



Chorus' initial price-quality regulatory asset base

Submission | Commerce Commission

28 May 2021

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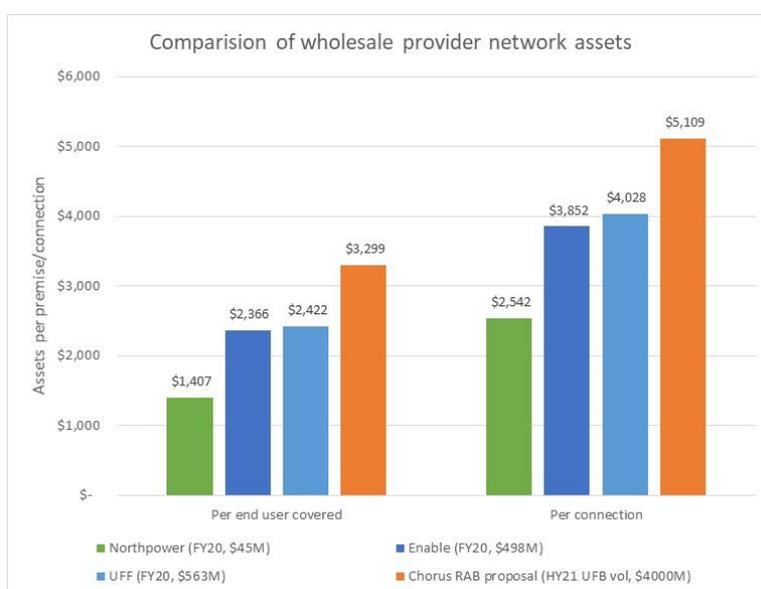
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Executive summary

Thank you for the opportunity to provide feedback on Chorus' proposed regulatory asset base (**the proposal**).

We support the Commission's intention to set the actual initial PQ RAB through 2022. The consultation paper highlights that the proposal appears to not apply key input methodologies (**IMs**), is incomplete in several areas, does not include key supporting documents and reverses previous Chorus held¹. These issues on their own will take significant time to resolve and assure.

Further, while the proposal is complex and financial values withheld, a high-level comparison of the proposal outcomes against other UFB providers suggests a significant loading of assets onto the regulated fibre business. Chorus claims 30% - 40% more network assets per end user are required to provide a Chorus fibre service than Enable, a smaller wholesale-only fibre provider with less access to synergies from existing telecommunications infrastructure².



We should expect Chorus to act on its natural incentives to maximise the regulatory asset base (**RAB**). It is the nature of these cost exercises that the cumulative effect of the model construct, assumptions and allocation choices, have a significant impact on the results. For example, the Commission highlighted in the IMs process that costs allocated could vary by over 100% depending on the chosen allocation³. Analysys Mason further produced a copper cost model for Chorus in 2014 claiming a \$91 per month cost per copper access⁴.

Accordingly, it is unlikely the Commission could lawfully accept the submitted proposal, and certainly not Chorus' non-compliant alternative, as consistent with the Act.

¹ For example, consultation paper at 4.45 notes inconsistent FLA depreciation, the Analysys Mason (**AM**) report lists differences at pages 96 to 104 of Annex D, and the demand and revenue model and FAR translation guides were not provided.

² A broad-brush comparison and there can a number of reasons for the discrepancy such as funding, asset or customer mix. Our analysis suggests that differences are unlikely due to density or topographical differences – and the most likely explanation is that some of Chorus' complex legacy assets are captured in the proposal.

³ Commission emerging views workshop June 2019 worked example at page 40

⁴ <https://chorus-nzx.hosting.outside.net/api/announcements/download/2014/375d1e5d-ab5c-491b-a92d-f7d03ade18f3/6b947da7-48bd-4c00-a641-1a26a83b6692/204917.pdf> at page 5

Process to determining the actual initial RAB in 2022

It is important that stakeholders have confidence in the determined RAB. Under the Commission's regulatory framework, the initial RAB is "locked-in" and accordingly has significant ongoing implications for consumers, downstream efficiency and ultimately the economy. The Commission should take the time to ensure it sets a RAB that stakeholders can rely on.

However, at this stage it is unclear what the process for setting the Actual Initial RAB⁵ in 2022 is, and therefore what weight parties can give to a transitional RAB that hasn't been considered in accordance with Commission process and approach guidance. The Commission process for setting the actual RAB in 2022 is not yet determined, noting that⁶:

We intend to confirm the process for how we will determine Chorus' initial PQ RAB and the ID RABs for all LFCs, in 2022, after we have determined PQP1. The initial PQ RAB will include our determination of the financial losses under Telecommunications Act 2001, s 177(2).

The Commission may wish to provide guidance on the intended process, particularly when decisions will be made that promote certainty for interested parties. The Commission could do this by addressing key IM compliance and methodological challenges posed by Chorus' proposal, narrowing the range of actual 2022 RAB outcomes. Accordingly, we recommend that the Commission aim to provide more certainty at the time it makes its final PQ determination by:

- a. Resolving the methodology and compliance challenges posed by Chorus' proposal and highlighted in the consultation paper, including inconsistencies with the IMs and proposed allocators that fail to result in the anticipated proportionate allocation of shared costs.
- b. Specify how assets should be identified as being employed in the provision of FFLAS. On the face of it, the proposed methodology – by seeking to allocate all fixed asset register assets and apply a layering of allocators to broad asset groups – inevitably assigns assets to FFLAS that are not actually employed in the provision of FFLAS, and is susceptible to gaming.
- c. Confirm that the IMs and Reasons Paper protections against double and over recovery will be applied, including a proportionate allocation of costs to reflect a multi-service firm transitioning from copper to fibre services, taking a time inconsistent approach to asset classes and allocator cap. Failing to apply these protections cuts to core principles that underpin the Commission's regulatory approach.
- d. Outline the high-level assurance modelling it will apply - as set out in the process and approach paper - to assure the RAB outcomes. The proposed modelling should include the TERA cross check (the approach taken to the proposal means information is readily available to the Commission to do this), whether a proportionate transition of costs occurs and likely materiality of the allocation cap.

⁵ The Commission will apply a tentative transitional initial RAB for the purposes of the 2021 price quality path, with the actual initial RAB determined through 2022 and wash up applying in 2025.

⁶ Process update April 2021 at footnote 5.

Introduction

1. Thank you for the opportunity to provide feedback on Chorus' RAB proposal (**the proposal**) and Commission consultation paper (**consultation paper**).
2. The Commission has proposed to consider the RAB through 2022, applying an interim tentative RAB for the purposes of the November PQ decision. We support the Commission's proposed approach – the Chorus proposal is incomplete, appears inconsistent with the IMs in several areas, does not apply several important protections against over-recovery, and would require significant further work and assurance to be capable of being accepted. There are substantive matters that the Commission will need to address.
3. In this submission we set out:
 - a. Reasons for supporting the Commission's proposed approach, recommending it consider further the expected purpose and outcomes from the initial tentative RAB.
 - b. Additional issues the Commission may wish to consider further and apply to the actual initial RAB to be set by the Commission, and
 - c. Provide feedback on the issues set out in the consultation paper.

