

Amendments to the Input Methodologies for Fibre

August 2021 amendments

C H ● R U S

Executive summary

Proposed amendments to process for determining initial RAB are unjustified, reduce certainty, and are inconsistent with the Act

- We accept that some form of transitional initial regulatory asset base (**RAB**) is unavoidable. But the true-up between transitional and final RAB should be limited to differences between forecast and actual costs in disclosure years prior to the implementation date as noted during the input methodologies (**IMs**) development process. The Commission's proposed amendments effectively allow it to defer completion of an exercise Parliament required the Commission to complete prior to the implementation date.
- The Commission's proposed amendments:
 - Are contrary to the requirements of the Telecommunications Act 2001 (**Act**) – They would facilitate a transitional initial RAB that doesn't meet the valuation requirements set in the Act and are contrary to the principle that Chorus' allowable revenue should be based on a particular valuation approach;
 - Reduce rather than promote the certainty that is the purpose of IMs – At no point in the lengthy IMs consultation did the Commission signal a RAB that would be revised during the first regulatory period (**PQP1**). A change of this magnitude at this late stage seriously undermines certainty; and
 - Are unjustified – The Commission has essentially given no reasons for the process change beyond stating it would like more time.
- These proposed amendments are clearly "fundamental" and fail the Commission's own test for making out of cycle amendments. We have engaged in an IMs development process lasting years to arrive at a set of rules for PQP1 and the fact the Commission has, at the eleventh hour, decided it would like more time to do its work does not present a compelling and urgent rationale for amendment.

Specification of wash-up requirements

- The Commission has proposed amendments to add more specification to the wash-up component of allowable revenue. In principle we would welcome the additional certainty such specification would bring. However, there are additional kinds of wash-ups Chorus believes should be included for PQP1. If the Commission is adding more specification to the wash-up mechanism in the IMs we think it is important these additional wash-ups be included.
- We think it would enhance certainty and better promote the purposes of Part 6 if the IMs were amended to include wash-ups for:
 - The difference between actual and forecast cost allocator metrics;
 - The difference between forecast and actual opening RAB values for commissioned assets (for PQP2 and later); and

- The difference between forecast and actual CPI for the revenue path.
- In addition, we have proposed a number of changes to clarify and improve the workability of the wash-up mechanism.

There are several errors in the IMs it is important to correct for determining the initial RAB

- We welcome the Commission's decision to consider amending the IMs to correct technical errors. In addition to the changes proposed by the Commission, there are several other errors it is important to correct for prior to determining Chorus' initial RAB.

Correcting for use of post-tax WACC

- The Commission indicated in its financial loss asset (**FLA**) IM final decision that its use of a post-tax WACC rather than a vanilla WACC to discount pre-implementation date cash flows would give rise to an error in the event of substantial tax losses. The Commission acknowledged that this would require a correction to account for the difference in the time value of money and that this correction could take place via IMs amendment.
- As set out in our submission on the initial RAB, our estimated regulatory tax losses at the start of the first regulatory period total approximately \$800m and the estimated amount of the consequential adjustment to regulated revenues could exceed \$40m in present value terms. This is clearly material and requires addressing urgently for it to be included in the final pricing decision for the first revenue path.

Correct calculation of present value benefit of Crown financing

- The Commission indicated in its August notice of intent (**NOI**) it was considering amendments which would correct for technical errors in the formulas for determining the 'present value benefit of Crown financing'. The Commission now says it has not identified any errors in those formulas and does not propose any amendments. However, there are errors in the formulas.
- The Commission's current approach applies the notional financing rate relating to Crown Infrastructure Partners (**CIP**) equity securities in vanilla terms and to CIP debt securities in post-tax terms. Essentially, the benefits of Crown financing are determined using a mix of vanilla and post-tax terms. This is inconsistent with the Commission's decision to use a post-tax WACC in calculating the value of the FLA and is an error which needs to be corrected.

Correct default approach to FLA asset life

- The current wording of the IMs can lead to an erroneous approach to determining the asset life of the FLA. The IMs set the default approach for calculating the asset life of the FLA as the weighted average life of the fibre assets in the RAB. The Commission has interpreted 'weighted average' as requiring an arithmetic mean whereas a harmonic mean is the correct approach in this context.
- We acknowledge the IMs permit an alternative asset life for the FLA to be adopted and that this has been proposed by the Commission in its draft price-quality

determination. However, we still believe an IM amendment is desirable to prevent this error if the Commission's views regarding applying an alternative asset life change prior to finalising the price-quality determination for PQP1, or it becomes a relevant factor in decisions for future regulatory periods.

Correct treatment of incentive payments

- Under the IMs as currently drafted, incentive payment spend appears to fall between the definitions of core fibre assets and opex. We cannot treat incentive payment spend as opex under the IMs because the expenditure is treated as capex under GAAP (i.e. NZ IFRS 15). Accordingly, in the initial asset valuation (**IAV**), incentive payments are treated as a financial asset.
- We believe the inconsistency between the IMs and GAAP contributes to the proposed exclusion of expenditure on incentives in the draft price-quality determination. Therefore the IMs should be amended to confirm that incentive payments should be treated as core fibre assets and to correctly align the IMs with GAAP.

Framework for IM amendments

1. In setting out its approach to making changes to the IMs we believe the Commission has:
 - 1.1 Incorrectly described the relationship between s 166 and s 174 and mischaracterised the High Court’s discussion of the equivalent provisions under Part 4 of the Commerce Act. The purpose of IMs in s 174 is subordinate to s 166 only insofar as amendments should not be made solely to enhance certainty if that would conflict with s 166. But it does not follow that the IMs should only promote certainty to the extent that doing so does not detract from the promotion of outcomes in workably competitive markets. The Commission’s task is to give effect to both; and
 - 1.2 Set out a test for out-of-cycle IMs amendments which its proposed amendments for determining the initial RAB fail to meet.

