

Fibre information disclosure and price-quality
regulation: Chorus expenditure proposal

Submission | Commerce Commission

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Executive summary

Thank you for the opportunity to provide feedback on Chorus' expenditure proposal for regulated fibre services. The Commission plans to assess and scrutinise the proposal to determine the FFLAS expenditure for the purposes of the BBM and has asked for feedback on whether the proposal best supports the expenditure objectives and Act.

However, only limited information has been made available to interested parties – significantly less than is typically made available in the context of Part 4 electricity line company – and this makes it difficult to provide specific feedback on the expenditure proposal.

Expenditure outcomes

Nonetheless, when we looked at the high-level outcomes of Chorus' proposed approach it suggests there are material issues to be addressed by the Commission. The expenditure proposal anticipates high operating costs, and a significant loading of shared costs on to FFLAS customers. For example:

- FFLAS would incur higher corporate function costs than Chorus currently incurs for its entire business, and an allocation of shared costs (70%) that far exceeds FFLAS' share of Chorus revenue and connections (around 50%), and
- The proposal implies FFLAS opex of over \$250 per connection per annum, around 15% higher than the much smaller Enable and almost three times the cost of other wholesale fibre providers such as NBNLink.

While difficult to draw conclusions based on the information provided, it does suggest that the expenditure proposal over-specifies the shared capability necessary for FFLAS, and then over-allocates the costs of that capability to FFLAS. We believe such an approach signals an intention to act on the incentives it already has to distort competition from alternative technologies – by funding Chorus activities in adjacent markets through guaranteed FFLAS returns – and double recovery of costs.

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Chorus connection incentives – inertia pricing

Chorus has further proposed that its connection incentives be funded through the capex expenditure. Chorus currently offers incentives of up to \$600 to connect customers to the network, up to \$800 to upgrade customers to higher and/or lower specification connections, and term commitments of up to 24 months. The Commission has requested feedback on Chorus' proposal and we agree it should be concerned that Chorus is seeking BBM endorsement of inefficient and distortionary pricing practices.

Chorus should be subject to competitive forces where there are alternative access technologies. And it should be constrained from exercising the power it has across its LFC areas, to distort meritorious competition from alternatives. Fibre, cable and wireless based technologies all compete for customers currently served by inferior copper technologies – and lower prices for this segment are expected. However, Chorus' has created a series of escalating incentives for RSPs to move end-users off alternative infrastructure and onto fibre. It is becoming evident that the strategy relies on and will benefit from a fibre lock-in, consumer apathy to change after the initial term, an almost guaranteed recoupment of costs through regulatory allocations, and the ability to undermine the case for investment in future generations of competitive infrastructure. It also means that customers whose demand preferences could be more efficiently met by alternatives to fibre will miss out on access to clear information and visibility of these more efficient choices.

In a dynamic service market where customers have diverse preferences there will inevitably be consumers that appear to be inert and not on the right technology for them. Mobile providers have

worked with the Commission on a range of measures designed to encourage customers to consider their needs to minimise the impact of customer inertia. It would therefore be a strange outcome that the Commission, in this context, were to adopt pricing structures that relies on and exploits customer inertia and embeds long fixed term commitments in retail markets.

We have wider competition concerns over Chorus pocket pricing practices that specifically discriminate against access seekers with their own networks, raise infrastructure rivals' costs by depriving them of scale and inefficiently distort markets through incentive hurdles that drive RSPs retail activity.

The Commission must make decisions that best promote the s162 purpose, promote competition for end user benefits and be consistent with other regulatory obligations in the Act. The Commission cannot accept a capex proposal where better options are available. We recommend that the Commission reject the capex proposal in preference to reflecting lower entry level prices for all fibre services of similar quality in the revenue forecast.

Recommended Commission focus for assessing the expenditure proposal

The Commission now faces the not inconsequential task of deciding the expenditure path that best supports the purposes of the Act. Chorus' expenditure proposal raises competition concerns and, while the concerning funding does not constitute a significant proportion of the overall proposal, it has material implications for competition and policy. Accordingly, for the next phase of the process, we recommend that the Commission focus on:

- a. Chorus' connection incentive capex proposal – these practices are ongoing and risk distorting retail markets. As set out above, we propose that the Commission reject this element of Chorus' capex proposal and build the implied discount in to the revenue forecast.
- b. The boundary of the regulatory funded service and where this crosses into competitive markets – the proposed boundary appears to include capability and services unnecessary for FFLAS.
- c. The proposed cost allocation methodology – the proposal does not include competition or double recovery considerations and these considerations need to be applied by the Commission so it can made decisions that best promote the purposes of the Act.
- d. Providing more transparency of the provision for FFLAS new services and system development, and process by which FFLAS developments occur, and
- e. Providing transparency of costs and performance, particularly as this relates to consumer outcomes and planned layer 1 unbundling.

Introduction

2. Thank you for the opportunity to provide feedback on Chorus' fibre expenditure proposal (**Chorus proposal**) and Commission consultation paper (**consultation paper**).
3. The Commission also recently surveyed interested parties on how it might best promote competition through its information disclosure (**ID**) and price quality (**PQ**) regulatory decisions (**the survey**). The Commission is right to consider how it might reflect the risks and opportunities for promoting competition – these are key outcomes of the regime.
4. The Chorus expenditure proposal now highlights the significant implications that decisions relating to the funded capability and cost allocation have for competition and regulatory outcomes. The focus of our submission is these competition concerns as they directly relate to the markets that we compete in.