The proposal challenges the IMs and is incomplete

4. The Commission has asked for comments on Chorus' RAB proposal. The Commission plans to subject the proposal to further analysis and seek further information and expert advice in order to set the actual RAB⁷.
5. We support the Commission considering the proposal in detail. On the face of it the Chorus proposal will likely require significant Commission and stakeholder review, an amended methodology, additional data, and expert review before the actual RAB can be set. At this stage, the proposal appears:
 - a. Incomplete in several areas:
 - i. Chorus has not applied key IMs such as the financial loss asset (**FLA**) depreciation profile. Analysys Mason (**AM**) for Chorus identifies nine confidential pages of differences between the methodology applied and the IMs⁸.
 - ii. While the proposal notes other several options were considered in choosing asset allocators, limited information is available on what these alternatives were and what impact they had on the results.
 - iii. The proposal does not include supporting documents⁹ and key information has

⁷ Consultation paper at 1.23

⁸ Consultation paper at 4.45 notes that the FLA depreciation profile is inconsistent with the input methodologies. The Analysys Mason report lists at pages 96 to 104 of Annex D the differences to the IMs that it believes has no economic impact.

⁹ For example, Chorus has provided background reports relating to the demand and revenue model (a key FLA input) and FAR translations. The consultation paper refers to reviews of the model for integrity and compliance with the IMs, but these do not appear to have been provided.

also been omitted as confidential.

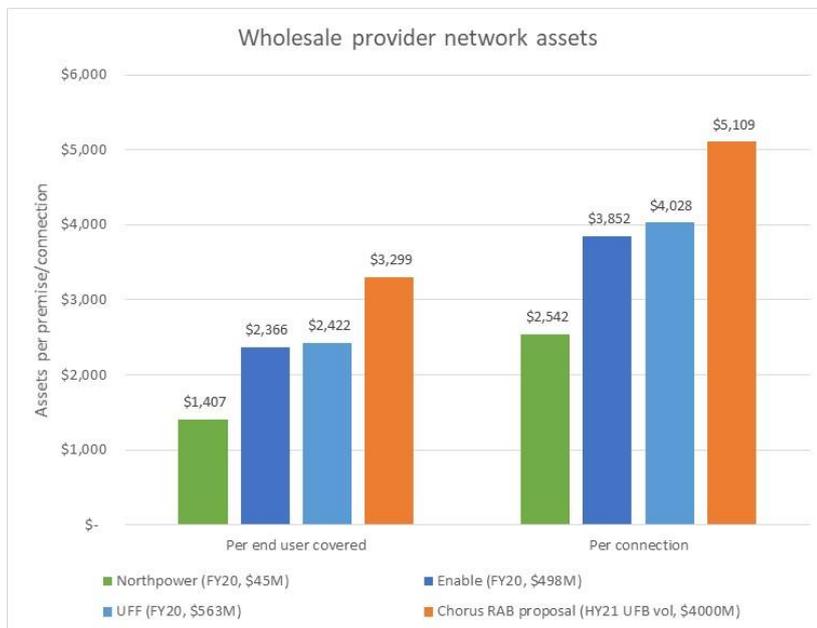
- b. Does not apply the IM protections as set out in the Reasons Paper that were expected to provide protections against over-allocation of costs to regulated fibre services.

For example, the proposal does not appear to recognise assets only at the time they are employed for FFLAS, proportionate allocations aligned with the copper to fibre transition and a cost allocation cap, and

- c. The cumulative effect of the methodology choices and allocators appears to result in a significant loading of assets on to FFLAS.

- 6. For example, high-level comparison of the outcomes of Chorus proposed methodology suggests a significant loading of assets on to the regulated fibre business. Chorus claims 30% to 40% more network assets are required to provide a Chorus fibre service per premises than Enable, a smaller wholesale-only fibre provider with less access to synergies from existing telecommunications infrastructure¹⁰.

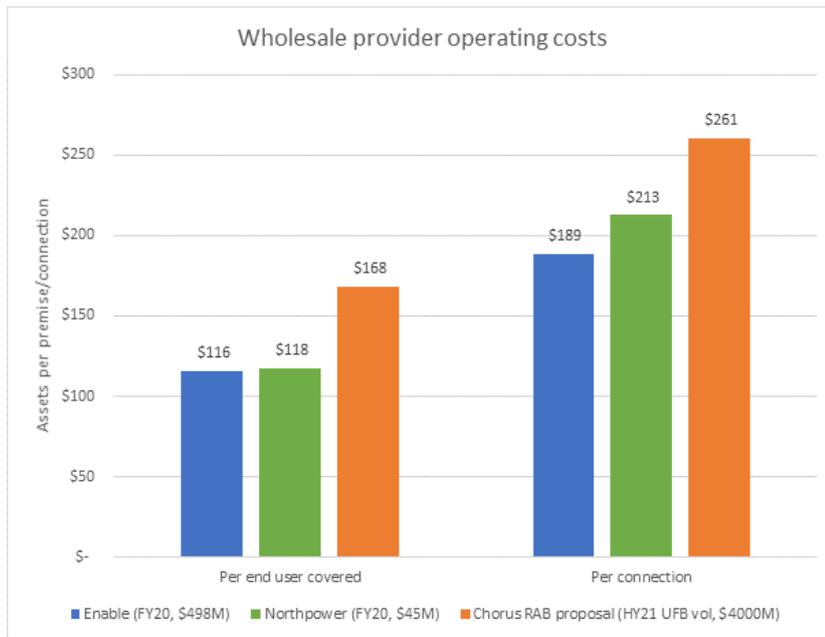
Figure 1



- 7. This is a broad-brush comparison and differences can relate, in part, to funding arrangements, asset or customer mix, density or topographical differences. However, our analysis suggests that the significant asset attribution differences we see in the comparison are unlikely to be attributed to density or topographical differences, or to a different asset to operating cost mix.
- 8. For example, as set out in figure 2, Chorus has also claimed higher operating costs suggesting that the significant asset allocations are not countervailed by lower operating costs. UFB has been deployed in geographies with a bounded variation of premises density - i.e. predominantly in metropolitan and suburban areas - and if anything, Chorus likely has a higher proportion of lower-cost-to-serve MDUs.

¹⁰ As with our expenditure proposal submission, this is a broad-brush comparison and there can a number of reasons for the discrepancy such as a different asset mix or customer mix. Nonetheless, Chorus is consistently claiming higher assets costs and opex than comparator firms and this suggests more work is required.

Figure 2



9. Accordingly, the most likely explanation for higher identified assets employed is that some of Chorus' complex legacy assets are captured in the proposal.
10. Further, it is the nature of these exercises that the cumulative cost model construct, assumptions, and allocation choices, has a significant impact on the results. The Commission highlighted through IMs development that costs allocated could vary by over 100% depending on the chosen allocation¹¹. Analysys Mason produced a copper cost model for Chorus in 2014 claiming a \$91 per month cost per copper access¹².
11. Therefore, we should expect Chorus to act on its natural incentives - and any information asymmetries available to it - to propose a methodology and parameters that maximise the RAB value. This is recognised in the Commission's proposed approach which anticipates the Commission seeking expert advice, determining asset values and allocators, and making decisions that best promote end-user interests.