Relationship between section 166 and section 174

2. As the Commission has noted, the purpose of IMs, as set out in s 174 of the Act, is to promote certainty for regulated fibre service providers and others in relation to the rules, requirements and processes applying to the regulation, or proposed regulation, of fibre fixed-line access services (**FFLAS**).
3. We accept that certainty is a relative rather than an absolute value and note the High Court’s observation, in the context of Part 4 of the Commerce Act, that the purpose of IMs in s 52R is “conceptually subordinate” to the purpose of Part 4 in s 52A. However it does not follow:
 - 3.1 that the Commission must *only* give effect to s 174 to the extent that doing so does not detract from promotion of the purposes set out in s 166(2);¹ or
 - 3.2 that s 174 does not constrain an amendment that the Commission considers is required to give effect to s 162.²
4. The Commission has mischaracterised the High Court’s discussion of the purpose statements in Part 4 of the Commerce Act. The Court’s statement that s 52R was conceptually subordinate to s 52A is in the context of a discussion about the appellate standard of “materially better”. The Court observed that an amended IM advanced by an appellant might be said to be materially better with reference to the overall purpose of Part 4 or to the purpose of IMs in s 52R. That is to say, the amended IM might be said to be materially better because it better promoted outcomes that are consistent with outcomes in workably competitive markets or was more certain. However, because of the conceptual primacy of s 52A, the Court would be unlikely to prefer an amended IM solely on the grounds of greater certainty if it did not achieve the s 52A purpose statement.
5. Applied to the present context, the Court would say the Commission should not amend an IM solely in order to enhance certainty if that would *conflict* with the purposes

¹ Commission, *Proposed Amendments to Fibre Input Methodologies draft decisions - Reasons Paper*, 27 May 2021, para 2.6

² *Ibid*, para 2.4

described in s 162. But it does not follow that the Commission or the Court should only give effect to s 174 to the extent that doing so does not detract from the promotion of outcomes in workably competitive markets. Rather, the Commission's task is to give effect to both purpose statements and to implement only those amendments to the IMs that are consistent with the achievement of both. Similarly, s 174 may constrain an amendment that the Commission considers would better give effect to s 162. If that were not the case, then s 174 would be redundant and that cannot have been intended by Parliament.

6. Promoting certainty in relation to the IMs has two aspects. IMs promote certainty by clearly articulating the rules with sufficient specificity that regulated providers can understand how price-quality paths will be set. But IMs also promote certainty by requiring the Commission to demonstrate a degree of ex-ante commitment to the rule book that governs the setting of price-quality paths. The Commission's formulation is that IMs "constrain [the Commission's] evaluative judgements in subsequent regulatory decisions and increase predictability".³ We agree. Certainty, in that sense, is undermined if the rules are constantly subject to change, or if the Commission changes the rules in a significant way at a late stage to accommodate its desired approach to setting price-quality paths. Section 174 was intended to constrain the Commission's ability to make ad hoc changes to the IMs, particularly where that would undermine settled expectations as to how a price-quality path would be set. This is of particular relevance to the Commission's proposed changes to the process for setting the initial RAB, as we go on to explain later in this submission.

Proper scope of IMs amendments outside the review cycle

7. The Commission has expressed a view that it will generally not be appropriate to consider "fundamental" changes outside the regular IM review cycle. The Commission says that the rules and processes IMs and the quality and capex IMs are not fundamental.
8. Without expressing a definitive view on the appropriate scope of IMs amendments outside of the regular review cycle, we note that – on the Commission's approach – amendments to the asset valuation IM would appear to be fundamental. That notwithstanding, the Commission has proposed an amendment to the asset valuation IM to give effect to its revised approach to the transitional RAB. Our view is that the Commission's proposed change to the process for determining the initial RAB is fundamental; indeed, it is difficult to imagine a more fundamental component of the regulatory framework. On the Commission's reasoning, then, an "especially compelling and urgent rationale" is required to justify making this change at this time. No such compelling and urgent rationale has been offered.

³ Ibid, para 2.2

Amendments for determining the initial RAB

9. The Commission is proposing amendments to the process for determining the pre-implementation date transitional RAB. While we accept that some form of transitional initial RAB is unavoidable (as we acknowledged in our submissions in the course of the IMs process), the true-up between transitional and final RAB should be limited to differences between forecast and actual values in disclosure years prior to the implementation date. The Commission's proposed amendment to replace references to "actual" values with "estimates of historic values" effectively allows the Commission to defer completion of an exercise Parliament required the Commission to complete prior to the implementation date. The Commission's proposed amendments are:
 - 9.1 contrary to the requirements of the Telecommunications Act;
 - 9.2 unjustified; and
 - 9.3 inconsistent with the promotion of certainty per s 174 of the Act.

Requirements of the Act

10. The IMs contemplate a transitional initial RAB to account for the fact that the initial RAB is established as of 1 January 2022, and the Commission is required to determine PQP1 prior to that date. In responding to the Commission's IMs consultation, we were comfortable that the Commission would have to forecast cost information in 2020/21, and that any differences between forecast and actual values would be washed-up in the course of either the first or second regulatory period. We had understood that would be the extent of the transitional process.
11. However, the Commission is now proposing a more extensive exercise that includes "updating" its determination of historic asset-related values following further scrutiny in the course of 2022. The Commission's proposal is contrary to the requirements of the Act because it effectively defers a determination the Commission is required to make prior to the implementation date.
12. The Commission is required to make a s 170 determination before 1 January 2022 specifying how price-quality regulation applies to Chorus. In making that determination, the Commission must apply the relevant IMs. The asset valuation IM must be determined in accordance with s 177, which in turn specifies a valuation methodology that requires the Commission to determine the *actual* costs of fibre assets. Read together, the effect of these provisions is that the Commission must determine an initial RAB based on actual asset-related values, applying s 177, before the implementation date.
13. What the Commission is instead proposing to do is to determine a provisional RAB based on "estimates" of actual values and then finally determine the initial RAB only after the implementation date. This is contrary to the requirements of the Act in three ways:
 - 13.1 First, the transitional initial RAB will not comply with the requirements of s 177 of the Act because it will not reflect: (i) the cost incurred by Chorus in constructing or acquiring fibre assets (for pre-2011 assets), or (ii) the cost recorded by Chorus in its financial accounts (for post-2011 assets) because it

will instead reflect a provisional estimate of those values. A proper application of s 177 requires the Commission to actually determine the relevant values. It is not permitted to determine provisional values and then subsequently amend those values after the implementation date.

- 13.2 Second, there is no basis in the Act to effectively revise the RAB after the implementation date. The relevant s 170 determination implementing price-quality regulation must be made prior to the implementation date. That determination must apply the relevant asset valuation IM and that IM must be in accordance with s 177. Section 177 contemplates that actual asset values are used to determine the initial value of fibre assets. The scheme of Part 6 assumes that the Commission completes the work required by s 177 before the date on which price-quality regulation is implemented. There is no basis to subsequently redetermine the initial value of fibre assets after that date. The Commission's proposal therefore exposes Chorus to an unacceptable risk that the Commission will be unable to carry out its proposed revision of the initial RAB in 2022.
- 13.3 Finally, Parliament intended that Chorus' allowable revenue under price-quality regulation would be determined in accordance with the asset valuation methodology it specified in s 177. Allowable revenue in the first regulatory control period will not be based on a proper application of s 177 because the true-up of the initial RAB will not be reflected in revenue until the second regulatory control period. The fact that any revenue differences from the first period will be washed-up in the second does not cure the fact that regulated revenue from 2022 to 2025 will be based on a provisional RAB rather than a properly determined RAB.

