

PQP2 Process and Approach

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C H ● R U S

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Introduction

1. This is Chorus’ response to the Commerce Commission’s (**Commission**) consultation paper ‘Fibre price-quality regulation: Proposed process and approach for the 2025-2028 regulatory period’ (**consultation paper**). No part of this submission is confidential.
2. Appendix A contains responses to the questions posed in the consultation paper. Appendix B contains proposed IM amendments.

Executive Summary

3. The consultation paper proposes a largely familiar and expected approach to determining Chorus’ PQP2 price path and quality standards. We are comfortable with much of what the Commission has proposed. However, there are some key areas where a different approach would deliver better outcomes for fibre end-users.
4. In the table below is a high-level summary of our submission.

<i>Issue</i>	<i>Chorus recommendation</i>
<i>Framework</i>	<ul style="list-style-type: none"> • The Commission must provide a balanced consideration of the economic framework – including the competition framework – when assessing issues: <ul style="list-style-type: none"> ○ There are topics in the consultation paper where the Commission suggests changes without fully considering the current state of competition in broadband markets (especially the commercial incentives Chorus already faces to act in the long-term interest of end-users) and whether this mitigates the need for regulation. ○ The Commission risks reaching the wrong conclusions about the best and most cost-effective way to meet its objectives if it starts with the assumption that additional regulatory interventions are needed to resolve every issue. • Where existing regulatory or legislative requirements (eg geographically consistent pricing (GCP) or anchor service regulations) are causing inefficient pricing outcomes, the Commission should consider amendments to those requirements, rather than propose further regulations for Chorus. • Where the purpose statement in section 162 and objective in section 166 conflict, the Commission should take a position that best promotes outcomes consistent with workably

<i>Issue</i>	<i>Chorus recommendation</i>
<i>Process</i>	<p>competitive markets, for the long-term benefits of end-users of FFLAS (i.e. section 162 takes priority).</p> <ul style="list-style-type: none"> • When considering uncertainty mechanisms, more streamlined reopeners should be preferred to costly and time consuming ICPS. • A technical drafting consultation should be held on the price-quality determination between the draft and final decisions. • The quality standard decision should be made at the same time as the expenditure allowances are set. • If that is not possible: <ul style="list-style-type: none"> ○ there should be no material change to the outcomes required by the quality standard after the expenditure allowances are set (for example, if the expenditure allowances are set based on the draft quality standards, there will not be scope to change the quality standards later in a way that requires a different service outcome); and ○ any new or changed quality standards relative to the quality standards for PQP1 should not come into effect until three months into PQP2.
<i>Base year</i>	<ul style="list-style-type: none"> • The base year for expenditure allowances should be 2022 as there is insufficient time to use audited 2023 data. • However, 2023 data should be used for the later PQ revenue path decisions that rely on reported opening RAB and tax values, as there is sufficient time to use this information for the final PQ decision.
<i>Asset management</i>	<ul style="list-style-type: none"> • The Commission should work with Chorus to identify the best method(s) of promoting improved asset management during PQP2. Adding extra reporting requirements may not be the most effective option.
<i>Price path smoothing</i>	<ul style="list-style-type: none"> • In relation to the framework for smoothing, the objectives should be to avoid pricing volatility, consider asset stranding risk, not curtail revenue growth driven by FFLAS uptake and provide clarity about how the mechanisms will work together. • Where depreciation is used as a smoothing mechanism then a subset of assets could also be targeted for altered depreciation (i.e. not limited to only the core RAB and/or the financial loss asset (FLA)).

<i>Issue</i>	<i>Chorus recommendation</i>
<i>Wash-up</i>	<ul style="list-style-type: none"> The Commission should not introduce additional measures to minimise the risk of price shock to (non-anchor) end-users. These measures are unnecessary given our existing commercial drivers to keep our prices competitive. There should be no limits imposed on the accrual of the price path wash-up. The wash-up needs to remain unlimited and symmetrical to preserve Chorus’ incentives to invest and maintain the expectation of real financial capital maintenance (FCM). Wash-ups should be applied in a manner that facilitates timely recovery, flexibility and limited regulatory intervention. There should be a mechanism to permit draw-down of wash-up balances during a regulatory period, to manage the risk of future price volatility.
<i>Price path compliance</i>	<ul style="list-style-type: none"> The price path mechanisms should be reviewed in light of experiences in PQP1, including updates to inflation and quantity forecasts. We will provide further recommendations to the Commission on this in due course.
<i>GCP compliance</i>	<ul style="list-style-type: none"> The requirement for twice-yearly director certification of information demonstrating compliance with the geographically consistent pricing obligation is entirely disproportionate to the risk of harm to end-users. It should not be carried through into PQP2. Instead, compliance should be monitored using pricing disclosures.
<i>Network expansion</i>	<ul style="list-style-type: none"> The Commission should primarily evaluate Chorus’ proposed network expansion investment by applying a workably competitive market test, which asks whether consumer willingness to pay (ignoring the constraint of GCP) is broadly equal to or exceeds the incremental cost of the network expansion. Provided new consumers in the proposed expansion area are broadly willing to pay for it, the capex objective is met. If instead the Commission assessed the proposal based on the GCP-constrained price, then there is a risk that Chorus would be prevented from rolling out fibre network to consumers who value the service and would be prepared to pay for it. In assessing the network expansion investment:

<i>Issue</i>	<i>Chorus recommendation</i>
	<ul style="list-style-type: none"> ○ The Commission’s focus should be limited to the in-market costs and benefits of fibre expansion, rather than costs or benefits outside the market ○ The role of competing technologies is relevant primarily to the extent it supports an analysis of the relative costs and benefits of different solutions, and therefore, the benefits to consumers of fibre network expansion.
<i>Quality standards</i>	<ul style="list-style-type: none"> • We support retaining quality standards for availability and performance for PQP2 and reviewing how these could be improved. • We support not creating any new additional quality standards for PQP2. • There is no need to set a quality standard for provisioning as (a) Chorus already has strong commercial incentives to deliver a good provisioning service; (b) it would be difficult to set a provisioning standard that would enhance existing incentives. At best it would impose cost without benefit. At worst it would establish perverse incentives to favour new customers over existing ones, inefficiently allocate field service resource and deprioritise other aspects of quality.
<i>Quality incentives</i>	<ul style="list-style-type: none"> • In principle, a revenue-linked quality incentive has some benefits, although Chorus already has strong commercial incentives that drive us to deliver services at a level of quality our end-users expect. • If a quality incentive is introduced it should apply to the Availability dimension only, and be set as a low-powered or ‘shadow’ scheme for PQP2, given limitations in the available data. It should also use the same definition of downtime as is applied for the quality standards. • No regulatory compensation payment scheme should be created. We are already required to make compensation payments under our current contracts so any regulatory compensation would be unnecessary duplication, creating cost without adding any extra benefit for end-users.
<i>Anchor services</i>	<ul style="list-style-type: none"> • We agree with the Commission that it should not review the anchor services regulations prior to PQP2.
<i>Deregulation</i>	<ul style="list-style-type: none"> • We look forward to participating in the consideration of a deregulation review.

<i>Issue</i>	<i>Chorus recommendation</i>
<i>IM amendments</i>	<ul style="list-style-type: none"> • The timing of this process requires more explanation because it is unclear how the Commission intends any potential review could affect the PQ path setting exercise for PQP2. • We would expect the process to start earlier in advance of PQP3, to better enable changes to the scope of the regulated service (if there are any) to be implemented before the new regulatory period.
	<ul style="list-style-type: none"> • We support considering IM amendments in advance of PQP2 to ensure the IMs are fit-for-purpose. • The proposed process of identifying and completing all IM amendments by June 2024 may not be achievable. Non-expenditure related IM amendments could be deferred if needed to late 2024. • Appendix B of this submission summarises the IM amendments we are currently recommending.

Framework and context

Economic framework

5. We support the components of the economic framework that the Commission has described in the consultation paper.¹ However, the discussion in the consultation paper is imbalanced, with a focus on regulatory interventions and less acknowledgement of the role existing competition can play in incentivising positive outcomes for end-users.
6. As the Commission is aware we face competition at a level beyond that faced by any other business subject to price-quality regulation in New Zealand. The broadband market share of alternative technologies is more than 17%² and our competitors are seeking to grow that further.³
7. Given the competitive dynamics of the markets in which we operate, less regulatory intervention rather than more is likely to be needed to ensure the Part 6 purpose is met. We **recommend** the Commission applies a more balanced discussion of the framework when introducing and assessing potential changes for PQP2. This is important to ensure the role of existing competition is fully considered. The Commission risks reaching the wrong conclusions about the best and most cost-effective way to meet its objectives if it starts with the assumption that additional regulatory interventions are needed to resolve every issue.
8. As an example, a potential quality standard for provisioning is discussed without any recognition that Chorus already faces substantial competitive pressure to ensure our provisioning processes are as smooth and timely as possible.
9. The consultation paper does go some way to acknowledging the incentives created by PQ regulation are weaker for Chorus than for other regulated firms because we face competitive pressures⁴ but only in the context of deregulation. However, there is already competition in the broadband market and, even if the threshold for deregulation is not reached, the Commission should take more note of existing competitive pressures on Chorus to deliver services at a price and quality that aligns to our end-users' expectations.
10. The consultation paper also summarises the legislative or regulatory restrictions on Chorus' pricing, such as GCP, anchor service, and direct fibre access services (**DFAS**) regulations. It says, "These requirements may result in prices that are not necessarily efficient and price structures that benefits some end-users and disadvantage others... we intend to monitor prices through ID disclosures to determine whether further intervention is required."⁵
11. It is not clear what the Commission intends here. The requirements listed are all imposed upon Chorus by legislation and reflect decisions made by policy makers when introducing the Part 6 regime. Where the requirements are causing inefficient

¹ Consultation paper, paragraphs 3.49.1 and 3.49.3.

² Commerce Commission, 2022 Annual Telecommunications Monitoring Report.

³ For example, [Spark is seeking to add a further 10,000-15,000 FWA connections in FY24.](#)

⁴ Consultation paper, paragraph 3.79.

⁵ Consultation paper, paragraphs 3.70 and 3.78.

pricing outcomes, we **recommend** the Commission consider amendments to those requirements, rather than introduce further regulations for Chorus.

Legal framework

12. The consultation paper discusses the Commission's view of the relative balance between the purpose statement in section 162 and the requirement in section 166(2).⁶
13. We have previously made submissions on this point.⁷ We continue to **recommend** that, where the purpose statement in section 162 and objective in section 166 conflict, the Commission needs to take a position that best promotes outcomes consistent with workably competitive markets, for the long-term benefits of end-users of FFLAS (i.e. section 162 takes priority).

Uncertainty mechanisms

14. The consultation paper raises the risk of over and under-forecasting expenditure and references the tools it has available under the Fibre IMs to mitigate that risk.
15. While we are confident the expenditure forecasts in our PQP2 proposal will reflect the efficient costs of a prudent supplier, there will remain uncertainty in some of the assumptions and inputs.
16. Our preference is to avoid individual capex proposals due to the delay they cause, and the significant process costs for the Commission and Chorus associated with applying for and approving an ICP. Instead we **recommend** the Commission consider utilising more streamlined adjustments to deal with uncertainty.

⁶ Consultation paper, paragraph 3.18.4. Section references are to the Telecommunications Act 2001 unless otherwise stated.

⁷ See, for example, Chorus's submission in response to the Commerce Commission's fibre regulation emerging views, 21 May 2019, at p 15.

Process and timeframes

Technical drafting consultation

17. The indicative timeline presented in the consultation paper does not include a technical drafting stage for reviewing the workability and accuracy of the price-quality determination prior to making final decisions and publishing the PQ path.
18. Chorus **recommends** the Commission allows for a technical drafting consultation round for the PQP2 determination between the draft and final PQ path decisions. This is best practice, providing an opportunity to ensure the drafting of the determination achieves the intended purpose(s) and mitigating the risk of uncertainty, error, or need for future amendments.
19. The lack of a technical drafting consultation was a significant shortcoming in the PQP1 process, contributing to the issues experienced with the lack of a CPI wash-up for the first year of PQP2 and with provisions regarding updates to quantities for mid-year compliance changes. We are keen to avoid similar issues for PQP2.