Commission's assessment approach – promotion of competition

5. Chorus has submitted its expenditure proposal and, as the Commission notes in the consultation paper, its task is to undertake its own assessment and scrutiny of the proposal applying a range of assessment factors and the Act. It will use experts to support its evaluation¹.
6. The Commission should determine key expenditure proposal elements. Chorus has predictable incentives to favour its commercial interests rather than end-user benefits and the Commission's role is to temper its ability to give full effect to those commercial interests – specifically because Chorus holds a position of substantial power in fibre markets, and by extension in broadband access markets more generally.
7. Chorus' market power already enables it to distort competition in adjacent competitive markets by undermining potential entry or expansion of alternative infrastructure providers. And regulatory consideration of expenditure proposals should be careful to consider the extent to which cost allocations and recoveries could exacerbate rather than contain the risk of competitive distortions.
8. There needs to be an independent review of key expenditure parameters.
9. The Commission can only approve an expenditure proposal:
 - a. That is consistent with Chorus' other legislative and regulatory obligations, including non-discrimination and equivalence obligations and the line of business restrictions set out in the Act.
 - b. That best gives, or is likely to best give, effect to the promotion of
 - i. Outcomes consistent with those produced in workably competitive markets². In our context, wholesale providers would be expected to inefficiently expand into adjacent markets, distort competition or inefficiently price wholesale services in a workably competitive market.

¹ Consultation paper at para 13

² The Commission noted in the IM reasons paper that, while its approach is based on s52A of the Commerce Act, its approach to s162 in the context of FFLAS would recognise the unique competitive landscape of telecommunications and differences between Part 4 and Part 6. IMs reasons paper 2.217 at footnote 94.

ii. Workable competition in telecommunications markets³.

10. Accordingly, the Commission is obliged to make PQ decisions that best promote the outcomes of a competitive market and competition itself, consistent with other regulatory obligations and purposes of the Act.
11. Chorus has suggested in the PQ and ID promotion of competition survey that PQ decisions should, in effect, be blind to the promotion of competition in deference to other regulatory tools. However, the Commission is required to make Part 6 decisions that best promote the purposes of the Act.
12. On the face of it, Chorus' proposals does not include competition and regulatory considerations, and this has been left solely for the Commission process. The Commission identified PQ related competition risks and opportunities in its survey relating bundling, margin squeeze and connection incentives. The Commission has also identified - and sought comments on - a number of important considerations excluded from the CutlerMerz report, including the nature of the "Corporate innovation" fund⁴.

The Chorus expenditure proposal

Gaps in the proposal document make providing feedback difficult

13. The Commission has asked for feedback on whether Chorus' expenditure proposal meets the expenditure objectives and purpose of the Act.
14. However, it's difficult to provide detailed feedback on the proposal as it lacks key information that would allow us to provide specific comments, for example:
 - a. All details relating to the cost allocation approach have been withheld, including general principles as well as detailed workings.
 - b. The proposal largely omits longer term asset management plans and forecast network expenditure beyond 2024.

Limited information on asset lifecycle drivers and subsequent years planned capex has been withheld. As noted at the Quality workshop, information relating to planned capex for long term assets undermines interested parties' ability to form a view on whether investment over the regulated period met the expenditure objectives.

- c. Specific details of the new services and capability development pipeline or, if this is unknown, how the funding provision was developed.

Access seekers have some visibility of proposals through the UFB Product Forum, showing proposals through to early 2022 that include a mix of FFLAS and non-FFLAS services⁵. On the face of it, the proposal sets out a series of ideas and projects rather than provide a coherent narrative or target architecture to assess the proposals against, and

³ Para 2.220 of IM Reasons paper and 1.10 of companion paper

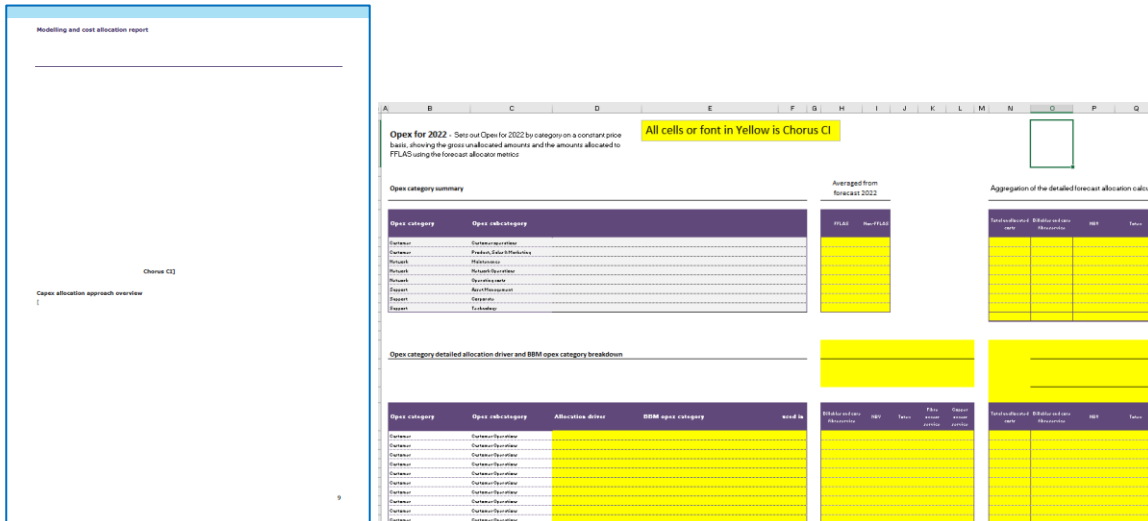
⁴ CutlerMerz report at page 4

⁵ See new product and change update at <https://sp.chorus.co.nz/future-of-fibre>

d. There is no breakdown of expenditure between product groups making it impossible, for example, to provide the Commission feedback on whether layer 1 expenditure is sufficient to promote competition⁶.

15. Cost allocation, in particular, is a key access seeker concern due to the related competitive and double recovery concerns, and we would have hoped expected the proposal to provide more information relating to allocations. Yet this information has been fully withheld (see Figure 1).