Proposal is unjustified

14. The Commission has acknowledged in its discussion of the framework for amending the IMs that changes to "fundamental" elements of the IMs will only be justified outside of the regular IMs review cycle if there is an especially compelling and urgent rationale for doing so.
15. The only justification the Commission has offered for this change is that it has run out of time to complete the exercise that Parliament originally intended it should complete by 1 January 2020 and then extended for a further two years to 1 January 2022.
16. The Commission has not explained why it has only now realised that it has insufficient time to complete the process. We emphasised to the Commission as far back as December 2018 that the process of determining the initial RAB would be complex and was critically important to Chorus and its shareholders and therefore should commence immediately. We explained that there was no barrier to progressing that work in parallel with the determination of the IMs given the methodology was essentially specified in the Act. The Commission declined to expedite the process of determining the initial RAB.
17. It is further not clear to us why the Commission has only now determined that it has insufficient time to complete the process of scrutinising modelling undertaken to determine the RAB. The Commission has recent experience with complex economic models having worked to construct the model for the copper final price over a number of years. The size and complexity of the exercise of determining the initial RAB could

not have been a surprise. The Commission's reasons paper explains that "the 'actual values' that currently exist are simply asset values within Chorus' financial systems" and that the relevant RAB asset values "can only be determined once we have carried out appropriate scrutiny". That is not a new or unanticipated state of affairs and therefore does not justify the change in approach.

Promotion of certainty

18. As discussed above, the promotion of certainty requires not only that the rules are clear but that they are durable. Part of the rationale of IMs was to require the Commission to commit to a rule-book in advance of making the evaluative judgements required to implement price-quality regulation. If the rules are subject to constant change, or are changed at a late stage, then certainty is undermined.
19. The Commission ran a lengthy and comprehensive IMs consultation process between 2018 and 2020. The result of that process was a determination that the transitional RAB would reflect a combination of actual historic and forecast values, reflecting the fact that commissioned assets, as well as costs for the FLA calculation, in the final disclosure year prior to implementation could not be known at the point the Commission was required to make its price-quality determination. The Commission gave no indication at any point in the process that it expected to determine a transitional RAB that would include only estimates of historic values. The determination of the relevant IMs in late 2020 created a reasonable expectation of the rules that would apply for the purposes of determining this price-quality determination. Chorus was entitled to rely – and did rely – on its expectation that the Commission would in fact determine the initial RAB in accordance with the process it had outlined in the IMs.
20. Changing such a fundamental component of the price-quality path at such a late stage in the process undermines the certainty that s 174 intends the IMs deliver. Not only does it represent a highly significant shift in the approach to determining the initial RAB, which itself undermines certainty, it also means that Chorus can have no certainty – as of the implementation date – as to what the value of the initial RAB actually is or what additional scrutiny is required to finalise it. The extent of the uncertainty this produces is such that the proposed amendment cannot reasonably be said to comply with s 174 of the Act.

Specification of wash-up requirements

21. The Commission has proposed amendments to the specification of price and revenues IM to address the mechanics of the wash-up, which includes five specific wash-ups alongside the general wash-up required by s 196 of the Act: connection capex variable adjustment;⁴ any individual capex projects approved in the regulatory period; the difference between the transitional and final initial RABs; forecast and actual pass-through costs; and forecast and actual Crown financing payments.
22. Chorus supports the use of a wash-up mechanism as part of the revenue path. Any regulated provider will face a combination of controllable and uncontrollable costs. Regulated providers should not be subject to windfall gains or losses for material costs they cannot control and it is reasonable for these costs to be washed up.
23. We propose:
 - 23.1 a number of technical amendments to improve the operation of the wash-up mechanism; and
 - 23.2 additional wash-ups which meet the Commission's criteria for an explicit wash-up.
24. The additional wash-ups we propose address differences between:
 - 24.1 forecast and actual cost allocator values (i.e. cost allocator metrics);
 - 24.2 forecast and actual values of commissioned assets included in the opening RAB used to calculate building blocks revenue for the next period (equivalent to the capex wash-up adjustment in the EDB IMs); and
 - 24.3 forecast and actual CPI for the revenue path (not other uses of CPI) – this relates to a recommendation we intend to make in our submission on the draft price-quality determination about the revenue path formula.
25. Our proposed amendments are set out in Appendix B.

Technical amendments to improve the operation of the wash-up mechanism

26. We have proposed a number of amendments that are intended to clarify the meaning of the IMs while preserving the Commission's original intent:⁵
 - 26.1 sub-clause (2): clarifying that forecast pass-through costs are as forecast by the regulated provider at the outset of each regulatory year (as opposed to forecast building blocks revenue which is forecast by the Commission);
 - 26.2 subclause (4): clarifying that wash-up amounts "comprise" the amounts determined by the Commission rather than "including" those amounts (which

⁴ The Commission's proposal for a wash-up to include the revenue impact of the connection capex variable adjustment raises two timing issues that we consider need to be addressed. We have discussed this further in Appendix B

⁵ Subclause references are to the numbering that appears in the amended clause 3.1.1 in Appendix B

- would imply additional amounts might be included in wash-up amounts), and clarifying that wash-up amounts may be positive or negative;
- 26.3 subclause (5): clarifying that actual wash-up accruals are used where available and the relevant value is the present value as at the end of the current period; and forecast wash-up accruals are used for any year for which an actual wash-up accrual has not been recorded in the wash-up account;
 - 26.4 subclause (6): moving what was previously subclause (9) up in the order of the clause to aid understanding;
 - 26.5 subclauses (7) and (8): substituting “actual allowable revenue” for “actual revenue allowance” to align with “forecast allowable revenue”; and
 - 26.6 subclause (9): clarifying that actual allowable revenue comprises a recalculation of forecast allowable revenue subject to the wash-ups listed in paragraphs (a) to (h). As previously drafted, it was not clear that actual allowable revenue comprised the sum of building blocks revenue, pass-through costs and the wash-up amount.
27. In addition to the technical amendments listed above, we note the following:
- 27.1 Our understanding of the concept of “forecast wash-up accruals” is that, while the forecast accrual will be used to determine the amounts drawn down in the next period, Chorus will also record an actual wash-up accrual for that year in the wash-up account. This will effectively result in a true-up of the forecast accrual when the draw-down for the next period is next calculated. We consider it is important that any forecast wash-up accrual is ultimately true-up to the actual accrual for that year. If our understanding is not correct, amendments should be made to ensure this true-up to the actual accrual takes place.
 - 27.2 For the purposes of calculating the balance of the wash-up account, the Commission will need to specify in the s 221 notice requesting the necessary information that: (i) the opening balance for PQP1 is nil; (ii) the time value of money adjustment is calculated against the opening balance; and (iii) whether accruals enter the account at mid-year or year-end. We expect further engagement with the Commission on these issues before the s 221 notice is finalised.