Timing of quality standard decision

20. The Commission proposes to determine quality standards for PQP2 in Q4 of 2024, after final decisions in Q2 of 2024 on expenditure allowances have been made.⁸
21. We **recommend** decisions on quality standards are instead developed alongside, and determined at the same time, as the expenditure allowances. The quality standard and expenditure allowances should be linked as the expenditure allowance needs to be set at the level necessary to achieve the required quality outcomes. This has been recognised by the Commission in the past:

*"The quality IM underpins quality standards required for the fibre network, and the Chorus capex IM deals with the investment required to deliver the required, enforceable level of quality."*⁹
22. Setting the final quality standard after expenditure allowances are determined creates a risk that the expenditure allowances are either too high or too low to fund the investment needed to meet that quality standard. It would be unacceptable for a quality standard, with enforceable financial penalties, to be set without a sufficient expenditure allowance to achieve the standard. Nor should end-users be required to fund a level of expenditure that exceeds what is needed to meet the quality standard.
23. The effect of the proposed timeframe for the quality standard decision is that it will be difficult in practice to make a material change to the quality standard following the draft decision. A better and more coherent process would be to develop the quality standards alongside the expenditure allowances, so submitters can consider both proposals together, and to determine the quality standard and expenditure allowances at the same time. We **recommend** the Commission consider this.

⁸ Consultation paper, Table 2.1.

⁹ Fibre input methodologies: Main final decisions – reasons paper, 13 October 2020, paragraph 5.31.

24. Alternatively, if that is not possible:
- a. We **recommend** the Commission commits to not making material change to the outcomes required by the quality standard after the expenditure allowances are set (for example, if the expenditure allowances are set based on the draft quality standards, there will not be scope to change the quality standards later in a way that requires a different service outcome);
 - b. We **recommend** the implementation of any materially changed quality standard(s) is delayed by three months into PQP2 to enable Chorus to establish new systems and processes to be able to comply. In PQP1 a new performance standard was determined just two weeks before it came into force which did not provide enough time to update our network capital plans. This was a contributing factor in our breach of the performance standard in March 2022.

Base year

25. The Commission proposes to use year-end 31 December 2023 as the 'base year' for PQP2 expenditure allowances.¹⁰ We disagree with this, and **recommend** the Commission uses 2022 as the base year, which is in line with how Chorus' proposal is being prepared and independently verified, and is the only practical option given timing constraints. It is also consistent with the Commission's approach for Transpower, where expenditure allowances are set based on information from the third year of a 5-year regulatory period.¹¹
26. While we agree with the Commission that using the most recent base year to the start of PQP2 will result in less reliance on forecasts and potentially less need for a wash-up, it creates significant uncertainty and time pressure when timeframes for evaluating and consulting on expenditure allowances are already very tight. There are several practical issues which limit the suitability of 31 December 2023 as the base year:
- a. 2023 data is uncertain as it is not yet available.
 - b. Chorus' audited 2023 ID data will not be available until May 2024, which is one month before the final expenditure allowance decision, required by 30 June 2024. It is unclear how the Commission plans to incorporate 2023 data given audited data is typically a requirement and we expect it would need to consult on the outcomes of using 2023 data before making the final expenditure decisions.
 - c. Using 2023 as the base year would require updating of a number of models and require us to re-audit our proposal and associated models, which comes at a significant cost that would ultimately be borne by end-users. It is unclear how this step could be built into the process between 31 May and 30 June 2024.
 - d. For input into the BST model, Chorus would have to repeat the base year analysis to identify whether any adjustments are required to the base year forecasting. This is not only a lengthy internal process, but also requires

¹⁰ Consultation paper, page 26.

¹¹ [Transpower 2020-2025 IPP Companion Paper, 14 November 2019](#), paragraph 4.47.

additional evaluation by the Commission. It is not clear how this step would be built into the process between 31 May and 30 June 2024.

27. Our proposal will discuss why 2022 is a suitable base year for PQP2.
28. However, when it is available, we also plan to use unaudited 2023 data as a sense check. This would be primarily to confirm the reasonableness of the adjustments and step-changes we are proposing for the 2022 base year.

Forecasting opening asset and tax values for PQP2

29. The consultation paper does not discuss the fact that Chorus ID data is also required to support the forecasts of opening allocated RAB values, opening tax asset values, and carry forward tax losses at the commencement of PQP2, and roll forward these values through the PQP2 period, in order to establish the PQP2 revenue path.
30. Unlike expenditure allowance decisions, the final decisions on the PQP2 revenue path are not scheduled until Q4 of 2023 so there would be sufficient time to update the forecasts of these asset and tax value components of the price path using the audited 2023 ID data.
31. We **recommend** the Commission update the June 2024 draft decision for the PQP2 revenue path for 2023 ID RAB and tax data in order to arrive at the final PQ revenue path decision – this will require an additional consultation step, by which the updated PQ revenue path is made available after the draft PQ path decision but prior to the final decision.
32. This would be a workable solution which is likely to minimise the risk and implications of forecast error for these items for both Chorus and end-users, and reduce the size of future wash-ups. It would also be consistent with the process applied for firms subject to price-quality regulation under Part 4 of the Commerce Act.

Asset management progress

33. The consultation paper discusses the importance of good asset management practices, particularly for our ability to accurately forecast expenditure for PQP2.¹² We have made good progress in PQP1 in terms of improving our asset management practices but there is more still to do. For the PQP2 proposal, the Commission:
 - a. Expects to see improvements in our asset management practices¹³
 - b. Considers its respective scrutiny should also be guided by the maturity of our asset management practices.¹⁴
34. For PQP2, the Commission considers further incentivising us to progress on our asset management journey.¹⁵

¹² For example, consultation paper, paragraph 3.62.

¹³ Consultation paper, paragraph 6.44.

¹⁴ Consultation paper, paragraph 6.40.

¹⁵ Consultation paper, paragraph 4.25.

35. We **recommend** the Commission work with Chorus to identify the best method(s) of promoting improved asset management during PQP2.
36. We remain committed to developing our asset management capability being transparent with the Commission and other stakeholders on our progress and the delivery of key aspects of our asset management system. We intend to commission an independent review of our asset management system during PQP2 to assess and benchmark the progress we are making.
37. We caution the Commission against taking an approach to encouraging asset management improvement during PQP2 that focuses primarily on reporting requirements. Additional reporting requirements risk making asset management a compliance exercise, which could make it harder to deliver meaningful improvements.

Revenue and price path

Price path smoothing

38. The consultation paper discusses options to smooth revenues (and therefore prices in aggregate) over time, which include:¹⁶
 - a. Altering depreciation of Chorus' PQ RAB, either as a whole or of the financial loss asset (**FLA**)
 - b. Smoothing building blocks revenue so it increases at a uniform rate – this could be either net or gross of pass-through costs.
39. We agree those are valid options to smooth revenue within and/or between multiple periods. A further option, where depreciation is used as a smoothing mechanism, is to target a subset of assets for altered depreciation (i.e. not limited to only the core RAB and/or the FLA).
40. In determining its approach to smoothing we **recommend** the Commission provides certainty on its framework for evaluating the need for smoothing at each reset, and how it intends to choose between various smoothing options to achieve its goals, including:
 - a. The benefits and potential drawbacks of minimising volatility in short- or long-term revenue paths
 - b. How asset stranding risk is impacted by the application and choice of smoothing methods. For example, if the Commission chose to backload depreciation, this could be applied to assets that are least susceptible to economic stranding
 - c. The cash flow implications of smoothing, for example, how to evaluate whether smoothing mechanisms:
 - i. Might curtail FFLAS uptake – Chorus needs to maintain incentives to invest efficiently and continue attracting customers to the network
 - ii. Provide sufficient ability to innovate and invest efficiently to maintain quality and meet consumer demands, and pursue efficiency gains
 - d. How revenue profiling mechanisms work together – for example, how in-period smoothing, within-period smoothing and drawdowns of accumulated wash-up accruals operate together.
41. Finally, there may be a situation where a price shock is not necessarily anticipated, but where there are benefits to applying an alternative depreciation method. The IMs permit alternative depreciation methods to be used in a broader range of circumstances,¹⁷ such as when it better promotes the purpose of Part 6.

¹⁶ Consultation paper, paragraph 5.50.

¹⁷ Clause 3.3.2(5) of the Fibre IMs

Price-shock risk

42. The Commission notes a potential risk of price shocks to end-users given expected increases in MAR (driven by increases in WACC and inflation). It says:

the main group of end-users we are concerned with that may face allowable revenue-driven price shocks are those not receiving a declared service such as an anchor service or DFAS¹⁸

43. The consultation paper goes on to discuss potential additional controls that could be introduced to manage this risk, including:

- a. Limiting Chorus' ability to accrue a wash-up where we under-recover revenue voluntarily
- b. A catastrophic demand risk cap, to share risk between Chorus and end-users where there is a sudden loss of demand
- c. Limiting the rate of increase for Chorus' total FFLAS revenue.

44. We **recommend** the Commission reconsider its assessment of price-shock risk. The suggested measures are not necessary, as the Commission recognised for PQP1.

45. We are not opposed to considering smoothing revenue over time, including across regulatory periods as in most cases this is likely to be consistent with our price-setting, and should be sufficient to mitigate any concerns the Commission may have about minimising price shocks in PQP2.

46. However, it is important to recognise that our general commercial drivers, contractual arrangements (which require us to consult on price changes) as well as the statutory intention behind the anchor product requirement mean the risk of price shock to end-users for non-anchor products is low.

47. Further, for the purpose statement to be achieved, Chorus needs a reasonable expectation of real FCM in order to have sufficient incentives to innovate and invest. We are concerned the Commission seems to be considering limits on Chorus' ability to recover revenues in order to limit price shock, but without considering our need to achieve real FCM and the negative incentive effects that could occur if this is prevented by regulatory intervention.

Wash-ups

48. The consultation paper sets out the mechanics and scope of the MAR wash-up and the principles it intends to apply when determining the wash-up draw down amount. We generally support the Commission's approach to the wash-up. However, we do not agree with introducing limits on how large a balance (positive or negative) can be accrued and seek more information as to how the wash-up principles will be applied in practice.

¹⁸ Consultation paper, paragraph 5.31.

Potential limits to the wash-up

49. We agree with the Commission that any wash-up for PQP1 revenues, or for the purposes of smoothing must be unlimited and symmetrical. We also welcome the Commission's commitment to not prevent Chorus from carrying forward a wash-up balance if prices are set to under-recover the MAR.
50. However, we are concerned with the suggestions that:
 - a. restrictions could be imposed if there was a material build-up of the wash-up balance¹⁹
 - b. where there is a "good reason" for imposing a constraint, the Commission could do so.²⁰
51. Any restriction on Chorus' ability to recover the wash-up balance would undermine real FCM and the purpose of the revenue cap with a wash-up mechanism, jeopardising our incentives to innovate and invest. It is concerning that this has even been raised as an option, particularly as there is limited analysis or discussion of the circumstances this could apply in and thus there is no certainty of the conditions in which the wash-up balance may be restricted. For example, no parameters are suggested to clarify what would constitute a "good reason" or a "material build-up".
52. We emphasise that a full wash-up is important in order to:
 - a. Support our ex-ante opportunity to earn a normal return (real FCM) by providing certainty that we will recover investments in long-lived assets and ensuing we have incentives to invest. Any limits on wash-ups put this at risk.
 - b. Guard against asymmetric risk, such as asset stranding because of competition from technology and demand risk due to a catastrophic event. As set out in the IM reasons paper,²¹ the framework has been designed to share the risk between Chorus and end-users through the wash-up mechanism and significantly mitigates demand risk as a result of a catastrophic event.

Application of the wash-up for PQP2

53. We **recommend** the Commission does not change its approach to wash-ups from PQP1, where the wash-up is: (i) unlimited (both in terms of accrual and total balance); and (ii) symmetric between over and under recoveries. We recommend the Commission apply the wash-up in accordance with the following objectives:
 - a. **Timeliness of recovery** – Wash-up accruals should be available to recover via revenues as soon as possible to facilitate timely recovery and avoid excessive accumulation in the wash-up account. An in-period re-opener mechanism is one option to consider that could support this outcome.
 - b. **Flexibility** – Chorus should be able to draw down when required, given we are best placed to manage cash-flows. This would not pose a risk to end-users given that our prices are already constrained by the market, Anchor Services

¹⁹ Consultation paper, paragraph 5.77.5.