Figure 1: Chorus cost allocation overview and implementation with CI marked



16. Accordingly, interested parties have significantly less information available to them than is available in comparable Part 4 processes - electricity line proposals include detailed cost allocation and asset information⁷. Further, Chorus' approach has made it difficult to understand what has been proposed and requires significantly more interested party effort to develop a picture of what has been proposed and its implications.

At a high level the expenditure proposal raises red flags

17. Nonetheless, a high-level comparison of the proposal against current Chorus reported spend and that of other wholesale fibre only providers suggests there are significant issues to be resolved.

18. On the face of it, Chorus' expenditure proposal would:

Embed a high-cost and inefficient cost structure that is likely to burden fibre consumers for the foreseeable future

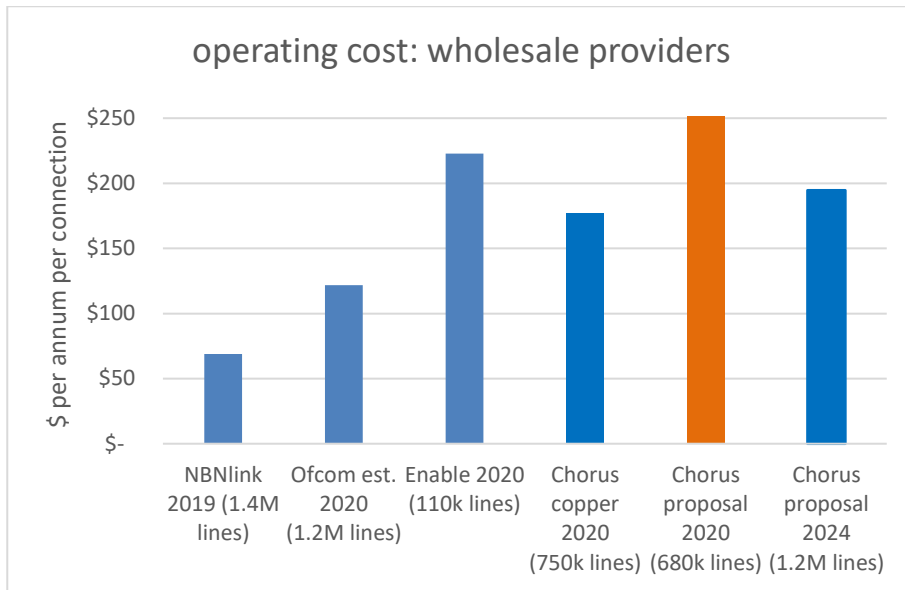
19. Chorus' proposal implies FFLAS opex of around \$250 per line per year and, as shown in Figure 2, this would see FFLAS consumers paying significantly more than if they had been served by other wholesale fibre providers. Chorus' proposed opex allocation to FFLAS is currently around \$30 more per line than Enable, a significantly smaller fibre provider, and will not achieve similar costs until 2023. By the end of the regulatory period Chorus' proposed FFLAS costs remain almost three

⁶ The Commission asks in consultation paper – question 1 referencing at para 56 – whether sufficient investment is being made to support layer 1 unbundling.

⁷ For example, the Powerco proposal sets out detailed information relevant for assessing the proposal https://comcom.govt.nz/_data/assets/pdf_file/0028/61597/Main-proposal-Powerco-CPP-12-June-2017.pdf

times that achieved by NBNLink and 60% higher than Ofcom estimated costs for a similar sized fibre provider.

Figure 2: Proposed operating costs per connection relative to that reported by other wholesale fibre network providers

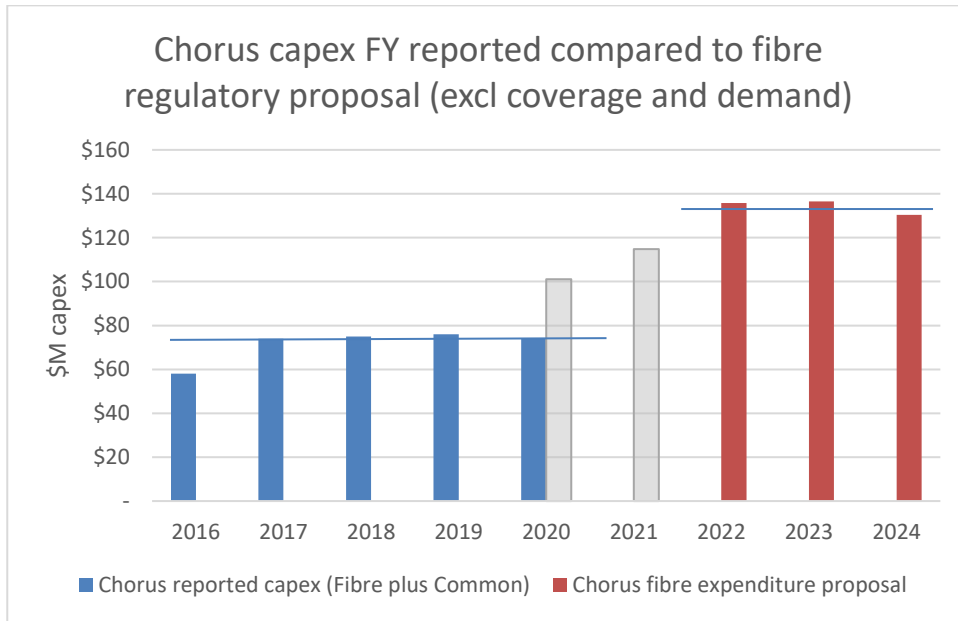


20. We appreciate that this can only be a broad sanity check and Chorus costs may, for example, reflect other drivers such as Chorus inefficiency or lower capital costs. Nonetheless, the scale of the differences questions whether the business model and costs attributed to FFLAS reflect that of a narrow and less complex wholesale fibre business, and the allocation of shared costs to FFLAS. An efficient allocation of shared costs to FFLAS would see FFLAS costs closer to that seen in peer fibre providers.

