

C H ● R U S

Quality Standards Proposal Summary

Agenda

Agenda

- Purpose & objectives
- Context & RP1 proposal overview
- Approach to quality in RP1
- Proposed standards for RP1
- Q&A





Purpose and goals

For today's session

Chorus was invited to present on quality proposals for 1st regulatory period, the plan is to:

- Provide some context and overview of our RP1 proposal
- Introduce our proposed quality standards for RP1
- Share initial thoughts on how these might evolve over time
- Address your questions and discuss ...

Proposed quality standards for RP1

Sustain quality through a period of transition, refine framework for RP2

- Propose a reporting-only approach of these 2 statistics for RP1 (annually):

Dimension	Statistic
Performance	Monthly maximum portion of very high (>90%) utilisation ports
Availability	Average downtime per access line (reported, unplanned, confirmed, annualised)

- Propose RP1 acts as a baseline for future standard setting

	RP1	RP2	RP3 →
Revenue linked performance incentives	✘	✓	✓
Quality standards	Reporting	Targets	Targets
Other existing (product, SLAs)	Continuity	Consult, review, harmonise + simplify	



Context & RP1 proposal overview

Chorus context

PQ regulation builds on existing foundations

- Ten years since Chorus demerged from Telecom – required to be wholesale only with open access obligations to participate in UFB
- Nearly completed planned UFB rollout, uptake ~60% in completed footprint
- Period of significant investment and cost pressure
- New PQ regime introduced by 2018 Telco Act, implemented by Commission via IMs (2020) and through PQ and ID determinations (2021 >>) ...
- Complements existing statutory, regulatory and contractual instruments