²⁰ Consultation paper, paragraph 5.75.

²¹ Commerce Commission, Final Input Methodology Reasons Paper, 13 October 2020, page 88.

and GCP regulations. These factors ensure price volatility and for future periods are minimised (discussed further below).

- c. **Limited further intervention** – this reduces the risk of unintended consequences when the Commission already has tools in place to manage risks. Where possible, the Commission should be using smoothing mechanisms to manage the impact of the size of wash-up balances and potential shocks to price changes, and not seek to impose limits on the availability of the wash-up itself.

Large wash-up balances and mid-period drawdowns or reopeners

54. The consultation paper raises the option for a large balance reopener, to avoid the wash-up balance becoming too large.
55. We support a mechanism that would allow us to draw-down from the wash-up balance mid-period, so we can avoid the accumulation of large wash-up balances which may result in:
 - a. Inefficient pricing decisions in-period and price volatility for end-users at the next reset
 - b. Ongoing deferral in the recovery of allowable revenue, increasing stranding risk and eroding longer term incentives to innovate and invest
 - c. Unnecessary short term financing pressures, constraining investment and operational decisions and introducing cost inefficiencies.
56. For energy firms regulated under Part 4 of the Commerce Act, wash-ups can be drawn down fairly mechanically within a regulatory period. This is manageable for those providers as network costs are a smaller portion of overall energy bills, and they are true monopolies so are more able to adjust pricing up and down in different years without impacting customer retention.
57. For Chorus, given the competition we face from alternative technologies, our price-setting is much more commercially sensitive and we would not be able to accommodate an automatic and symmetrical in-period wash-up draw down. This is because if a wash-up balance was negative in one year, but positive in another, it is unlikely we could commercially reduce and then increase prices to the required levels, given the implied price increase could be well above inflation. As such, an automatic and symmetrical in-period wash-up drawn down would create material risk of under-recovery of revenues over time and reduce Chorus' ex-ante expectation of real FCM.
58. However, allowing large wash-up balances to build up across a regulatory period and then only permit them to be reflected in the MAR at the next price reset also causes challenges. It either implies substantial price volatility (in either direction) at the reset, or large-scale inter-period smoothing, which creates risks in terms of financeability and asset stranding.
59. Given these nuances, we would like to explore options that provide flexibility to draw down wash-up balances where that is needed to minimise the risk of price volatility and reduce the need for smoothing at the next price reset. We **recommend** the Commission ensures any mechanism:

- a. Is easily accessed – it should not require a long and complex process for us to draw-down a wash-up balance.
- b. Is not necessarily limited to just large wash-up balances. Chorus should be able to draw-down wash-up balances mid-period to manage cash-flows in a broader way. For example, to mitigate in-period price volatility or where revenue growth driven by FFLAS uptake is curtailed and a positive wash-up balance is available.

Price path compliance

60. The consultation paper discusses the mechanics of the revenue path and how the Commission intends to assess compliance with the annual cap. We are broadly comfortable with this discussion and it reflects current expected practice.
61. However, we **recommend** the Commission review the mechanics of the price path for PQP2 to address some unexpected outcomes and complexities we have experienced in PQP1, including:
 - a. The lack of a CPI wash-up for the first year of a regulatory period, as previously debated with the Commission. We note the Commission has acknowledged the issue, including proposing to resolve it for Part 4 firms.²²
 - b. The use of forecast CPI for the regulatory year. While the current approach is what Chorus requested for PQP1, it is not proving workable in practice due to the application of various CPI measures in an unexpectedly high inflation environment. The anchor price uses lagged actual CPI instead; inconsistency between these two CPI metrics creates potential challenges in terms of compliance and hinders our ability to earn a normal return (and thus achieve real FCM).
 - c. The restrictions on updating quantities when recalculating forecast total FFLAS revenue,²³ which we have previously raised with the Commission.²⁴
 - d. How a materiality threshold could be applied, for example where price changes for minor products with very small associated revenues do not trigger a price-compliance statement.
62. Ways to set the price path compliance requirements in a way that could accommodate a change to Chorus' pricing year should also be considered, as the current timing of price compliance statements is designed to fit a particular commercial pricing schedule.
63. Getting the price-path design right is complex (which is a major reason why a technical drafting consultation for the PQ determination is essential) and we have not completed our work on how it could be better determined. We aim to provide further advice to the Commission on resolving these issues and setting a more workable price path in advance of the PQ draft decision.

²² Commerce Commission, [Financing and incentivising efficient expenditure during the energy transition topic paper, Part 4 Input Methodologies Review 2023 – Draft Decision, 14 June 2023, Topic 5b.](#)

²³ [Fibre Price-Quality Path Determination 2021, Schedule 3, clause \(4\).](#)

²⁴ Emails between ██████████ and ██████████, 'Approach to 2022 mid-year compliance', dated 16 June 2022, 22 June 2022, and 14 July 2022.

Section 201 compliance

64. Related to price path compliance is the requirement from the Commission that Chorus produce, disclose and arrange twice-yearly director certification of information demonstrating compliance with the geographically consistent pricing obligation under section 201.²⁵ The consultation paper proposes continue to assess compliance with this requirement in PQP2 but may consider changes to the level of assurance.
65. We strongly support removing the reporting requirement for GCP compliance from PQP2. The current requirement is entirely disproportionate to the risk of harm to end-users from potential non-compliance with this obligation and is difficult to justify by reference to the purpose of Part 6 in section 162. It requires significant resource commitment for negligible benefit.
66. Pricing of FFLAS is always transparent through ID and PQ price compliance so there can be no question of non-compliant pricing approaches being hidden. A more proportionate approach would be to monitor compliance using pricing information disclosed under other obligations in the framework and consider any complaints of non-compliance against the Commission's enforcement criteria. We **recommend** the compliance requirement for geographically consistent pricing not be carried through to PQP2.

²⁵ Para A7 of Attachment A to the s193 notice.

Expenditure evaluation

Overall approach

67. The consultation paper outlines the proposed approach to determining expenditure allowances for PQP2. The Commission will determine capex allowances in accordance with the base and connection capex IMs, and apply a similar approach for approving the opex allowance. This reflects expected practice and we are broadly comfortable with this approach. The Commission's suggested areas of specific interest are reasonable.

Network extension

68. The Commission has proposed²⁶ factors that it intends to consider when reviewing Chorus' planned fibre network extension capex (for each area where expansion is considered). We discuss each of these factors below. The Commission is required to assess proposed capex against the capex objectives and good telecommunications industry practice (**GTIP**).²⁷
69. The capex objective is focused on whether the capex that Chorus proposes to incur is efficient. The focus on efficiency and consumer demands of appropriate quality mean the Commission should assess: (i) whether there is demand for the network expansion that Chorus proposes to undertake, and (ii) whether the proposed expenditure reflects efficient costs to meet that demand.
70. The Commission's role in satisfying itself that there is demand for the network expansion extends to evaluating the case for the investment, which includes assessing whether existing consumers will be required to cross-subsidise new consumers to a disproportionate extent. That said, a certain amount of cross-subsidy would not necessarily be a problem given: (i) any fibre network consists of more and less costly consumers to serve, and (ii) all consumers (including existing consumers) benefit from comprehensive connectivity.²⁸ Provided new consumers in the proposed expansion area are broadly willing to pay for the costs of the expansion, the capex objective is met.
71. The reference to GTIP does not lead to a different conclusion. GTIP is principally focused on asset management and operation of the network, rather than on whether there is a business case for system growth. As a general principle, if there is demand for system growth, GTIP would support investing to meet that system growth, provided doing so is operationally feasible.
72. That analysis is reinforced by the Act. The s 162 purpose statement provides that the purpose of Part 6 is to promote the long-term benefit of end-users in markets for

²⁶ Consultation paper, paragraph 6.48.

²⁷ As defined in the Fibre IMs.

²⁸ In this sense a telecommunications network arguably differs from an electricity or gas pipeline network. A consumer of electricity lines services derives relatively little private benefit from other consumers (in other parts of the country) being connected to the network (other than the standard network benefit of lower prices through more cost sharing). That is because an electricity network connects generators to load. But a telecommunications network connects consumers to each other. The more consumers are connected to a telecommunications network, the more valuable that network is to all connected consumers. Accordingly, existing consumers can derive a private benefit from Chorus' investment in expanding the network to connect more consumers.

FFLAS. In a workably competitive market, a supplier of FFLAS would consider whether consumer willingness to pay exceeds the cost of the investment. If so, a supplier in a workably competitive market would invest.

73. Based on this analysis, when it assesses the proposal, we **recommend** the Commission ignore the impact of GCP and instead focus on consumers' willingness to pay. GCP is a social policy decision to redistribute the costs and benefits of fibre investment and therefore distorts the outcomes that would otherwise occur in a workably competitive market. Consumers' willingness to pay is a better measure of the value they place on fibre services and therefore the competitive price of fibre in rural areas.
74. If the Commission instead assessed the proposal based on the GCP-constrained price, there is a risk that Chorus would be prevented from rolling out fibre network to consumers who value the service and would be prepared to pay for it. This would defeat the purpose of GCP, which is to make fibre available but at a price that equalises the cost differences between urban and rural. Put another way, GCP explicitly requires urban consumers to cross-subsidise rural consumers, and therefore even if Fibre Frontier, under the GCP constraint, resulted in a cross-subsidy that is the outcome intended by the Act.
75. Taking all those factors into account, we **recommend** the Commission primarily evaluates Chorus' proposed network expansion applying a workably competitive market (**WCM**) test, which asks whether consumer willingness to pay (ignoring the constraint of GCP) is broadly equal to or exceeds the incremental cost of the network expansion.
76. We regard that as a reasonably conservative approach to assessing proposed expenditure on network expansion and so, if this test is met, the Commission can be satisfied the proposed expenditure meets the capex objective. However, we have cross-checked our proposed expenditure by applying a telecommunications network optimisation (**TNO**) test, which identifies the optimal investment option, measured in terms of net benefit to telecommunication end-users, having regard to: (i) the costs of alternative technologies, and (ii) the benefits of telecommunications end users of each technology.
77. In most cases, we would expect the WCM and TNO tests to produce similar results, as both are measures of evaluating the benefits that end-users enjoy from investments in network expansion. End-users could be expected to be willing to pay for an investment solution that results in the highest net benefit to those users. In our view, both are consistent with the s 162 purpose statement as they measure in-market costs and benefits (as opposed to a broader 'public' net benefit test, which excludes benefits to the wider economy).
78. We discuss each of the Commission's proposed factors below:
 - a. **6.48.1 – competition within the rural area in the context of geographic average pricing:** the starting point for this consideration is that expanding the fibre network is pro-competitive because it expands customer choice in rural areas. However, we expect the Commission will likely want to satisfy itself that the expansion will not have negative effects on competition. We do not consider that Fibre Frontier would be anti-competitive (through cross-subsidisation) because:

- i. as described above, we consider that the correct approach is to ignore the impact of GCP and focus on consumers' willingness to pay; and
 - ii. the Commission should be very cautious before concluding that rural fibre deployment by Chorus would deter entry or expansion by others and therefore lessen competition. There is otherwise a risk that the Commission trades away a high probability of a pro-competitive outcome (Chorus expanding fibre coverage) against a low probability of an anti-competitive outcome (exit, lack of expansion or avoided entry by others).
- b. **6.48.2 - potential costs and benefits of the proposed expansion** – we **recommend** this factor is limited to considering the in-market costs and benefits of fibre expansion, rather than the economy-wide or costs and benefits outside of the market. Both the WCM and TNO tests outlined above meet this criterion. The private benefits of FFLAS to consumers should be captured in their willingness to pay, which suggests the WCM test should be the conceptual starting point. However, the TNO test provides a useful cross-check of the benefits that accrue to FFLAS users from fibre expansion.
- c. **6.48.3 – whether fibre is the most efficient way to meet the need** - Applying the WCM test, if consumers are willing to pay for fibre, the regulatory model should fund Chorus to deliver it. The role of competing technologies is relevant primarily to the extent it supports an analysis of the relative costs and benefits of different solutions, and therefore, the benefits to consumers of fibre network expansion. Chorus' TNO test provides a useful cross-check that quantifies the relative costs and benefits of competing solutions. This approach is consistent with s 162, but principally because it offers an alternative to the WCM method of evaluating consumer benefits of fibre expansion.
- d. **6.48.4 - The relevant capital contributions policies and expected value of contributions** - We agree this is relevant, although we caution against the Commission substituting its own judgement for that of Chorus in relation to the appropriate balance between capital contributions (which deter uptake) and monthly charges.
- e. **6.48.5 - The cost of maintaining legacy network and how this has contributed to the decisions on the proposed fibre expenditure** – It would be valid to take into account avoided copper costs when applying the TNO test but, as Chorus' proposed network expansion does not rely on avoided copper costs, this is not an issue the Commission needs to resolve at this time.

