000	7	8
230,001–240,000	7	7
220,001–230,000	11	11
210,001–220,000	8	8
200,001–210,000	12	12
190,001–200,000	11	11
180,001–190,000	21	21
170,001–180,000	23	23
160,001–170,000	41	41
150,001–160,000	30	30
140,001–150,000	45	45
130,001–140,000	37	37
120,001–130,000	54	54
110,001–120,000	57	57
100,000–110,000	79	79
Grand Total	483	484

Director remuneration

Fee structure

Total remuneration available to directors (in their capacity as such) in the year ended 30 June 2019 was fixed at our 2016 annual shareholders' meeting at \$1,149,500.

Annual fee structure	Year ended 30 June 2019 \$	Year ended 30 June 2018 \$
Board fees:		
Board chair	223,650	223,650
Deputy chair	167,750	167,750
Non-executive director	114,000	111,850
Board committee fees:		
Audit and Risk Management Committee		
Chair	32,600	32,000
Member	16,300	16,000
People, Performance and Culture Committee		
Chair	22,900	22,470
Member	11,750	11,500
Nominations and Corporate Governance Committee		
Chair	16,720	16,720
Member	8,880	8,880

Notes:

- 1 The Board chair and deputy chair receive Board fees only. Other directors receive committee fees in addition to their Board fees.
- 2 Directors (except the CEO) do not participate in a bonus or profit-sharing plan, do not receive compensation in share options, and do not have superannuation or any other scheme entitlements or retirement benefits.
- 3 Directors may be paid an additional daily rate of \$2,400 for additional work as determined and approved by our chair and where the payment is within the total fee pool available. In the year to 30 June 2019 \$7,200 was paid to Anne Urlwin for her additional work on one of our Due Diligence Committee's as noted in the table below.
- 4 Director base fees, and some committee fees were increased in the year to 30 June 2019 by ~1% - 2%. Board chair and deputy chair fees did not increase.

Fees paid to Directors (in their capacity as such) in the year ended 30 June 2019

Director	Total fees ¹ \$	Board fees	ARMC	PPCC	NCGC	DDC
Patrick Strange	223,650	223,650			-	
Jon Hartley	167,750	167,750	-		-	
Mark Cross	130,300	114,000	16,300			
Prue Flacks	145,780	114,000		22,900	8,880	
Murray Jordan	125,750	114,000		11,750		
Jack Matthews	125,750	114,000		11,750		
Anne Urlwin	153,800	114,000	32,600			7,200
Kate McKenzie ²	-	-				
Total						

Notes:

- 1 Amounts are gross and exclude GST (where applicable).
- 2 Kate McKenzie as CEO did not receive any remuneration in her capacity as a director.
- 3 Directors (other than the CEO) did not receive any other benefits.
- 4 Directors are entitled to be reimbursed for travel and incidental expenses incurred in performance of their duties in addition to the above fees.

Fee structure from 1 July 2020

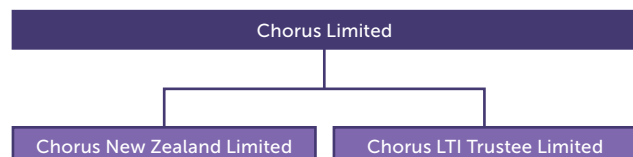
Our PPCC reviews non-executive director remuneration annually based on criteria developed by that committee. Based on that committee's recommendation the Board has determined not to change Board fees for the year from 1 July 2019.

Disclosures

Group structure

Chorus Limited has two wholly owned subsidiaries:

Chorus New Zealand Limited (CNZL) and Chorus LTI Trustee Limited (CLTL).



Chorus Limited is the entity listed on the NZX, ASX and Luxembourg stock exchanges. It is also the borrowing entity under the group's main financing arrangements and the entity which has partnered with the Crown for the UFB build.

CNZL undertakes (and is the contracting entity for) Chorus' operating activities and is the guarantor of Chorus Limited's borrowing. CNZL also employs all Chorus people. CNZL has its own constitution but its Board is the same as the Chorus Limited Board.

CLTL was incorporated in December 2014 as trustee for our long term incentive plan.

Disclosures in respect of CNZL and CLTL are set out in the "Subsidiaries" section on page 98.

Indemnities and insurance

Chorus indemnifies directors under our constitution for liabilities and costs they may incur for their acts or omissions as directors (including costs and expenses of defending actions for actual or alleged liability) to the maximum extent permitted by law. We have also entered into deeds of indemnity with each director under which:

- Chorus indemnifies the director for liabilities incurred in their capacity as a director and as officers of other Chorus companies.
- Directors are permitted to access company records while directors and after they cease to hold office (subject to certain conditions).

Deeds of indemnity have also been entered into on similar terms with certain senior employees for liabilities and costs they may incur for their acts or omissions as employees, directors of subsidiaries or as directors of non-Chorus companies in which Chorus holds interests.

We have a directors' and officers' liability insurance policy in place covering directors and senior employees for liability arising from their acts or omissions in their capacity as directors or employees on commercial terms. The policy does not cover dishonest, fraudulent, malicious or wilful acts or omissions.

Director change

No directors resigned or were appointed in the year to 30 June 2019.

Director interests and trading

As at 30 June 2019, directors had a relevant interest (as defined in the Financial Markets Conduct Act 2013) in approximately 0.059% of shares as follows:

Current Directors

Director	Interest as at 30 June 2019		Transactions during the reporting period			
	Shares	Interest	Number of shares	Nature of transaction	Consideration	Date
Patrick Strange	35,000	Beneficial owner as beneficiary of Three Kings Trust	10,000	On market acquisition	\$44,200.00	28 August 2018
Mark Cross	22,505	Beneficial owner as beneficiary of Alpha Investment Trust; power to exercise voting rights and acquire/dispose of financial products as director of trustee.	310	Acquisition of shares on reinvestment of dividends under Chorus' dividend reinvestment plan	\$1,449.43	9 October 2018
			10,000	On market acquisition	\$58,800.00	1 April 2019
			195	Acquisition of shares on reinvestment of dividends under Chorus' dividend reinvestment plan	\$1,087.23	16 April 2019
Prue Flacks	14,687	Registered holder and beneficial owner	303	Acquisition of shares on reinvestment of dividends under Chorus' dividend reinvestment plan	\$1,416.70	9 October 2018
			2,480	On market acquisition	\$14,582.40	2 April 2019
			190	Acquisition of shares on reinvestment of dividends under Chorus' dividend reinvestment plan	\$1,059.36	16 April 2019
Murray Jordan	32,625	Registered holder and beneficial owner of ordinary shares as trustee and beneficiary of Endeavour Trust	10,000	On market acquisition	\$44,200.00	28 August 2018
			810	Acquisition of shares on reinvestment of dividends under Chorus' Dividend Reinvestment Plan	\$3,787.23	9 October 2018
			509	Acquisition of shares on reinvestment of dividends under Chorus' Dividend Reinvestment Plan	\$2,837.96	16 April 2019
Jack Matthews	10,000	Registered holder and beneficial owner	10,000	On market acquisition	\$52,199.00	5 March 2019
Anne Urlwin	19,767	Director and shareholder of registered holder	5,000	On market acquisition	\$22,374.54	29 August 2018
			491	Acquisition of shares on reinvestment of dividends under Chorus' Dividend Reinvestment Plan	\$2,295.71	9 October 2018
			308	Acquisition of shares on reinvestment of dividends under Chorus' Dividend Reinvestment Plan	\$1,717.27	16 April 2019
Kate McKenzie	123,957	Beneficial interest under Chorus' long term incentive plan	58,095	Off market purchase of shares granted under Chorus' long term incentive plan	\$265,320.00	31 August 2018

As at 30 June 2019, no directors had relevant interests (as defined in the Financial Markets Conduct Act 2013) in any Chorus' NZX bonds maturing May 2021.

As at 30 June 2019, directors had a relevant interest (as defined in the Financial Markets Conduct Act 2013) in approximately 0.111% of Chorus' NZX bonds maturing December 2028 as follows:

Director	Interest as at 30 June 2019		Transactions during the reporting period			
	Bonds	Interest	Number of bonds	Nature of transaction	Consideration	Date
Patrick Strange	340,000	Beneficial owner as beneficiary of Three Kings Trust	340,000	Acquisition of bonds on issue	\$340,000.00	6 December 2018
Prue Flacks	15,000	Registered holder as trustee of CJH Bull Family Trust	15,000	Acquisition of bonds on issue	\$15,000.00	6 December 2018
Murray Jordan	100,000	Registered holder and beneficial owner as trustee and beneficiary of Endeavour Trust	100,000	Acquisition of bonds on issue	\$100,000.00	6 December 2018
Jon Hartley	70,000	Beneficial owner as trustee and beneficiary of Hartley Family Trust	35,000	Acquisition of bonds on issue	\$35,000.00	6 December 2018
			35,000	On market acquisition	\$36,957.45	22 May 2019
Anne Urlwin	30,000	Director and shareholder of registered holder	30,000	Acquisition of bonds on issue	\$30,000.00	6 December 2018

Changes in Director interests

Patrick Strange	Became chair of Auckland International Airport Limited (previously a director). Ceased as a director of NZX Limited.
Jon Hartley	Became chair of Timberlands Limited. Ceased as deputy chair of Sovereign Assurance Company Limited, a member of the Ministry of Business Innovation and Employment Risk Advisory Committee and as a trustee of World Vision NZ.
Mark Cross	Ceased as a director of Argosy Property Limited, Genesis Energy Limited, Aspect Productivity Technology Limited and Challenge Petroleum Limited, and as a Board member of Triathlon New Zealand Incorporated.
Prue Flacks	Became chair of Mercury NZ Limited ¹ .
Murray Jordan	Became a trustee of the Foodstuffs' Members Protection Trust and the Foodstuffs Co-operative Perpetuation Trust. Murray will become a Trustee of Southern Cross Health Trust ² which has 2 subsidiaries which Murray will be a director of - Southern Cross Hospitals Limited and Southern Cross Benefits Limited.
Jack Matthews	Became a director of Plexure Group Limited ³ and Bravo TV New Zealand Limited, and a director and shareholder of PI Meson Limited. Ceased as a director of APN Outdoor Group Limited, Trilogy International Limited and The Network for Learning Limited.
Anne Urlwin	Became a director of Tilt Renewables group companies, Tararua Wind Power Limited, Waverley Wind Farm Limited and Waverley Wind Farm (NZ) Holding Limited ⁴ . Ceased as a director of Hockey New Zealand.
Kate McKenzie	None for the year.