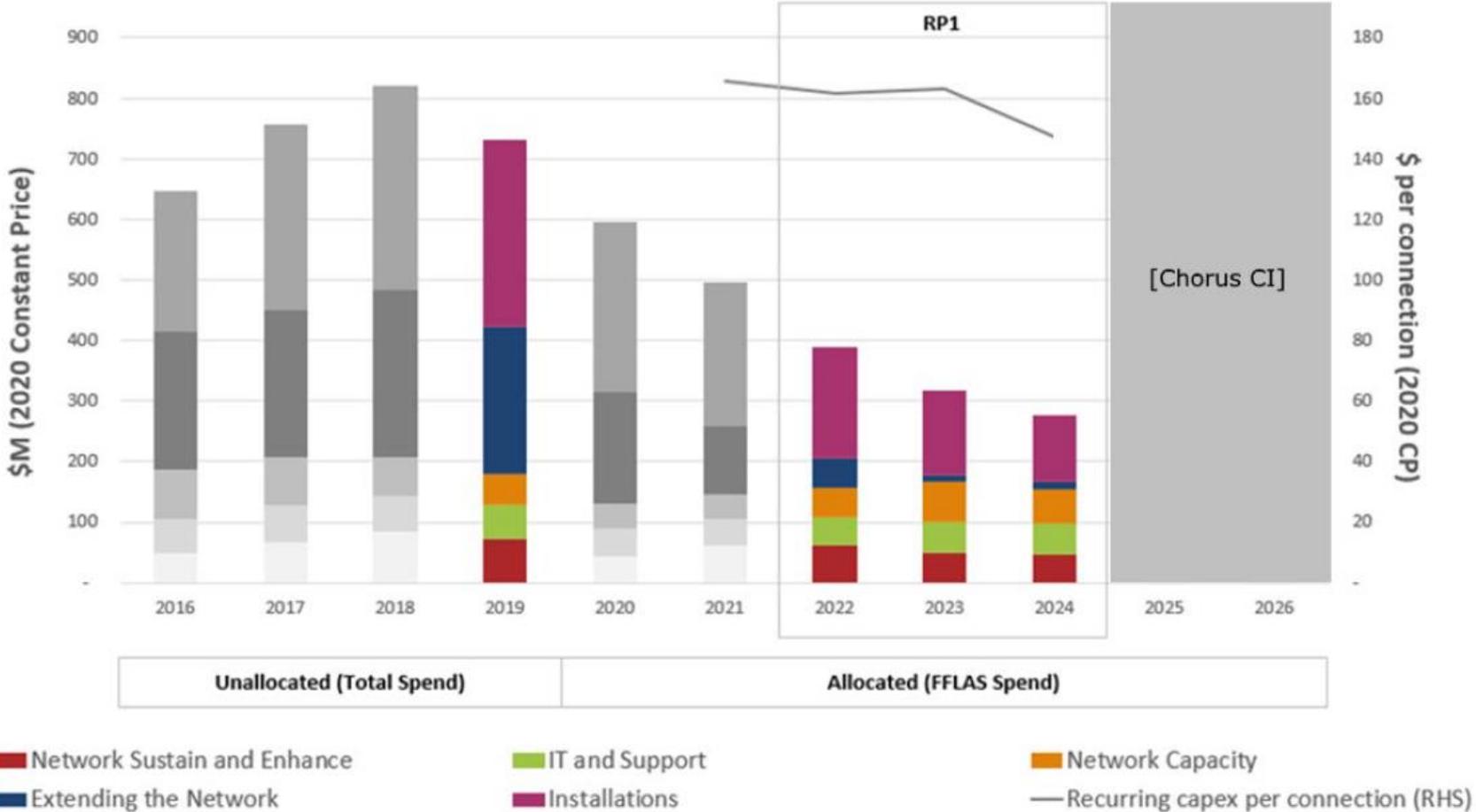
RP1 proposal overview