Additional wash-ups proposed

28. The Commission has explained that it will include an explicit wash-up where:⁶
- 28.1 Chorus not bearing the risk that outcomes differ from forecast best promotes the purpose of Part 6 or workable competition (often in terms of the economic principles and incentive framework); and
 - 28.2 there is no existing mechanism which provides for that.
29. We propose that the following items are washed-up (and these wash-ups are added to the list in clause 3.1.1.(8) of the IMs):

⁶ Commission, *Chorus’ Price-quality path from 1 January 2022 - Draft decision*, 27 May 2021, para A 136

The difference between actual and forecast cost allocator metrics

30. Chorus's FFLAS business is still growing and the rates of demand, expenditure and other relative utilisation indicators over time are particularly hard to forecast. There is a material risk that some forecast allocator metrics turn out to not reflect the actual utilisation of expenditure or assets that are shared between PQ-FFLAS and other services. In particular, given the forecast uncertainty, Chorus has set allocators for PQP1 based on past actuals which in light of a growing fibre business could lead to actual utilisation (between PQ-FFLAS and other services) varying materially over PQP1.
31. To manage this risk, and to mitigate the need for extensive debate on cost allocator metrics at the time revenues are set, it is reasonable to wash-up for the revenue impact of differences between forecast and actual allocator metrics i.e. that this risk is not borne by Chorus. This is especially important given the transitional nature of PQP1. We note that this wash-up incentivises accurate forecasting of allocator metrics.
32. This will promote the long-term benefit of end-users by preserving the expectation of an NPV=0 outcome and reducing the risk of windfall gains or losses. It will promote competition by ensuring the allocation of costs between FFLAS and non-FFLAS services is correct over time.

The difference between forecast and actual opening RAB values for RP2 and later

33. The primary purpose of the wash-up between the transitional and final initial PQ RAB is to ensure there is a correct opening RAB value for PQP1. There is a similar wash-up (recoverable cost) for the energy firms regulated under Part 4 with respect to the value of commissioned assets forecast to be included in the opening RAB for the forthcoming regulatory period. We consider that this wash-up should also apply to Chorus such that the opening RAB for each regulatory period is corrected for this variance.
34. This will promote investment incentives, and hence the long-term benefit of end-users, by ensuring that Chorus is able to recover the actual cost of its new investments in future periods and minimises excessive profits by ensuring that prices reflect actual opening RAB values for these investments over time.
35. While this wash-up will not affect revenues set for PQP1, it is desirable that it be specified now to promote regulatory certainty and minimise future consultations on IM amendments.

Forecast v actual CPI for revenue path.

36. As we will discuss in our submission on the draft price-quality determination, the draft determination requires forecast building blocks revenue (**FBBR**) to be rolled forward using the term $(1+\Delta\text{CPI}_{t-1})$. However, this is inconsistent with the formula for in-period revenue smoothing which means the ex-ante expectation of real FCM will not hold. Failure to correct this will result in error due to variability in inflation. We expect this means Chorus will under-recover the PV of its maximum allowable revenue (**MAR**) by approximately \$4m for PQP1.
37. A better approach is to roll-forward FBBR using forecast CPI for the current regulatory year $(1+\Delta\text{CPI}_t)$. This will give Chorus an ex-ante expectation it will be able to recover

its MAR, but would then require a wash-up for the difference between forecast and actual CPI for year t.

38. This will promote the long-term benefit of end-users as it would preserve investment incentives by ensuring Chorus can recover its MAR (as will be explained in our price-quality submission) and ensuring that prices are consistent with actual rather than forecast CPI over time.

Amendments to correct technical errors

39. The Commission has proposed amendments to the fibre IMs to correct technical errors. Below we describe some errors in the fibre IMs which it is important for the Commission to correct prior to determining the initial PQ RAB in order to best meet the purpose of Part 6.
40. We have also noted further technical errors, and commented on the detail of some of the Commission's proposal, in the table at Appendix A.

Correcting for use of post-tax WACC

41. The Commission indicated in its FLA final decision that its use of a post-tax WACC to discount pre-implementation date cash flows would give rise to an error in the event of substantial tax losses. The Commission acknowledged that this would require a correction to account for the difference in the time value of money.⁷
42. We submitted during the IMs consultation on the need to make this change and proposed a method for doing so. When we provided our MAR model to the Commission we also indicated that Chorus had incurred substantial tax losses in the pre-implementation period. Further, in our submission on the initial RAB, we set out that our estimated regulatory tax losses at the start of the first regulatory period total approximately \$800m and the estimated amount of the consequential adjustment to regulated revenues could exceed \$40m in present value terms. This is clearly material and requires addressing urgently for it to be included in the final pricing decision for the first revenue path.⁸
43. It is important the Commission make the amendments to the IMs prior to the calculation of the transitional initial RAB because:
- 43.1 The Commission acknowledged when determining the FLA IMs that a correction would be required in the event of substantial tax losses. Chorus therefore had a reasonable expectation that the Commission would address this issue in the event that tax losses did exist and, on that basis, Chorus chose not to take any further action at the time the IMs were determined.
- 43.2 The Commission's own reasoning supports correcting for this issue. The Commission stated in its FLA IMs reasons paper that using a post-tax WACC to discount pre-implementation cash flows implies that the tax deduction benefit for notional interest costs was received during the pre-implementation period. Because of Chorus' tax losses, those benefits will actually be received in future regulatory years. A correction is therefore required to ensure that the value of the FLA accords with the requirements of s 177 of the Act. If not, then the value of the FLA understates Chorus' accumulated unrecovered returns over the pre-implementation period.
- 43.3 The amount at issue is significant. We set out our calculation of the revenue impact of the Commission's use of a post-tax WACC when we provided the

⁷ Commission, *Fibre Input Methodologies – Financial Loss Asset Final Decision – Reasons paper*, 3 November 2020, para 3.402

⁸ Chorus, *Submission on Commission's consultation on Chorus' initial PQ RAB*, 28 May 2021, paras 20-22

Commission with our MAR model. The magnitude of the issue is such that it requires a change to the IMs.