Notes:

1. From 27 September 2019.
2. From 1 August 2019.
3. From 1 July 2019.
4. From 4 July 2019.

Director restrictions

No person who is an 'associated person' of a telecommunications services provider in New Zealand may be appointed or hold office as a director. NZX has granted a waiver to allow this restriction to be included in our constitution.

Securities and security holders

Ordinary shares

Chorus Limited's shares are quoted on the NZX and on the ASX and trade under the 'CNU' ticker. There were 439,288,154 ordinary shares on issue at 30 June 2019 and 31 July 2019. Each share confers on its holder the right to attend and vote at a shareholder meeting (including the right to cast one vote on a poll on any resolution).

Constitutional ownership restrictions

Ownership restrictions carried through at demerger and incorporated into our constitution in agreement with the Crown require prior Crown approval for any person to:

- Have a relevant interest in 10% or more of our shares; or
- Other than a New Zealand national, have a relevant interest in more than 49.9% of our shares.

We were advised:

- In December 2017 that the Crown approved certain funds managed by L1 Capital Pty Ltd having a collective relevant interest in up to 15% of our shares.

- In 2012 that the Crown approved AMP Capital Holdings Limited and its related companies acquiring a relevant interest in up to 15% of our shares.

If our Board or the Crown determines there are reasonable grounds for believing a person has a relevant interest in our shares in excess of the ownership restrictions, our Board may, after following certain procedures, prohibit the exercise of voting rights (in which case the voting rights vest in our chair) and may force the sale of shares. Our Board may also decline to register a transfer of shares if it reasonably believes the transfer would breach the ownership restrictions.

NZX has granted waivers allowing our constitution to include the power of forfeiture, the restrictions on transferability of shares and our Board's power to prohibit the exercise of voting rights relating to these ownership restrictions. ASX has also granted a waiver in respect of the refusal to register a transfer of shares which is or may be in breach of the ownership restrictions.

Takeovers protocol

We have established a takeovers protocol setting out the procedure to be followed if there is a takeover offer, including managing communications between insiders and the bidder and engagement of an independent adviser. The protocol includes the option of establishing an independent takeover committee, and the likely composition and implementation of that committee.

Shareholder distribution as at 31 July 2019

Holding	Number of holders	% of holders	Total number of shares held	% of shares issued
1 to 999	11,525	55.32%	4,732,698	1.08%
1,000 to 4,999	5,995	28.78%	14,020,838	3.19%
5,000 to 9,999	1,813	8.70%	11,993,588	2.73%
10,000 to 99,999	1,421	6.82%	29,593,148	6.74%
100,000 and over	79	0.38%	378,947,882	86.26%
Total	20,833	100%	439,288,154	100%

Substantial holders

We have received substantial product holder notices from shareholders as follows:

	Notices received as at 30 June 2019		Notices received as at 31 July 2019	
	Number of ordinary shares held	% of shares on issue	Number of ordinary shares held	% of shares on issue
L1 Capital Pty Ltd	63,601,466	14.80% ¹	63,601,466	14.80%
Commonwealth Bank of Australia	21,536,089	5.013% ¹	21,536,089	5.013%
The Vanguard Group, Inc.	23,418,083	5.370% ²	23,418,083	5.370%

¹ As reported in the substantial product holder notice, based on 429,641,197 ordinary shares on issue at that time.

² As reported in the substantial product holder notice, based on 436,075,010 ordinary shares on issue at that time.

Twenty largest shareholders as at 31 July 2019

Rank	Holder name	Holding	%
1	JP Morgan Nominees Australia Limited	47,944,845	10.91
2	HSBC Custody Nominees (Australia) Limited	43,828,962	9.97
3	HSBC Custody Nominees (Australia) Limited <A/C 2>	33,215,581	7.56
4	Citibank Nominees (New Zealand) Limited*	30,793,421	7.00
5	National Nominees Limited	24,502,026	5.57
6	HSBC Nominees (New Zealand) Limited*	21,257,287	4.83
7	Accident Compensation Corporation*	20,141,794	4.58
8	JP Morgan Chase Bank Na Nz Branch-Segregated Clients Acct*	19,942,864	4.53
9	Citicorp Nominees Pty Limited	18,714,569	4.26
10	HSBC Nominees (New Zealand) Limited A/C State Street*	17,911,537	4.07
11	L1 Capital Pty Ltd Special Situations 14 A/C	11,410,000	2.59
12	BNP Paribas Nominees Pty Ltd Agency Lending Drp A/C	7,521,353	1.71
13	FNZ Custodians Limited	5,975,661	1.36
14	New Zealand Depository Nominee Limited A/C 1 Cash Account	5,144,852	1.17
15	Forsyth Barr Custodians Limited <1-CUSTODY>	4,713,438	1.07
16	HSBC Custody Nominees (Australia) Limited Nt-Comnwlth Super Corp A/C*	4,646,045	1.05
17	ANZ Wholesale Australasian Share Fund*	4,636,252	1.05
18	JBWere (NZ) Nominees Limited NZ Resident A/C	4,371,335	0.99
19	ANZ Custodial Services New Zealand Limited*	4,132,833	0.94
20	BNP Paribas Nominees (NZ) Limited*	3,883,948	0.88

* Held through New Zealand Central Securities Depository Limited (NZCSD). NZCSD provides a custodial service that allows electronic trading of securities by its members. As at 31 July 2019, 137,701,140 Chorus ordinary shares (or 31% of the ordinary shares on issue) were held through NZCSD.

American depositary receipts

American Depositary Shares, each representing five shares and evidenced by American Depositary Receipts, are not listed but are traded on the over-the-counter market in the United States under the ticker 'CHRY' with Bank of New York Mellon as depositary bank. As at 30 June 2019 Chorus had 1.2 million ADR's on issue.

Twenty largest bondholders (May 2021) as at 31 July 2019

Rank	Holder name	Holding	%
1	FNZ Custodians Limited	37,297,000	9.32
2	BNP Paribas Nominees (NZ) Limited*	27,865,000	6.97
3	Forsyth Barr Custodians Limited	27,498,000	6.87
4	TEA Custodians Limited Client Property Trust Account*	27,078,000	6.77
5	Custodial Services Limited – A/C 3	19,507,000	4.88
6	Citibank Nominees (New Zealand) Limited	19,503,000	4.88
7	Custodial Services Limited – A/C 4	17,492,000	4.37
8	Investment Custodial Services Limited – A/C C	16,628,000	4.16
9	HSBC Nominees (New Zealand) Limited O/A Euroclear Bank	15,106,000	3.78
10	Custodial Services Limited – A/C 2	13,695,000	3.42
11	JBWere (NZ) Nominees Limited – NZ Resident A/C	9,472,000	2.37
12	NZPT Custodians (Grosvenor) Limited*	8,751,000	2.19
13	FNZ Custodians Limited – DTA Non Resident A/C	7,635,000	1.91
14	HSBC Nominees (New Zealand) Limited*	7,517,000	1.88
15	Custodial Services Limited – A/C 1	7,513,000	1.88
16	National Nominees New Zealand Limited*	7,364,000	1.84
17	Custodial Services Limited – A/C 18	6,694,000	1.67
18	JP Morgan Chase Bank NA NZ Branch – Segregated Clients ACCT*	6,652,000	1.66
19	Public Trust Class 10 Nominees Limited*	5,838,000	1.46
20	ANZ Custodial Services New Zealand Limited*	5,281,000	1.32

Twenty largest bondholders (December 2028) as at 31 July 2019

Rank	Holder name	Holding	%
1	Forsyth Barr Custodians Limited – 1-Custody	73,526,000	14.71
2	ANZ Custodial Services New Zealand Limited*	56,163,000	11.23
3	JBWere (NZ) Nominees Limited – NZ Resident A/C	47,061,000	9.41
4	HSBC Nominees (New Zealand) Limited O/A Euroclear Bank*	30,000,000	6.00
5	FNZ Custodians Limited	23,973,000	4.79
6	Custodial Services Limited – A/C 4	21,109,000	4.22
7	Investment Custodial Services Limited – A/C C	19,328,000	3.87
8	Custodial Services Limited – A/C 3	15,823,000	3.16
9	BNP Paribas Nominees (NZ) Limited*	15,075,000	3.02
10	Custodial Services Limited – A/C 2	13,174,000	2.63
11	Custodial Services Limited – A/C 1	11,033,000	2.21
12	Custodial Services Limited – A/C 18	6,925,000	1.39
13	JBWere (NZ) Nominees Limited – 54440 A/C	6,850,000	1.37
14	Forsyth Barr Custodians Limited – Account 1 E	6,037,000	1.21
15	JBWere (NZ) Nominees Limited – 55527 A/C	5,000,000	1.00
16	JBWere (NZ) Nominees Limited – 54441 A/C	4,500,000	0.90
17	Generate Kiwisaver Public Trust Nominees Limited*	4,500,000	0.90
18	HSBC Nominees (New Zealand) Limited A/C State Street*	3,750,000	0.75
19	Custodial Services Limited – A/C 16	3,047,000	0.61
20	JBWere (NZ) Nominees Limited – 44626 A/C	3,000,000	0.60

* Held through New Zealand Central Securities Depository Limited (NZCSD).