See a steep increase in FFLAS attributed capex beyond Chorus' currently reported fibre and common capex (setting aside coverage and demand driven spend)

21. Further, as shown in Figure 6, the proposal anticipates a significant increase in non-coverage/demand driven capex from that reported for as fibre and common capital expenditure. Chorus' overall capex is expected to fall from \$595M in 2020 to \$296M in 2024 due to a tailing off of coverage and installation expenditure. However, in the context of falling capex overall, Chorus has proposed a material increase in capex relating to systems and new services, i.e. capex not related to coverage or connections.

Figure 3: Chorus reported capex and proposed regulatory period capex (excluding fibre coverage, installations and demand driven capex, and copper⁸)



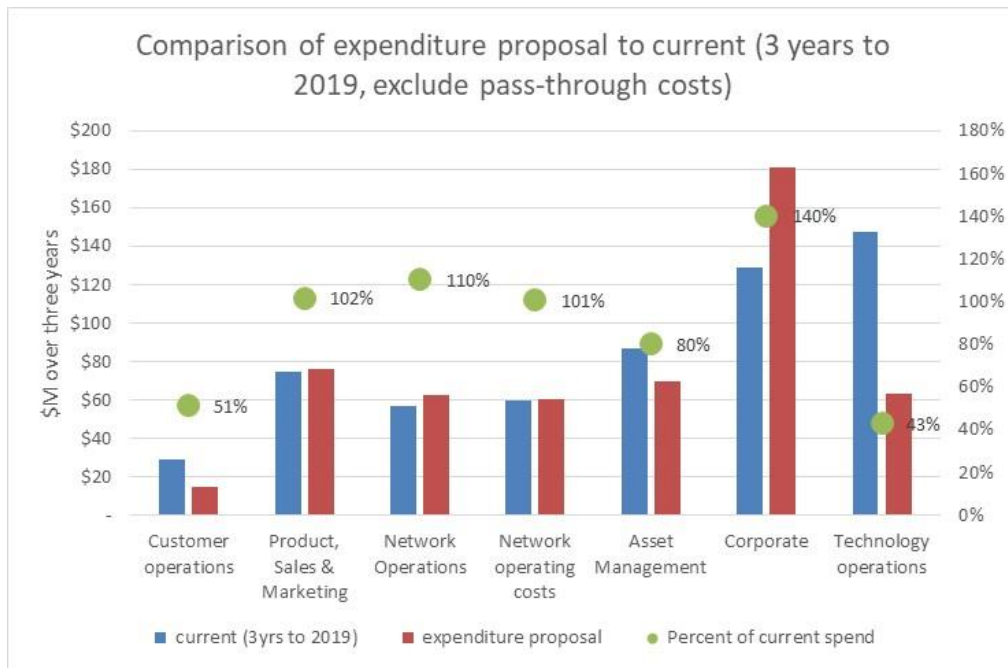
22. We can't be definitive on what the increase in proposed investment this means with the information available to us and there could be any number of drivers, i.e. due to additional lifecycle and new product development requirements, catch up investment from the pre-regulatory period, changes in scope and allocation methodologies. Nonetheless, a stepwise increase in fibre expenditure of this nature warrants closer assessment.

See a significant proportion of operating costs recovered from FFLAS

23. We do not have breakdown of prior period opex in the same way as it has for capex. However, when we compare Chorus' unallocated spend over the past three years against the FFLAS proposal, it suggests a significant increase in operating costs and high allocation of those costs to FFLAS consumers. For example, Figure 4 compares Chorus total opex to proposed FFLAS allocated opex, and proportion FFLAS allocated opex is of current total opex.

⁸ Comparison of Chorus reported fibre and common capex against Chorus' expenditure proposal (in both cases we have excluded fibre network extension (coverage), installation and capacity related capex where these can be identified). This is a broad comparison as, for example, it uses nominal rather than real spend.

Figure 4: comparison of Chorus opex for the period through to 2019 relative to the expenditure proposal



24. Again, a broad comparison can only indicate where further assessment may need to be focused. However, it suggests a significant proposed increase in Chorus corporate and shared costs, and high allocation of these costs FFLAS. For example, Chorus proposed to spend the same or more on FFLAS product and sales, operations and Corporate costs than it has for its entire business in the pre-regulatory period.
25. Nonetheless, the comparisons suggest further critical review of the proposal is warranted.

Whether the expenditure proposal is consistent with the purposes of the Act

Question 1

We welcome your views on the overall appropriateness of Chorus' expenditure proposal and on whether it will deliver outcomes to the long-term benefit of end-users with specific reference to the areas raised in paragraph 56. We are also interested in specific issues you think the Commission should focus on in its evaluation.

26. We welcome the opportunity to provide feedback on a range of issues raised by the proposal: Chorus' proposed incentive payments, levels of investment to support an unbundled layer 1 service potentially impact competition⁹, and the proposed high allocation of labour costs to FFLAS¹⁰. These elements of the proposal impact competition - no firm can compete against a regulated firm whose activities are funded through guaranteed BBM returns.

⁹ Para 36 of PQ consultation

¹⁰ Question 2 of consultation. Chorus proposes to allocate 91% of labour costs to regulated fibre services that contribute to around 50% of Chorus revenue and connections.