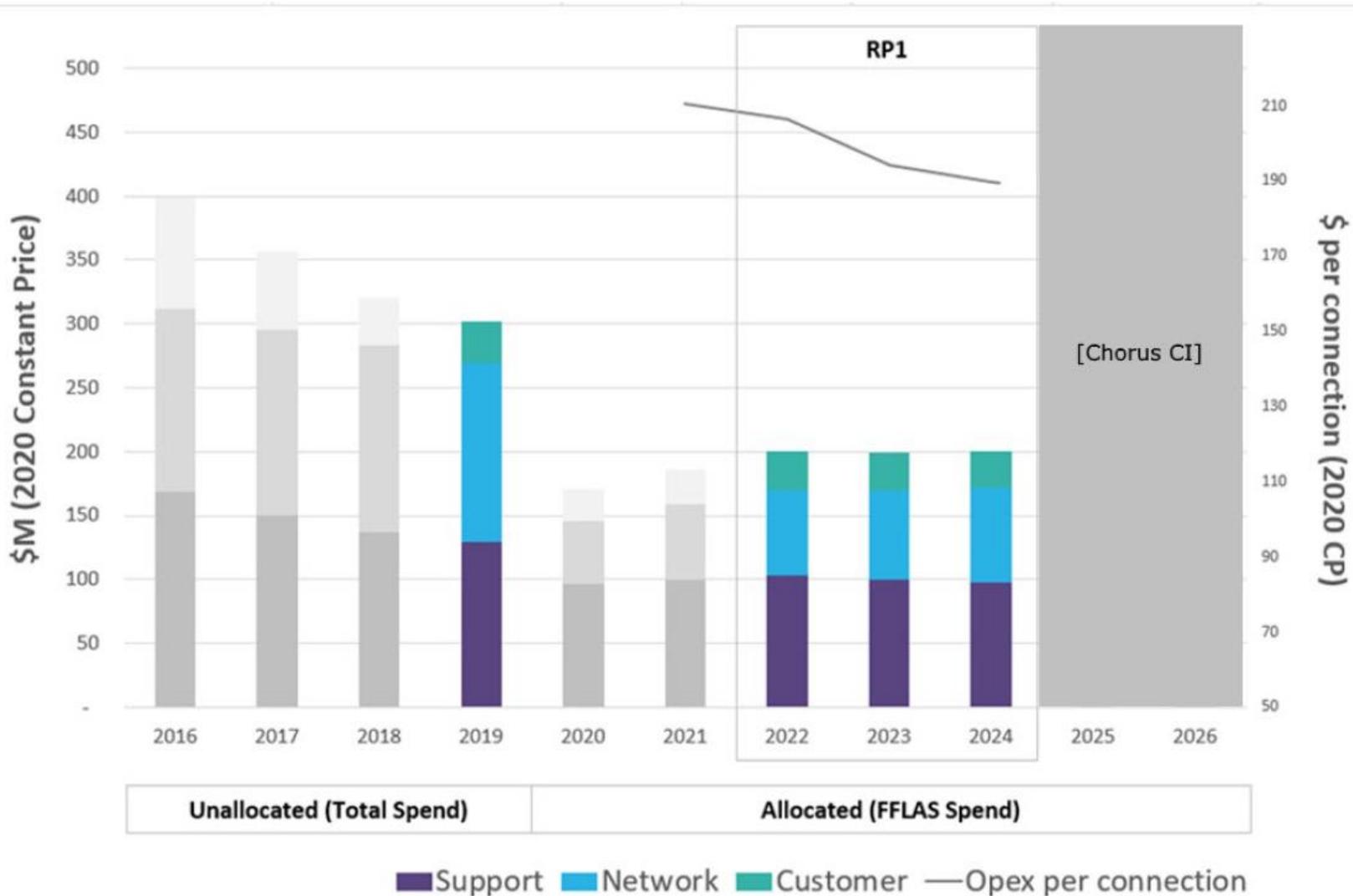
We're making New Zealand Better...