Debt listings

Chorus Limited has issued:

- \$400 million bonds traded on the NZX debt market (the NZDX) maturing May 2021;
- \$500 million bonds traded on the NZDX maturing December 2028;
- EUR 500 million EMTNs traded on the ASX; and
- GBP 260 million EMTNs traded on the Luxembourg Stock Exchange.

NZX bondholder distribution as at 31 July 2019

May 2021 maturity

Holding	Number of holders	% of holders	Total number of bonds held	% of bonds issued
1,000 to 4,999	0	0%	0	0%
5,000 to 9,999	198	11.70%	1,101,000	0.28%
10,000 to 99,999	1,303	77.01%	34,871,000	8.72%
100,000 and over	191	11.29%	364,028,000	91.00%
Total	1,692	100%	400,000,000	100%

December 2028 maturity

Holding	Number of holders	% of holders	Total number of bonds held	% of bonds issued
1,000 to 4,999	0	0%	0	0%
5,000 to 9,999	76	4.4%	435,000	0.09%
10,000 to 99,999	1,385	80.34%	44,081,000	8.82%
100,000 and over	263	15.3%	455,484,000	91.09%
Total	1,724	100%	500,000,000	100%

Unquoted securities

Crown Infrastructure Partners (CIP) Securities

The terms of issue for the CIP1 and CIP2 securities are set out in the subscription agreement's between Chorus Limited and CIP.

These terms are summarised in note 6 of our Financial Statements and on our website at www.chorus.co.nz/reports.

Security	Number issued in the year ended 30 June 2019	Total on issue at 31 July 2019	Holder	Percentage held
CIP1 equity securities	50,072,984	430,294,163	CIP	100%
CIP1 debt securities	50,072,984	430,294,163	CIP	100%
CIP1 equity warrants	1,967,899	12,686,015	CIP	100%
CIP2 equity securities	59,897,222	64,182,706	CIP	100%

Other disclosures

New NZX listing rules

NZX implemented new listing rules from 1 January 2019. Chorus transitioned to the new rules on 12 February 2019.

NZX waivers

Chorus relied on NZX's class ruling dated 19 November 2018 continuing waivers and rulings granted under the previous listing rules. The class ruling is available until 30 June 2020, meaning the waivers and rulings granted to Chorus under the previous rules will apply until then (subject to replacement waivers and rulings being granted before). Chorus applied on 28 March 2019 for applicable new rulings and waivers to be granted under the new listing rules.

A summary of all waivers granted and published by NZX in the 12 months ending 30 June 2019 and relied on is available on our website at www.chorus.co.nz/investor-info.

Non-standard designation

NZX has attached a 'non-standard' designation to Chorus Limited because of the ownership restrictions in our constitution (described above).

ASX disclosures

Chorus Limited and its subsidiaries are incorporated in New Zealand.

Chorus Limited is not subject to Chapters 6, 6A, 6B and 6C of the Australian Corporations Act 2001 dealing with the acquisition of shares (including substantial shareholdings and takeovers).

Our constitution contains limitations on the acquisition of securities, as described above.

For the purposes of ASX listing rule 1.15.3 Chorus Limited continues to comply with the NZX listing rules.

Registration as a foreign company

Chorus Limited has registered with the Australian Securities and Investments Commission as a foreign company and has been issued an Australian Registered Body Number (ARBN) of 152 485 848.

Net tangible assets per security

As at 30 June 2019, consolidated net tangible assets per share was \$1.64 (30 June 2018: \$1.78).

Net tangible assets per share is a non-GAAP financial measure and is not prepared in accordance with NZ IFRS.

Revenue from ordinary activities and net profit

In the year ended 30 June 2019:

- Revenue from ordinary activities decreased 2% to \$970 million (30 June 2018: \$990 million); and
- Profit from ordinary activities after tax, and net profit, attributable to shareholders decreased 38% to \$53 million (30 June 2018: \$85 million).

Subsidiaries

Chorus New Zealand Limited (CNZL)

Directors as at 30 June 2019: Patrick Strange, Jon Hartley, Mark Cross, Prue Flacks, Murray Jordan, Jack Matthews, Anne Urlwin, Kate McKenzie.

No directors resigned from, or were appointed to, CNZL during the year to 30 June 2019.

Current CNZL directors are also Chorus Limited directors and do not receive any remuneration in their capacity as CNZL directors.

Chorus LTI Trustee Limited (CLTL)

Directors as at 30 June 2019: Prue Flacks, Murray Jordan and Jack Matthews.

No directors resigned from, or were appointed to, CLTL during the year to 30 June 2019.

Current and former directors of CLTL did not receive any remuneration in their capacity as directors of CLTL.

Other subsidiaries

Chorus Limited has no other subsidiaries.

Glossary

ASX Corporate Governance Code	ASX Corporate Governance Council's Corporate Governance Principles and Recommendations (3rd edition).	FY	Financial year – twelve months ended 30 June. e.g. FY19 is from 1 July 2018 to 30 June 2019.
Backbone network	Fibre cabling and other shared network elements required either in the common areas of multi-dwelling units to connect individual apartments/offices, or to serve premises located along rights of way.	Gbps	Gigabits per second. A measure of the average rate of data transfer.
Backhaul	The portion of the network that links local exchanges to other exchanges or retail service provider networks.	Gigabit	The equivalent of 1 billion bits. Gigabit Ethernet provides data transfer rates of about 1 gigabit per second.
Bandwidth fibre access	A fibre service that provides dedicated bandwidth between customers and their retail service provider's equipment in the local exchange.	GPON	Gigabit Passive Optical Network.
Baseband	A technology neutral voice input service that can be bundled with a broadband product or provided on a standalone basis.	IP	Internet Protocol.
Board	Chorus Limited's Board of Directors.	IT	Information Technology.
Building block model	A methodology used for regulating monopoly utilities. Under BBM a regulated supplier's allowed revenue is equal to the sum of the underlying components or 'building blocks', consisting of the return on capital, depreciation, operating expenditure and various other components such as tax.	Layer 2	The data link layer, including broadband electronics, within the Open Systems Interconnection model. Layer 1 is the physical cables and co-location space.
Chorus	Chorus Limited and subsidiaries.	Mbps	Megabits per second – a measure of the average rate of data transfer.
CIP	Crown Infrastructure Partners, the Government organisation that manages New Zealand's rollout of Ultra-Fast Broadband infrastructure.	NZ IFRS	International Financial Reporting Standards – the rules that the financial statements have to be prepared by.
Commission	Commerce Commission – the independent Crown Entity whose responsibilities include overseeing the regulation of the telecommunications sector.	P2P	Where two parties or devices are connected point-to-point via fibre.
Constitution	Chorus Limited's Constitution.	RAB	Regulatory Asset Base refers to the value of total investment by a regulated utility in the assets which will generate revenues over time.
CPI	Consumers Price Index (inflation).	RBI	Rural Broadband Initiative – refers to the Government programme to improve and enhance broadband coverage in rural areas between 2011 and 2016.
Direct fibre access	Also known as 'dark' fibre, a fibre service that provides a point to point fibre connection and can be used to deliver backhaul connections to mobile sites.	share	Means an ordinary share in Chorus.
Director	A director of Chorus Limited.	TSO	Telecommunications Services Obligation – a universal service obligation under which Chorus must maintain certain coverage and service on the copper network.
EBITDA	Earnings before interest, income tax, depreciation and amortisation.	TSR	Total shareholder return.
EMTN	European Medium Term Notes.	UFB	Ultra-Fast Broadband refers to the Government programme to build a fibre to the premises network to about 85% of New Zealanders. UFB1 refers to the original phase of the rollout to 75% of New Zealanders. UFB2 and UFB2+ were subsequent phases announced in 2017.
		VDSL	Very High Speed Digital Subscriber Line – a copper-based technology that provides a better broadband connection than ADSL.

