Vector Submission on Fibre Input Methodologies – Further Consultation Draft (Initial Value of Financial Loss Asset)

Due 10 September

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Introduction

1. The financial loss asset (FLA) will have enduring consequences for New Zealand telecommunications end users and dependent markets. Accordingly, the separate consultation on the FLA provides a much-needed opportunity for the Commission to ensure it has all the evidence to make the right decisions for assessing losses and determining the value of the FLA.

2. The FLA was introduced into the *Telecommunications Act 2001* (the Act) in 2018, well after the preferred UFB partners were selected and post roll-out of significant parts of the government sponsored fibre-to-the-premises (FTTP) networks. The original terms of the UFB selection process had expected selected partners to take on risks relating to network build, customer take-up and technology obsolescence.

3. The subsequent changes to the Act have modified the extent to which suppliers are expected to absorb the risks from participating in the UFB. The *Telecommunications (New Regulatory Framework) Amendment Act 2018* (the Amendment Act) introduced fundamental changes to the UFB project from the original specifications of the tender selection process. Other fundamental changes by the Amendment Act include delays to the requirement for UFB networks to be unbundled and revisiting terms of behavioral undertakings submitted by selected partners to participate in the UFB roll-out. In this sense, the FLA is providing Chorus and LFCs with an unexpected benefit from their original expectations of participating in the UFB project.

4. In this submission we provide comment on two issues:

    a. The manner with which the Commission should assess expenditures incurred for Chorus and LFCs when assessing losses for the Pre-Implementation Period; and

    b. The consistency between targeting a real return on investment for the FLA and the forward-looking price setting process under Part 6 of the Act.

5. Vector is not convinced the Commission's reasoning and discretion to allow legacy assets and shared overhead costs are permitted in the estimation of losses for the FLA. Whilst the Commission has justified its proposed approach for the loss assessment as being not expressly prohibited by the Act, this reasoning does not mean it is the interpretation most consistent with the purpose of Part 6 of the Act. The proposed approach has created greater risk of double recovery of costs – with the potential for claimed costs already being recouped through regulated tariffs set for Chorus' copper services.

6. The Pre-Implementation Period (2012-2022) over which the FLA is being assessed should exhibit the same features for the return on investment set by the Commission for other regulated businesses over the same time period. This would also ensure the Commission consistently targets, both during the Pre-Implementation Period and the forward setting price framework, a target *real return* on investment – where compensation for inflation reflects actual inflation over the period in question rather than expected inflation.

7. The target real return should be the same irrespective of whether Chorus' losses are estimated using a discounted cashflow (DFC) analysis or any other methodology. The Commission's 'on the record' view is that, over the Pre-Implementation Period, expected inflation using the IM inflation forecasting methodology was materially higher than actual inflation compensating for expected inflation in the discount rate.

8. Therefore, using a historical discount rate without adjusting the embedded historical expected inflation in the discount rate for the FLA for Chorus and LFCs will **provide a windfall** gain. Vector notes that **other regulated businesses such as gas pipeline businesses (GPBs) and electricity distribution businesses (EDBs)** were **explicitly denied compensation for expected inflation** over this period and, instead, were only compensated for actual inflation in price setting processes discharged by the Commission.

1. Ascertaining costs for the FLA asset

9. Vector is not convinced the Commission's decisions for determining costs for the FLA are consistent with section 162 of the Act. This is because the decision

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to include legacy assets and shared overhead costs within the loss calculation creates the risk of including expenditures in the FLA that were already recovered through the regulation of Chorus' copper network. Therefore, excluding such costs from the FLA would be a more consistent interpretation of the requirement of the Act.

10. A direct actual expenditure approach for the Pre-Implementation Period would ensure there would be no incidental double recovery (i.e. already recouped as part of copper network service tariffs) able to be claimed as part of the FLA. Whilst the Commission has suggested its interpretation of section 177 is permissible and has the discretion to undertake a broader interpretation of the costs, we are not convinced its interpretation gives best effect to the purpose of Part 6.