Quality standards

Overall approach

79. The Commission is required to set standards for the mandatory quality dimensions availability and performance. It may set standards for the optional dimensions such as ordering or provisioning.
80. For PQP1, it set three quality standards. One each for layer 1 and layer 2 availability, and one for performance. It did not set a quality incentive scheme for PQP1.
81. It proposes to:²⁹
 - a. Review the existing quality standards, supported by a request for information on historical performance
 - b. Investigate whether standards for the optional quality dimensions are warranted
 - c. Consider introducing a pilot quality incentive scheme, built on its experience from the electricity distribution sector.

Current quality standards

82. The Commission considers the current standards set for the mandatory quality dimensions availability and performance should be reviewed and maintained for PQP2.³⁰

Availability quality standards

83. For the two standards set for the availability quality dimension, the Commission considers the Availability Point Of Interconnect (**POI**) areas for which average net unplanned downtime is measured separately should be reviewed. It explains, "*it may be possible to achieve a better equality in the number of end-user connections and consistent quality end-users demand while retaining enough meaningful geographic distinction*".³¹
84. We agree with that conclusion and will present a view in our PQP2 proposal on how this could be achieved. We will also support the Commission in resetting the standards using updated historical information.

Performance quality standard

85. For the performance quality standard the Commission considers:
 - a. Updating the standard using historical performance information applying a methodology that sets the standard "*significantly above the mean and median values of historical data*".³²

²⁹ Consultation paper, paragraphs X36 – X47.

³⁰ Consultation paper, paragraph 7.9.

³¹ Consultation paper, paragraph 7.12.

³² Consultation paper, paragraph 7.17.

- b. Investigating the impact of unforeseeable demand spikes as *“It would be inefficient to invest in extra capacity to cater for these eventualities as the quantum of the investment may not be known and end-users may not be prepared to pay if this was the outcome”*.³³
 - c. *“the treatment of Force Majeure events should apply similarly across all quality standards, but this was missing from the performance standard in PQP1”* and that a *“breach of the availability [performance]³⁴ quality standards is due to its own behaviour and not caused by a significant event beyond its reasonable control”*.³⁵
86. We agree with the Commission’s focus regarding its approach to setting a standard for the performance quality dimensions for PQP2. However:
- a. As the Commission noted in its PQP1 reasons paper the approach it intends to take resulted in a situation where the standard was set at a threshold where end-users are not experiencing any degradation in quality.³⁶ We therefore **recommend** setting the standard for PQP2 at a level beyond which end-user experience would be impacted. As we will explain further in our PQP2 proposal, we consider this level to be at 95% port utilisation.³⁷
 - b. Unpredictable and unforeseeable demand spikes are an issue, as they are likely to become more common and more material. While our bandwidth forecasting methodology is sound and subject to global benchmarking, we have no visibility as to when these spikes will incur and how material they will be and **recommend** addressing this issue through the design of the performance standard. Consequently, we do not aim – nor do we have the insights – to design our network to accommodate such demand spikes and agree with the Commission’s conclusion that it would – most likely – not be economic to do so. Providing significantly more bandwidth capacity to be able to accommodate a wider range of possible demand spikes would ultimately increase prices for end-users, while only creating a marginal and short-lived benefit to them a few times a year. We will provide more information on this issue in our proposal – including a discussion on some options that could mitigate the issue – and will support the Commission and other stakeholders in the investigation process.
87. We agree with the Commission’s finding regarding Force Majeure. However, excluding asset failure due to Force Majeure events from our performance against the quality standard would not go far enough. As we will explain further in our PQP2 proposal, we **recommend** all port utilisation events caused by network failures are excluded from our performance against the quality standard, including – but not limited to – those relating to Force Majeure events. Including port utilisation events caused by network failures creates a risk of doubly penalising Chorus for the same

³³ Consultation paper, paragraph 7.18.

³⁴ We assume this is a drafting error and the Commission’s intention was to refer to the performance quality standard here.

³⁵ Consultation paper, paragraph 7.19.

³⁶ Chorus’ price-quality path from 1 January 2022 – Final decision Reasons paper, 16 December 2021, para 7.186.

³⁷ In 2017, a significant and thorough process was undertaken between CIP, Chorus and other TCF members to define a fit for purpose performance regime that was seeking to drive largely the same outcomes as described under the PQ determination. During that process, research and analysis was undertaken, which led to agreement that port utilisation levels below 95% would be deemed the practical indicator that actual performance characteristics experienced by users were compliant with the contractual Service Level Agreements for Frame Delay (Latency), Frame Delay Variation (Jitter) and Packet Loss.

event. This is because the performance standard measures reliability for which the Commission has put in place separate availability standards.³⁸

Potential new quality standards

88. The Commission says it intends to reassess the optional dimensions evaluated in PQP1. In doing so the Commission says:
 - a. It intends to re-evaluate the decision not to set a quality standard for the optional dimension of provisioning in PQP1
 - b. It does not currently consider that it will be appropriate to set standards for other optional dimensions.
89. We **recommend** against introducing a quality standard for provisioning, as it is neither necessary nor appropriate. Chorus already has strong incentives to connect end-users in a timely manner and it would be difficult to set a provisioning standard that would enhance existing incentives. Issues with provisioning performance in late 2022 and early 2023 were both short-term and related to factors largely beyond our control. It. At best a provisioning standard would impose cost without benefit. At worst it would establish perverse incentives to favour new customers over existing ones and deprioritise disaster recovery.
90. We agree with the Commission that it will not be appropriate to set standards for other dimensions.

Potential provisioning standard

91. The first question is: What would we be trying to achieve through a provisioning standard? The purpose of quality standards is to ensure regulated providers have incentives to appropriately maintain and replace assets, support service levels, connect access seekers and end-users in a timely manner.³⁹
92. Therefore in considering a provisioning standard we need to assess:
 - a. Whether Chorus has existing incentives to provision fibre services in a timely manner.
 - b. If incentives already exist, how are fluctuations in provisioning performance explained?
 - c. If more incentive is needed, what kind of quality standard would establish an incentive to provision fibre services at a level of quality that reflects end-user demands?

³⁸ This creates an element of 'double-jeopardy' where we can be penalised for network failure driven port utilisation events under the quality standards set for both the availability and performance quality. We note port utilisation above the maximum threshold caused by network failures did not count as a breach under our prior performance measurement regime for UFB.

³⁹ Commission, Chorus' price-quality path from 1 January 2022 – Final decision Reasons paper, 16 December 2021, para 7.12

Existing incentives

93. Chorus already has strong incentives to ensure provisioning meets customer expectations:
- a. **Market incentives:** Our business depends on selling fibre services. Increasingly RSPs have choices including our three largest customers who are unregulated, vertically integrated MNOs who have a closer relationship with end-users. Ease of installation is a factor cited by MNOs as a key benefit of FWA.⁴⁰ Our success as a business depends on making the fibre installation experience as smooth as possible.
 - b. **Customer contracts:** Our service level terms contain provisioning service levels:
 - i. Provisioning cycle time (median and individual): This service level provides for cycle time management/urgent remediation where median targets are failed, and jeopardy management where individual orders languish. This ensures there is management focus, customer engagement and accountability when provisioning times increase beyond a certain level.
 - ii. Provisioning appointments: Service credits are payable where technicians do not show up at agreed appointments. This provides a financial consequence to this aspect of provisioning performance which is a key pain-point for end-users.
 - iii. Intact provisioning times: Where fibre infrastructure is already in place, there are timeframes for activation of layer 2 services with service credits payable for failure. This provides a financial incentive to ensure intact provisioning operates smoothly.
 - c. Other provisioning measures:
 - i. **Installation customer experience:** Chorus records customer experience scores for both new and intact installations. Installation customer experience scores are disclosed in our quality information disclosures. They also form a key part of our internal key performance indicators as is evident from discussion of these scores in our reporting to investors.⁴¹ Although not entirely within our control (because RSPs play such a significant part), we know that the install experience is key to our success in the market as noted above.
 - ii. **TCF fibre installation code:** This code, to which we are a signatory, requires us to report against targets on: installation met commit, reinstatements, customer install satisfaction and failed installations. If we do not meet a target this is disclosed and tabled for discussion at TCF Board. The code also includes targets for RSPs. The code is

⁴⁰ See for example: One NZ: "No complicated installations and no technicians required" at <https://one.nz/broadband/wireless-broadband/> and Spark: "It's fast and easy to get set up. Once you have your Spark modem, plug it in to a power socket and you'll be connected quickly. Receive end-to-end support if you experience any issues, unlike copper or fibre which may require other providers to be involved" at <https://www.spark.co.nz/shop/internet/wirelessbroadband/>

⁴¹ See for example: Chorus, *Annual Report 2023*, section 1.1, pages 3-4 ([available here](#))

currently under review to be potentially expanded into a "Provisioning Code" which would also cover intacts and abandonment.

94. These clearly demonstrate that Chorus has strong existing incentives to get provisioning right, as well as mechanisms which ensure transparency, accountability and financial consequences where provisioning expectations are not met.

Provisioning challenges

95. Given the strong incentives and accountability mechanisms described above, recent challenges in provisioning warrant explanation.

96. From mid-2022 until mid-2023 there was a drop in provisioning performance. This was evident in information disclosures for provisioning cycle time and in the number of rebates paid for provisioning missed appointments. These provisioning performance challenges were largely caused by short-term factors beyond Chorus control:

- a. **COVID travel restrictions & immigration policy** – together with a tight labour market, the inability to source skilled labour from overseas created a technician shortage (350 vacancies at Dec 22). This was exacerbated by the reopening of borders leading to a number of technicians travelling overseas to reconnect with family they had been prevented from seeing for years due to pandemic border controls. Fibre technicians were added to the immigration 'green list' from March 2023 and, with international travel returning to pre-pandemic norms, the shortfall was essentially resolved by July 2023.
- b. **Extreme weather events** – Cyclone Gabrielle and other extreme weather events at the start of 2023 caused significant damage to the network. We placed an operational priority on restoring service to disaster affected customers over connecting new customers. A provisioning standard would impede redeployment of resource for disaster recovery. This is contrary to end-users interests and inconsistent with a focus on climate change adaptation.

97. These issues are consistent with what we would expect in workably competitive markets. Workable competition does not mean bad things never happen. The events described above have caused disruption across many aspects of the economy, including in competitive markets.

98. In conclusion, provisioning issues have NOT been caused by insufficient incentives to focus on provisioning. Both the issues described above and their impact on performance have been priority focuses at an operational, management and governance level.