Disclaimer

This annual report:

- May contain forward looking statements. These statements are not guarantees or predictions of future performance. They involve known and unknown risks, uncertainties and other factors, many of which are beyond Chorus' control, and which may cause actual results to differ materially from those expressed in the statements contained in this annual report.
- Includes statements relating to past performance. These should not be regarded as reliable indicators of future performance.
- Is current at its release date. Except as required by law or the NZX and ASX listing rules, Chorus is not under any obligation to update this annual report or the information in it at any time, whether as a result of new information, future events or otherwise.
- Contains non-GAAP financial measures, including EBITDA. These measures may differ from similarly titled measures used by other companies because they are not defined by GAAP. Although Chorus considers those measures provide useful information they should not be used in substitution for, or isolation of, Chorus' audited financial statements.
- May contain information from third parties Chorus believes reliable. However, no representations or warranties are made as to the accuracy or completeness of such information.
- Should be read in the wider context of material previously published by Chorus and released through the NZX and ASX.
- Does not constitute investment advice or an offer or invitation to purchase Chorus securities.



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www.mybnymdr.com

ARBN 152 485 848

Results announcement

(for Equity Security issuer/Equity and Debt Security issuer)

Updated as at 8 May 2019

Results for announcement to the market		
Name of issuer	Chorus Limited	
Reporting Period	Year ended 30 June 2019	
Previous Reporting Period	Year ended 30 June 2018	
Currency	New Zealand Dollars	
	Amount (000s)	Percentage change
Revenue from continuing operations	\$970,000	Down 2%
Total Revenue	\$970,000	Down 2%
Net profit/(loss) from continuing operations	\$53,000	Down 38%
Total net profit/(loss)	\$53,000	Down 38%
Interim/Final Dividend		
Amount per Quoted Equity Security	\$ 0.135000	
Imputed amount per Quoted Equity Security	\$0.052500	
Record Date	24 September 2019	
Dividend Payment Date	8 October 2019	
	Current period	Prior comparable period
Net tangible assets per Quoted Equity Security	\$1.64	\$1.78
A brief explanation of any of the figures above necessary to enable the figures to be understood	This announcement should be read in conjunction with the attached annual report, audited financial statements for the year ended 30 June 2019 contained in that report, media release and investor presentation.	
Authority for this announcement		
Name of person authorised to make this announcement	David Collins Chief Financial Officer	
Contact person for this announcement	Brett Jackson Investor Relations Manager	
Contact phone number	+64 27 488 7808 +64 4 896 4039	
Contact email address	Brett.Jackson@chorus.co.nz	
Date of release through MAP	26/08/2019	

Audited financial statements accompany this announcement.

Section 1: Issuer information				
Name of issuer	Chorus Limited			
Financial product name/description	Ordinary shares			
NZX ticker code	CNU			
ISIN (If unknown, check on NZX website)	NZCNUE0001S2			
Type of distribution (Please mark with an X in the relevant box/es)	Full Year	X	Quarterly	
	Half Year		Special	
	DRP applies	X		
Record date	24/09/2019			
Ex-Date (one business day before the Record Date)	23/09/2019			
Payment date (and allotment date for DRP)	08/10/2019			
Total monies associated with the distribution ¹	\$59,303,901.00			
Source of distribution (for example, retained earnings)	Retained earnings			
Currency	New Zealand Dollars			
Section 2: Distribution amounts per financial product				
Gross distribution ²	\$0.18750000			
Total cash distribution ³	\$0.13500000			
Excluded amount (applicable to listed PIEs)	n/a			
Supplementary distribution amount	\$0.02382353			
Section 3: Imputation credits and Resident Withholding Tax ⁴				
Is the distribution imputed	Fully imputed			
	Partial imputation			
	No imputation			
If fully or partially imputed, please state imputation rate as % applied	100%			
Imputation tax credits per financial product	\$0.05250000			

¹ Continuous issuers should indicate that this is based on the number of units on issue at the date of the form

² "Gross distribution" is the total cash distribution plus the amount of imputation credits, per financial product, before the deduction of Resident Withholding Tax (RWT).

³ "Total cash distribution" is the cash distribution excluding imputation credits, per financial product, before the deduction of RWT. This should include any excluded amounts, where applicable to listed PIEs.

⁴ The imputation credits plus the RWT amount is 33% of the gross distribution for the purposes of this form. If the distribution is fully imputed the imputation credits will be 28% of the gross distribution with remaining 5% being RWT. This does not constitute advice as to whether or not RWT needs to be withheld.

Resident Withholding Tax per financial product	\$0.00937500	
Section 4: Distribution re-investment plan (if applicable)		
DRP % discount (if any)	3%	
Start date and end date for determining market price for DRP	23/09/2019	27/09/2019
Date strike price to be announced (if not available at this time)	01/10/2019	
Specify source of financial products to be issued under DRP programme (new issue or to be bought on market)	New Issue	
DRP strike price per financial product	\$unknown	
Last date to submit a participation notice for this distribution in accordance with DRP participation terms	5pm (NZ time) 25/09/2019	
Section 5: Authority for this announcement		
Name of person authorised to make this announcement	David Collins Chief Financial Officer	
Contact person for this announcement	Brett Jackson Investor Relations Manager	
Contact phone number	+64 27 488 7808 +64 4 896 4039	
Contact email address	Brett.Jackson@chorus.co.nz	
Date of release through MAP	26/08/2019	

Corporate governance statement



C H ● R U S

Statement overview

This statement outlines the key aspects of our corporate governance framework and was approved by our Board on 26 August 2019.

Our Board regularly reviews and assesses our governance policies, processes and practices to identify opportunities for enhancement and to ensure they reflect our operations and culture.

Corporate governance framework

As a New Zealand company listed on the NZX our corporate governance policies and practices meet or exceed the standards of that market. We have adopted and fully followed the recommendations set out in the NZX Corporate Governance Code.

Although we have an ASX “foreign exempt” listing status¹ we also continue to take the ASX Corporate Governance Code into account in our governance practices and policies.

Our Board regularly reviews and assesses our governance policies, processes and practices to identify opportunities for enhancement.

Our corporate governance practices are outlined below and in our annual report. Key corporate governance documents are available at www.chorus.co.nz/governance.

Our Board’s role

Our Board is appointed by shareholders and has overall responsibility for strategy, culture, health and safety, governance and performance.

Summary ² of our Board’s roles and responsibilities,:	
Culture	<ul style="list-style-type: none">• Leading culture “from the top” so our culture is consistent with our values
Strategy & performance	<ul style="list-style-type: none">• Engaging in ongoing strategy development• Overseeing capital allocation• Approving, and reviewing performance against, our strategy and business plans (including capital expenditure and operating budgets)
Financial oversight & reporting	<ul style="list-style-type: none">• Overseeing our accounting and reporting systems and, where appropriate, approving our financial and other reporting• Overseeing and monitoring the performance of internal and external auditors• Overseeing our control and accountability systems• Overseeing long term capital management (balance sheet and dividend)• Setting, monitoring and reviewing our internal audit plan
Risk management	<ul style="list-style-type: none">• Adopting and reviewing Chorus’ risk management framework, including setting the risk appetite• Regularly reviewing principal risk reporting
Health & safety	<ul style="list-style-type: none">• Setting the strategy, culture and expectations in relation to health and safety
Board composition & performance	<ul style="list-style-type: none">• Reviewing and evaluating Board, Board committee and individual director performance• Appointing members to Board committees
Governance	<ul style="list-style-type: none">• Overseeing corporate governance, including reviewing key governance documents• Carrying out the functions specifically reserved to our Board and its committees under Board approved policies and committee charters• Monitoring compliance with our continuous disclosure obligations
People	<ul style="list-style-type: none">• Reviewing and approving remuneration and people strategies, structures and policies• Appointing and removing our CEO, CFO and General Counsel & Company Secretary• Assessing the measurable objectives set for, and progress towards achieving, our diversity and inclusiveness goals
Significant transactions	<ul style="list-style-type: none">• Approving major capital expenditure and business activities outside the limits delegated to management

1 An ASX foreign exempt listing is based on the principle of substituted compliance. This means our primary obligation is to comply with the NZX listing rules (as our home exchange). As a result we do not need to follow or report against compliance with the ASX Corporate Governance Code.
2 Summary primarily drawn from our Charter but also from other supporting governance documents.

Board membership

Our Board's skills, experience and composition supports effective governance and decision making, positioning it to add value.

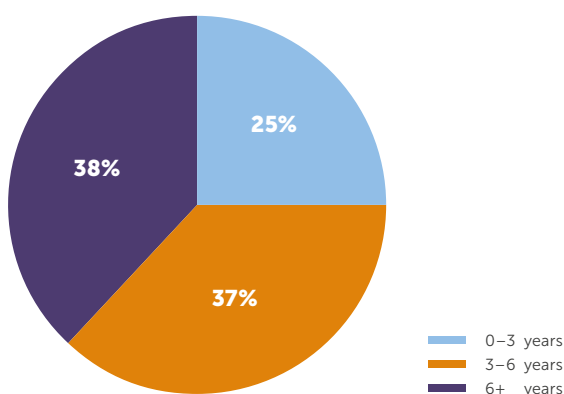
Supported by the Nominations and Corporate Governance Committee (NCGC) our Board regularly assesses its composition utilising a skills matrix and annual evaluation processes. Training is provided or recruitment undertaken if new or additional skills or experience is required. This ensures diversity of thought, skills and expertise and that our Board remains aligned with our strategic direction.