11. We continue to believe the construction of section 177(5) requires an analysis of directly incurred expenditures. Indeed, the Commission's explanation of the legislative background to this provision again does not provide a strong rationale for enlarging the loss ascertaining exercise. Rather, the background to section 177(5) requires the Commission not to apply any efficiency overlay to directly incurred expenditures of Chorus and LFCs during the Pre-Implementation Period.

12. All parties agree that a double recovery of costs through two separate regulated pricing processes is not in the long-term benefit of telecommunications end users. Therefore, it is incumbent on the Commission to ensure it can clearly ascertain the losses for the FLA in a manner which is able to transparently avoid this consequence.

13. The inclusion within the Amendment Act the right to recover financial losses for the UFB network over the Pre-Implementation Period had provided Chorus with a perverse opportunity to game the volume of losses for UFB by virtue of its ownership of the existing copper customer access network. The extent to which customer migration from its copper network could have been managed to accrue losses over the Pre-Implementation Period would result in future higher UFB prices which would undermine the objectives of section 162 of the Act.

14. Vector recommends the proposals by Spark and TERA to provide a cross-check between UFB costs and regulated copper services has merit as it would provide a ceiling to the extent any double recovery in costs that could be claimed. The step proposed by TERA whilst having some practical challenges still has merit. This is because it provides an approximate level beyond which cost claims would otherwise appear unreasonable. Most importantly, the expenditures being claimed as part of the losses for the FLA must be independently verified as being incurred for delivering UFB and not already recovered through other regulated service prices.

15. Given the Commission has chosen to exercise its discretion for increasing the scope of expenditures for assessing the FLA, it must demonstrate that its interpretation of the task is not only permitted but best gives effect to the statutory objectives of Part 6. We believe the precedent set by the FLA needs to be understood by stakeholders. It is important for all stakeholders to have a clear understanding how the Commission would exercise a similar discretion when charged with solving future regulatory problems.

2. Real financial capital maintenance (FCM) requires adopting an inflation adjusted discount rate for determining unrecovered financial returns for the FLA

16. As discussed in our submission to the Dr Lally Paper we have strong reservations about the Commission's approach for estimating the unrecovered financial returns for the FLA is inconsistent with the Commission's specified target *real* return on investment. The target *real* return on investment should be adopted for both the Pre-Implementation Period and in the forward-looking price setting process under Part 6 of the Act. The transition to a DCF framework does not change the requirement for the discount rate to only provide compensation for actual inflation over the period and to remove the inflation expectations embedded in the nominal WACC.

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17. Vector notes the difference between the Commission's inflation forecasting and actual inflation had a material impact on the price setting processes set by the Commission during the Pre-Implementation Period for other regulated sectors (e.g. Default Price Path (DPP) 1 and DPP 2 for EDBs and GPB1).

18. Vector, which supplies both GPB and EDB services under Part 4 of the Commerce Act has recorded our repeated concern about the Commission's inflation forecasting methodology having a predisposition to over-forecast inflation.[1] This predisposition has had a material impact on the nominal return and financial performance of these businesses over the Pre-Implementation Period. However, the Commission has to-date not elected to change its inflation forecasting method as the best method for adjusting the inflation expectations within the nominal WACC.

Real FCM should be applied consistently targeted for the FLA and forward-looking price setting processes

19. Under Part 4 of the Commerce Act (excluding Transpower) and the proposed approach for setting Fixed Fibre Line Access Service (FFLAS) prices under Part 6 of the Act for Chorus, the regulated entity is explicitly compensated for:

    a. The nominal WACC; **less**

    b. Expected inflation estimated to be embedded in the nominal risk-free-rate (RFR) used to set the nominal WACC (with expected inflation removed from returns within the working of the Commission's financial models); **plus**

    c. Actual inflation (with actual inflation compensated via the roll forward of the RAB between regulatory periods).

20. However, the Draft Fibre IMs determine financial returns for the FLA using a *nominal* WACC (including the implied expected inflation) with no adjustments for the expected inflation with actual inflation over the Pre-Determination Period.