44. There are broadly two options for how this can be implemented in the IMs. The first is to use a vanilla WACC to discount cash flows to calculate the value of the FLA. However, this would likely require extensive changes to the IMs as currently drafted, and we understand that the Commission's preference is to include a correction item in the relevant formulae rather than to switch from a post-tax WACC to a vanilla WACC methodology. Accordingly, the more straightforward option is to calculate the value of the unused interest deductions in the pre-implementation period and apply a one-off adjustment to the value of the FLA and carried forward tax losses at the implementation date.
45. We describe in Appendix B the methodology we anticipate the Commission adopting. Note that Chorus' MAR model includes functionality (currently disabled) that illustrates the effect of these calculations. We can therefore use the existing MAR model to demonstrate the effect of this correction for the Commission.

Correct calculation of present value benefit of Crown financing

46. The Commission indicated its August NOI it was considering amendments which would correct for technical errors in the formulas for determining the "present value benefit of Crown financing". In the Proposed Amendments Reasons Paper the Commission then said that, having considered the matter further, it had not identified any errors in those formulas and did not propose any amendments.
47. In our view, there are errors in the formulas which need to be corrected by amendment to the IM.
48. The IMs as currently drafted fail to properly account for the tax implications of the Commission's characterisation of the nature of Crown financing in the pre-implementation period. The Commission's decision was to use the post-tax approach to calculating the financial losses, and that 25% of the CIP equity securities were effectively debt-like and should be treated as such when quantifying Chorus' financing costs.
49. The consequence of characterising this portion of the equity as debt is that the Commission ought to have specified the cost of debt for that component of Crown financing in post-tax terms and, therefore, applied a $(1-T_c)$ term. It has not done so. This means that in calculating the notional benefit of Crown financing based on the post-tax approach, the Commission is:
 - 49.1 Correctly treating all of the CIP debt component as tax deductible by applying the $(1-T_c)$ term;
 - 49.2 Correctly specifying the 75% of the CIP equity to which the cost of equity is applied on an equivalent post tax basis. This occurs because the cost of equity has been estimated using the simplified Brennan Lally WACC, which delivers an estimated cost of equity that is net of the benefit of imputation tax credits; but
 - 49.3 Incorrectly treating the 25% of the CIP equity component by applying a cost of debt in vanilla terms which assumes that this component of return (if it was

received)⁹ would be neither deductible as interest for tax purposes nor give rise to imputation tax credits.

50. The IMs should apply a consistent approach to determining the annual benefits of Crown financing both in the pre- and post-implementation periods. In the post-implementation period, the IMs calculate the annual benefits of Crown financing using cost of debt and cost of equity values expressed in vanilla terms, consistent with the use of vanilla WACC in the calculation of the return on capital building block.¹⁰ For example, the amount C in clause 3.5.11(1)(c) represents the notional financing rate relating to CIP equity securities, expressed in vanilla terms, and is calculated using the following formula:

$$(0.75 \times \text{cost of equity for that regulatory period}) + (0.25 \times \text{cost of debt for that regulatory period})$$

51. For comparison, the amount A under clause 3.5.11(1)(a) represents the notional financing rate relating to CIP debt securities, also expressed in vanilla terms, and it is calculated using the following formula:

$$(\text{proportion of 'B' that is forecast to be senior debt} \times \text{cost of debt for that regulatory period}) + (\text{proportion of 'B' that is forecast to be subordinated debt} \times (\text{cost of debt for that regulatory period} + 0.41\%))$$

52. In the pre-implementation period, clause B1.1.2(5) of the IMs requires us to calculate the present value of annual benefits of Crown financing using cost of debt and cost of equity values expressed in post-tax terms, consistent with the use of post-tax WACC in the calculation of the present value of the FLA. However, the cost of debt value applied in the calculation of the amount C under clause B1.1.2(5)(c), which represents the notional financing rate relating to CIP equity securities, is expressed in vanilla terms using the following formula:

$$(0.75 \times \text{cost of equity for that financial loss year}) + (0.25 \times \text{cost of debt for that financial loss year})$$

53. For comparison, the amount A under clause B1.1.2(5)(a) represents the notional financing rate relating to CIP debt securities, expressed in post-tax terms, and is calculated using the following formula:

$$(\text{proportion of 'B' that is senior debt} \times \text{cost of debt for that financial loss year} (1 - T_c)) + (\text{proportion of 'B' that is subordinated debt} \times (\text{cost of debt for that financial loss year} + 0.41\%)(1 - T_c))$$

54. This means that the formula for calculating the present value of annual benefits of Crown financing under clause B1.1.2(5) applies the notional financing rate relating to CIP equity securities expressed in vanilla terms and the notional financing rate relating to CIP debt securities expressed in post-tax terms. In other words, the present value of annual benefits of Crown financing is determined using notional financing rates that are based on a mix of vanilla and post-tax terms. This is inconsistent with the Commission's requirement to calculate the present value of annual benefits of Crown

⁹ No tax deduction or imputation tax credits have been created in reality because the focus here is on the required return that Chorus has *avoided* as a consequence of receiving the Crown financing

¹⁰ We intend to address in our submission on the November 2021 IM amendments the calculation of the notional deductible interest with respect to Crown financing outstanding under clause 2.3.1(7), which is currently inconsistent with the calculation of annual benefits under clause 3.5.11

financing using cost of debt and cost of equity values expressed in post-tax terms, consistent with the use of post-tax WACC in the calculation of the present value of the FLA.

55. This is an unjustifiable inconsistency in the Commission’s approach to treating annual benefits of Crown financing in the pre-implementation period. For consistency with the use of post-tax approach to calculating the financial losses, the Commission should apply the post-tax cost of debt to the portion of CIP equity securities that the Commission considers to have the characteristics of debt.