Our constitution provides for a minimum of five and maximum of 12 directors. As at 30 June 2019 we had eight directors (seven independent directors and the managing director).

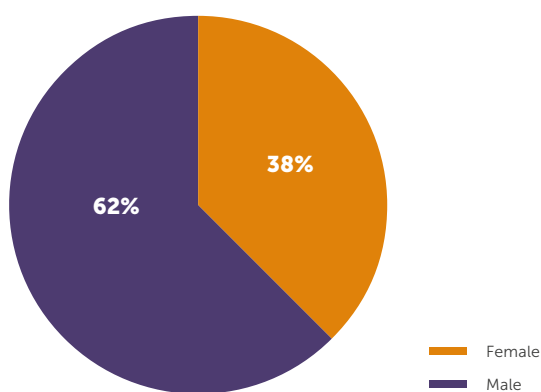
Directors are not appointed for specified terms. However, the NZX listing rules require directors to retire at least once every three years. Mark Cross is retiring by rotation and standing for re-election at our 2019 ASM.

We recognise that women and ethnic minorities are still under-represented in the leadership of New Zealand businesses and our Board remains actively conscious of this in its succession planning. More information on our approach to diversity is set out in our annual report.

Director tenure



Board gender diversity










Director	Appointed	Last elected at ASM
Prue Flacks	2011	2017
Jon Hartley	2011	2017
Anne Urlwin	2011	2018
Murray Jordan	2015	2018
Patrick Strange	2015	2018
Mark Cross	2016	2016
Jack Matthews	2017	2017
Kate McKenzie	2017	2017

Our Board has determined that collectively its directors have a broad range of managerial, financial, accounting and industry skills and experience in the key areas set out below. A summary of current directors' skills, experience and qualifications is set out in our annual report and on our website at www.chorus.co.nz/governance.

As the Chorus business evolves, so too does the Board. Chorus' beginnings were focused on infrastructure build and project management. With the success of the build,

we are increasingly focused on connecting customers and their experience as well as future connectivity and innovation opportunities. The Board considers it is important to balance both specialist expertise and the ongoing need for strong general commercial expertise.

The following table reflects the strengths of the current Board based on a mix of key skills and experiences as are currently relevant for Chorus.

Skill/experience	Description	Combined Board
Capital markets and investment	Experience in, and understanding of, capital markets, market regulation, capital investment and the investor experience	
Communications connectivity and technology	Understanding, expertise and/or experience in communications connectivity, adopting new technologies, leveraging and implementing technologies	
Governance – financial, audit, legal, listed company	Experience with, and a commitment to, high corporate governance standards including in listed companies Understanding financial business drivers, and/or experience implementing or overseeing financial accounting, external reporting and internal financial controls	
Physical infrastructure and operations including contracting, safety and risk	Experience in leading, and/or understanding of, physical infrastructure operations, including contracting Commitment and experience in management of workplace safety Experience anticipating and identifying key risks and monitoring the effectiveness of risk management frameworks and controls	
Governance – executive experience in large businesses	Executive experience in leading large businesses, developing and implementing strategy and strategic objectives, assessing business plans and driving execution	
Infrastructure regulation	Understanding the current and developing regulatory environment, complexities and actual and potential impacts Expertise identifying and managing legal, regulatory, public policy and corporate affairs issues	
Customer experience	Experience in customer-led transformation, customer focus and/or customer centric organisations	

 Substantial experience
  Moderate experience
  Some experience

Appointment

Our Board may appoint additional directors to our Board or to fill a casual vacancy.

The independence, qualifications, skills and experience needed for the future and those of existing Board members are reviewed before appointing new directors. External advisors are also engaged to identify potential candidates.

To be eligible for selection, candidates must demonstrate appropriate qualities and satisfy our Board they will commit the time needed to be fully effective in their role.

Appropriate checks are undertaken before a candidate is appointed or recommended for election as a director, including as to the person's character, experience, education, criminal record and bankruptcy history.

Shareholders may also nominate candidates for appointment to our Board. In addition, under the agreements entered into with Crown Infrastructure Partners (CIP) relating to our UFB programme, CIP is entitled to nominate one person as an independent director (they have never used this right). Should this occur, our Board must consider this nomination in good faith, but the appointment (and removal) of any such person as a director is to be made by shareholders in the same way as other directors.

We have written agreements with each non-executive director setting out the terms of their appointment, including obligations and responsibilities, compliance with our policies (including code of ethics and securities trading) and ongoing professional development.

No person who is an 'associated person' of a telecommunication services provider in New Zealand may be appointed or hold office as a director.

Director induction and professional development

Our director induction programme ensures new directors are appropriately introduced to management and our business, acquaints directors with relevant industry knowledge and familiarises them with key governance documents and stakeholder relationships.

Our directors are expected to continue ongoing professional development to ensure they maintain appropriate expertise to effectively perform their duties.

We hold dedicated Board education sessions covering a range of topical matters, both technical and cultural.

Visits to our operations, briefings from key management, industry experts and key advisers, together with educational and stakeholder visits, are also arranged for our Board.

Review and evaluation of Board performance

Our Board uses internally and externally facilitated performance and evaluation processes overseen by our NCGC. As part of this process our chair meets with directors individually to discuss performance.

Our Board also formally engages in annual:

- Reviews of our Board chair and deputy chair, and chairs of our standing Board committees;
- Confirmations of our Board chair and deputy chair, and chairs of our standing Board committees; and
- Performance discussions of individual directors standing for re-election.

In addition to Board performance reviews, our Board takes a forward focused approach to future Board capability, composition and the potential contribution of each existing director.

An external review of Board, individual director, and standing Board committee performance commenced in the reporting period.

Independent advice

A director may, with our chair's prior approval, obtain independent professional advice (including legal advice) and request the attendance of advisers at Board and Board committee meetings.

Independence

All our directors are independent directors except for Kate McKenzie, our CEO and managing director.

For a director to be considered independent our Board must affirmatively determine he or she does not have a disqualifying relationship as set out in our Board charter. These disqualifying relationships reflect those set out in the NZX listing rules and NZX and ASX corporate governance codes.

Our Board has not set financial materiality thresholds for determining independence but considers materiality in the context of each relationship and from the perspective of the parties to that relationship.

Delegation of authority

Our Board has overall responsibility for strategy, culture, health and safety, governance and performance.

Implementation of our Board approved strategy, business plan and governance frameworks, and responsibility for developing our culture and health and safety practices, is delegated by the Board to management through the CEO.

As such our CEO (with the support of her executive team) is responsible for Chorus' day-to-day management, operations and leadership, reporting to the Board on key performance, management and operational matters.

Our CEO sub-delegates authority to her executive team and they sub-delegate their authority to other Chorus employees within specified financial and non-financial limits.

Formal policies and procedures govern the parameters and operation of these delegations.

Three standing Board committees also assist our Board in carrying out its responsibilities. Some Board responsibilities, powers and authorities are delegated to those committees.

Other committees may be established and specific responsibilities, powers and authorities delegated to those committees and/or to particular directors.

Board committees

Board committees assist our Board by focusing on specific responsibilities in greater detail than is possible for the Board as a whole. Each standing Board committee has a Board approved charter and chair. Committee members are appointed by our Board.



Audit and Risk Management Committee (ARMC)

Role	Our ARMC assists our Board in overseeing our risk and financial management, accounting, audit and financial reporting
Members	Anne Urlwin (chair), Jon Hartley, Mark Cross
Independence	All committee members are independent directors
Responsibilities	<ul style="list-style-type: none"> Overseeing the quality and integrity of external financial reporting, financial management and internal controls Regularly reviewing principal risk reporting Recommending to our Board the appointment, and if necessary removal, of the external auditor Assessing the adequacy of the external audit and independence of the external auditor Reviewing and monitoring the internal audit plan and reporting Overseeing the independence and objectivity of the internal audit function Reviewing compliance with applicable laws, regulations and standards

People Performance and Culture Committee (PPCC)

Role	Our PPCC assists our Board in overseeing people, culture and related policies and strategies
Members	Prue Flacks (chair), Murray Jordan, Jack Matthews
Independence	All committee members are independent directors
Responsibilities	<ul style="list-style-type: none"> Reviewing people and remuneration strategies, structures and policies Approving annual remuneration increase guides and budgets Reviewing candidates for, and the performance and remuneration of, our CEO Approving, on the recommendation of our CEO, the appointment of our CEO's executive direct reports (except our CFO and General Counsel & Company Secretary whose appointment is approved by our Board) Reviewing our CEO's performance evaluation of her executive direct reports Developing and annually reviewing and assessing diversity and its reporting Overseeing recruitment, retention and termination policies and procedures for senior management Making recommendations (including proposing amendments) to our Board with respect to senior executive (including CEO) incentive remuneration plans Annually reviewing non-executive director remuneration

Nominations and Corporate Governance Committee (NCGC)

Role	Our NCGC assists our Board in overseeing and promoting continuous improvement of corporate governance at Chorus
Members	Patrick Strange (chair), Jon Hartley, Prue Flacks
Independence	All committee members are independent directors
Responsibilities	<ul style="list-style-type: none"> Identifying and recommending suitable candidates for appointment to our Board and Board committees Reviewing the size, independence, qualifications, skills, experience and composition of our Board Developing, reviewing and making recommendations to our Board on corporate governance principles Establishing, developing and overseeing a process for the annual review and evaluation of Board, Board committee, and individual director performance Developing and reviewing Board succession planning (including for the Board chair) Monitoring compliance with our codes of ethics and managing breaches of the Director Code of Ethics Reviewing and overseeing director induction and ongoing professional development

Board chair and deputy chair

Our chair is elected by the Board and must be a non-executive, independent director.