Commission proposed process to determine the actual RAB

12. We support the Commission applying the comprehensive process set out in the 2020 process and approach paper to determining the actual RAB and accept that this will likely take until at least 2022.
13. The initial RAB is a key decision as the initial RAB value is 'locked-in'¹³ and expected to be maintained over time¹⁴. Accordingly, the initial RAB has lasting implications for Chorus' allowable revenue and end-user prices¹⁵, the efficiency of downstream markets and demand, and wider economic growth. It will also make a material contributor to end-user prices and no regulatory

¹¹ Commission emerging views workshop June 2019 worked example at page 40

¹² <https://chorus-nzx.hosting.outwide.net/api/announcements/download/2014/375d1e5d-ab5c-491b-a92d-f7d03ade18f3/6b947da7-48bd-4c00-a641-1a26a83b6692/204917.pdf>, AM paper <https://chorus-nzx.hosting.outwide.net/api/announcements/download/2014/5b078f14-4a38-49f4-8ab6-8a9c440a1c85/18ddbc1-0ee7-44f4-8836-9775b9b51c30/205054.pdf>

¹³ Process and approach paper at 5.109

¹⁴ The Commission applies the FCM economic principle.

¹⁵ Ibid at 5.109.1

framework that delivers unacceptable prices for end users is durable over time.

14. Accordingly, the Commission should ensure sufficient scrutiny and assurance is applied to the setting the actual RAB as set out in the process and principles paper¹⁶. Stakeholders must have confidence that appropriate scrutiny is in place, and that the actual RAB value best promotes s 162 and 166(2)(b) of the Act¹⁷.
15. The Commission has proposed a two-stage process whereby it will:
 - a. Set a transitional initial RAB (**transitional RAB**) for the purposes of setting the planned revenue path for the first period in November 2021, based on estimates of asset values and an application of provisional cost allocators¹⁸, and
 - b. Set the actual initial RAB (**actual RAB**) through 2022, with any differences between the transitional and actual RAB would be washed-up in the second regulatory period.
16. We appreciate that the Commission aims to provide certainty to Chorus and other stakeholders on the initial PQ RAB value as soon as practical¹⁹.
17. However, at this stage it is unclear what the process for setting the Actual Initial RAB²⁰ in 2022 is, and therefore what weight parties can give to a transitional RAB that hasn't been considered in accordance with Commission process and approach guidance. The Commission noted in the April process update that²¹

We intend to confirm the process for how we will determine Chorus' initial PQ RAB and the ID RABs for all LFCs, in 2022, after we have determined PQP1. The initial PQ RAB will include our determination of the financial losses under Telecommunications Act 2001, s 177(2).
18. The Commission may wish to provide guidance on the intended process, particularly when more certainty will be provided to the parties.
19. In particular, the Commission can provide more certainty – narrowing the potential likely Actual RAB values – by addressing the key IM compliance and methodological challenges posed by Chorus' proposal and considering the additional focus areas identified below.

Additional focus areas

20. The consultation usefully highlights particular elements of Chorus' initial PQ RAB proposal on which the Commission is seeking feedback, and we can confirm that these issues are a concern.
21. Chorus' proposal and documentation is complex, and numbers randomised in the supporting model. Accordingly, it is difficult to provide definitive feedback on elements, determine materiality or priorities for resolving issues.
22. Nonetheless, the information provided, and likely outcomes of the proposed methodology, suggest

¹⁶ Ibid at 5.135-5.136 where the Commission sets out the form of scrutiny and assurance it will apply to the Chorus proposal.

¹⁷ Ibid 5.121.1

¹⁸ Consultation paper at 1.20

¹⁹ Ibid 5.121.2

²⁰ The Commission will apply a tentative transitional initial RAB for the purposes of the 2021 price quality path, with the actual initial RAB determined through 2022 and wash up applying in 2025.

²¹ Process update April 2021 at footnote 5.

there are additional areas that the Commission should consider further. In particular:

How the Commission will go about identifying assets employed in the provision of regulated services

23. Chorus' proposed methodology highlights a number of uncertainties with the process for identifying employed assets, for example Chorus appears to have applied a methodology that:
- a. Assumes all residual fixed asset register (**FAR**) assets – i.e. after directly attributable assets are assigned – are employed in the provision of FFLAS
 - b. Applies broad asset categories and layered two-step allocation processes that the Commission has observed results in large swings in allocations and is susceptible to gaming.
 - c. Does not specify the scope or FFLAS service delivery point, and therefore likely captures assets employed in the provision of downstream and adjacent market services.
24. The proposed methodology, in itself, would inevitably over-state assets employed in the provision of FFLAS as it potentially captures unused assets for the RAB. These concerns are set out in more detail.
25. The proposal is complex and incomplete, and it may be that these concerns are resolved in the detailed documentation or model. Nonetheless, even if this were the case, the Commission should set out how it intends to identify assets employed for the purposes of the initial RAB.

The proposed methodology allocates residual rather than “employed” assets to FFLAS

26. In particular, the proposed approach to identifying assets employed in the provision of FFLAS (or the FLA) appears to
- a. Start with the FAR²² as it was in 2012.
 - b. Directly attributable assets for copper or relevant fibre services²³ are excluded from the allocation, i.e. Analysys Mason (**AM**) explains that it includes all assets except those fully dedicated to copper, RBI or lost UFB areas²⁴, and
 - c. Residual assets are assumed to be employed in the provision of FFLAS and allocated using various layered allocators, i.e. first to geographies and secondly between copper and regulated fibre services.
27. In other words, the methodology aims to fully allocate FAR assets and, in doing that, assumes residual assets within a geography are employed in the provision of FFLAS²⁵.
28. The residual approach, however, is likely to capture assets that are not employed for FFLAS in practice, i.e. because they are redundant or unusable assets, or assets that are overlaid by the fibre

²² While the FAR processing document has not been provided to interested parties, the AM paper outlines at A-17 that the model starts with a RAB for all assets. See also 4.2.2 of the AM paper.

²³ Relevant fibre services vary slightly between pre-implementation (contracted UFB FFLAS only) and at implementation (all FFLAS).

²⁴ AM at 4.2.2.

²⁵ Assets are grouped into copper switch network exchange service areas (**ESAs**) and a national category for assets that cannot be associated with an exchange.

network. For example, in terms of ducts, the path dependent nature of the existing duct network means that some existing ducts routes will be unusable for the fibre network because the duct is unserviceable, inconsistent with the fibre network design or overlaid with new ducts due to their condition. However, the proposed methodology would see these unused routes allocated to the fibre RAB.