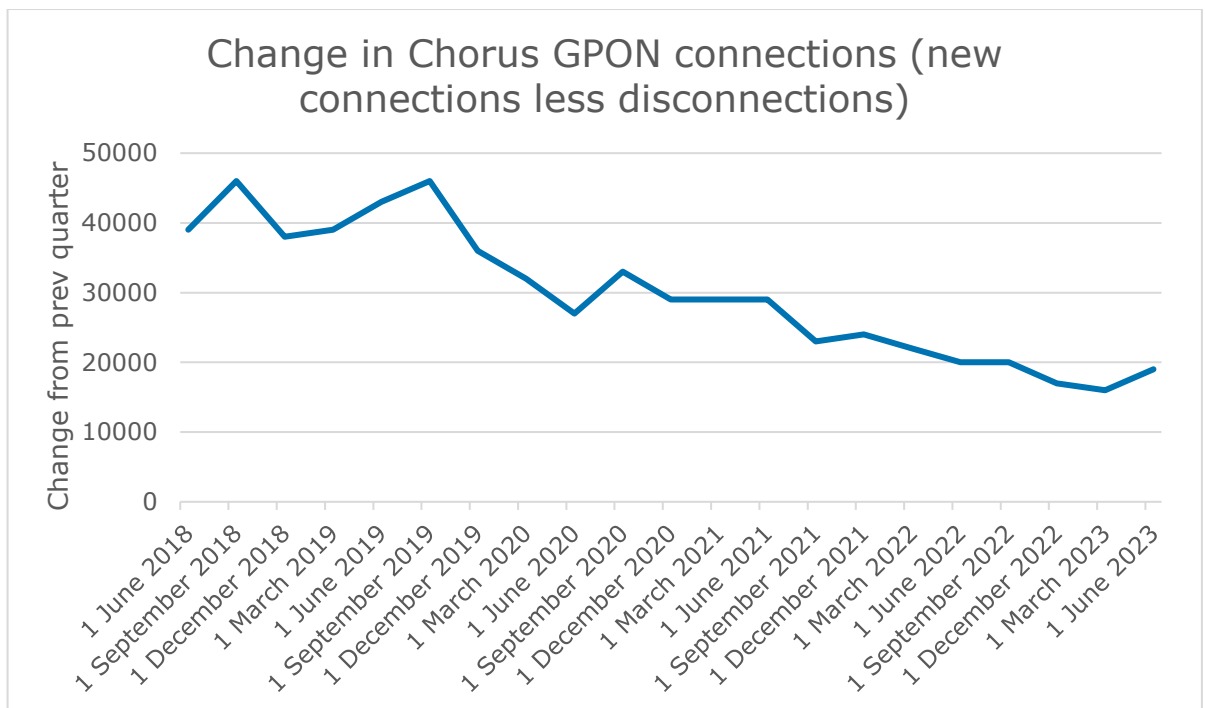
Provisioning standard setting

99. For the reasons described above, we do not believe a quality standard for provisioning is necessary. If the Commission were to take a contrary view, the question would be what kind of quality standard would establish an incentive to provision fibre services at a level of quality that reflects end-user demands?

100. In our view, the nature of provisioning means that not only would a provisioning quality standard fail to enhance existing incentives for good provisioning, but it

would risk creating incentives to act in ways that are contrary to end-users' interests.

101. Any standard relating to provisioning time would be problematic. First, provisioning performance depends on having the right level of resource on hand to meet order volumes. Order volumes have been declining as network expansion slows and uptake reaches very high levels in fibre coverage areas. The chart below shows the quarterly change in Chorus GPON fibre connections nationally from June 2018 to June 2023 – this is a useful proxy for the volume of provisioning and shows a clear downward trend.



102. It would be inefficient to establish a provisioning standard that required a reserve of technician resource (even if that were possible) in order to maintain performance in the case of any spike in order volumes or change in trend. As well as being inefficient this could have consequences for worker welfare.
103. The declining volume of provisioning activity also reflects the diminishing importance of provisioning over time relative to other aspects of fibre service quality.
104. Second, specific connections can be held-up for extremely long periods due to unavoidable factors: consents and neighbour disputes, health and safety issues, local authority issues. This small number of extremely long lead-times skews any average measures of provisioning time.
105. Median measures of provisioning time control for outliers (and form part of the contractual cycle-time framework) but are also flawed measures of provisioning performance because, in many cases, provisioning is delayed due to RSP or end-user requests. For example, where a new install requires access to a house, the end-user will want the installation to occur at a suitable time when they can be home. Similarly, an intact install maybe ordered but delayed until an end-user takes possession of the property. In such cases, which are not uncommon, the time to

provision (the time between order-placed and service-given) is extended but does not reflect actual provisioning performance.

106. Existing provisioning commitments acknowledge the difficulties of setting provisioning time targets.⁴²
107. If a standard based on provisioning time is unlikely to be practical, we have considered other options:
 - a. **Missed provisioning appointments** – this is the basis for service credit payments under our fibre reference offer. Since this already has proportionate financial consequences for Chorus which benefit the parties directly impacted by the failure, we do not believe overlaying further serious consequences would have any positive effect. Instead, it would risk driving inefficient overprovisioning of technician resource and excessive prioritisation of provisioning over other aspects of quality that would result from a provisioning time-based standard.
 - b. **Provisioning customer experience** – Customer experience measures are an important internal KPI for Chorus. However, while these measures are important and appropriate for disclosure under ID, the fact that RSPs play such a significant role in end-users' experience of provisioning means it would not be appropriate to set a regulatory compliance boundary using them.
108. It is therefore difficult to think of a provisioning standard which would enhance existing incentives and which would not risk driving inefficient or customer-adverse behaviours.

Other optional dimensions

109. We agree with the Commission's emerging view that no new standards under the optional dimensions should be set.
 - a. **Ordering** – Service levels for ordering are ancillary in both the fibre reference offer and copper STDs. This means they are reported against only and there are no service credits for failure. It would be odd to elevate the importance of ordering by including it as a measure or standard under PQ. The TCF Fibre Installation Code includes 'ordering' requirements (as well as other dimensions).
 - b. **Switching** – Switching is not only relevant for Chorus. All parties involved need to play their part to make switching work effectively for end-users. The TCF Fibre Transfer Code is in place to cover all parties. Disconnection and intact provisioning (the steps in a switch) covered by contract service levels.
 - c. **Faults** – Strong market and contractual incentives to restore faults (including service credit payments). As the Commission notes, faults are also a

⁴² As above, service levels for provisioning cycle time in the fibre reference offer require management, planning and reporting if failed rather than direct financial consequences (see for example clause 10 of the Chorus UFB Services Agreement Service Level Terms for Bitstream Services). Also, under the copper standard terms determinations, provisioning service levels only apply where RSPs have submitted order forecasts (see for example clause 6.1.6 of the UBA Standard Terms Determination Operations Manual). To the best of our knowledge, no RSP has ever submitted a UBA order forecast.

component of availability so adding a faults standard would introduce an element of double jeopardy.

- d. **Customer Service** – There are currently two customer services measures disclosed under ID. As noted above, provisioning experience scores reflect a mix of Chorus and RSP performance, so it is inappropriate to attach consequences for Chorus only. Missed appointments give rise to service credits on a per appointment basis which is both an existing incentive and the most appropriate way to address the inconvenience caused to individual end users.

Revenue-linked quality incentive

110. The consultation paper raises the option of introducing a revenue-linked quality incentive scheme for Chorus in PQP2.
111. Chorus agrees there would be in-principle benefits from creating an incentive scheme for quality to sit alongside a revenue cap and quality standards. However, we already have strong commercial incentives to provide a good quality of service to our customers and end-users, so the Commission should consider the extent to which a quality incentive is needed to drive end-user service outcomes.
112. Introducing a quality incentive for Chorus would create some implementation challenges that need to be considered. On balance, we could be comfortable with a revenue-linked quality incentive scheme if it applied to the Availability dimension (downtime) only and was either low-powered or in a 'shadow scheme' form for PQP2, reflecting data limitations. It must also use the same definition of downtime as applies for the quality standard.

Implementation issues

113. If a revenue-linked quality incentive is introduced, it should be applied to the **Availability** dimension, because:
 - a. It is an existing quality standard, it is consistent with Part 4, and it combines network reliability and field operations performance.
 - b. The other quality dimensions are not suitable:
 - i. An incentive to improve **Performance** would not be appropriate as the existing port utilisation target is essentially zero (as we target a congestion free network already, there is no point or consumer benefit in giving Chorus a financial incentive for improvements in port utilisation).
 - ii. An incentive to improve **Provisioning** would lead to a focus on field service activities. However, cycle time measures are complex and the data is manual and noisy (see discussion above regarding a potential Provisioning quality standard).
 - iii. An incentive to improve **Fault rate** would reflect reliability of the network but these matters are mostly beyond Chorus' control, so the incentive would not be one we could readily respond to and payments in either direction are likely to be mostly random.
 - iv. An incentive to improve **Fault restore time** is unnecessary as RSPs/end-users already have the option to purchase a service including

reduced restore times for a modest price uplift on a per connection basis.

114. The primary challenge with setting a revenue-linked quality incentive for **Availability** relates to the historical data (we are assuming any target would need to be set with reference to the historical data):

a. Data prior to 1 January 2022 was gathered under CIP reporting requirements which used a different definition of downtime to the price-quality determination:

- i. when reporting to CIP, ONT faults were excluded in the measure of downtime
- ii. under the PQ quality standards, interruptions to non-diverse transport services, and instances of port utilisation greater or equal to 95% are excluded from measured downtime, but ONT faults are included.

As a result, to develop a consistent data set would require an adjustment to be made to pre-2022 data to align the data sets. This is likely to require some assumptions that would create risk that the target is not set at the right level.

b. As the UFB build only concluded in 2022, the network was being constructed for most of the time period to which the historical data set applies. As the network has grown and changed over time, historical availability metrics may not be a fully reliable indicator of expected future trends. Also, covid-19 lockdowns in 2020 and 2021 were recorded as force majeure events which affected the recording of downtime during the lockdowns.

c. Alternatively, the target could be based on 2022 data only, but again this would carry some risk as 2022 may not be a representative year for downtime.

115. Based on these factors, we agree with the Commission that, if a revenue-linked quality incentive is introduced for PQP2, it should be low-powered or applied on a 'shadow' basis, to reduce the impact of any issues caused by the data quality.

116. If a revenue-linked quality incentive is introduced, it must use the same definition of downtime as applies for the equivalent quality standard. Currently price-quality regulation and information disclosure regulation apply different definitions of downtime, which causes confusion and complexity. We should not introduce a third measure through a revenue-linked incentive.⁴³

117. We also note that a revenue-linked quality incentive scheme would be an additional compliance and reporting requirement on top of an already extremely large set of disclosure and compliance reports that apply to Chorus. This should be considered when deciding whether to introduce a quality incentive.

⁴³ For avoidance of doubt, this relates to the definition of what is and is not included in downtime, not to the specified targets which would vary between PQ and an incentive mechanism.

Compensation payments

118. As an alternative to a revenue-linked quality incentive, the consultation paper suggests setting a “compensation scheme” that requires Chorus to pay prescribed amounts of compensation if it fails to meet those standards. We **recommend** against regulatory compensation payments – these are unnecessary, would duplicate existing arrangements and not incentivise service improvements.
119. The Commission does not seem to be aware (at least, the consultation paper does not mention) that Chorus already makes compensation payments to customers where specified service levels are not delivered. Under our standard contracts with RSPs, we are required to make compensation payments (through service rebates) for Layer 1 FFLAS⁴⁴ and Bitstream Services⁴⁵ in the following circumstances:
- a. Where we fail to attend an install scoping appointment or complete installation of a Fibre Connection on the date agreed with the RSP or end-user (a service rebate of one month’s rental fee).
 - b. Where we fail to restore faults within the timeframes in the service levels (a service rebate of one month’s rental fee). There are higher service rebates and shorter timeframes for enhanced services (a service rebate of two months rental fees).
 - c. Where we fail to establish an RSP on our network and provide access to the RSP and end-users within the agreed timeframe (a service rebate of \$1,000 a day for the first seven days, and \$10,000 a day thereafter).
 - d. Where we fail to provision the First MDU Order within 20 Business Days or as agreed with the RSP, MDU owner or end-user (a service rebate of one month’s rental fees).
120. These Core Service Rebates, set out in our contracts cover our key quality metrics (provision of services, restoration of faults and establishment of RSPs).
121. The compensation payments are made to RSPs who then have responsibility for passing on the payments to affected end-users.
122. We do not support the Commission creating a compensation scheme as it would duplicate the arrangements already in place contractually and could effectively create double the penalty for the same or similar service failures. There is no need for such a scheme to exist as current arrangements work well.
123. The consultation paper suggests a compensation payments scheme could “produce direct benefits to affected end-users”. This seems unlikely given that Chorus (a) already makes compensation payments so any benefit in terms of service outcomes

⁴⁴ Chorus UFB Services Agreement, Fibre Access Services (Layer 1): Service Level Terms for Fibre Access Services (Layer 1), Reference Offer (October 2020) at Appendix 1 and 2: <https://assets.ctfassets.net/7urik9yedtc/1eqt4ypSnMdVO5ZWackf5P/fe52f4de7653515b746dcf64460f8b04/chorus-contracts-agreements-direct-fibre-service-level-terms-2020-10.pdf>

⁴⁵ Chorus UFB Services Agreement, Bitstream Services: Service Level Terms for Bitstream Services, Reference Offer (October 2020) at Appendix 1 and 2: <https://assets.ctfassets.net/7urik9yedtc/1Lycg6dtHeyAJIvoHwdqLf/981412418570a798bb8d49a7a3cdef76/chorus-contracts-agreements-bitstream-service-level-terms-2020-10.pdf>

are already being achieved; and (b) Chorus already has other material drivers, including competition and reputational, for delivering a good-quality service.