The chair's responsibilities include:

- Leading the Board;
- Setting the agenda for Board meetings in consultation with the CEO;
- Facilitating the effective contribution of all directors; and

- Promoting constructive relationships between directors and management.

The chair's other commitments must not hinder his or her effective performance in the role.

The Board has appointed an independent director as deputy chair to undertake chair's duties in her/his absence and assist our chair (including leading the annual review of our chair's performance).

Health & Safety

We are committed to taking all reasonably practicable steps to ensure a healthy, safe and secure environment for our people and anyone who is in the vicinity of our workplaces.

We are committed to an open reporting culture and continuous improvement. We have zero tolerance for major injuries or fatalities. No business objective is prioritised over the health and safety of any person.

Our Board has a terms of reference setting out its roles and responsibilities in relation to health and safety at Chorus which is reviewed every two years.

Our Board ensures appropriate policies and procedures are adopted and implemented and reviews the monitoring, identification reporting and management of significant health and safety risks.

Health and safety is discussed at scheduled Board meetings with our Board receiving reports from management containing comprehensive summaries of health and safety activity and outcomes, including data on all actual health and safety incidents, near misses, breaches, subsequent investigations (including assessment of root causes) and remedial actions.

Our Board receives additional quarterly reports on progress against our annual health and safety plan and all directors carry out at least two health and safety site visits each year.

People

Managing performance

Our performance management approach is based on fostering and rewarding valuable business outcomes.

Our people have performance and development plans, which are regularly reviewed with their people leaders.

Performance plans are developed to connect our people with our strategy, their functional plans and individual roles. Performance plans include outcome based objectives, behavioural measures and an individual development plan.

Formal performance reviews were undertaken for all our people during the year. As part of this, people leaders sought feedback and participated in peer review and moderation sessions, resulting in an overall performance ratings and remuneration recommendations determining an individual's total pay (fixed remuneration and variable).

A similar process is undertaken each year for our executive team, with our CEO making recommendations to our PPCC for executive team members, and our PPCC leading the performance review of our CEO, making recommendations to our Board. These processes are consistent with those set out in our PPCC charter, allow our Board to provide input into individual performance outcomes, total reward approvals (fixed and variable) and development plans and were undertaken in the year ended 30 June 2019.

We have written agreements with our managing director and each of our senior executives setting out the terms and conditions of their employment.

Managing risk

Like all businesses, we are exposed to a range of risks. Our risk management activities aim to ensure we identify, prioritise and manage key risks so we can execute our strategies and achieve our goals.

Risk management

No business can thrive without taking on risk. Effective risk management is about informed risk taking and appropriate and active management of risks.

We seek to understand and respond to our current and future business environment; and to actively seek and robustly evaluate opportunities and initiatives which protect and achieve our business strategies. We strive to understand, meet and appropriately balance stakeholders' expectations to deliver value to shareholders and a sustainable environment for Chorus in the long term.

Our Board

Our Board is ultimately responsible for risk management governance:

- Annually setting risk appetite and tolerances and reviewing principal risks;
- Approving and regularly reviewing our Managing Risk Policy and supporting framework;
- Promoting a culture of proactively managing risk; and
- Through our ARMC, providing risk oversight and monitoring.

Risk appetite

Our risk appetite sets our tolerable levels of risk. It forms a dynamic link between strategy, target setting and risk management and sets boundaries for day-to-day decision making and reporting.

Principal risks

Principal risks are our key risks. These are assessed on a risk profile identifying likelihood of occurrence and potential severity of impact. Current principal risk categories are identified via a comprehensive enterprise risk management framework encompassing financial and non-financial risks. They include, anticipating and responding to:

- Customer/market risks: customer service and experience; revenue growth and market changes;
- Operational risks: e.g. network and IT quality, availability and resilience; delivering effective and quality outcomes (including with service partners); labour market risks;
- People & culture: e.g. health & safety; engagement; capability; talent and change management;
- Regulatory risks and broader societal expectations: e.g. working within the regulatory and legal environment, and broader societal expectations;
- Capital management: e.g. working within appropriate capital management settings.

Our climate change risks are reviewed as part of our operational risks (see the Enabling Climate Action section in our annual report).

Risk management processes

Our Managing Risk Policy sets out how we manage our risks, including by:

- Having a single risk management framework;
- Providing the CEO and executive team with discretion to manage risk within the guidance provided in our framework;
- Balancing the level of control implemented to mitigate identified risks with our commitment to comply with external regulation and governance requirements and Chorus' value and growth aspirations; and
- Meeting good practice standards for risk management processes and related governance.

Principal risks are owned by relevant executives. This promotes integration into operations and planning and a culture of proactive risk management. Notwithstanding individual ownership, our CEO and executive hold collective responsibility for considering how risk and events interrelate and for managing our overall risk profile.

Principal risks are reported to our ARMC quarterly and, if necessary, also by exception. Principal Risk owners support the regular reporting from the Manager of Risk & Business Assurance by providing "deep dives" on the risks they own. Our ARMC reports to our Board.

The risk and control environment



Principal risks are assessed with each responsible executive and collectively with the executive team before being reported to the ARMC. This allows for constructive challenge and debate. Underlying risk assessment and monitoring practices are undertaken by each principal risk owner with assistance from our Manager Risk & Business Assurance.

Our Board also receives management and other internal and external reporting over risk positions and risk management operation (including from internal audit plans approved by the ARMC) through our overall governance framework.

Our risks are not static. Our CEO and executive regularly seek to identify emerging risks in line with our strategic direction and risk management framework.

Before our Board approves the financial statements, our CEO and CFO provide a certificate as to the appropriateness of those financial statements.

Internal audit

We operate a co-sourced internal audit model with our Manager Risk & Business Assurance supported by external advisors PricewaterhouseCoopers to provide additional resource and specialist expertise as required.

The responsibilities of our internal audit function include:

- Assisting our ARMC and Board in their assessment of internal controls and risk management;
- Developing an internal audit plan for review and approval by the ARMC each year;
- Executing the plan and reporting progress against it, significant changes, results and issues identified; and
- Escalating issues as appropriate (including to our ARMC and/or Board chairs).

Our executive team and ARMC monitor key outstanding internal audit issues and recommendations as part of regular reporting and review, including the timeliness of resolution.

Our ARMC has direct and unrestricted access to our internal audit function, including meeting them without management.

Our Manager Risk & Business Assurance has a management reporting line to our General Counsel & Company Secretary and a direct reporting line to our ARMC. Our ARMC reviews the remuneration and incentive arrangements of our Manager Risk & Business Assurance each year.

External auditor

Our Board and ARMC monitor the ongoing independence and quality of our external auditor. Our ARMC also meets with our external auditor without management present.

Our ARMC charter and External Auditor Independence Policy amongst other things:

- Prohibit the provision of certain non-audit services by our external auditor;
- Require ARMC approval of all audit and permitted non-audit services;
- Require our client services partner and lead/engagement partner to be rotated every five years (with a five year cooling off period) and other audit partners to be rotated every seven years (with a two year cooling off period);
- Require our ARMC to review our external auditor's fees half yearly (including the ratio of fees for audit vs. non-audit services); and
- Impose restrictions on the employment of former external audit personnel.

The non-audit services undertaken by our external auditor KPMG in the year to 30 June 2019 are set out in note 10 of the financial statements in our annual report. Those services were provided in accordance with our ARMC charter and External Auditor Independence Policy and did not affect KPMG's independence, including because:

- They were approved only where we were satisfied they would not have a material bearing on KPMG's external audit procedures; and
- They did not involve KPMG acting in a managerial or decision-making capacity.

KPMG confirm their independence via independence declarations every six months.

Our external auditors attend our ASM each year.

Acting ethically

Codes of ethics

Directors and employees are expected to act honestly and with high standards of personal integrity. Codes of ethics for our directors and employees set the expected minimum standards for professional conduct. These codes facilitate behaviours and decisions that are consistent with our values, business goals and legal and policy obligations, including in respect of:

- Conflicts of interest;
- Gifts and personal benefits;
- Anti-bribery and corruption;
- Use of corporate property, opportunities and information;
- Confidentiality;
- Compliance with laws and policies; and
- Reporting unethical behaviour.

We have communicated our codes of ethics and provided training to our directors and employees. Our people are also encouraged to report any unethical behaviour. All reported breaches are investigated.

Other policies reinforce the behaviours we expect at Chorus, including:

- **Bribery & gifts:** Acceptance of bribes, or gifts/other benefits which could be perceived as influencing decisions, are prohibited under our codes of ethics policies. Our Gifts and Entertainment Policy sets out the parameters within which gifts and entertainment may be accepted and our approval processes for gifts and entertainment over \$150.
- **Anti-bullying, Harassment and Discrimination:** Our Anti-bullying, Harassment and Discrimination Policy reinforces our commitment to a psychologically and physically safe working environment including our zero tolerance approach to bullying, harassment and discrimination.
- **Whistle blowing and fraud:** Our Whistle Blowing and Fraud policies allow for confidential reporting of serious misconduct or wrongdoing and suspected fraud or corruption.