29. We have a number of concerns with Chorus' proposed approach to identifying employed assets. The proposed methodology:

- a. Is based on identifying and allocating FAR residuals rather than an analysis of assets employed in the provision of FFLAS as required by the IMs and Act. The approach is inevitably less accurate than a bottom up analysis based on network records and susceptible to gaming.
- b. Is inconsistent with anticipated mitigation against excess returns that anticipates, amongst other measures, a tight and accurate identification of assets employed in the provision of regulated fibre services to minimise reliance on allocations and mitigate against over recovery and excess returns²⁶.
- c. Inevitably transitions Chorus' legacy business model assets to FFLAS. As copper demand expires, Chorus' current legacy business would form the default regulated future fibre business - this was the specific policy outcome that the decision to implement a fibre only RAB sought to avoid.

While Chorus' business model is for Chorus to determine as a multiservice provider, this should be based on its efficiencies rather than an over-reaching BBM.

- d. Does not apply the IMs as intended by failing to use all the relevant information – i.e. data in GIS and FAR – to reduce the pool of shared network costs and hence the potential size of variances in the allocation²⁷.
- e. Relies primarily on the use of stepped allocators to identify assets. This approach, by its nature, and as explained in the Reasons Paper²⁸, is less reliable and more susceptible to gaming.

For example, Chorus proposes to identify the value of shared duct by the proportion of duct length in the UFB area relative to the ESA area that it sits in. If Chorus was to use duct trench length less value would be ascribed to shared assets than if it uses the sum of the length of individual ducts (because as noted in the paper UFB area trenches are more likely to contain multiple ducts).

- f. Related to allocator choice, the proposal allocates some assets on the basis of demand for services that are not associated with the employed asset – such as demand in an ESA or nationally²⁹ from customers outside UFB geographic areas - and this can incorrectly increase assets allocated to FFLAS over time. For example, where Chorus loses a copper customer to alternative services such as wireless broadband outside the UFB footprint, the allocation of costs to FFLAS increases even though there hasn't

²⁶ For example, see FLA decisions paper at X25 and 3.256

²⁷ Reasons Paper sets out at 4.163 to 4.167 the Commission expectations.

²⁸ Reasons Paper from 4.225

²⁹ AM IAV model documentation at 4.2.4 and A-38

been increased use of the fibre network.

30. We believe that identifying assets employed in the provision is a requirement of the Act and has a material impact on the reliability of the model and model outcomes.
31. Accordingly, the Commission should consider and set out how it will identify these assets in a way that meets the requirements of the Act, and to mitigate the risk of double recovery and achieve a proportionate transition of shared costs from the copper to fibre network.

Broad asset groupings risk over-stating employed assets

32. Further, Chorus' proposal appears to be based on broad categories of exchange service areas (**ESAs**) and asset classes. However, broad geographies and asset classes risks including assets that are not functionally required.
33. Chorus' proposed residual approach and application of broad categories risks mistakenly identifying unused assets as employed. For example, using ducts again, while we accept that it is not possible to unbundle elements of a duct route such as the trenching cost, the fibre network will inevitably not use all duct routes within an ESA and some routes should be omitted from the RAB. Aggregating all ESA geography ducts into a single asset class will overstate assets employed in the provision of FFLAS.
34. The proposal currently applies a limited geographic filter through identified ESAs and a rest of NZ (RONZ) category, particularly through the pre-implementation period. The product mapping Chorus has provided to the Commission³⁰ for the purposes of the draft PQ determinations suggest that FFLAS services will be widely available post-implementation and, together with broad asset classes, this suggests that almost all legacy assets will be brought in to the RAB over time.
35. The proposal refers to a FAR paper, although not provided, and this may set out how these assignments occur and identify residual legacy assets that are not expected to transition to the RAB. However, in all cases, the Commission should consider whether asset groupings have been correctly applied, considering asset groupings that best supports the identification of assets employed for FFLAS and, in the context of the FLA, a transitioning copper to fibre business.

Assets for the provision of other and downstream services being assigned to the RAB

36. The proposal also does not appear to clearly define the limit of the FFLAS service – i.e. the service delivery points - and there is a risk that assets are brought into the RAB that are not employed in the provision of FFLAS.
37. The Commission has requested views on the completeness, accuracy and categorisation of Chorus proposed FFLAS services in the draft PQ determination³¹, and this highlights the uncertainty over the scope of FFLAS services. For example, on the face of it this proposal seems to suggest that Chorus considers services such as the residential gateway, competitive collocation and CRT (Chorus transport service designed to compete against other national providers) are FFLAS services at least in part.
38. We agree with the draft PQ determination that defining the scope of FFLAS is central to Part 6 regulation (and RAB), and the inclusion of these proposed services potentially adds significant cost to the RAB. For example, while we do not believe the residential gateway service is a FFLAS or

³⁰ Draft PQ determination at Attachment I

³¹ Ibid from 2.31

specified in the UFB agreements, supporting the service adds significant complexity and costs to an end-to-end service. In the absence of a clear definition, regulated providers have an incentive to optimise between in and out of scope services.

39. Again, we appreciate that the service demarcations may be specified in model documentation not provided to parties. However, Chorus’ proposed categories and claim that all investment (except that directly attributable to copper) is directly attributed to fibre suggests the proposal incorrectly attributes many of these costs to FFLAS. In the case of the FLA, the UFB Contract services do not include additional downstream variants, and these should be omitted from the FLA calculation.
40. Accordingly, we recommend that the Commission consider the service demarcation further (in light of the Act that also prohibits Chorus from providing services beyond layer 2) testing that downstream and prohibited services are not assigned to the RAB.

Chorus appears not to have applied the Reasons Paper methodology

41. The consultation paper notes that Chorus appears to have not applied elements of the IMs.
42. The Commission also provided specific guidance relating to the allocation of shared costs, reflecting concerns relating to double recovery, windfall gains and Chorus’ natural incentives to maximise BBM costs.
43. However, Chorus has not applied the methodology consistent with these protections³²:

Measure	Further guidance	Comment
a. Assets would only come into the FLA, and post-implementation, into the RAB, when they are employed in the provision of FFLAS	<ul style="list-style-type: none"> Apply filters to capture extent to which assets have been deployed, i.e. recognition of shared assets only as UFB roll-out³³. Costs excluded if information constraints prevent costs being excluded. 	<p>Partially applied.</p> <p>While unclear from proposal, the current methodology is not as described in Reasons Paper and the effect of this is not known.</p> <p>The fully allocated FAR and GL approach will inevitably mis-identify employed assets.</p> <p>Benchmarking suggests the FLA and thus the RAB is over-stated.</p>
b. Proportionate cost allocation using ABAA.	<ul style="list-style-type: none"> Pre-implementation expected to reflect transition from copper services to fibre services - to provide some protection against over-recovery³⁴ 	<p>Not applied - cost allocators such as duct length used and total expenditure (totex) will not result in demand proportionate allocation.</p> <p>Includes demand based allocators use demand for services that are unlikely to use the shared asset.</p>

³² FLA Reasons Paper at 3.304 and 3.327, and 3.355 to 3.356. Reasons Paper at 4.265