Correcting FLA asset life

56. In its consultation on Chorus’ IAV model, the Commission expressed a view that Analysys Mason’s calculation of the asset life of the FLA did not comply with clause 2.2.10(1)(d)(i) because it did not use a weighted arithmetic average to determine the FLA asset life. As we explained in our submission responding to the Commission’s consultation, the approach adopted by Analysys Mason complies with the IMs because clause 2.2.10(1)(d)(i) merely requires the use of a “weighted average” of the lives of the UFB-related core fibre assets to determine the asset life of the FLA. The IMs do not specify the type of weighted averaging method, or specifically that a weighted arithmetic average must be used.
57. Analysys Mason used depreciation as the weighting variable, which is a simplified and equivalent method of applying a weighted harmonic average using initial RAB values for the core fibre assets as weights. The use of a weighted harmonic average is consistent with clause 2.2.10(1)(d)(i). We provided with our submission in response to the Commission’s consultation on the IAV a report from Incenta that demonstrates the equivalence of Analysys Mason’s approach.¹¹
58. Not only is a weighted harmonic average permitted by the IMs; we think it is more consistent with the purpose of the FLA. In our view, the main criterion for choosing a method for calculating the FLA asset life is that which most closely matches the profile of recovery if the accumulated losses had not been aggregated into a single asset and instead were recovered as part of the core fibre asset values using their individual asset lives. Our submission in response to the Commission’s consultation on the IAV, and the supporting report from Incenta, outlines this in greater detail.
59. We acknowledge the IMs permit an alternative asset life for the FLA to be adopted and that this has been proposed by the Commission in its draft price-quality determination. However, an IM amendment is desirable to prevent an error arising if the Commission’s views regarding applying an alternative asset life change prior to finalising the price-quality determination for PQP1, or it becomes a relevant factor in decisions for future regulatory periods. Given a weighted harmonic average would better achieve the purpose of the FLA, we propose an amendment to clause 2.2.10(1)(d) to clarify that a weighted harmonic average is the required approach.

Correct treatment of incentive payments

60. In Attachment G of the Commission’s Reasons Paper accompanying its draft price-quality determination, the Commission has outlined its proposed approach to evaluating incentive payments made to retain existing, and drive new, connections to

¹¹ Incenta, *Remaining life for the FLA asset – report for Chorus, May 2021*

the fibre network. We will separately respond to the Commission's proposed approach in our submission on the draft price-quality determination, but the Commission's analysis demonstrates that there is a gap in the IMs in relation to incentive payments.

61. The Commission has explained that, pursuant to NZ IFRS 15, the incremental costs of obtaining a contract with a customer are recognised as an asset. The Commission also observes that incentive payments are not "operating costs" because the relevant IMs definition excludes "a cost that is treated as a cost of an asset by GAAP".¹² The Commission then goes on to comment that whether incentive payments have been incurred in the acquisition of a "core fibre asset" and whether they are employed in the provision of regulated FFLAS will be a fact-specific inquiry.
62. Our position, which is addressed in our submission responding to the price-quality determination, is that incentive payments are demonstrably incurred in the acquisition of a core fibre asset. But we note that the nature of incentive payments under NZ IFRS 15 is not clearly addressed in the definition of "core fibre asset" in the IMs as currently drafted.
63. The IMs provide that "core fibre assets" excludes intangible assets unless they are finance leases or "identifiable non-monetary assets" whose costs do not include pass-through costs. "Identifiable non-monetary asset" is defined with reference to GAAP. Our understanding, based on advice from our auditors, is that incentive payments are not identifiable non-monetary assets. Rather, they are more properly characterised as financial assets and that is how we have treated them in our MAR model.
64. The Commission has rightly acknowledged that incentive payments that are recognised as assets under NZ IFRS 15 should be eligible for inclusion in the RAB to align with the GAAP treatment. Accordingly, the definition of core fibre assets should permit that. To the extent that there is any doubt about whether the definition of core fibre asset includes incentive payments that would be recognised as an asset under NZ IFRS 15, it would be appropriate to amend the IMs to clarify that it does to avoid error.
65. If incentive payments are excluded from the definition of core fibre asset, then the result would be that the Commission would exclude expenditure directly related to the fibre business that is economically justified and in the interests of consumers because of a gap in the IMs. Given that the Commission has recognised that incentive payments are "treated as a cost of an asset by GAAP" and therefore cannot be treated as opex, it follows that they must be treated as fibre assets. Otherwise there is no mechanism to recover these costs through the IMs. This would be contrary to:
 - 65.1 the asset valuation requirements of the Act because it would deprive Chorus of the opportunity to recover through regulated fibre prices the costs of a relevant "fibre asset" as that term is defined in s 177(6); and
 - 65.2 the purpose of Part 6 as it would undermine incentives to invest in growing the fibre customer base to achieve the efficiency gains that the Commission has identified accrue to customers where incentive payments succeed in increasing connection numbers.

¹² Commission, *Chorus' Price-quality path from 1 January 2022 - Draft decision*, 27 May 2021, paras G12-G13

Appendix A - Other amendments to correct technical errors

This table sets out our view on some of the Commission’s proposed changes to correct technical errors and suggests other corrections we think should be made.

Reference	Issue	Recommended Solution
2.1.1 (5)-(6), (9) 3.2.1 (7)-(8), (13)	<p>These sub-clauses have an error as they do not allow for cost/value to be allocated to services that are not regulated FFLAS (it requires costs to be allocated to EITHER PQ-FFLAS OR ID-only FFLAS).</p> <p>The omission of services that are not regulated FFLAS could unintentionally imply that non-FFLAS costs/values should be allocated to FFLAS.</p> <p>Use of the words "...to either....or..." implies one or the other, and doesn't allow allocation across 2 or more options (e.g. allocation of shared national IT assets across non-FFLAS, PQ-FFLAS and ID-only FFLAS).</p>	<p>Services that are not regulated FFLAS should be added to the list of service classes to which costs/values can be allocated. For example, 2.1.1(5) should be amended to:</p> <p><i>In respect of operating costs that are not directly attributable to the provision of PQ FFLAS, ID-only FFLAS, or services that are not regulated FFLAS, cost allocators must be used to allocate those operating costs to either-between:</i></p> <p>(a) PQ FFLAS; or</p> <p>(b) ID-only FFLAS; and/or</p> <p>(c) services that are not regulated FFLAS.</p> <p>Equivalent changes should be made to 2.1.1(6) and (9)(b); and 3.2.1 (7), (8) and (13)(b).</p>
2.2.13 (1)(a)(i) B1.1.3(1)(a)(i)	<p>Chorus records capital contributions consistent with GAAP – rather than recording asset values net of any capital contribution received. This would be problematic to rework historical data over a number of years. In Chorus’ IAV model, to produce the effect equivalent to netting off capital contributions, the model has “negative” asset</p>	<p>Amend the IM rules to allow a proxy approach, where Chorus has not historically recorded asset values net of capital contributions received.</p>

	classes over which capital contributions received are spread.	
2.2.13(6)(b)	The Commission has identified an error in use of the term "commissioned" and proposed to replace it with "commissioned for FFLAS". The need for the change is not clear to us since a core fibre asset should be commissioned for FFLAS anyway, but we are comfortable with the Commission's aim and agree alignment with B1.1.3(4)(b) is desirable.	We are comfortable with replacement of "commissioned" with "commissioned for FFLAS" in 2.2.13(6)(b)

Appendix B – Drafting changes to IM Determination

Amendments for determining the initial RAB

Clause 3.3.1

In sub-clause (8), replace all references to “*estimates of historic values*” with “*historic actual values*”.