- Complete UFB build and continue connecting consumers to our fibre access network
- Continue investing in network capacity, product development and resilience, and carefully manage a transition in our field workforce, so we can sustain quality of service at current levels
- Continue to innovate and invest to meet evolving consumer needs and sustain the fibre access value proposition in a fast-moving industry, and
- Adapt our business and develop our asset management capability to support a transition from network build to optimising the built network
- We propose total expenditure of \$1.6bn, comprising \$983m capex and \$599m opex

Capex overview

We propose \$983 million capital expenditure





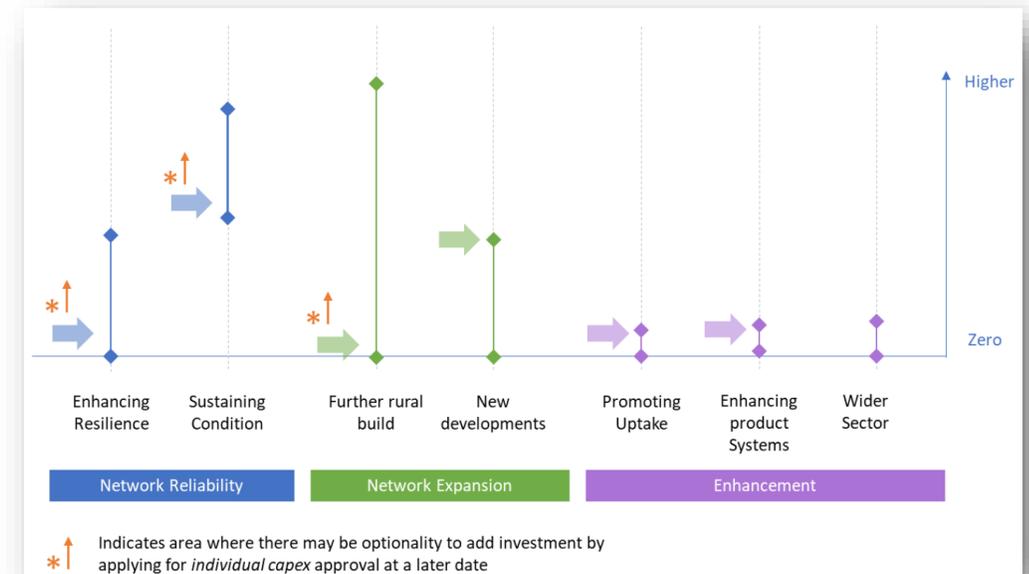
Opex overview

We proposed \$599 million of operating expenditure

Quality – continuity for RP1

We aim to maintain existing quality outcomes in RP1

- Reflects policy objective and stakeholder feedback, and recognising evolving nature of UFB network as we connect more remote communities:
 - We also consulted with customers in 2020 about areas of investment and where we could adjustment could drive changes in quality
 - View that reliance on high-speed broadband growing and resilience should grow over time ... but continuity appropriate for RP1
- Proposal also reflects that:
 - links between expenditure and quality are understood only at a high-level. This will take time to develop; and
 - proposal was developed in a short timeframe and standard setting through happening in parallel



Chorus, *Help us shape the future of fibre – Engagement paper on investment plans for the three years from July 2022*, 20 March 2020

Our approach to quality in RP1 proposal





Quality - introduction

- Quality encompasses all aspects of service provision as well as how we design, build, maintain and operate our network.
- Historically Crown Infrastructure Partners (CIP) determined the quality of our network and services with quality defined:
 - in network facing parameters in CIP contracts (NIPAs) and
 - in customer facing parameters through CIP approved reference offers
- The new framework transitions control of quality from contractual commitments to regulatory obligations
- Caution is needed with this transition to ensure new regulation reflects policy objectives and avoids (adverse) unintended consequences



Purpose of quality standards

Quality standards under the IMs have two main functions:

- To ensure regulated suppliers have incentives to provide services of a quality that reflects end-user demands (section 162(b))
- To avoid any incentive a regulated supplier may have to enhance its return by under-investing or otherwise degrading the regulated service

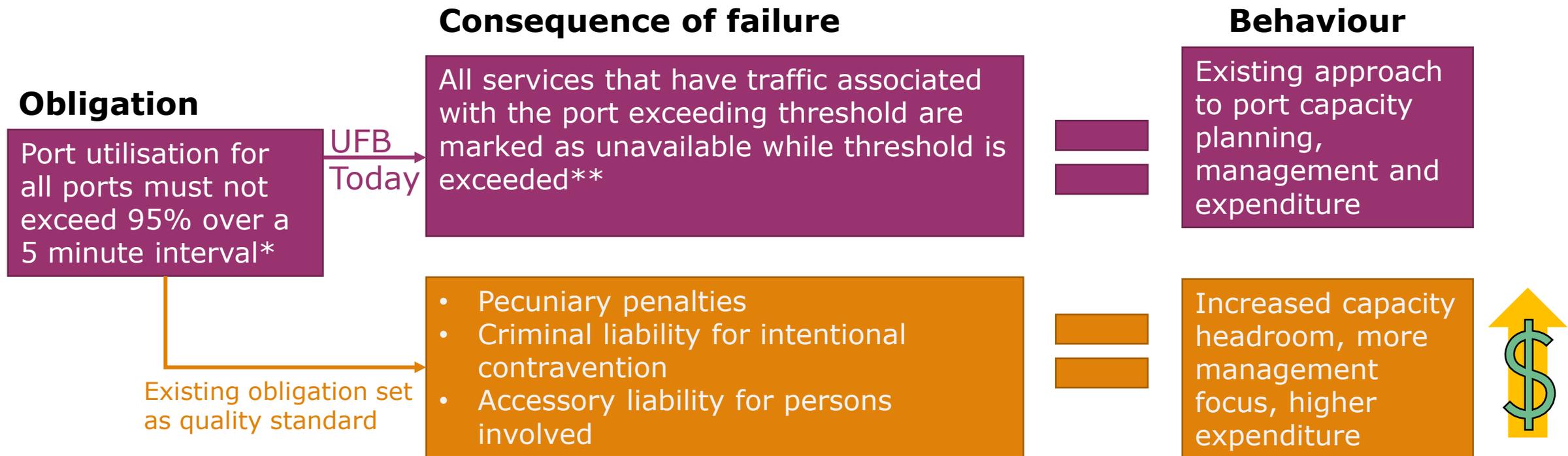
Described in EDB DPP3 determination

7.14 These quality standards and incentives are a crucial part of promoting the purpose of Part 4 of the Act. Most directly, they are important for ensuring distributors have incentives to provide services at a quality that reflects consumer demands. However, as distributors' revenues are constrained by the price path, quality standards are also important for ensuring distributors have incentives to invest, and are constrained in their ability to earn excessive profits at the expense of quality.