³³ FLA Reasons Paper at 3.328 and FLA further consultation paper at 2.96.1

³⁴ FLA Reasons Paper at 3.329 and Reasons paper at 4.266

Measure	Further guidance	Comment
c. Causality applied with consideration of how asset is employed at each stage of its life ³⁵	<ul style="list-style-type: none"> This is to ensure consistency with "s177(6)(b) that asset is employed for provision of FFLAS. Particularly relevant to multiservice Chorus transitioning from copper to fibre technology - recognises that investment decisions likely to factor in the benefits to all services across the life of the asset³⁶. 	Not applied – inconsistently applied to asset class through time, i.e. duct and power use classes change through time.
d. Cost allocation data is to be updated annually		Unclear
e. The inclusion of a cost cap for the purposes of the FLA to limit the amount of costs for reused assets to those which cannot be avoided in providing the UFB services	<ul style="list-style-type: none"> The cap on costs applies equally to the calculation of the past FLA.³⁷ Recognises the potential harm that would occur if such assets had 'nominal' costs in excess of what would otherwise have been incurred in providing UFB services. 	Not applied.
f. The use of a list of default allocators ³⁸		Chorus has proposed additional allocators.
g. Cost allocators are applied consistently across like costs and between years to minimise gaming ³⁹		Not applied - Chorus has applied different methodologies to existing and new fibre assets.

44. The Commission has indicated that it will determine the FLA, actual initial RAB and the relevant cost allocations used⁴⁰. Accordingly, the Commission is likely left with the task of applying the approach anticipated by the Reasons Paper and the Act, including the extent to which a choice between allocators such as premises passed or actual connections may have implications for double recovery, and whether it may be appropriate to apply different allocators to different types of costs⁴¹.

Incenta advice to Chorus relating to the shared cost cap

45. The proposal does not apply the cap on allocation of shared costs to FFLAS. AM note that the model assumes that a limit on the allocation of shared costs does not apply over the period of the model⁴². While it is unclear what the basis for this assumption is, Incenta has advised for Chorus

³⁵ Reasons Paper 4.156 -4.157

³⁶ Reasons Paper at 4.157

³⁷ Further FLA consultation 2.96.4

³⁸ FLA at 3.333

³⁹ Reasons Paper at 4.266

⁴⁰ Process and approach paper at 3.304 and 3.346

⁴¹ FLA reasons paper at 3.383

⁴² AM at 3.6.2

that the cap is unlikely to bind on the basis that⁴³:

- a. The IMs require causal based allocators opex cap that has the effect of sharing economies, implying that allocated should be below standalone cost.
- b. In relation to assets, causal allocations and existence of sunk assets means the extent of assets avoided is likely to be minimal.

46. Incenta further advises that consideration of a cap is based on cost reductions that can be achieved in reality⁴⁴ and a hypothetical exercise relating to the costs that could be avoided. To the degree to which the Incenta cost driver mitigations are relevant, this assumes there are no legacy issues that result in higher costs compared to what there would be for a fibre only business⁴⁵ and assets do not have an alternative use.

47. We agree, the IMs and Reasons paper anticipates an empirical analysis applied on a with and without basis in order that the Commission can be satisfied that costs are not inefficiently being over-allocated to fibre. The cap sits beside other protections such as the use of proportional allocators.

48. However, the IMs recognise that applying the cap would be a pragmatic and proportionate exercise undertaken by Chorus⁴⁶ and not something explained away on a theoretical basis.

4.131 We consider that Chorus should be able to identify instances where such a cap might take effect, eg costs that could be prudently avoided such as space vacated in a central office which is no longer required for FFLAS.

4.132 We note that for all regulated providers, this cap only applies to shared costs that would have a material effect on total costs allocated to regulated FFLAS (and not costs that are below this threshold). We consider that in doing so, it would be reasonable for the regulated providers to aggregate some related expense items or asset values, to avoid the need to assess each asset value or expense on an item-by-item basis.

4.133 We expect that these organisations would be able to draw on resources such as ongoing asset management planning and review of operating efficiency in order to make these assessments. We also note that benchmarking could be used to address gaps in a regulated provider's data set and to demonstrate compliance at a broader level, such as overall expenditure on network operational support systems.

4.134 We do not consider this requirement should be onerous in the case of many costs which are inherently stand-alone and necessary for the operation of a FFLAS network (eg, lead-ins, ONTs) or where efficiency gains can be readily demonstrated from the sharing of resources (eg, head office resources).

49. Incenta's concerns only apply in a single set of circumstances. For example, if there was no error in the chosen allocators, if Chorus' legacy business costs weren't constrained to be higher than a fibre only business, if there were no error in the identification of asset employed in fibre, if a residual methodology to fully allocate the FAR and GL hadn't been applied, if assets could not reconfigured and if no assets were fungible, then it would be safe to assume that the cap is unlikely to bind.

50. We believe that the proposal should have included the pragmatic assessment of the cap in the context of the allocations:

⁴³ Incenta at 2.3.3

⁴⁴ Ibid at 2.1

⁴⁵ Ibid at 2.2

⁴⁶ Reasons Paper at 4.131

- a. As it stands, the proposed methodology and high-level benchmarking suggests a material misstatement of cost and a binding cap on many costs is likely. For example, the proposed approach to exchange space is contrary to the Reasons Paper approach which anticipates – as copper use falls away – that space is reused and forms part of the avoided costs⁴⁷,
- b. Chorus has a complex and high cost legacy business that likely has significantly higher costs than a fibre only provider would have, and
- c. The cap was an integral part of the protections set out in the Reasons Paper and the Commission should apply it as indicated.

51. Accordingly, we recommend that the Commission:

- a. Critically assess key asset and operating cost categories – such as exchange space and labour – by applying the prospective analysis anticipated by the IMs, and
- b. At a minimum, apply the prospective caps identified in the Reasons Paper. For example, the Commission noted that exchange space would not be fully allocated to FFLAS and that the cost of deploying FFLAS equipment in a cabinet might form a cap (discussed below), and
- c. Undertake its own benchmarking against other provider costs as signalled in the process and approach paper to test whether the RAB – after caps are applied – leaves residual concerns, i.e. there likely continues to be an overstatement of cost.

Double recovery, proportionate allocators and the TERA cross-check

Allocation of costs proportionate to the transition from copper to fibre

52. The consultation also indicates that the proposed allocators may not result in a proportionate allocation of cost as expected, and this may be inconsistent with the outcomes expected for a multi-service firm transitioning from copper to fibre, and mitigation of double recovery concerns.
53. The proposal does not discuss the proportionate transition of costs. However, Incenta has advised that a per customer allocator would be neutral in relation to the avoidance of double recovery only where the “shared costs” allocated between copper and fibre are unchanged by the subsequent provision of fibre⁴⁸, and it is inevitable that shared costs have increased as a consequence of the fibre roll-out.
54. The inference being that the Commission should be unconcerned that proposed allocators do not result in the expected proportionate transition of costs from copper to fibre. Incenta further advise that causal allocators may result in recovery overall or an under-recovery, even if the causal allocator resulted in a materially higher allocation than a per connection allocation⁴⁹.
55. We disagree with Incenta’s suggestion that the Commission should not, or does not need to, ensure a proportionate transition of costs. The risk of over or double recovery was considered at length through the IMs process, and the Commission determined measures aimed to mitigate these concerns including the allocation of costs proportionate to the transition of demand from the legacy

⁴⁷ Reasons Paper at 4.111

⁴⁸ Incenta at 3.1

⁴⁹ Ibid at 3.3

copper to fibre services. It would be a significant and material change if the Commission no longer intended to apply these mitigations.