While we did not receive any reports of serious instances of unethical behaviour by our employees in the year to 30 June 2019, we did unfortunately receive reports of alleged unethical behaviour by some sub-contractors used by our service company partners. As noted in our annual report, we, and an independent reviewer, fully investigated these allegations. We, with our service company partners, have announced the steps we are taking aimed at creating consistently fair conditions, in line with employment laws, for all workers in the Chorus supply chain and are committed to doing the right thing by people working on our behalf.

Trading in Chorus securities

All non-executive directors are encouraged to hold Chorus shares. It is the Board's intention that each director will, subject to chair discretion, hold at a minimum shares equal in value to one year's, post-tax, director base fees, accumulated over the first 3 years in office.

All trading in Chorus securities by directors and employees must be in accordance with our Securities Trading Policy. That policy prohibits trading in Chorus securities while in possession of inside information and requires, amongst other things:

- Directors to notify, and obtain consent from, the chair (or in the chair's case, the ARMC chair) before trading; and
- Employees identified as potentially coming across market sensitive information ("restricted persons"), to obtain consent from our General Counsel & Company Secretary (or in our General Counsel & Company Secretary's case, our Board chair) before trading.

Trading in Chorus shares or NZX listed bonds by directors is disclosed to our Board, the NZX and ASX. Trading by "senior managers" is disclosed to the NZX.

Market disclosures

We are committed to providing timely, factual and accurate information to the market consistent with our legal and regulatory obligations.

We have a Board approved Disclosure Policy and a CEO approved Market Disclosure Policy setting out our disclosure practices and processes in more detail.

Our disclosure policies are designed to ensure:

- Roles of directors, executives and employees are clearly set out;
- Appropriate reporting and escalation mechanisms are established;
- There are robust and documented confidentiality protocols in place where appropriate; and
- Only authorised spokespersons comment publicly, within the bounds of information which is either already publicly known or non-material.

Our approach to tax

We take our tax obligations seriously and work closely with Inland Revenue to ensure we meet our tax obligations.

We obtain external advice and Inland Revenue's views (through informal correspondence, determinations or rulings) in respect of unusual or material transactions.

As we operate only in New Zealand all our tax is paid in New Zealand at the prevailing corporate tax rate (currently 28%). We have paid all taxes we owe and all tax compliance obligations are up to date.

Stakeholder engagement

Shareholder engagement

We are committed to fostering constructive relationships with shareholders that encourage engagement with us, including by:

- Communicating effectively with them;
- Giving ready access to balanced and understandable information;
- Making it easy for shareholders to participate in general meetings; and
- Maintaining an up to date website providing information about our business.

Our investor relations programme is designed to further facilitate two-way communication with shareholders, provide them and other market participants with an understanding of our business, governance and performance and an opportunity to express their views. As part of this programme we enable investors and other interested parties to ask questions and obtain information, meet with investors and analysts and undertake formal investor presentations. Our annual and half year results presentations are made available to all investors via webcast.

Annual meetings are held in a main centre and webcast to enable shareholders to view and hear proceedings online.

We enable shareholders to vote by proxy ahead of meetings without having to physically attend or participate in those meetings and adopt the one share one vote principle, conducting voting at shareholder meetings by poll.

Because of the ownership restrictions contained in our constitution, there may be rare circumstances where, in the event that the restriction is breached, our Board may prohibit the exercise of voting rights. More information on our ownership restrictions is included in our annual report and in our constitution.

We consider that shareholders should be entitled to vote on decisions which would change the essential nature of our business.

Shareholders are also able to ask questions of, and express their views in respect of, our Board, management and auditors (including via appointed proxies) at and before annual meetings.

We encourage shareholders to communicate with us and our share registrar electronically, including by providing email communication channels and online contact details and instructions on our website.

Stakeholder survey

We conduct an annual survey of a diverse group of stakeholders to gauge perceptions of our performance and identify any matters that may require further attention. These stakeholders include investors and analysts, business leaders, central and local government, media, and telecommunications industry organisations.

dear investors



We're on the fast-track to our goal of keeping New Zealand new, with the fibre rollout now 80% complete and more than half of our broadband connections on fibre.

When we signed up for the original ultra-fast broadband (UFB) contract with the Government in 2011, we had a target of 20% fibre uptake by 2020. This year, demand for fibre was stronger than ever. We completed a record 186,000 fibre installations, up from 156,000 last year, and fibre uptake within our UFB areas grew from 45% to 53%. That's all the more impressive when you consider we built the network past another 176,000 homes and businesses during FY19.

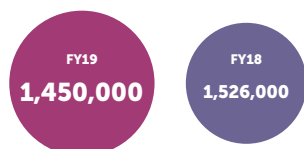
Demand for data also keeps growing, reflecting the ever increasing range of online streaming content and the proliferation of connected devices in the home. Monthly average household

data usage on copper and fibre connections across our network increased by 55 gigabytes (GB) to 265GB. Fibre customers use an average of 341GB. Pleasingly, we've seen a growing proportion of customers opt for higher speed connections, with uptake of 1 gigabit per second (Gbps) plans increasing from 7% to 10% of our consumer connections in the period.

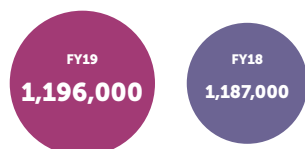
We completed a number of significant initiatives during the year as part of our ongoing transformation programme to optimise our business for a fibre-centric future. Despite some impact from individual retailer processes, we lifted overall customer satisfaction from 7.5 to 7.7 out of ten. This reflected our collaboration with our industry partners to redesign our processes and reduce the effort required by most fibre installations to just one customer appointment. Our people have been critical to embracing this kind of customer design-led change. We achieved a score of 7.6 out of 10 in our annual engagement survey, consistent with the middle of our international 'technology' company benchmark, and a positive net promoter score of 28.

FY19 result overview

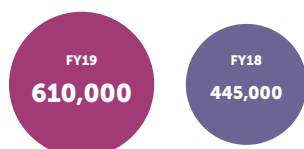
Fixed line connections



Broadband connections



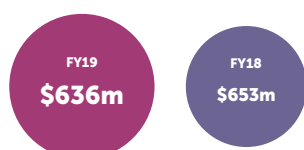
Fibre connections



Net profit after tax



EBITDA¹



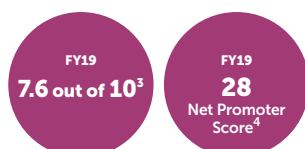
Dividend



Customer satisfaction



Employee engagement score²



Dividend reinvestment plan for shareholders

A dividend reinvestment plan is available to our Australian and New Zealand resident shareholders with a discount rate of 3% for the 8 October 2019 dividend payment.

If you haven't previously registered to participate and wish to do so, you'll need to have registered your participation by 5:00pm (NZ time) on 25 September 2019.

You can register by logging into our Computershare profile at www.investorcentre.com/nz or downloading the Participation Notice at www.chorus.co.nz/dividends and returning it to Computershare.

The full terms of the reinvestment plan can be read in our Offer Document dated February 2016 at www.chorus.co.nz/dividends, or you can request a copy free of charge. Our most recent audited financial statements, and auditor's report, are included in our 2019 annual report, which is available free of charge on request and at www.chorus.co.nz/financial-results.

- 1 Earnings before interest, income tax, depreciation and amortisation (EBITDA) is a non-GAAP profit measure. We monitor this as a key performance indicator and we believe it assists investors in assessing the performance of the core operations of our business.
- 2 A new engagement survey provider means FY18 data isn't directly comparable.
- 3 Based on the mean response to "How likely are you to recommend your company as a place to work?"
- 4 Net Promoter Scores can range from -100 to 100 and are calculated by subtracting the percentage of detractors (0-6 engagement score) from the percentage of promoters (9-10 engagement score).

We were pleased to have legislation enacting a new regulatory framework for fibre passed by Parliament in November. We've begun assisting the Commerce Commission with the information it requires as it goes through the process of establishing the value of our regulated asset base and our allowable fibre revenues. The utility-style regime is expected to apply to our fibre access services from January 2022.

We had a strong year for broadband connections, with an increase of 9,000 lines. This was a significant jump from a gain of just 1,000 broadband lines in FY18 and reflects our ongoing initiatives to win broadband customers from cable and fixed wireless networks in our own fibre areas, together with premises growth nationwide. Although broadband connections grew, it was outweighed by the ongoing reduction in our copper lines and we ended FY19 with 76,000 less fixed line connections overall. This was consistent with connection losses in the prior year and reflects other fibre companies reducing our copper broadband connections in areas where we're not the Government's UFB partner, as well as large retailers migrating voice only customers onto their own wireless networks.

We're 80% of the way to our target of building our fibre network past approximately 1.36 million homes and businesses by the end of 2022. We've started taking fibre to some of the more than 300 smaller towns for the extension of the original UFB rollout (UFB2), where fibre promises to deliver even greater socio-economic benefits. The fibre rollout remains on time and on budget and, with copper investment reducing and a positive performance on connection costs, we were able to limit capital expenditure to \$804 million for the year. This was slightly below the lower end of our guidance range, of \$820 million to \$860 million, and heralds the beginning of reducing capital expenditure as we pass the peak of the UFB rollout schedule.