27. Axiom advised that we should expect Chorus to act on its natural incentives to assuage competition in other markets and the proposal suggests this has been the case¹¹. Chorus operates in a number of related markets – such as the provision of copper-based accesses, backhaul services such as tail extension, regional transport and future network services - and has strong incentives to use FFLAS and guaranteed regulatory funding to distort competition in those markets.
28. While we can't form firm conclusions based on the information in the proposal, what we do know about the expenditure proposal suggests that - if it were substantially adopted by the Commission - there is a real risk that it would be inconsistent with the purposes of the Act and other regulatory obligations.
29. For example, if the Commission accepted Chorus' proposal as it stands:

Significant FFLAS expenditure would likely cross into competitive markets

30. The comparison suggests that the expenditure proposal is premised on a substantial proportion of the costs to support Chorus' integrated business being allocated to FFLAS. However, we know that this complexity is costly to support and likely goes far beyond that necessary for FFLAS services.
31. Further, there is no clear demarcation between FFLAS and other services and this risks the proposal further subsidising competitive Chorus activities. For example, expenditure that crosses into competitive markets includes:
- a. A Corporate Innovation fund that on the face of it includes FFLAS and adjacent market services.
 - b. Dual fibre paths to UFB2 towns, transport fibre lifecycle replacement, the West Coast cable and RCG mobile sites (installation funding) all cross into competitive markets. The Government funded initiatives, in particular, were subject to competitive tender.
 - c. Product development and systems to support residential gateways, Artificial Intelligence, automated transport, and real time video streaming. While we need further information, none of these services sit comfortably within the FFLAS layer 2 bitstream access, and
 - d. Corporate, business transition and copper withdrawal costs.
32. Over time no firm can compete against a provider that can draw on regulated guaranteed revenues. Any approach that fails to draw a clear line around regulated expenditure and then also allocates the bulk of shared costs to the regulated service, will inevitably lessen competition in adjacent markets and inefficient investment. For example, Chorus would not face incentives to invest efficiently in new capability as it does not face full consequences of making an investment.

¹¹ These concerns are detailed in Axiom report submitted to the Commission in July 2019 https://comcom.govt.nz/_data/assets/pdf_file/0023/161915/Axiom-for-Spark-submission-Fibre-emerging-views-Report-July-2019.pdf

FFLAS cost allocation would be beyond any reasonable allocation based on activity, revenue or connection share

Question 2

We want to know whether you agree with this estimated allocation of labour costs to FFLAS for FY20. We welcome your views.

33. The Commission has also asked for feedback on Chorus' estimated allocation of labour costs set out in its December 2020 market release. Chorus reported in December 2020 that, if the expenditure proposal allocation methodology had been applied to reported earnings, 91.25% of FY20 labour cost would have been allocated to regulated fibre services.

34. The Commission further reports that¹².

Chorus' reason for this large allocation of labour costs to FFLAS, in its investor presentation, was that Chorus was founded as a fibre business and that, therefore, corporate overheads should mostly be attributed to fibre as these were incremental costs. However, given the relative segments of Chorus' business in 2020, as Chorus reported, we query this allocation of labour costs to FFLAS.

35. We agree that the allocation methodology and level of allocation to FFLAS is concerning. Chorus reports that over 90% of labour costs would have been allocated to FFLAS in 2020, whereas FFLAS represents about 50% of Chorus revenues and connections. Further, the Figure 4 comparisons suggest a high proportion of costs allocated to FFLAS, and these outcomes also appear inconsistent with likely activity in the network. For example, the copper network is more prone to faults and accordingly we would expect it to indirectly drive a material amount of labour activity (albeit service companies would address the actual fault), and NOC costs likely relate in part to the number of elements monitored.

36. This suggests the proposal weights shared costs to FFLAS and could be explained in part by Chorus' allocation methodology. Chorus's proposed methodology that the nominated founding business should bear the incremental costs of that business, would also imply that any second or subsequent business only bears the incremental costs of activities in those markets. Therefore, under the proposed approach only incremental costs are allocated non-FFLAS and competitive.

37. The proposed approach is inconsistent with how Chorus has viewed Chorus over time - Chorus has characterised itself as a network provider transitioning from a copper to fibre-based network.

38. Further, the proposed principle appears to simply restate the ACAM allocation methodology that is not available to regulated providers under the IM¹³. ACAM is premised on only incremental costs being allocated to unregulated services¹⁴ - which is the effect of Chorus' allocation principle. There also likely to be practical difficulties applying the approach, for example the Commission could equally declare that copper was Chorus' foundation business and only incremental costs allocated to FFLAS. It's also unclear what the principle might mean when applied to electricity sector.

The proposal risks double recovery of shared costs

39. The expenditure proposal also highlights the risk of double recovery along the lines TERA advised in its report to the Commission. TERA advised that - where you have two regulatory cost models both aiming to provide full cost recovery over time and shared costs – differences between the

¹² Consultation paper para 59

¹³ IMs reasons paper at 4.68

¹⁴ IMs reasons paper at 4.42.3

models in the allocation of shared costs can result in a misstatement of costs, i.e. the under or double recovery of those shared costs.

40. It was generally agreed through the IMs process that the double recovery of costs was not permitted by the Act. The Commission concluded that the double recovery could be minimised by, amongst other mitigations, cost allocator choice. For example, by applying an allocator that reflects the migration from copper to fibre services provides some protection against over-recovery¹⁵.
41. However, the Commission now faces an expenditure proposal that allocates a significant proportion of shared costs to FFLAS beyond that implied by the copper pricing model. As the Commission notes in the consultation paper, Chorus proposes to allocate over 90% of shared labour costs to FFLAS where these services comprise around 50% of Chorus revenue and connection share. As it stands, the proposal likely leads to substantive double recovery.

Chorus customer retention and incentive capex

Question 3

We welcome your views on customer retention and incentive capex, including whether the amount proposed by Chorus meets the expenditure objective and reflects good telecommunications industry practice. We are also interested in views on any competition impacts of this spend on relevant telecommunication markets and whether further information is required to assess Chorus proposed expenditure in this area.