56. The Commission should apply the IM mitigations as set in the Reasons Paper in setting the actual initial RAB and, if there is a concern that shared costs are misaligned, this can be mitigated through more targeted identification of employed assets (minimising shared costs that must be allocated) and applying the TERA cross-check.

57. In any case, there is nothing to suggest that shared costs are misaligned:

- a. The FPP was based on the costs of a fibre provider and, as Chorus transitions to fibre, we would expect Chorus costs to approach fibre costs over time not depart as Incenta fears. TERA advised that FPP and BBM controls both seek to provide a normal return over time, suggesting that costs would converge.
- b. There might be some transitional differences across time, but the proportionate allocation wasn't intended to resolve all double-recovery - which was seen as impractical – just to mitigate amongst a package of measures.
- c. There does not appear to have been a material change in Chorus reported operating costs as the UFB network was deployed. Chorus' reported operating costs in 2020 dollars have remained static to marginally declining over the period that Chorus has grown its' UFB business. It is unlikely that Chorus' shared costs have increased and, overall, it suggests that costs are transitioning between copper and fibre in line with the transition of the business (as per the demand-based allocator).

58. Accordingly, we recommend that the Commission:

- a. Apply the mitigations as set out in the IMs and Reasons Paper to mitigate double recovery concerns, including applying proportionate allocators in line with the transition of demand; and
- b. Apply the TERA recommended cross-check against the misstatement of costs.

A cross-check on the under or over-statement of cost

59. Concerns relating to under or over-statement of costs were discussed at length through the IMs process. TERA advised that there is inherently a risk of risk over or under recovery where two controls are applied that seek to provide a normal long run return and there are shared costs, and there are differences in how these shared costs are allocated. TERA recommended a cross-check against over or under recovery by applying the fibre IMs costing methodology across both copper and fibre services to highlight whether this has occurred.

60. The Commission had reservations about TERA's proposed cross check as the regulated tariffs for copper services (UCLL and UBA) were not set using a BBM approach, and therefore comparing the copper tariffs to costs determined using a BBM approach may result in under- or over-recovery⁵⁰.

61. However, in practice Chorus' proposal is based on de-constructing – and reconciling to - the existing FAR and GL costs and, accordingly, the cross-check can be applied without relying on prior FPP modelling parameters. The BBM cross-check could therefore be applied across copper and fibre services (based on the information developed to prepare the proposal) without concerns that it

⁵⁰ FLA Reasons Paper at 3.369

may incorrectly identify a misstatement of cost.

62. While not suggesting the Commission should adjust BBM outcomes to reconcile to the cross-check, we believe it provides a useful benchmark to highlight whether the Commission's allocators and implementation of the BBM is delivering the intended outcomes. If there were a material disconnect this would simply signal that further consideration was required.
63. The Commission should apply the cross check as part of its planned modelling assurance exercise based on the inputs already available through the proposal.

Focus areas identified by the Commission

64. The Commission has highlighted particular elements of Chorus' initial PQ RAB proposal on which it is seeking feedback, including
 - a. Direct attribution of assets to UFB FFLAS;
 - b. Allocation of shared assets created pre-1 December 2011;
 - c. Operating costs allocated to UFB FFLAS during the pre-implementation period;
 - d. Revenue allocated to UFB FFLAS during the pre-implementation period;
 - e. Cost allocators requiring Commission approval; and
 - f. FLA life.

Directly attribution of assets to UFB FFLAS

What are your views on Chorus' forecast level of direct attribution of capex spent between 1 December 2011 and 31 December 2021 to UFB FFLAS, is Chorus' estimate reasonable? Please explain your views.

Do you support Chorus' proposed direct attribution of assets to UFB FFLAS (ie, whether Chorus' approach of 100% allocation is consistent with the definition of "directly attributable" in the IMs, which is where an operating cost is wholly and solely incurred, or an asset is wholly and solely employed, in the provision of a particular service)? Please explain why you support or do not support Chorus' proposal.

65. The Commission is interested in stakeholders' views on Chorus' direct attribution of assets and operating costs. Directly attributable being where an operating cost is wholly and solely incurred, or where an asset is wholly and solely employed, in the provision of a particular service.

The proposed approach does not seem plausible

66. The underlying expectation through the IMs process was that, as is a multi-product firm, we would see a material proportion of costs shared between regulated and non-regulated services, and as the use of an asset by services changes over time so would the allocation.
67. However, the Commission has observed that the proposal claims a significant proportion of RAB assets are assumed to be directly attributable to UFB FFLAS indicating there is never any sharing of these assets or functions with other services, i.e.
 - a. The Commission has not identified any asset allocators that start off at 100% (ie, direct

attribution to UFB FFLAS) which then subsequently become partly allocated to services that are not UFB FFLAS⁵¹.

- b. Whereas power assets deployed prior to 2012 are allocated on power usage, power assets deployed after 2012 are 100% allocated to FFLAS (implying there is no sharing of these assets over their lives)⁵².

68. We agree this outcome does not seem plausible for a multiservice firm:

- a. Chorus operates in a number of markets and multiple services are expected to draw on fibre and power infrastructure. For example, Chorus provides copper, fibre and collocation services at exchanges (i.e. for service provider equipment and mobile cell sites).
- b. It is unlikely that over the ten-year period there has been no growth in other services and that, while these are long life assets, no equipment or batteries have needed to be replaced for lifecycle reasons.

69. We do not have the data that would allow us to quantify the expected sharing that occurs in practice. However, the Commission could test proposals through considering copper data growth (as a proxy for power consumption), whether there has been investment in copper equipment since 2012 or review project business cases for drivers.

The approach is not consistent with FLA principles and the expected Reasons Paper outcomes

70. On the face of it, rather than an allocation question, the proposal signals differing views in whether new investment in existing assets classes and platforms should be allocated to all services using the platform or only to the incremental fibre service.

71. The proposal assumes that all new fibre capex is directly attributable to FFLAS for the pre-implementation period (2011-2021). However, our understanding through the IMs development was that such investment would be allocated to all copper and fibre demand on the basis that Chorus operates a multiservice network that is transitioning from primarily copper to fibre services. This formed part of a package of measures intended to mitigate double recovery concerns.

72. Chorus' proposal does not appear consistent with - and potential undermines - key elements of the Commission's IMs framework, for example:

- a. The Commission concluded that, as Chorus was a multi-service firm, all services should make a contribution to costs and accordingly an incremental cost approach to valuing the FLA was not warranted⁵³.