Commerce Commission, DPP for electricity distribution businesses from 1 Apr 2020—Final decision Reasons paper, 27 November 2019

Breakout: quality standards vs service levels

The consequence of failure is greatly increased for quality standards vs service levels. This has affects supplier behaviour and can drive adverse outcomes



* Layer 2 Performance Measurement and Reporting Regime, clause 6

** IBID, clause 6.3 – used as a proxy for traffic performance requirements

Setting quality standards

Historic performance - while we have been measuring and reporting against service levels under UFB contracts for some time, historic UFB performance doesn't necessarily provide a good indicator of future FFLAS performance. This is because:

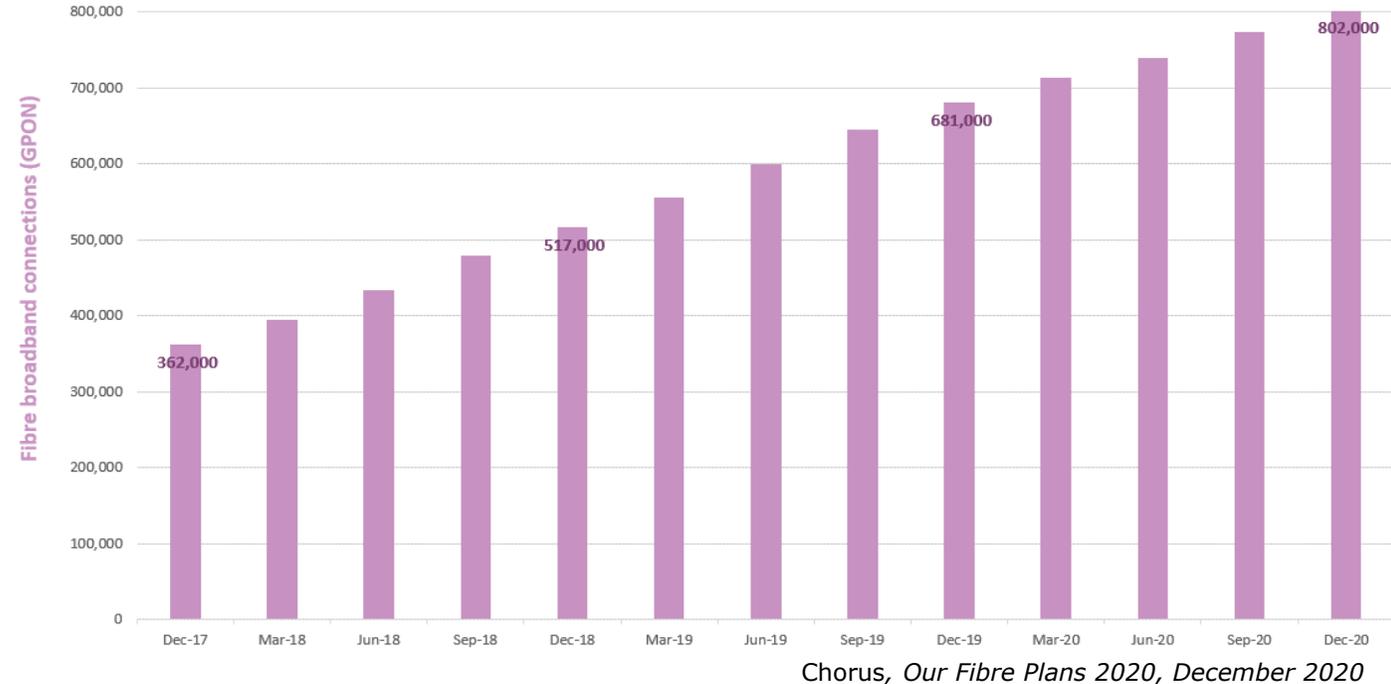
- **Network growth and expansion** – network has increased rapidly in size and new network is in deeper rural areas further from operational support
- **Business in transition** – moving from network build to network operate/maintain