42. Chorus has a number of incentive programmes that it proposes to include in the capital expenditure path. At this stage, these incentives include:
 - a. RSP payments of up to \$600 for connecting premises of customers who are not currently on fibre to the fibre network.
 - b. RSP payments for connecting or upgrading customers to higher specification services, with volume hurdles that require RSPs to limit sales to low specification variants.
 - c. RSP payments of \$104 for offering entry level fibre services priced at less than \$60 per month.
 - d. Term commitments of up to 24 months.
43. Chorus proposes that incentive payments be treated as capex and capitalised in to the RAB. The Commission has asked for views on these practices.
44. The Commission is right to question Chorus incentive pricing. Permitting Chorus to recover customer retention incentives is akin to creating an incentive for a dominant firm to engage in predatory conduct with a guarantee of future recoupment of the costs of funding a distortionary strategy.
45. There's nothing wrong with Chorus creating competitive alternatives by reducing prices and amending their product constructs to match or meet the market. However, by embarking on a strategy of targeted discrimination against RSPs with alternative infrastructure, and a pocket pricing approach with deep incentive offered exclusively to win over end users already on a competitors

¹⁵ IM past losses reasons paper at 3.329.

infrastructure, their approach anti-competitive in the circumstances. The ability to do so should be constrained.

46. We think the Commission should consider these concerns from at least three perspectives:

- a. Incentive payments designed or rely on targeting only customers that are prone to switching, and consequently are intended to exclude efficient prices from inert customers. A competitive and efficient market would result in the benefits of competition flowing through to all customers, including inert customers also seeing the benefits of low prices for the same quality service.

In a dynamic service market where customers have diverse preferences there will inevitably be consumers that appear to be inert and not on the right technology for them. Mobile providers have worked with the Commission on a range of measures designed to encourage customers to consider their needs to minimise the impact of customer inertia. It would therefore be a strange outcome that the Commission, in this context, were to adopt pricing structures that relies on and exploits customer inertia and embeds long fixed term commitments in retail markets.

- b. Its discriminatory in that it is targeted exclusively at providers of alternative infrastructure and their customers. There are a number of parallels with the Telecom Loyalty decision. The targeted nature of the initiatives and the hurdles they create for others are particularly egregious, and
- c. Its predatory in that its intended to raise the costs of competing providers or at least prevent RSPs from accessing cheaper alternatives efficiently. It is not hard to reach the inference that the purpose of these incentive payments are to restrict, deter or eliminate the entry or expansion of alternative infrastructure providers in the market. because

47. To best give effect to the purpose of Part 6, the Commission will need to consider the effect of pocket pricing on all end-users. Chorus' incentive scheme is specifically designed to reduce the effective price to customers that have proven prone to switching provider technology, leaving inert end-users who are less liable to switch facing higher fibre prices and undermining competing networks business models. The Commission must make decisions that promote the purposes of the Act.

48. Therefore, it should conclude that enabling Chorus to recoup incentive payments (which the majority of the market are disqualified from accessing), would not advance the purpose. If it were minded to compete on the merits Chorus could do so without a guaranteed return – in the same way as unregulated operators do. A better approach would be to capture reduced prices in the revenue forecast.

49. In addition, we consider the more detailed information disclosures should be sought to increase transparency in relation to costs, prices and revenue effects of such initiatives. The Commission could also bring forward consideration of pricing methodologies.

Quality proposal and reporting measures

50. Chorus has proposed that there be two reporting measures for PQ purposes:

- a. The maximum proportion of aggregation ports above utilisation thresholds by month (70% and 90% utilisation)¹⁶.

¹⁶ Our Fibre Assets at page 52

- b. The annualised average minutes downtime per access line by month¹⁷. This is a combined (reported, unplanned, confirmed, annualised)

51. Chorus would comply with the PQR by publishing these statistics annually, i.e. they would not establish threshold for compliance purposes

52. The network performance objective should relate to performance characteristics such as frame delay, frame delay variation and frame loss. However, we accept that properly constructed utilisation reporting can indicate whether these objectives have been met. We recommend that this include:

- a. A clear specification of the scope of the network, including the demarcation point for reporting purposes, ports in the network at which utilisation is measured and explicitly state what parts of the end-to-end service are not measured or reported on. This will make transparent whether reported ports reflect an uncongested network in practice, and the elements not reported on where congestion can also occur.
- b. A testing programme to validate that the utilisation threshold supports the target performance characteristics. The Commission should identify the performance characteristics it is expecting to see – such as defined in UFB Contracts - and this could then be related to the utilisation threshold. Chorus already has probes deployed in the network and must provide reporting on request¹⁸.
- c. Relevant frequency for interested parties to monitor outcomes – in this case we believe monthly reporting is required.
- d. Commission to consider augmenting the measurement reporting through information disclosure:
 - i. Identifying ports exceeding the utilisation threshold to make transparent that the same ports or regions are sitting consistently congested, i.e. Chorus is working to clear congested ports.
 - ii. Adding an “errors” reporting measure. The level of network errors is another indicator of network quality that captures, for example, degradation of the network across layer 1 and 2 elements. The expenditure proposal includes provision for lifecycle replacement of legacy fibre cable and, therefore, the measure should reflect improvements in the underlying infrastructure.
 - iii. In light of future demand, a similar OLT port utilisation measure.

53. We further agree that service availability is important for customers. However, the highly averaged nature of the measure is unlikely - on its own - to indicate whether Chorus has maintained or improved end user performance. For example, the proposed measure does not reflect planned downtime (which currently contribute a material portion of current outages), events outside the network that impact service and customers who face long restore wait times. If Chorus was to reduce service company capacity in a region, for example, this would be unlikely to materially shift the proposed measure but would result in significant wait times for customers at times of peak activity.