However, the proposal optimises between an allocated and incremental methodologies, applying an incremental to fibre methodology in some circumstances and an allocated approach in other circumstances to the same platforms to maximise FFLAS costs. The Commission should take a consistent approach to this should be taken over time (to existing and new investment in the shared platforms) and across demand.

- b. The proportionate allocation of platform costs was a key mitigation to concerns relating

⁵¹ Consultation paper at 4.10

⁵² Ibid at 4.11

⁵³ For example, see FLA Reasons Paper at 3.361

to double recovery, i.e. because the proportionate transition of the fibre business would approach the approach that sits behind the TSLRIC model.

73. The Commission should be internally consistent in its approach to determining the actual RAB. For example, if Chorus is correct and an incremental to fibre approach taken to new investment in shared asset classes, then the principle should be applied consistently on both sides of the equation and an incremental to fibre approach taken to use of the existing assets.
74. Nonetheless, we believe that the Commission should, for the purposes of setting the actual RAB, apply the IMs and Reasons Paper expectation that there be a proportionate allocation of investment in shared platforms prior to implementation between copper and fibre services.

Opex

What are your views on Chorus' forecast level of direct attribution of opex spent between 1 December 2011 and 31 December 2021 to FFLAS, is Chorus' estimate reasonable? Please explain your views and provide justification if you consider a different level would be more appropriate.

75. Financial values in the model have been randomised and it is unclear to us whether the direct attribution of opex to FFLAS over the pre-implementation period is reasonable.
76. Nonetheless, Chorus' proposed methodology raises questions, and the Commission is right to consider the allocation of opex further. Chorus has applied a 2-step process⁵⁴ to allocating operating costs for the purposes of the FLA (operating costs from the general ledger (**GL**) are first allocated out to expense categories and then these are allocated to services, a further allocation occurs in the IAV).
77. It is unclear why Chorus has applied this approach – Chorus was highly critical of Commission proposals to specify the 2-step allocation process for PQ and information disclosure purposes⁵⁵ as unnecessary and only driving further time, cost and complexity into the regime⁵⁶. The Commission had proposed prescribing a two-step process as being transparent and providing a common view of allocated costs, recognising that a two-step approach can lead to disproportionate allocations based on allocator choice and was prone to optimisation between the steps (gaming)⁵⁷.
78. Nonetheless, the proposed approach raises concerns that should be considered further:
- a. Chorus' proposed approach appears to have the objective of fully allocating GL costs from the GL⁵⁸, and this raises similar concerns with the residual methodology for fully allocating assets from the FAR.

As the approach aggregates up cost data and then fully allocated these costs it will likely err towards over-allocating opex to FFLAS. A significant proportion of Chorus costs are driven by the complexity of its legacy business and – as no optimisation is

⁵⁴ Consultation paper at 4.13

⁵⁵ The Commission was concerned that the sequencing of two step allocations can result in significant differences in allocations to services, and that a regulated provider would “optimise” the sequencing for preferred allocation outcomes. Further consultation draft – reasons paper June 2020 from 3.148.

⁵⁶ Chorus submission on further consultation draft reasons paper at para 54.

https://comcom.govt.nz/_data/assets/pdf_file/0013/223114/Chorus-Submission-on-Fibre-IMs-further-consultation-package-13-August-2020.PDF Considered by the Commission from 4.244 of the Reasons Paper

⁵⁷ Reasons Paper at 4.226

⁵⁸ AM opex report pg1

applied - the approach results in these costs being substantially transitioned into FFLAS.

- b. AM reports that it has identified costs as directly attributable when these are not directly attributable in fact – this is unlikely to be consistent with the IM requirements⁵⁹.
- c. The layering of allocators highlights the sequencing concerns – i.e. large swings in outcomes and potential gaming – of a two stepped approach highlighted by the Commission in the further consultation draft reasons paper⁶⁰.
- d. We believe identifying employed costs based on top-down allocators is less accurate and more prone to gaming.

79. Accordingly, we recommend that - as part of considering the proposal – the Commission test that operating costs allocations result in the proportionate transition of costs from copper to fibre services and that it is consistent with the benchmark costs seen from other wholesale providers.

Allocation of shared assets created pre-1 December 2011

What are your views on Chorus' proposed allocation of pre-2011 ducts based on the proportion of those ducts that are within its UFB contract areas, multiplied by the proportion of UFB uptake? Please explain your views and provide justification if you consider a different allocation would be more appropriate.

Is Chorus' proposed allocation of costs associated with any surplus space within buildings to UFB FFLAS appropriate? What alternative allocators might better reflect the space actually occupied and should therefore be considered? Please explain why you support Chorus' proposal or why any alternatives you propose would be more appropriate.

80. Chorus has applied a two-step allocation process to key assets that, on the face of it, conflates the identification of assets employed for the provision of FFLAS with the allocation of shared costs of those employed assets. As set out above, a two-step process is potentially less accurate and prone to gaming the sequencing.

81. Chorus's approach appears based on taking all FAR assets within a geography – i.e. an ESA or RONZ – and then applying two allocations:

- a. First, the ratio of pre-merger duct length (or manholes etc) in the UFB area over total duct length, and
- b. Second, an allocation based on regulated fibre connection in a geographic area relative to all connections.

82. However, it is unclear from the process where the identification of assets employed in the provision of FFLAS occurs, and where the allocation of any shared costs occurs. For example, the identification of assets employed in the provision of FFLAS could occur in the starting pool of assets (all assets in an ESA as in this example), or in the ratio of UFB coverage to the overall geography. This is important because Chorus and the Commission must show that these assets are being employed in FFLAS if they are to be included in the RAB.

⁵⁹ Ibid at 4.13

⁶⁰ Further consultation draft from 3.148 and Reasons Paper from 4.234

83. We believe that neither is a reasonable approach for identifying whether assets are employed in the provision of FFLAS. We believe this would require a bottom-up analysis based on GIS and network reports as suggested by the Commission.

84. The Commission further set out a number of risks and concerns with two step allocation processes in the Reasons Paper and decided, following submissions, not to specify the allocation processes. However, we believe the proposal raises similar concerns to those set out in the Reasons Paper and Commission may wish to consider further how the allocation steps work in practice and the demarcation between identifying employed assets and allocation of employed assets that are shared with other services.