By RP2 UFB build will be complete and more stable performance data will become available

Riversdale Fibre broadband on offer

Riversdale residents now have access to world-class broadband, after fibre was installed in the Southland town. Chorus' general manager of network operations, Andrew Carroll, said: "It's wonderful that residents in Riversdale can now tap into the most dependable, super-fast broadband that fibre offers." The towns of Blackmount, Manapouri, Mossburn, Waikaia, Winton and Te Anau also have fibre installed.

Southland Times, 14 May 2020





Setting quality standards

Standards reporting in RP1 can be used to baseline future quality standards as well as any future revenue linked incentive scheme.

Also, by ensuring robust historic data before setting targets as standards we can avoid:

- False positives by normalising for extreme events and calibrating
- Inefficient or over-cautious behaviour and impeding service differentiation or otherwise worsening quality

7.85 Additional quality standards that reflect consumer demands should be explored further during the DPP3 period and with a view to potentially considering them for future resets. As discussed further in Attachment N, we generally require a historic dataset of any new measure to set a standard against.

Importance of historic data before setting standard recognised in DPP3 determination

N17 Our view is that the information required should first be collated, with a view to establishing quality standards and potentially a financial incentive scheme for future DPP resets.

Commerce Commission, DPP for electricity distribution businesses from 1 Apr 2020–Final decision Reasons paper, 27 November 2019



Proposed quality standards for RP1

Price-Quality standards – 1

Performance: Maximum portion of very high (>90%) utilisation ports by month

- Our capacity planning aims to maintain a congestion-free network
- This is the best metric to provide overall indication of performance
- If port utilisation <90%, other metrics like frame delay and frame loss unlikely to be an issue
- Focus on aggregation ports, where there is greatest scope for congestion and capacity is a key investment driver
- Exclude RSP handover ports - governed by RSP investment and not in our control
- 90% threshold - timely indication of network stress - minimal performance degradation but limited headroom
- Maximum results consistent with the focus on periods of high utilisation



Price-Quality standards – 2

Availability: Average downtime (reported, unplanned, confirmed, annualised) by month

- Best way to characterise the full distribution of performance (across all users) in a single statistic
- Confirmed downtime = downtime originating from identified faults in our network
- Combining layer 1 & 2 provides a user-focused view
- Monthly reporting provides visibility of within-year trends, whilst annualising the figures makes them more relatable
- Include periods where port utilisation in excess of bitstream reference offer SLAs
- Information on non-Chorus network reported faults may be of secondary interest

Recap – Quality standards proposal

We still sustain quality through a period of transition

- Propose a reporting-only approach of these 2 statistics for RP1 (annually):

Dimension	Statistic
Performance	Monthly maximum portion of very high (>90%) utilisation ports
Availability	Average downtime per access line (reported, unplanned, confirmed, annualised)

- Propose RP1 acts as a baseline for future standard setting

	RP1	RP2	RP3 →
Revenue linked performance incentives	✘	✓	✓
Quality standards	Reporting	Targets	Targets
Other existing (product, SLAs)	Continuity	Consult, review, harmonise + simplify	



Questions?



Additional material

Part 4 experience

UFB SLAs a good start point for performance measures ... but caution needed in setting standards