124. We are also unsure sure what the Commission expects the process to be. Chorus is a wholesaler and we are restricted in the interactions we can have with end-users. If the Commission expects Chorus would pay end-users directly, there is no existing administrative structure to facilitate such payments and there would be challenges in terms of confirming the identity of those who made claims for compensation. Alternatively, if the compensation payments were to be made in bulk to RSPs, the Commission should put processes in place to ensure they are being passed on and do not simply become a cash transfer between Chorus and our retailers.
125. Finally, in the absence of a VOLS estimate, it would be challenging to set a customer compensation payment value that matches end-user willingness to pay, so there would be a risk that end-users would pay for compensation at a level that does not match their preferences.

Anchor services review

126. The Commission’s emerging view is it will not undertake a review of the anchor services before the start of PQP2. The Commission notes it could undertake a review of the anchor services at any time if it deems it necessary.
127. We agree with the Commission’s emerging view that it should not conduct a review of the anchor services prior to PQP2:
- a. The regulations are unnecessary as their statutory purposes are achieved by market factors. However, the costs imposed by the regulations in their current form would not, at this stage, justify the resourcing required for a review and the risks it might introduce.
 - b. A decision to review the anchor service regulations and implement a change to the regulations at a time other than the start of a new regulatory period would be highly disruptive and at odds with the intention of the legislation.
128. We therefore **recommend** that a review of anchor services is not undertaken prior to PQP2.

Whether to review

129. We agree with the Commission that the statutory purposes of anchor services are being achieved within the regulatory framework, but evidence suggests it is not the anchor service regulations themselves that are achieving them.
130. The fibre portfolios offered by both Chorus and other LFCs demonstrate that anchor services are unnecessary to achieve the statutory purposes. In summary:
- a. Chorus offers and promotes sub-anchor services at sub-anchor prices (Home Fibre Starter) in order to provide a fibre service that caters for the more price-conscious segment of the market. This shows that market incentives are sufficient to ensure the availability of basic services at reasonable prices.
 - b. Chorus offers a service with substantially higher performance at the same price as the anchor service. The anchor service itself is also priced below the regulated price cap.⁴⁶ This shows it is the market, not the regulation, setting the price/quality balance.
 - c. The other LFCs, unconstrained by the anchor service regulation but facing similar competition from wireless networks, offer comparable fibre portfolios further reinforcing the adequacy of market forces to constrain fibre portfolios.
131. We also note one other purpose of the anchor service regulations was to ensure a smooth transition for RSPs and end-users from a contractual framework between Chorus and the Crown which set all price-caps and specifications, to revenue-cap

⁴⁶ As of 1 July 2023, the Broadband Anchor Service price cap is \$54.46 and, as of 1 October 2023 the market price will be \$53.54. See: <https://sp.chorus.co.nz/product-update/confirmation-anchor-services-and-linked-services-final-price-changes-1-october-2023>

based regulation which would give Chorus more flexibility over specification and price points.⁴⁷ That transitional purpose has clearly been achieved.

132. These factors suggest there is a strong case for review of the anchor service regulations with a view to their removal. However, the anchor service regulations are not currently creating a material impediment for Chorus, while the amendments made by the Court mean we can comply with the regulations in a relatively efficient way. So we do not think it would be a good use of resources to review the anchor service regulations at this time.

Timing and sequencing

133. The Commission said its preference is to undertake an anchor services review prior to the start of a PQ regulatory period.⁴⁸ We note this is not a preference, but a statutory requirement – section 208(1) says “The Commission may, before the start of each regulatory period...” review an anchor service.
134. A technical argument can be made that it is always before the start of the next regulatory period, but this would make meaningless the words “before the start of each regulatory period”. We must assume Parliament would not have used those words for no effect. The most reasonable interpretation is that Parliament intended for any review to take place such that revised regulations would take effect at the start of the next regulatory period.
135. Regardless of the timing of a Commission review, any material change to the anchor service regulations at a time other than the start of a new regulatory period has the potential to be highly disruptive to Chorus, our RSP customers and end-users. Depending on the requirements of revised regulations, the revision may be a ‘change event’ requiring re-opening of the PQ path.⁴⁹
136. Even if the existing expenditure and revenue path can be maintained, inserting a new specification and price point would almost certainly require changes to the price and specification of many other products in the fibre portfolio – it is the purpose of the anchor services to affect other fibre services in this way. A very long lead-time would be required to ensure the changes can be communicated properly to end-users and minimise disruption. We urge the Commission not to underestimate the potential for shocks in any decision to revise the anchor service regulation.

⁴⁷ Cabinet paper on review of Telecommunications Act 2001: Final policy decisions for fixed line communications services, paragraphs 35-36 and recommendation 3.5; <https://www.mbie.govt.nz/dmsdocument/1118-review-telecommunications-act-2001-final-policy-decision-cabinet-paper-pdf>

⁴⁸ Consultation paper, paragraph A36.

⁴⁹ Fibre IMs clause 3.9.4.

Deregulation review

137. The Commission notes the deregulation review under section 210 is out-of-scope of this consultation. It says it will consider whether there are reasonable grounds to conduct a deregulation review in 2024. We therefore focus our comments on the potential process for the deregulation review.
138. We look forward to engaging with the Commission on the scope for a deregulation review, including the proposed parameters and legal and economic frameworks. However, the timing of consideration of a deregulation review requires further explanation because it is unclear how any potential review will affect the PQ path setting exercise for PQP2.
139. The Commission intends to consider whether there are reasonable grounds to review the scope of PQ and ID regulation in 2024. However, the Commission will be well-progressed in regulating a particular scope of FFLAS for PQP2 before it considers whether the scope of FFLAS regulation should change. We are not clear which of the following processes the Commission intends to apply:
- a. Any review, recommendation to the Minister, revision and taking effect of regulations under section 226 and necessary adjustments to PQ parameters can be made prior to the start of PQP2 in January 2025
 - b. Following the steps described above, any revised regulations under section 226 would take effect part-way through PQP2, likely requiring a reopening of the PQ path as a 'change event'
 - c. Following the steps described above, any revised regulations under section 226 would take effect for PQP3 in January 2029.
140. The requirement in section 210(3) that the Commission must consider whether there are grounds for review "before the start of each regulatory period" indicates to us that the intention of Parliament was that the Commission should consider the appropriate scope of FFLAS regulation for each regulatory period so that any revised scope could take effect for the upcoming regulatory period. We do not understand how the Commission's proposed process can be consistent with this. While it may be too late to properly resolve this for PQP2, we expect the Commission will consider the case for a deregulation review in advance of PQP3 with sufficient time for any changes to be realistically implemented before the price-quality path is set.

IM amendments

141. We agree with the consultation paper that IM amendments may be required in advance of PQP2. We have previously tabled a number of IM changes with the Commission, both during the PQ process for PQP1 and in response to specific matters that have arisen since the PQP1 final decisions. We believe these changes will lead to materially better outcomes for suppliers and end-users. Some changes are also required to correct known technical errors in the IMs.
142. The indicative timeline suggests the draft fibre IM amendments will be published in Q1 2024 with statutory consultation processes completed and final decisions made by the end of Q2 2024. This provides only a narrow window for following the statutory processes and to change the IMs.
143. We recognise some IM changes may need to be made by Q2 2024 so they are in time for final expenditure allowances decisions. However, past experiences indicates that the need for other IM amendments may not be identified, and/or other IM changes may be able to be deferred, until nearer the time of the final PQ decisions in the second half of 2024. For example, changes that would primarily affect the content of the PQ determination or revenue path, or in-period processes to apply during PQP2.
144. We **recommend** the Commission consider whether allowing for an IM amendment process that extends past Q2 2024, and/or that is conducted in stages (e.g. fast track / slow track), would make it more manageable and lead to better outcomes.
145. **Appendix B** summarises the amendments we think would materially improve the fibre IMs and the outcomes they drive for end-users. We **recommend** these IM amendments are progressed in advance of PQP2. We may identify further amendments as the process continues.

Appendix A: Responses to questions

Ref	Feedback question	Chorus answer
Rev1	Do you think any additional revenue controls are needed and if so whether they are an appropriate way to manage price shock risk during the period?	No. We are not opposed to smoothing of revenues over time as necessary. However, other interventions to manage price shock risk are unnecessary as our general commercial drivers, contractual requirements and the statutory intention of the anchor product all mean the risk of price-shock to end-users is low.
Rev2	Are there any changes you would suggest to our proposed approach to applying a washup drawdown amount to the PQP2 MAR? Please provide reasons for any suggested changes.	As discussed above, we support a mechanism that would allow us to draw-down from the wash-up balance mid-period. However, this would need to be flexible as an automatic draw-down mechanism would be commercially challenging to implement.
Rev3	Do you suggest any changes to our proposed approach to monitoring Chorus' compliance with its PQP2 price-quality path? Please provide reasons for any suggested changes.	The general monitoring approach is reasonable. The methodology for setting the price path should be reviewed in light of the issues identified during PQP1. We will provide recommendations to the Commission on this in advance of the draft decision.
Exp1	Are there any particular or additional aspects to our proposed evaluation process that you think we should consider?	No.
Exp2	Are there any additional areas or particular aspects of Chorus' expenditure that we should specifically focus on during our evaluation of Chorus' proposals?	No, we agree with the Commission's approach of focusing on areas raised by the IV and stakeholder feedback.
Exp3	Are there any particular aspects or characteristics that we should consider in our evaluation of Chorus' proposed rural fibre expansion expenditure?	The Commission is required to assess proposed capex against the capex objectives and good telecommunication industry practice. In order to meet these requirements, the Commission should primarily evaluate Chorus' proposed network expansion applying a workably competitive market test, which asks whether end-users'

Ref	Feedback question	Chorus answer
		willingness to pay (ignoring the GCP constraint) is broadly equal to or exceeds the incremental cost of network expansion.
EXP4	Are there any particular aspects or characteristics that we should account for in our evaluation of Chorus' proposed resilience expenditure?	The Commission should account for the preferences of our end-users and stakeholders. End-user feedback is an important driver of resilience capex and was not a criterion mentioned in the resilience discussion in the consultation paper.
QUAL1	Do you consider the current standards are effective at creating meaningful incentives on Chorus to ensure that its network meets appropriate standards of availability and performance in normal operating conditions. What changes would you have us make and why?	<p>The current standards could be improved.</p> <p>We propose to adjust some aspects of the PQP1 quality standards carried over into PQP2 to better capture how end-users experience network quality and to avoid breaches that do not speak to a failure to invest in and manage the network in accordance with good telecommunications industry practice.</p> <p>Our proposed changes particularly address issues with the way quality standards are set for PQP1 with a view to improve their effectiveness going forward and to help enable the new regulatory regime to work as intended.</p>
QUAL2	Do you see the need for a new quality standard, what would you propose and why?	No. We believe current standards are appropriate and Chorus already has commercial drivers to deliver a good quality of service. As discussed above, there are practical challenges with applying a quality standard to the other quality dimensions.
QUAL4	Do you think we should develop a quality incentive scheme PQP2 and what kind of incentive scheme do you see as appropriate?	As discussed above, we agree there could be benefits from introducing a quality incentive scheme. However, the Commission should consider whether this is necessary given existing commercial drivers for Chorus to deliver services at the quality level demanded by end-users. Also, data limitations suggest that any quality

Ref	Feedback question	Chorus answer
		incentive scheme should be low-powered or in 'shadow' form for PQP2.
QUAL5	What measure or measures of quality, performance, or customer service do you consider should be subject to a quality incentive scheme that could deliver most benefits to end-users?	If a quality incentive scheme was introduced, the most suitable quality dimension is Availability.
QUAL6	How could we determine an appropriate incentive rate for a quality incentive regime under PQ regulation and do you consider it possible to determine a Value of Lost Load (VoLL) equivalent for fibre?	<p>Determining a credible and accepted value of lost service (VOLS) estimate for fibre is possible but probably not in the timeframe for the PQP2 decision.</p> <p>In the absence of a VOLS, another option would be to calculate the incentive rate by a methodology similar to that for the 2015-2020 electricity distribution DPP quality incentive.</p>
AS1	Do you agree that the Commission should, at this stage, not undertake an anchor services review?	Yes. We agree with the Commission's emerging view that it should not conduct a review of the anchor services prior to PQP2.