21. Given the price setting events for Part 4 suppliers over the same time period as the Pre Implementation Period showed expected inflation (from the use of the

[1] *Vector submission IM Review Draft Decision and IM Report, 4 August 2016 p.12*

same methodology to forecast expected inflation as in the Draft Fibre IMs) exceeded actual inflation, the financial return for the FLA exceeds the level required to satisfy real FCM. Such a position cannot be reconciled with the Commission's stated position of targeting real FCM for meeting its statutory objective in both administering Part 4 of the Commerce Act and its proposed approach for Part 6 of the Act. Deviating from real FCM would obviate much of the discussion from the Draft Decision for the target return approach.

22. Were the Commission to consistently target real FCM for both prices set under Part 6 and the FLA, then the *nominal return* for Chorus and LFCs over the Pre-Implementation Period should be equal to:

    a. The nominal WACC the Commission estimates; ***less***

    b. An estimate of expected inflation built into that nominal WACC (using inflation expectations contemporaneous with the nominal WACC); ***plus***

    c. Actual inflation.

23. The above steps are intended to ensure the supplier earns a real return on investment and inflation compensation that is no greater than observed inflation. Whilst the Commission's approach is typically applied in a forward-looking context, so long as the Commission retains the view that its measure of expected inflation was reasonable (i.e. the Draft Fibre IM inflation forecasting method), the removal of expected inflation in the historical nominal WACC must also be applied to the FLA to ensure returns do not exceed actual inflation for real FCM.

Deducting expected inflation using the IM methodology

24. The Commission's preferred method of deducting forecasting inflation embedded in the nominal WACC is to rely on the Reserve Bank of New Zealand's (RBNZ) forecasting (and where RBNZ forecasts are not available it simply relies on the inflation target of the RBNZ as the relevant forecast). Failing to adjust the nominal WACC by expected inflation will result in Chorus and LFCs exceeding the target real return on investment for the losses incurred in the Pre-Implementation Period.

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25. The Commission's method involves estimating a nominal WACC using a series of five-year risk-free-rates (RFRs) from 31 December 2012.[2] Each RFR has 5 years of expected inflation built into it. Applying the Commission's inflation forecasting methodology to the December 2012 RBNZ inflation forecasts results in an estimate of expected inflation of 1.86% per annum. However, actual inflation was between 1.08% and 1.19% (depending on whether actual inflation is measured over the subsequent 5 years or to the end of the Pre-Implementation Period).

26. This means that, based on the Commission's logic clearly set out above, the nominal return that Chorus and LFCs required was around 70 to 80 basis point per annum (bppa) less the nominal WACC estimated as at December 2012. This 70 to 80 bppa is the difference between:

    a. The Commission's estimate of compensation for expected inflation 1.86% built into the 5-year nominal RFR using the inflation forecasting method of the IMs; and

    b. the actual inflation that occurred over the subsequent 5 years from 31 December 2012 or to the end of the Pre-Implementation Period circa 1.08% to 1.19% (depending on whether expected inflation is measured over the subsequent five years or the application of the RFR to the end of the Pre-Determination Period)

27. The average difference between expected inflation and actual inflation is around 0.8%. This means the nominal return Chorus and LFC require on average is around 80bp lower than the nominal WACC estimated for each year from 2012 onwards. The 80bp difference in nominal returns is consistent with the impact of on investment returns for GPBs and EDBs over the same time period from the application of real FCM under Part 4. Accordingly, if the Commission considers its Draft Fibre IM inflation forecasting methodology remains the most