¹⁷ Our Fibre Assets at page 55

¹⁸ For example, see UFB Contracts <https://www.crowninfrastructure.govt.nz/wp-content/uploads/2011/12/UFB-Performance-Management-and-Reporting-17-Nov.pdf>

54. Accordingly, we recommend that the Commission maintain existing UFB Contract reporting measures which highlight the number of customers facing restore times longer than 4 hours.
55. More generally, Chorus' proposed approach highlights the importance of determining ID measures that provide transparency of key aspects of network and end user experience. If anything, the context within which the Commission is applying PQ and ID requirements suggest more information disclosure. For example,
- a. The PQ determination will not include quality or investment incentives for the first regulatory period and cannot be relied on to drive behaviours.
 - b. The acknowledged regulated provider incentives to reduce costs at the expense of consumer outcomes through the regulatory period.
 - c. The incomplete nature of the expenditure proposal that has provision for performance improvement capex – i.e. systems to better manage intact customer experience, reduced electricity costs¹⁹, upgraded fibre terminals²⁰ and fibre replacement – and no corresponding operating cost reduction or commitment to improve customer services, and
 - d. Chorus proposal that PQ performance commitments be deferred to the second regulatory period.
56. If anything, this suggests greater transparency is required so that we can see what is going on. A further consideration is to add measures that will enable the Commission to set appropriate quality requirements for the second regulatory period.

Recommended focus areas

57. Therefore, while it is difficult to form a firm view on the proposal, the proposal highlights focus areas for the remainder of the process. Accordingly, we recommend that the Commission focus on:

Addressing Chorus connection incentive proposal

58. Chorus pricing behaviour raises end user and lessening of competition concerns, and it would be difficult to approve proposed incentive capex. We recommend that the Commission not approve the capex proposal but instead account for lower prices for entry level services in the revenue forecast.

The boundary of the regulated FFLAS service and where this crosses into competitive markets

59. The expenditure proposal anticipated FFLAS funded investment in markets that Spark and other network providers are making significant investments. For example, Chorus' expenditure proposal seeks FFLAS funding for regional transport where there are already a number of providers. Therefore, it's important that proposed FFLAS projects are transparent, i.e. where the investment is to made and terms on which non-FFLAS services will use that infrastructure.

60. []SPKCI

61. []SPKCI

62. []SPKCI

¹⁹ Our Fibre Assets at 80

²⁰ Our Fibre Assets at 45

63. Accordingly, the areas where the Commission could focus its assessment includes:

| Ref | Expenditure proposal | Comment |
|--------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 19, 73 | West Coast fibre | <p>This cable was deployed through a competitive tender – it is unclear why this should then be funded through FFLAS.</p> <p>If the Commission were to accept that competitive projects are admitted to the RAB as of right, then it would likely jeopardise future processes. Firms are unlikely to tender for projects in competition with a regulated guaranteed return provider.</p> |
| 27 | RCG mobile site backhaul installations | RCG uses Chorus' mobile access product for backhaul links. Again, this is a competitive service at commercial rates. |
| 78 | Cook Strait cable leases | We understand this cable supports commercial service that are unrelated to FFLAS. |
| 19 | New Government programmes | <p>Chorus notes it has included all known Government programmes in its forecast and will bring new programmes into the forecast as and when they emerge. It's unclear why Chorus considers that Government initiatives beyond the UFB Initiative provided in the Act should be automatically included in FFLAS. These programmes are Government funded and competitively provided.</p> <p>We need the Commission to set out its approach to accepting new Government proposals in to the RAB. If it doesn't provide this transparency, then it is difficult for competing providers to participate in these tenders or invest due to the risk of being overlaid by BBM funded infrastructure.</p> <p>Overall, we believe the Commission should set the criteria for accepting expansion investment in to the RAB, not Chorus, and any non-commercial expansion should be through Government programmes with transparent rules relating to anticipated BBM funding.</p> |
| 36 | Customer migrations as copper is withdrawn | <p>The proposal appears to anticipate funding of managed copper migrations. However, copper withdrawal is driven by the costs to maintain the copper network and copper migration costs should be allocated to copper accordingly.</p> <p>This means that the lifecycle cost of copper services that we compete against are being subsidised through FFLAS.</p> |
| 70 | Dual fibre paths to UFB2 towns | <p>Chorus proposes to fund dual fibre to UFB sites of greater than 1000 customers. This extends the UFB contract commitments to provide dual fibre to sites with more than 3000 customers.</p> <p>We agree that added resilience may benefit some communities. However, at its core resiliency is a competitive aspect of a service and RSPs compete to provide additional quality.</p> <p>[]SKPCI</p> <p>The proposed approach risks undermining investment by competing backhaul and transport providers, reducing competition and investment in regional and national routes.</p> |

| Ref | Expenditure proposal | Comment |
|-----|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 44 | Lifecycle fibre cable replacement | []SPKCI |
| | RGW service enhancements ²¹ | <p>Chorus proposes to continue investing to enhance RGW capability. However, this capability goes beyond layer 2 FFLAS service, to the provision of in-home switching and potentially firewalls for example.</p> <p>On the face of it Chorus has deployed complex ONTs unnecessary for FFLAS – there are lower cost ONTs available that provide the necessary layer 2 functionality. The Commission should consider whether further enhancing Chorus RGW services through FFLAS expenditure is consistent with FFLAS and the purposes of the Act.</p> |
| 46 | Sustain capex | <p>The proposal includes capex to replace legacy cables and poles²². The Commission should also consider the allocation of this expenditure between FFLAS and other services.</p> <p>Chorus poles may also support copper services and failing to allocate an efficient proportion of lifecycle costs to these services risks slowing copper network retirement. If costs are inefficiently allocated to FFLAS, Chorus does not incur the efficient cost of maintaining the copper network and less incentive to retire legacy copper assets.</p> |

Resolving for a fair cost allocation, the promotion of competition and double recovery

64. On the face of it, the expenditure proposal over-specifies the shared capability necessary for FFLAS and then over-allocates the shared cost of that capability to FFLAS. Chorus' proposed approach appears blind to the implications for competition, and for the durability of the regulatory framework (no regulatory framework that builds in unearned profits is sustainable over the long term).
65. Accordingly, as discussed through the IM process, the Commission is now required to determine cost allocation rules that best support the purposes of the Act. To augment this assessment, we recommend that the Commission:
- a. Apply the cap set out in the IM that cost allocations may not exceed the avoided cost, summarised in the reasons paper as²³:
 5. The total shared asset values or operating costs that a regulated provider can allocate to PQ FFLAS and ID-only FFLAS combined, or ID FFLAS (whichever is applicable) FFLAS classes must not exceed the total asset values or total operating costs the

²¹ See Chorus roadmap referred above

²² Chorus fibre network page 56.