Appendix B: IM amendments

We **recommend** that the following technical amendments to the fibre Input Methodologies are implemented for PQP2. The table below discusses the rationale for, and benefits of, each amendment proposed. They include IM amendments previously raised with the Commission during, and since, the PQP1 PQ process.

These are appropriate changes to be made under s 181 of the Act outside of the statutory seven-year fibre IM review cycle because:

- they ensure the fibre IMs are fit-for-purpose for the PQP2 PQ reset (including correcting known errors in the existing fibre IMs)
- they do not involve fundamental changes to the foundational building blocks for the cost of capital, asset valuation, cost allocation or tax, nor materially alter the balance of risk and benefits between Chorus and end-users.

Amendment	References	Reasons amendment should be made	Assessment against IM amendment criteria
1. In-period updating of path for approved ICPs	Chorus IM amendments Letter to Commission, 3 October 2022; Chorus submission on draft decisions for fibre price-quality information disclosure (PQID) November IM amendments, 8 July 2021.	Under the current IM settings, capex that is approved in-period through an ICP is recovered via a wash-up in the subsequent regulatory period. This means Chorus would be expected to incur the costs but would not be permitted any additional revenues for some years. While in net present value (NPV) terms this deferral is recognised through the time value of money adjustment in the wash-up account, it creates a cash flow shortfall, which is particularly acute for larger projects or programmes of work and/or for longer regulatory periods. Cash flow and associated financing concerns could pose a material disincentive to Chorus for undertaking ICP projects, which	Supports incremental improvement to the way the price path is set by ensuring that revenues can adjust in-period where major new capital expenditure projects are approved. Supports incentives to invest by mitigating cash-flow risk associated with large capex projects. Does not create a risk of excessive profits, as is simply aligning a

Amendment	References	Reasons amendment should be made	Assessment against IM amendment criteria
		<p>would otherwise benefit fibre end-users.</p> <p>Given the potentially critical role of future ICP projects, Chorus considers that approval of an individual capex allowance should result in an in-period updating of PQ path (based on the expected commissioning date of the assets) to enable Chorus to recover the costs and efficiently finance its operations each year.</p>	<p>revenue allowance more accurately to the time approved expenditure is incurred.</p> <p>Is achieved through simple amendments to the IMs relating to regulatory rules or processes – adding a price path reconsideration provision similar to the IMs for Transpower.</p>
<p>2. Depreciation commencing in year of commissioning</p>	<p>Chorus IM amendments letter to Commission, 3 October 2022;</p> <p>Chorus submission on draft decisions for fibre PQID November IM amendments, 8 July 2021.</p>	<p>Currently assets cannot be depreciated until the year after they are commissioned. This is inconsistent with GAAP, defers recovery of investments even after they are commissioned, and causes practical challenges in aligning regulatory and accounting asset values.</p> <p>Amending the IMs to allow assets to be depreciated in the year of commissioning will enhance certainty by making the depreciation approach consistent with GAAP and could improve investment incentives by mitigating the risk of asset stranding. The change would be NPV-neutral and make the fibre IMs consistent with the IMs for Transpower.</p>	<p>Supports incremental improvements to the price path by ensuring recovery of costs can begin once an asset is commissioned.</p> <p>Enhances certainty and reduces compliance costs by aligning regulatory and accounting requirements.</p> <p>Does not create a risk of excessive profits, as it simply better aligns the time-profile of the return of investment with costs.</p>

Amendment	References	Reasons amendment should be made	Assessment against IM amendment criteria
<p>3. Timing of annual benefit of Crown financing</p>	<p>Chorus IM amendments letter to Commission, 3 October 2022; Chorus submission on draft decisions for fibre PQID November IM amendments, 8 July 2021.</p>	<p>The IMs materially overstate the Crown financing benefit building block with respect to repayments of Crown financing that occur during a regulatory year – see our previous submission for details.</p> <p>This means the IMs will lead to an overstatement of the benefit of Crown financing and will result in a PQ determination not reflective of actual costs incurred by Chorus in respect of Crown financing during the regulatory period.</p> <p>Unless this is amended, the PQ determination would be inconsistent with s 171 of the Act, which requires the maximum revenues set by the Commission to reflect the actual costs of Crown financing.</p>	<p>Removes potentially material technical inaccuracy in the IM determination, ensuring cost of capital IM is consistent with legislation.</p> <p>Improves accuracy of calculation and ensures that business decision related to financing and investment are not unduly distorted by regulatory rules.</p> <p>Does not create a risk of excessive profits, as it limits compensation for Crown financing to actual costs incurred per s 171.</p>
<p>4. Change to definition of notional deductible interest</p>	<p>Chorus IM amendments letter to Commission, 3 October 2022; Chorus submission on draft decisions for fibre PQID November IM amendments, 8 July 2021.</p>	<p>The IMs should be amended to address an inconsistency in the leverage assumptions used to calculate notional deductible interest for Chorus in clause 2.3.1(7).</p> <p>The way ‘notional deductible interest’ is currently calculated with respect to regulatory tax allowance doesn’t account for the actual mix of debt and equity portions of Crown financing for Chorus. This understates our regulatory tax allowance and is also</p>	<p>Removes technical error in the IM determination, ensuring taxation IM is consistent with primary regulatory legislation.</p> <p>Improves accuracy and ensures that business decision related to financing and investment are not unduly distorted</p>

Amendment	References	Reasons amendment should be made	Assessment against IM amendment criteria
		<p>inconsistent with s 171 of the Act which requires that the maximum revenues reflect, in respect of any Crown financing, the actual financing costs incurred by the provider.</p>	<p>by regulatory rules.</p> <p>Avoids windfall gains or losses, as it limits compensation for notional tax costs to those reflecting actual costs incurred per s 171.</p>
<p>5. Connection capex to include customer incentives capex</p>	<p>Chorus incentives ICP submission, 1 November 2022.</p>	<p>The process for the 2023 individual capex proposal highlighted that ICPs are not well suited to the uncertain and variable nature of customer incentives capex.</p> <p>The regulatory settings should allow for a more dynamic approach to incentives capex that supports innovation by Chorus to meet end-user demands.</p> <p>We recommend changing the IM definition of connection capex to include customer incentives capex. The result would be a connection capex variable adjustment that would apply to incentives.</p> <p>This would be beneficial because the Commission could specify a reasonable unit rate up front, which can be confirmed as being lower than the expected incremental revenues per added connection. Chorus then bears the risk of any commercial need to spend more than that amount per connection, but the volumes are washed-up – removing the</p>	<p>Supports incremental improvement to the way the price path is set by providing a more efficient and less costly process to ensure individual capex allowances are not set too high or too low, noting the uncertain and variable nature of this expenditure.</p> <p>Enhances certainty as Chorus would have certainty across a regulatory period of the per unit value of incentives capex that has been approved. And ensures that there is no windfall gain or loss due to fluctuations in incentive payment volumes.</p>

Amendment	References	Reasons amendment should be made	Assessment against IM amendment criteria
		risk associated with forecasting incentives uptake.	
<p>6. Wash up for CPI in opening year of regulatory period</p>	<p>Chorus CPI letter to Commission, 19 October 2022.</p>	<p>As has been the subject of correspondence between Chorus and the Commission during 2022 and 2023, there is no clear wash-up for variations between actual and forecast inflation in the opening year of a regulatory period (which is inconsistent with the treatment of inflation in other years of a regulatory period). This appears to be a historical oversight and there is no policy or principled reason to allocate all inflation forecasting risk to Chorus in year 1, and to end-users in other years.</p> <p>The IMs, PQ determination and wash-up notice should apply a consistent inflation wash-up across all years of a regulatory period. This could be done either by amending the IMs or the PQ determination. Here we present a solution by way of the IMs, but a variation to the PQ determination (e.g., by specifying the year 1 revenue cap net of CPI) would also be an acceptable solution.</p> <p>We note this solution does not resolve the failure to compensate Chorus for the inflation spike in the first year of PQP1, which continues to have the effect that we will never be able to make a normal return on our investments that were in the regulatory asset base at that time.</p>	<p>Enhances certainty and incentives to invest, by creating confidence that Chorus will be able to recover the costs of its investments and operating costs irrespective of unexpected inflation shocks.</p>

Amendment	References	Reasons amendment should be made	Assessment against IM amendment criteria
<p>7. Confirming the scope of Crown financing wash-up</p>	<p>N/A</p>	<p>Clause 3.1.1(11)(b) of the IMs implements a wash-up for actual Crown financing balances during a regulatory period. However, the current drafting can be read as also encompassing the difference in the effective financing rate calculated under ID versus that adopted at the time the PQ path was set.</p> <p>The Commission has confirmed in the explanatory material issued at the time of the relevant IM decision that the wash-up should be performed in respect of actual Crown financing balances only. We recommend the provision be amended to clarify this intent.</p>	<p>Improves clarity of a technical aspect of the IM determination; enhances predictability and compliance.</p>
<p>8. Cost allocation definition changes</p>	<p>N/A</p>	<p>The cost allocation IM applies in respect of assets by attributing unallocated closing RAB values to the provision of FFLAS (see cl. 2.25(4)). The resulting allocated closing RAB values automatically become allocated opening RAB values for the next regulatory year (see cl. 2.2.5(3)).</p> <p>The definition of “asset value” in cl. 1.1.4(2) to which cost allocation processes are applied incorrectly refers to “unallocated opening RAB value” rather than “unallocated closing RAB value”. This should be corrected.</p>	<p>Corrects a technical error in the IM determination thereby making the mechanics of the post-allocated RAB roll forward mechanism internally consistent.</p> <p>Simplifies and improves processes for PQ path proposals and evaluation.</p>
<p>9. Addressing stranding risk</p>	<p>Chorus IM amendments letter to Commission,</p>	<p>It is evident that the risk of asset stranding is dependent on constantly evolving market circumstances. An approach that locks in the ex-ante stranding</p>	<p>Provides additional certainty to regulated providers that the risk of stranding</p>

Amendment	References	Reasons amendment should be made	Assessment against IM amendment criteria
	<p>3 October 2022; Chorus submission on draft decisions for fibre PQID November amendments, 8 July 2021.</p>	<p>allowance across multiple regulatory periods (e.g. the current 10 basis points annual allowance specified in the cost of capital IM) fails to recognise the dynamic nature of stranding risk.</p> <p>We propose the Commission determines the stranding allowance as part of each PQ determination in conjunction with the other regulatory mechanisms and decisions used to address stranding risk, including availability of in-period reopeners, revenue smoothing, wash-ups, and the length of the regulatory period.</p> <p>This would allow Chorus the ability to propose regulatory settings to respond to current information and changing expectations and evidence – ensuring that combined stranding mitigation measures are appropriately calculated and applied to reflect the risks, and allow the Commission to revise its assessment of stranding risk as part of each PQ determination to assure itself that the combination of regulatory tools is properly achieving the purpose of Part 6.</p>	<p>will be appropriately accounted for in light of dynamic circumstances.</p> <p>Supports ongoing incentives for efficient investment and innovation.</p>

Our suggested drafting to implement these to the *Fibre Input Methodologies Determination 2020* are set out below.

In-period updating of price-quality path for approved ICPs

Clause 3.1.1

Delete clause 3.1.1(11)(d):

~~(d) any **individual capex allowance** determined in respect of the **regulatory period** that corresponds with that **regulatory year** that was determined after that **regulatory period** commenced;~~

Re-number the remaining paragraphs of clause 3.1.1(11) accordingly.