85. In terms of each category, comments are below:

Asset type	Proposed allocator	Comment
Ducts	Ratio of pre-demergers duct length in UFB areas over total duct length (duct overlap), weighted by UFB FFLAS uptake	<ul style="list-style-type: none"> • Chorus should be identifying ducts employed for the provision of FFLAS rather than starting with all ducts in an area (the effect of the proposal). The approach is driven by Chorus' residual methodology which, as above, will inevitably misidentify assets as having been employed in the provision of FFLAS. • Fraction of duct length in the wider ESA area is not a good proxy for assets employed in the provision of FFLAS. • As noted in the paper, even if duct length overlap was a permitted starting point, it's unclear whether Chorus has applied the best causal allocator. For example, we don't have the information available to us, but if it were based on the individual ducts within the same trench, it would overstate the shared value because urban routes will have more ducts within the same trench and thus more "duct length". This is a difficulty with the Chorus methodology for identifying assets employed, it is prone to the chosen allocator boosting the shared asset value. • If shared assets were properly identified, then relative connection volume use of that asset is likely a proportionate allocator.
Man-holes	Ratio of pre-demergers manholes in UFB areas over total manholes, weighted by UFB FFLAS uptake	<ul style="list-style-type: none"> • Same concern as ducts.
Poles	Ratio of poles with current and planned fibre lead-ins in UFB areas over total poles, weighted by UFB FFLAS uptake	<ul style="list-style-type: none"> • Same concern as ducts.

Asset type	Proposed allocator	Comment
Fibre cables	Ratio of GPON fibre count over total fibre count (to use for FY23, and then extrapolated back over the pre-implementation period in line with changes in duct overlap)	<ul style="list-style-type: none"> • The proposal assumes that 11.65% of fibres in shared cables are used by UFB. The only shared cables are those existed in 2012 as the rest are assumed to be fully dedicated to UFB. The survey is of demerger cables. The shared cable is then weighted by the percent UFB coverage represents in an ESA. • As the allocator is based on duct overlap rather than demand it is unlikely to result in a proportionate allocation as expected. • Artificially differentiates between asset class/platform investment prior to 2012 and post 2012 (which is considered incremental to fibre). This is not consistent with mitigating double recovery concerns.
Power assets	Ratio of fibre equipment power consumption over total power consumption	
Exchange space	Ratio of fibre equipment space used over total space used	<ul style="list-style-type: none"> • The approach appears to apportion vacant floorspace across services that are delivered from the exchange. Accordingly, in a scenario in which copper equipment in an exchange had been fully replaced by fibre equipment, the entire cost of the exchange building may end up being allocated to UFB FFLAS. • The proposed approach appears inconsistent with the example guidance in the Reasons Paper that the space used to supply copper would be avoidable and hence would be excluded (because it could be redeployed elsewhere)⁶¹. • Chorus has both applied an allocator that likely results in the inefficient outcome the cap is intended to avoid, and not applied a cap. • The Reasons Paper further recommended an exchange allocation cap equivalent to the cost of a cabinet (being the alternative to fibre)⁶². We recommend that Commission cap exchange space allocation at an asset value implied by the commercial collocation price. The same principle should apply to power assets.

⁶¹ Reasons Paper at 4.111

⁶² Reasons Paper at 4.115 and 4.123

Operating costs allocated to UFB FFLAS during the pre-implementation period

What are your views on Chorus' proposed allocator types for sharing operating costs in the calculation of the FLA? If you consider alternative allocator types would be more appropriate, or you support the proposed allocators, please explain why, and outline any alternative allocators you would propose.

What are your views on Chorus' proposed use of Totex as an allocator for sharing operating costs? If you consider alternative allocator types would be more appropriate, or you support the proposed use of Totex, please explain why, and outline any alternative allocators you would propose.

Is Chorus' proposed choice of allocator types from the default list reasonable? Are these choices likely to be consistent with the IM, and if not, which allocator types should be used and why?

Do you agree with Chorus' proposed use of a number of alternative allocator types, which must be approved by the Commission? Are these choices likely to be consistent with the IM, and if not, which allocator types should be used and why?

86. Chorus proposes to use a variety of opex allocators, including those set out in the IMs and other allocator types such as net book value, similar business allocators, total expenditure (totex) and future benefits⁶³.
87. The consultation paper notes that the choice of allocator is important and can markedly shift costs. For example:
- a. The choice of allocator type is likely to be particularly significant in the early stages of the pre-implementation period, where there was relatively heavy investment in the UFB deployment (particularly in communal assets) but also relatively low uptake of UFB FFLAS⁶⁴. For example, while there were minimal UFB connections in 2013, over 85% of reported capex was attributed to the fibre network.
 - b. A significant proportion of Chorus' proposed allocated operating costs relates to costs that are allocated on the basis of totex. These include CTO overheads and corporate personnel costs⁶⁵.
88. We agree that the Commission should be cautious adopting the proposed allocators as these have a significant impact on RAB outcomes. Our expenditure proposal benchmarking highlights that Chorus anticipates allocating significant operating costs to FFLAS and, if applied to the FLA, would add significantly to end user prices. Further, the should also consider whether the cumulative effects of the allocations supports the proportionate transition of costs that it was expecting to see.
89. In any case, totex is unlikely to reflect actual cost drivers or result in the proportionate transition of costs:

⁶³ Consultation Paper at 4.25-4.26

⁶⁴ Ibid at 4.28

⁶⁵ Ibid at 4.27

- a. While Incenta advise for Chorus that it is not uncommon for overhead to be allocated between activities on the basis of expenditure⁶⁶, this does not mean it is the allocator that is consistent with the Commission's framework and best promotes the purposes of the Act.

Further, the drivers to which Incenta refers relate to labour costs that we expect would be capitalised into the asset. Therefore, the approach would be seeking to recover labour costs from FFLAS that were already built into the asset value.

- b. The consultation paper rightly observes that through time corporate resources would be focused on other issues – i.e. the copper pricing review – suggesting an allocator reflecting segments might be a better proxy⁶⁷.
- c. Chorus financial reporting that labour and associated overheads in relation to the UFB roll out have been capitalised and, as costs are largely capitalised, there will be little impact on reported labour costs⁶⁸:

Labour costs and the associated overheads in relation to the UFB build and connect activity are capitalised. As this activity reduces over time, we expect the related labour cost savings to be largely capital in nature.

This further suggests totex is unlikely to be a material operating cost driver.

- d. As noted above, the Commission's Reasons Paper approach anticipates a proportionate shifting of costs from copper to fibre network. Therefore, we expect that the cumulative effect of the allocators would likewise see a proportionate allocation over time.

Cost allocators requiring Commission approval

Is Chorus' proposed choice of allocator types from the default list reasonable? Are these choices likely to be consistent with the IM, and if not, which allocator types should be used and why?

Do you agree with Chorus' proposed use of a number of alternative allocator types, which must be approved by the Commission? Are these choices likely to be consistent with the IM, and if not, which allocator types should be used and why?

90. It is unclear which of the proposed allocators - from the information provided - are material. We recommend that the Commission consider the cumulative outcome of these allocators and whether they deliver a proportionate demand-based transition of cost from the copper to FFLAS.

⁶⁶ Consultation paper at 4.32

⁶⁷ Ibid at 4.34

⁶⁸ Chorus FY20 annual report at page 20

FLA depreciation

What are your views on Chorus' approach to the calculation of the weighted average life of the UFB-related core fibre assets in the initial RAB as at the implementation date? Please explain why you support it, or what alternative approach you recommend and why.

91. The Commission has proposed in the draft PQ determination to apply accelerated depreciation to the FLA.

[End]