²³ Reasons paper at page 230

regulated provider could not have avoided if it ceased supplying services that are not regulated FFLAS.

6. This rule only applies to an allocation of an asset value or total operating cost that would have a material effect on the total asset values or operating costs allocated to the applicable FFLAS class.

High proposed FFLAS opex relative to other wholesale fibre network providers suggests that the avoided cost cap is likely to be exceeded and material. In doing this, the Commission should take a medium-term perspective of the costs that can be reasonably avoided, a medium-term approach would likely entail a smaller corporate function and labour allocation to FFLAS, and

- b. Develop further benchmarks of wholesale fibre network provider operating models and costs. This would inform the range in which, over time, we would expect FFLAS allocated costs to trend towards and settle at. The benchmarking suggests that this cap will come in to effect. Chorus' proposed allocations go far beyond what we see from standalone wholesale fibre providers.

Work to provide more transparency on FFLAS service and system development capex

- 66. The expenditure proposal includes provision for new services and customer management capability. We support funding of new FFLAS services and system development that will, for example, allow further digitising of Chorus processes to reduce overall costs.
- 67. While the proposal sets out high level projects such as support for artificial intelligence, automated transport, and real time video conferencing²⁴, it provides little information on the target architecture and specific enhancements that support those goals. Shorter term roadmaps are available to access seekers, but these only run through to the start of 2022 and contain a mix of FFLAS and other capability. Therefore, the necessary funding for new services and systems remains uncertain, i.e. whether more or less is required for FFLAS and systems.
- 68. We recommend that the Commission seek to promote more transparency relating to the dimensioning of the provision of for new services and system enhancements, and for the specific FFLAS related development roadmap. The Commission could consult further on these matters, and then individually as the roadmaps are developed.
- 69. Alternatively, Chorus could consult on these aspects, reporting back to the Commission the information consulted on (that should identify which proposals relate to FFLAS), a summary of parties' views and response on the views raised, and copies of the individual submissions received. All this information (except individual submissions where these contain confidential information) should be publicly released.
- 70. The expenditure proposal also seeks funding for "Corporate innovation". The proposal applies most of the \$42.1M capex provision aims to create longer term value²⁵. It is uncertain what this entails, in practice, how it relates to FFLAS and whether there is a double up with the provision for service development. We believe the Commission would need significantly more transparency relating to this programme to support this proposal and that, given where we are in the process, the proposal

²⁴ Our Fibre Assets at page 104 and 105.

²⁵ Our Fibre Assets at page 107.

should be considered via a separate capex proposal. In the interim, the Commission could also benchmark proposed corporate innovation spend against that of other wholesale fibre providers.

Work to provide transparency of costs and performance, particularly as this relates to consumer outcomes and planned layer 1 unbundling.

71. There is little if any information detailing the allocation of costs between FFLAS and layer 1 and 2 services. Accordingly, we recommend this should form part of the draft for consultation.

[End]

Attachment 1: CutlerMerz questions

Question 4

We welcome your views on corporate IT and support capex, and in particular the component relating to innovation spend. This includes whether the amount proposed by Chorus meets the expenditure objective and reflects good telecommunications industry practice.

The expenditure proposal also seeks up to \$42.1M funding for innovation. As noted above, it is unclear what this entails, in practice, how it relates to FFLAS and whether there is a double up with the provision for service development.

We believe the Commission should require significantly more transparency to support this proposal and that, given where we are in the process, that any approval be deferred and subject to a separate capex proposal. This is consistent with CutlerMerz's recommendation to ringfence the expenditure²⁶.

The Commission could also benchmark proposed spend against other wholesale fibre providers.

Question 5

We welcome your views on Business IT capex as well as the related opex sub-categories, including whether the amount proposed by Chorus meets the expenditure objective and reflects good telecommunications industry practice.

We support improving the end user experience and reducing costs. However, as discussed above, we have little information on the development roadmap and it is unclear whether the funding is relevant for FFLAS services. We recommended in our submission further transparency relating to the provision and FFLAS attributed projects.

don't believe it is possible to form a view based on the information available in the proposal. The high level have only limited visibility of the proposal and on individual initiatives as they become known.

Question 6

We welcome your views on augmentation capex, including whether the amount proposed by Chorus meets the expenditure objective and reflects good telecommunications industry practice. We also welcome views on whether this expenditure would be best treated as individual capex.

We agree any material augmentation beyond UFB2+ should be subject to individual capex proposal. Given current coverage required a subsidy, further expansion would likewise require Government funding to be viable.

We believe any BBM funding should be made contingent on the expansion being shown to make a positive contribution to FFLAS fixed costs.

²⁶ para 66 of report.

Question 7

We welcome your views on access capex, including whether the amount proposed by Chorus meets the expenditure objective and reflects good telecommunications industry practice.

Question 8

We welcome your views on site sustain capex, including whether the amount proposed by Chorus meets the expenditure objective and reflects good telecommunications industry practice.

Question 8

We welcome your views on field sustain capex, including whether the amount proposed by Chorus meets the expenditure objective and reflects good telecommunications industry practice.

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