Specification of wash-ups

Clause 3.1.1.

Amend clause 3.1.1 as follows:

- (1) *For the purpose of s 194(2)(b) and s 195 of the Act, the ‘maximum revenues’ that may be recovered by a regulated provider for a regulatory year in a regulatory period will be specified in a PQ determination as a revenue cap, whereby the forecast total FFLAS revenue derived by a regulated provider in a regulatory year must not exceed forecast allowable revenue specified in the PQ determination for that regulatory year.*
- (2) *‘Forecast allowable revenue’ means the sum of the following for a regulatory year:*
 - (a) *forecast building blocks revenue;*
 - (b) *forecast pass-through costs **as determined by the regulated provider in calculating forecast allowable revenue for each regulatory year;** and*
 - (c) *the wash-up amount.*
- (3) *For the purpose of this clause, subclauses (2)(b) and (c) can be positive or negative amounts.*
- (4) *For the purpose of subclause (2), the ‘wash-up amount’ for each regulatory year of the second regulatory period onwards **includes comprises** amounts **(which may be positive or negative)** determined by the Commission for each regulatory year of that regulatory period, where the sum of those amounts equals the total closing wash-up account balance adjustment for the current regulatory period in present value terms as at the final day of the current regulatory period.*
- (5) *‘Closing wash-up account balance adjustment’ means a positive or negative amount determined by the Commission in advance of each regulatory period for the second regulatory period onwards that is drawn down from the wash-up account **balance** in the last **completed** regulatory year of the current regulatory period, and this amount must be no more than the sum **in-absolute terms** of:*
 - (a) *the present value **as at the end of the current regulatory period** of the wash-up account balance for the last **completed** regulatory year of the current*

regulatory period for which a wash-up accrual has been recorded in the wash-up account ~~as at the end of the current regulatory period~~; and

- (b) a forecast wash-up accrual for ~~the final any~~ regulatory year of the current regulatory period ~~for which a wash-up accrual has not been recorded in the wash-up account~~.
- (96) 'Wash-up account' means a memorandum account maintained by a regulated provider to record wash-up accruals not yet returned to or recovered from access seekers, closing wash-up account balance adjustments, and to record a time value of money adjustment:
- (a) using a rate equal to the mid-point estimate of post-tax WACC determined under clause 3.5.1(2); and
 - (b) calculated by applying a method:
 - (i) as specified in a PQ determination; or
 - (ii) as specified and obtained by the Commission.
- (67) 'Wash-up accrual' means an amount for a regulatory year, being the difference between the actual ~~revenue-allowance allowable revenue~~ and actual total FFLAS revenue for that regulatory year, as determined by the Commission.
- (78) 'Forecast wash-up accrual' means an amount for a regulatory year, being the forecast difference between the actual ~~revenue-allowance allowable revenue~~ and actual total FFLAS revenue for that regulatory year, as determined by the Commission.
- (89) 'Actual ~~revenue-allowance allowable revenue~~' means ~~the sum of forecast building blocks revenue, pass-through costs and the wash-up amount for a regulatory year, an amount~~ as specified by the Commission, ~~for the purposes of calculating a wash-up accrual or forecast wash-up accrual, and which~~ must include the revenue impacts ~~(for a wash-up accrual)~~ or forecast of ~~actual~~ revenue impacts ~~(for a forecast wash-up accrual)~~ (whichever is applicable) for that regulatory year of:
- (a) subject to subclause (10), the difference between:
 - (i) the sum of all "opening RAB values" of all fibre assets for the PQ RAB as of the implementation date, as determined under clause 3.3.1(7)-(8); and
 - (ii) the sum of all initial RAB values in respect of all fibre assets in the PQ RAB as at the implementation date, as determined in accordance with clause 2.2.3(2) and 2.2.4(1); and
 - (b) the difference between:
 - (i) the 'annual benefit of Crown financing building block' for that regulatory year, as determined under clause 3.5.11; and

- (ii) *the 'annual benefit of Crown financing building block' for the disclosure year that corresponds with that regulatory year, as determined under clause 2.4.10;*
 - (c) *the difference between:*
 - (i) *any capex allowance determined in respect of the current regulatory period that was determined before the current regulatory period commences; and*
 - (ii) *any capex allowance determined in respect of that regulatory year that is determined after the current regulatory period commences;*
 - (d) *the difference between:*
 - (i) *the forecast pass-through costs as determined by the regulated provider in calculating forecast allowable revenue for that regulatory year; and*
 - (ii) *the actual pass-through costs for that regulatory year; and*
 - (e) *the difference between:*
 - (i) *forecast operating costs and forecast asset values allocated to PQ FFLAS for that regulatory year by applying forecast allocator values; and*
 - (ii) *forecast operating costs and forecast asset values allocated to PQ FFLAS by applying actual allocator values determined under clause 2.1.1 for the disclosure year that corresponds with that regulatory year;*
 - (f) *the difference between:*
 - (i) *the forecast of ΔCPI_t as set out in a PQ determination; and*
 - (ii) *the actual ΔCPI for year t;*
 - (g) *the difference between:*
 - (i) *any forecast values of commissioned assets for the current regulatory period used to determine building blocks revenue for the next regulatory period; and*
 - (ii) *the actual values of commissioned assets for the current regulatory period; and*
 - (eh) *in respect of the final regulatory year of a regulatory period, the connection capex variable adjustment for that regulatory period as determined under clause 3.7.21(2).**
- (10) *For the purpose of subclause (89), the 'actual revenue allowance' for a regulatory year only includes the revenue or forecast of actual revenue impacts for that*

regulatory year of the matters specified in subclause (89)(a) for the first regulatory period.

* The Commission has proposed a wash-up to include the revenue impact of the connection capex variable adjustment for that regulatory period. The connection capex variable adjustment is determined at the end of the regulatory period after the Commission receives the connection capex annual report for the last regulatory year of the period. The Commission's wash-up proposal raises two timing issues that we consider need to be addressed:

- when the wash-up for the connection capex variable adjustment is calculated relative to the determination of the 'closing wash-up account balance adjustment'; and
- accounting for the revenue impact of the timing of connection capex through the regulatory period.