Reduced connection revenues meant we achieved EBITDA of \$636 million, within our guidance range, but down from \$653 million in FY18. This was partly offset by our transformation initiatives and a tight rein on costs, with operating expenses slightly lower than in FY18 despite increased regulatory and network related expenses. We achieved this by adopting new digital processes and tools to deliver benefits across our business, as well as for our retailers and their customers. New online tools, for example, helped reduce network maintenance costs by avoiding unnecessary technician visits.

Net profit after tax reduced to \$53 million, from \$85 million in FY18, largely because of increased interest costs and depreciation and amortisation. A fully imputed final dividend of 13.5 cents per share will be paid on 8 October 2019, bringing total dividends for FY19 to 23 cents per share

Outlook

Within six months' time we'll have completed the rollout of fibre across our original UFB contract areas. This means the intensity of our organisational focus on building the fibre network is now reducing, with annual rollout volumes slowing through to the end of 2022. As we continue the work already underway to reshape our business, our emphasis is shifting to what's required to maintain and operate our network.

Our overarching strategy remains simple. We'll keep connecting as many customers to fibre as fast as we can, while continuing to do everything we can to improve customer satisfaction. Digital platforms are the key to this and form a central part of our ongoing transformation

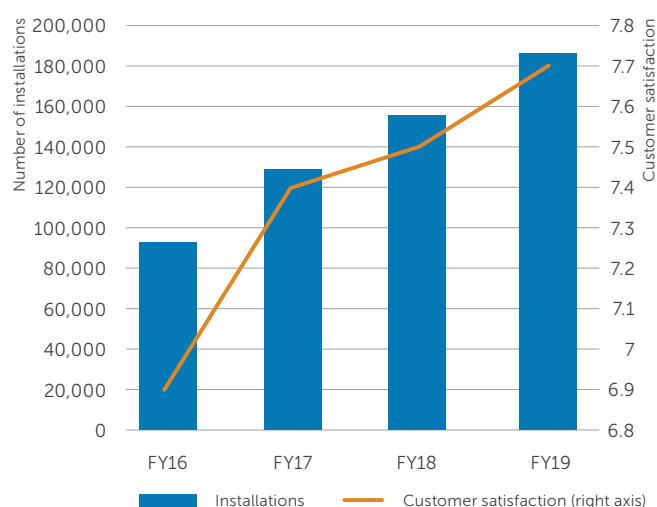
programme focussed on streamlining our business.

The pace of fibre uptake has encouraged us to accelerate some aspects of this programme, so we can optimise our operations earlier than previously expected.

For example, a new service company gateway will help us keep retailers and customers better informed about progress with their provisioning or fault-related activity. We're also consolidating and simplifying our management of customer interactions into a single system. Ultimately, we believe most premises already connected by fibre should be zero touch for activating broadband service and any service issues should largely be able to be resolved remotely.

Figure 1:

Fibre installations and customer experience



Despite some of the competitive challenges we face, particularly the decline in voice only connections, we remain focussed on our aspiration of returning to modest EBITDA growth in FY20. Our modernisation activities will help remove legacy system constraints and merge some teams within our business. Declining copper connection volumes also present an opportunity for us to realise maintenance and capital expenditure savings in some areas. However, this doesn't mean we'll stop looking after the copper network. Faults on the copper network remain relatively infrequent, averaging about once every five years, and usually take less than 24 hours to repair.

The Commission has indicated it will develop a copper withdrawal code for the industry by mid-2020. Naturally, we'll take a customer-centric approach and inform consumers well in advance and in accordance with the new code. While we're starting to plan for when we might start switching off parts of the copper network in our fibre areas, that's still some time in the future and it will be on a street-by-street basis, subject to factors such as fibre uptake. In the interim, we believe retailers need to take care to avoid creating consumer confusion about the timeframes for copper switch-off. Some consumers appear to have been advised that they need to disconnect from the copper network when that isn't the case.

Strong fibre demand is expected to continue, supported by our migration programme and incentive campaigns, as well as the upcoming Rugby World Cup. This should drive further

average revenue per user (ARPU) growth as customers increasingly recognise the benefits of higher speed plans. Commercialisation of our new data centre services and the promotion of business products with enhanced restoration times are other revenue priorities. We're also continuing to enhance our interaction with land developers given the ongoing growth in new premises nationwide.

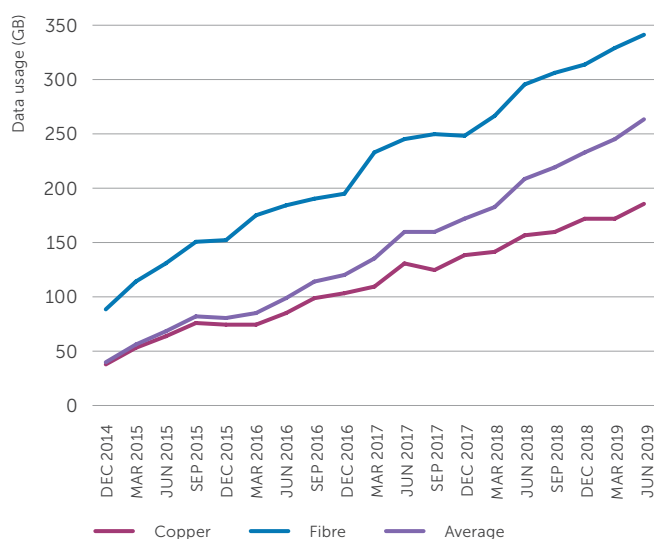
We're positive about the future for fibre, but we also acknowledge that technology can change quickly in our industry. It's important that these risks are recognised and that investors have a fair opportunity to earn a return on, and of, the substantial investment we've made to bring fibre to New Zealand homes and business. This has occurred well ahead of most other countries in the world and we continue to invest ahead of demand to enable the network capacity and resilience needed for reliable high-speed broadband.

In Europe, regulators have acknowledged the risk involved in fibre investment by allowing a rate of return higher than that allowed for legacy network investment. Our investors were, therefore, surprised by the Commission's initial views on some of the parameters that will shape our allowable return on the fibre network. These parameters potentially implied one of the lowest cost of capital calculations for a regulated utility in New Zealand. Our focus is on providing clear evidence to the Commission through its ongoing processes to ensure our investors' concerns are fully and fairly reflected in future decisions.

We believe New Zealand's best interests are served by the continued development of vibrant retail competition for broadband and that open access wholesale networks are critical to this. A combination of a lack of competitive intensity, a lack of clarity for consumers, and cross-subsidies between mobile and fixed wireless services, may create structural advantages over other retailers. That's why, with the auction of the first blocks of 5G spectrum scheduled to occur in 2020, we've encouraged regulatory and government bodies to consider including allocation requirements that help ensure competition continues to emerge.

Figure 2:

Monthly average data usage per connection on our network



We agree with the Commission's preliminary mobile market review finding that 5G deployment will likely involve infrastructure sharing, given the use cases for 5G investment remain unclear. We've already begun trialling small cell deployments with mobile operators, building on the success of earlier innovation trials to identify alternative uses for our assets.

Infrastructure sharing at a wholesale level makes good economic sense for New Zealand, if it creates a more level playing field and fosters a healthier retail market. The UFB rollout is clear evidence of this. As our industry evolves, we'll keep exploring opportunities to leverage our infrastructure to help make New Zealand better.

Kate McKenzie to step down at end of 2019

Kate has advised the board of her intention to return home to Australia at the end of the year. Kate was named as Chorus CEO in December 2016 and the Board would like to thank her for the superb work she has done leading Chorus. We're sorry to see her go, but understand her desire to spend more time with her Sydney-based family. She'll leave with our very best wishes and thanks for a job well done.

We're well placed to take advantage of the opportunities ahead as we move from building the fibre network to operating it, thanks to her tenure and leadership. Kate and the Board are committed to an orderly transition, as she remains focused on maintaining the progress made to date and leading the excellent leadership team that is in place, while her successor is selected.

We've been considering succession planning for some time, and the process to appoint a successor is underway. We'll consider internal and external candidates for the role.

Thank you for your support of Chorus.

Kind regards

Patrick Strange
Chair

① If you'd like more detail on our financial results, the annual report and a recorded webcast of our results briefing will be available on our website at www.chorus.co.nz/reports

Keeping New Zealand new

As a utility network operator, we take a long term view. We want to make New Zealand better, keeping it at the cutting edge through our network infrastructure and the connectivity we provide. Our copper VDSL and fibre to the premises network makes

high-speed unlimited broadband available to ~90% of broadband capable lines nationwide. About 100 retailers use our infrastructure to deliver fixed line and mobile network services to their customers. By the end of 2022 we'll have fibre available to ~1.36 million customers.

WE'RE GOING TO

**KEEP
NEW ZEALAND
NEW**

WE'LL GET THERE BY

Creating an environment for our customers and our people that optimises today's business and allows us to innovate for growth

BECAUSE WE WANT TO

**MAKE
NEW ZEALAND
BETTER**

WE'RE FOCUSED ON

CUSTOMER

Transform customer experience

DIGITAL

Nothing happens if it's not digital

PEOPLE

We're committed to enabling our people

OPTIMISATION

We improve by getting better at what we do

INNOVATION

New revenue opportunities