Clause 3.9.1

Add new clause 3.9.1(4):

~~(4) The **Commission** must reconsider and amend a **regulated provider’s PQ determination** if the **Commission** determines an **individual capex allowance** under clause 3.7.28.~~

Clause 3.9.2

Add new clause 3.9.2(6):

~~(6) If the **Commission** determines an **individual capex allowance** under clause 3.7.28, it must publish **notice** on its website as soon as practicable thereafter of its intention to reconsider and amend the relevant **PQ determination**.~~

Clause 3.9.8

Amend clause 3.9.8 as follows:

~~(1) Subject to subclause (2), If the **Commission** is satisfied under clause 3.9.2(5) that a **reopener event** has occurred, then the **Commission** must have regard to at least the following matters when deciding whether to amend the relevant **PQ determination**:~~

...

~~(2) The **Commission** must amend the relevant **PQ determination** if it has determined an **individual capex allowance** under clause 3.7.28.~~

Clause 3.9.9

Amend clause 3.9.9 as follows:

~~(1) Subject to subclauses (2) and (4), if the **Commission** decides that the **PQ determination** should be amended, the **Commission** may amend the price path and the quality standards to take account of part or all of the net effects of the **reopener event** on costs, revenues, and **PQ FFLAS** quality outcomes.~~

...

~~(4) If the **Commission** has determined an **individual capex allowance** under clause 3.7.28, the **Commission** must amend the **PQ determination** to include all of the impact of the **individual capex allowance** on **forecast**~~

allowable revenue for the relevant **regulatory period** or **regulatory periods**.

Depreciation commencing in year of commissioning

Clause 2.2.5

Amend clause 2.2.5(2)(b) as follows:

- (b) a **core fibre asset** with a **FFLAS commissioning date** in the **disclosure year** in question, ~~its value of commissioned asset; and the value determined in accordance with the formula-~~
value of commissioned asset – unallocated depreciation

Clause 2.2.8

Insert new clause 2.2.8(3):

- ~~(3) For the purpose of subclause (1), in the case of a **fibre asset** with a **FFLAS commissioning date** in the **disclosure year** in question, a **regulated fibre service provider** must determine 'unallocated depreciation' and 'depreciation' using a **depreciation method** consistent with **GAAP**, unless:~~
- ~~(a) an alternative depreciation method is applied for some or all **fibre assets** in accordance with clause 3.3.2(5); or~~
- ~~(b) a different depreciation method is applied for some or all **fibre assets** in accordance with clause 3.3.2(6).~~

Re-number the remaining subclauses of clause 2.2.8 accordingly.

Timing of annual benefit of Crown financing

Clause 2.4.10

Amend clause 2.4.10 as follows:

- (1) In respect of **regulated fibre service providers** subject to both information disclosure regulation and price-quality regulation in regulations made under s 226 of the **Act**, 'annual benefit of Crown financing building block' for a **disclosure year** is calculated ~~as the sum of the amounts calculated~~ in accordance with the following formula ~~for each day of the disclosure year~~—

$$(A \times B) + (C \times D),$$

where-

- (a) A is the amount determined in accordance with the following formula:
- $$\left(\left(\text{proportion of 'B' that is senior debt} \times \text{cost of debt for that disclosure year} \right) + \left(\text{proportion of 'B' that is subordinated debt} \times \left(\text{cost of debt for that disclosure year} + 0.41\% \right) \right) \right) \times E;$$

- (b) B is the amount of **Crown financing** outstanding in respect of the **regulated provider** (or related party as referred to in section 164 of the **Act**) ~~on the first at the start of the~~ day ~~in question of the~~ **disclosure year** that is debt (whether senior or subordinated);
- (c) C is the amount determined in accordance with the following formula:

$$((0.75 \times \text{cost of equity for that disclosure year}) + (0.25 \times \text{cost of debt for that disclosure year})) \times E; \text{ and}$$
- (d) D is the amount of **Crown financing** outstanding in respect of the **regulated provider** (or related party as referred to in section 164 of the **Act**) ~~on the first at the start of the~~ day in question ~~of the~~ **disclosure year** that is equity; ~~and~~
- (e) E is determined in accordance with the following formula:

$$1 \div \text{number of days in the disclosure year.}$$

Clause 3.5.11

Amend clause 3.5.11 as follows:

- (1) For the purposes of specifying a price-quality path, “annual benefit of Crown financing building block” for a **regulatory year** in a **regulatory period** is determined as the sum of the amounts calculated in accordance with the following formula for each day of the regulatory year—

$$(A \times B) + (C \times D),$$

where-

- (a) A is the amount determined in accordance with the following formula:

$$((\text{proportion of 'B' that is forecast to be senior debt} \times \text{cost of debt for that regulatory period}) + (\text{proportion of 'B' that is forecast to be subordinated debt} \times (\text{cost of debt for that regulatory period} + 0.41\%))) \times E;$$
- (b) B is the forecast amount of **Crown financing** outstanding in respect of the **regulated provider** (or related party as referred to in section 164 of the **Act**) ~~on the first at the start of the~~ day in question ~~of the~~ **regulatory year** that is debt (whether senior or subordinated);
- (c) C is the amount determined in accordance with the following formula:

$$((0.75 \times \text{cost of equity for that regulatory period}) + (0.25 \times \text{cost of debt for that regulatory period})) \times E; \text{ and}$$
- (d) D is the forecast amount of **Crown financing** outstanding in respect of the **regulated provider** (or related party as referred to in section 164 of the **Act**) ~~on the first at the start of the~~ day in question ~~of the~~ **regulatory year** that is equity; ~~and~~
- (e) E is determined in accordance with the following formula:

1 ÷ number of days in the **regulatory year**.

Change to definition of notional deductible interest

Clause 2.3.1

Replace clause 2.3.1(7) with the following:

(7) For **regulated fibre service providers** subject to both **information disclosure regulation** and **price-quality regulation**, 'Notional deductible interest' means the value determined for the **disclosure year** in accordance with the following formula:

sum of all **opening RAB values** × **leverage** × **cost of debt** – Crown financing deductible interest

where:

Crown financing deductible interest is calculated for the **disclosure year** using the following formula:

Senior debt outstanding × **cost of debt** for that **disclosure year** + subordinated debt outstanding × (**cost of debt** for that **disclosure year** + 0.41%) + equity outstanding × (0.25 × **cost of debt** for that **disclosure year**)

Senior debt outstanding is the amount of **Crown financing** outstanding as of the last day of the preceding **disclosure year** that is that is senior debt;

Subordinated debt outstanding is the amount of **Crown financing** outstanding as of the last day of the preceding **disclosure year** that is subordinated debt; and

Equity outstanding is the amount of **Crown financing** outstanding as of the last day of the preceding **disclosure year** that is equity.

Insert new clause 2.3.1(7A):

(7A) For **regulated fibre service providers** subject only to **information disclosure regulation**, subject to subclauses (8)-(9), 'Notional deductible interest' means the value determined for the **disclosure year** in accordance with the following formula:

(sum of all **opening RAB values** – Crown financing outstanding) × **leverage** × **cost of debt**

where:

Crown financing outstanding is the amount of **Crown financing** outstanding as of the last day of the preceding **disclosure year**.

Connection capex to include customer incentives capex

Clause 1.1.4

Amend clause 1.1.4(2) as follows:

connection capex means **capital expenditure** approved by the **Commission** as part of the **connection capex baseline allowance** or the

connection capex variable adjustment and directly incurred by **Chorus** in relation to connecting new **end-user** premises, building or other access points where the **communal fibre network** already exists or will exist at the time of connection, and includes:

- (a) **UFB initiative brownfield** connection expenditure;
- (b) **UFB initiative greenfield** and **infill** connection expenditure; ~~and~~
- (c) **Chorus** initiated migration from **copper fixed line access services** to **PQ FFLAS**; ~~and~~
- (d) customer incentives for **PQ FFLAS**;

Wash-up for CPI in opening year of regulatory period

Clause 3.1.1

Amend existing clause 3.1.1 as follows:

- (11) 'Actual allowable revenue', for a **regulatory year**, means the sum of forecast **building blocks revenue**, forecast **pass-through costs** and the **wash-up amount**, adjusted, as specified by the **Commission** for the purposes of calculating a **wash-up accrual** or **forecast wash-up accrual**, to include the modelled impacts on **forecast allowable revenue** (for a **wash-up accrual**) or forecast of modelled impacts on **forecast allowable revenue** (for a **forecast wash-up accrual**) (whichever is applicable) for that **regulatory year** of: ...
 - (f) subject to subclause (13), the difference between:
 - (i) any forecast **CPI** values referred to in a **PQ determination** for the purposes of calculating **forecast allowable revenue** under subclause (2) for that **regulatory year**; and
 - (ii) the corresponding actual **CPI** values for that **regulatory year**; and ...

(13) For the purpose of paragraph (11)(f), and subject to subclause (14), where no forecast **CPI** value is referred to in a **PQ determination** for the first **regulatory year** of a **regulatory period**, then the forecast **CPI** value is deemed to be referred to by the **PQ determination** and is calculated as equal to the product of the forecast **change in CPI** for:

- (a) the first **regulatory year**, and
- (b) each prior **regulatory year** for which a forecast **CPI** value formed part of a **change in CPI** calculation for that **regulatory year** at the time the **PQ determination** was made,

where—

the product of the **change in CPI** across n **regulatory years** is calculated as:

$$(1 + \text{change in } CPI_t) \times (1 + \text{change in } CPI_{t+1}) \times \dots (1 + \text{change in } CPI_{t+n}) - 1$$

'change in CPI' for **regulatory year** is calculated in accordance with the following formula—

$$\frac{CPI_{Mar,t} + CPI_{Jun,t} + CPI_{Sep,t} + CPI_{Dec,t}}{CPI_{Mar,t-1} + CPI_{Jun,t-1} + CPI_{Sep,t-1} + CPI_{Dec,t-1}} - 1$$

where—

$CPI_{q,t-n}$ is **CPI** for the quarter ending in q in the 12-month period n years prior to **regulatory year** t , calculated using the most recent Reserve Bank Monetary Policy Statement available before 30 June of year $t-1$.

- (14) Subclause (13) does not apply in respect of the first **regulatory year** of the **first regulatory period**.
- (15) Where subclause (13) deems a forecast **CPI** value to be referred to by a **PQ determination** then in calculating the modelled impact on **forecast allowable revenue** of the item in subclause (11)(f), any impact that is also attributable to washing-up forecast **CPI** values for actual **CPI** values under paragraph (11)(a) must only be accounted for once.

Confirming the scope of Crown financing wash-up

Clause 3.1.1

Amend clause 3.1.1(11)(b) as follows:

- (b) the difference between:
 - (i) ~~the forecast amounts of **Crown financing** outstanding on the first day of the **regulatory year** that are senior debt, subordinated debt or equity for the purposes of calculating the 'annual benefit of Crown financing building block' for that **regulatory year**, as determined~~ under clause 3.5.11; and
 - (ii) the ~~corresponding actual amounts of senior debt, subordinated debt or equity outstanding on the first day of annual benefit of Crown financing building block' for the **disclosure year** that corresponds with that **regulatory year**, as determined under clause 2.4.10;~~

Cost allocation definition changes

Clause 1.1.4

Amend clause 1.1.4(2) as follows:

- | | |
|--------------------|---|
| asset value | means: |
| | (a) in respect of a core fibre asset , the unallocated- opening-closing RAB value ; and |
| | (b) in respect of a UFB asset , the value determined in accordance with Schedule B; |

Addressing stranding risk

Clause 3.3.5

Amend clause 3.3.5(2) as follows:

- (2) The annual ex-ante allowance for asset stranding is the amount determined in accordance with the formula-

$$A \times B$$

where-

- (a) A is ~~0.001~~ specified in a PQ determination; and
- (b) B is the average of-
- (i) the sum of **opening RAB values** for each **regulatory year** of the **regulatory period** for all **core fibre assets** and the **opening RAB value** for the **financial loss asset**;
 - (ii) the sum of **closing RAB values** for each **regulatory year** of the **regulatory period** for all **core fibre assets** and the **closing RAB value** for the **financial loss asset**.