When connection capex variable adjustment is calculated

As currently drafted, it appears the Commission expects to calculate the wash-up for the connection capex variable adjustment in the final year of each regulatory period. However, the final connection capex annual report (which is required to calculate the variable adjustment) is not received until after the end of the regulatory period: see clauses 3.7.18(1) and 3.7.21(1).

That leaves two options, either of which requires clarification in the IMs. Either the Commission can calculate a *forecast* accrual in the final year of the regulatory period reflecting a forecast of the connection capex variable adjustment. This would enable the variable adjustment to be included in allowable revenue for the immediately following regulatory period. This would require amendments to clauses 3.7.18-21 to clarify that the Commission may determine a *forecast* connection capex variable adjustment to enable a forecast wash-up accrual.

The alternative is to clarify in clause 3.1.1. that the wash-up for the connection capex variable adjustment is determined in the final year of a regulatory period in respect of that regulatory period. If the Commission adopts that approach, it would be appropriate to provide for the revenue impact of that wash-up accrual to be drawn down in the following regulatory period along with other wash-up items as opposed to waiting for the end of the next period to calculate the closing wash-up account balance adjustment. If not, the revenue impact of connection capex variable adjustments would be deferred.

Accounting for the timing of connection capex

Neither clause 3.7.21 nor clause 3.1.1 indicates how the Commission intends to account for the timing of connection capex through the regulatory period when calculating the connection capex variable adjustment. The connection capex variable adjustment reflects differences between forecast and actual connection volumes and the impact of those differences on Chorus' connection capex. Consistent with the Commission's treatment of all other capex, the calculation of the adjustment should reflect the timing of when the relevant assets enter the RAB (i.e. in the year they are commissioned). As currently drafted, clauses 3.7.21 and 3.1.1 could be read as providing that the connection capex variable adjustment does not include a time value of money adjustment for when the relevant assets entered the RAB and only accrues time value of money adjustments from

the date on which the wash-up accrual enters the wash-up account. To address this issue, and ensure connection capex is treated consistently with other capex, the Commission could amend clause 3.7.21 to either:

- provide for a time value of money adjustment to the value of the connection capex variable adjustment reflecting the timing of when assets entered the RAB; or
- calculate the connection capex variable adjustment annually, rather than at the end of the period, and provide for calculation of a wash-up accrual for each year of the period.

Amendments to correct technical errors

Correcting for use of post-tax WACC

The steps required to implement Chorus' preferred adjustment to address pre-implementation tax losses as a result of the Commission's use of a post-tax WACC are as follows:

1. Derive the notional interest implicit in the use of a post-tax WACC to derive the "present value of total net cash flows"

- Amend the capitalisation factor that was used to produce the "present value of annual net cash flows" for each financial loss year to create a series of "present values" that correspond to the commencement of each year after the year to which the cash flow relates.
 - This is done by amending the formula in clause B.1.1.2(7) so that "days to implementation date" is replaced with "days to the start of cash flow year +1" and "days to the start of cash flow year +2", and so forth, the last of which is the commencement of the year prior to the implementation date.
 - Use the post-tax WACC that is attributable to the relevant cash flow year.
- Multiply each of the "present value of annual net cash flows" values calculated as above by the product of the leverage and cost of debt that is relevant to the cash flow year to derive a series of "notional interest" amounts attributable to each cash flow year.
- Sum the notional interest amounts calculated as above for each financial loss to derive the aggregate notional interest for each financial loss year.

2. Derive the notional interest that has been avoided as a consequence of Crown financing¹³

- Calculate the avoided interest as a consequence of Crown financing raised in each financial loss year, for each of the subsequent years prior to the implementation date according to the following formula (where "A" and "B" are defined in clause

¹³ The objective is to derive the tax deductible interest that would have been avoided as a consequence of the Crown finance, and in a manner that is consistent with the Commission's calculation of the "present value of Crown financing benefit"

B.1.1.2(5) and relate to the financial loss year in which the relevant Crown financing was raised):

$$\frac{A \times B}{1 - T_c}$$

- Sum the avoided notional interest amounts calculated as per above for each financial loss to derive the aggregate avoided notional interest for each financial loss year.

3. Derive the net notional interest

- For each financial loss year, deduct the aggregate avoided notional interest from the aggregate notional interest to derive the aggregate net notional interest.

4. Determine the unused interest deductions

- For each financial loss year, determine the value of the aggregate net notional interest for each financial loss year that could have been used in that year to reduce corporate taxation before tax was reduced to zero. Where any interest deductions could not be used in a given year, they should be carried forward (without any adjustment) to be available for use in future years.
- Calculate the unused interest deductions for each financial loss year as the difference between the aggregate net notional interest for that year and the extent of the aggregate net notional interest that could be used in that year.

5. Calculate the effect on the FLA and carried forward tax losses

- The adjustment to the FLA at implementation date is calculated as the sum of the present value of the unused interest deductions. The present value of the unused interest deduction for a given financial loss year is calculated as the unused interest deductions for that year, the mid-year timing factor for that financial loss year according to clause B.1.1.2(5) and the corporate tax rate.
- The adjustment to the (tax effect of the) carried forward tax losses at implementation date is calculated as the product of the interest deductions that would have been carried forward to the implementation date under step 4 above, and the corporate tax rate.

Correct calculation of present value benefit of Crown financing

Clause B1.1.2

Amend clause B1.1.2(5)(c) as follows:

(c) *C is the amount determined in accordance with the following formula:*

(0.75 × cost of equity for that financial loss year) + (0.25 × cost of debt for that financial loss year) (1 - T_c);

Correct default approach to financial loss asset life

Clause 2.2.10

Amend clause 2.2.10(1) as follows:

(1) 'Asset life' means, in the case of-

...

(d) the financial loss asset, either:

- (i) the period equivalent to the weighted **harmonic** average life of the UFB-related core fibre assets in an initial RAB as at the implementation date, where the weights used are the initial RAB values of those UFB-related core fibre assets; or
- (ii) a period adopted by the regulated provider under an alternative method; and

Correct treatment of incentive payments

Clause 1.1.4

Amend clause 1.1.4 as follows:

Core fibre asset means a fibre asset that is employed in the provision of regulated FFLAS (whether or not the asset is also employed in the provision of other services), and excludes

- (a) the financial loss asset;
- (b) intangible assets, unless they are-
 - (i) finance leases; or
 - (ii) identifiable non-monetary assets whose costs do not include (wholly or partly) pass-through costs; ~~and~~
 - (iii) **recognised as an asset in accordance with NZ IFRS 15; and**
- (c) works under control;