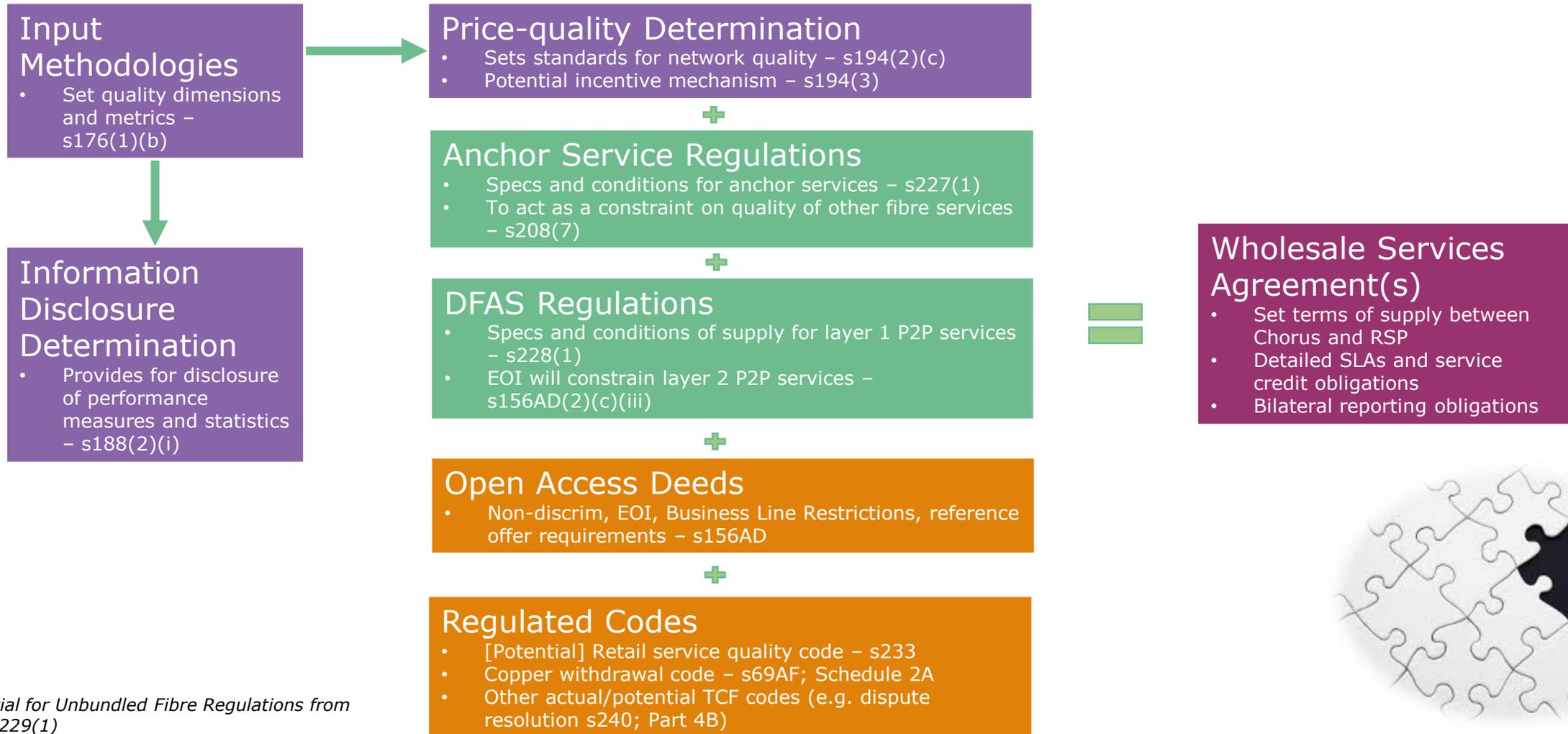
- Transpower's RCP2 experience highlights the risk of adopting service levels / performance measures as quality standards

F38 Our approach to setting quality standards that are enforceable under the Act has also matured since we set the RCP2 quality standards. These were set in the midrange of the quality incentive scheme (ie, at the target value for performance) and have proven to be aspirational.²⁶¹

F40 We have set the RCP3 quality standards that more realistically reflect Transpower's historical performance and provide a minimum level of quality to consumers that is in line with that historical performance.

Commerce Commission, Transpower's IPP from 1 Apr 2020 – Decision and Reasons paper, 29 August 2019

Stepping back – the pieces of the RP1 quality puzzle



*Potential for Unbundled Fibre Regulations from RP2 – s229(1)