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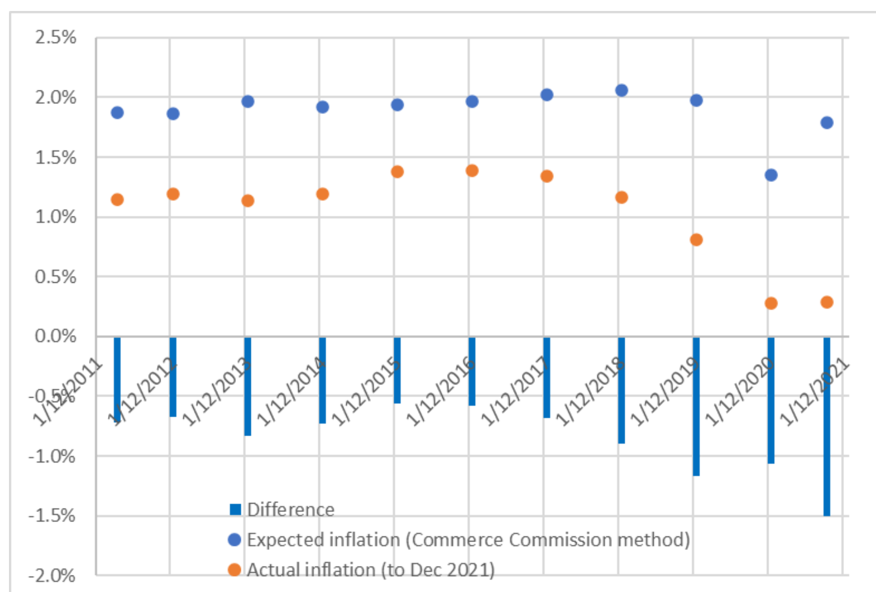
[2] [Further consultation–initial value of financial loss asset] Fibre Input Methodologies Determination 2020– SCHEDULE B, Methodology for determining the financial losses clause 1.1.12 (1) (c)(iii).

appropriate way to measure expected inflation then this impact should be consistently applied to the discount rate used for the FLA.

28. The difference between the Commission's forecast inflation (using the Draft Fibre IM Methodology) and actual inflation is shown in Figure 1 below. Figure 1 shows from March 2012 onwards 5 years of expected inflation using the Draft Fibre IM inflation forecasting methodology; actual inflation to December 2021; and the difference between these.

Figure 1: Expected vs Actual inflation for 2012-2021 using the IM forecasting methodology



29. Figure 1 shows each year over the Pre-Implementation Period expected inflation exceeded actual inflation by at least 50bp.

The Draft Fibre IMs for the FLA do not remove inflation expectations from the nominal WACC

30. The Commission is proposing to value the FLA in a manner that is equivalent to providing financial returns for Chorus and LFC losses compensating for expected inflation (incorporated in its nominal WACC RFR estimate) for the 2011-2021 period. This approach is inconsistent with the Commission's framework of targeting real FCM. Real FCM requires inflation compensation not to exceed actual inflation for the years in question.

31. The current drafting of the Fibre IMs would result in the financial returns being determined using a nominal WACC for the Pre-Implementation Period while the investment return for FFLAS prices set under Part 6 will be set to target a real return on investment.

The Commission's Draft Fibre IM Inflation Forecasting Methodology

32. The Commission may consider it unusual applying its inflation forecasting method for estimating expected inflation (in a retrospective context) and, in doing so, arriving at a materially higher estimate than the actual inflation now known to have occurred. However, failing to remove the inflation expectations in its nominal discount rate will result in a discount rate that is higher than actual inflation occurring over the Pre-Implementation Period. This means real FCM is violated as inflation compensation exceeds actual inflation.

33. Vector considers **the systematically lower actual inflation compared to the Commission's expected inflation (from applying the Draft Fibre IM inflation forecasting method) over the last decade highlights there is something wrong with the Commission's method for estimating expected inflation.** The persistent over-forecasting of expected inflation for an extended period (covering almost the whole duration of the FLA) suggests this method is unlikely to be the most reliable method to forecast expected inflation. It is for this reason Vector has previously advocated that one option is for the Commission to target a nominal return on investment as the target return model given the persistent delta between the Commission's expected inflation and actual inflation and the impact on nominal returns.

34. Vector continues to recommend the Commission reconsider its inflation forecasting method as there are materially better approaches to forecast expected inflation than the proposed Draft Fibre IM method. The historical application of this method demonstrates the predisposition of the Draft IM method to over-forecast expected inflation. Vector continues to recommend the Commission adopt market-based forecasts of inflation to ensure its inflation expectations better reflect those embodied within its nominal WACC estimate.

35. Below in Figure 2 we show using the Commission's post-tax WACC model, how the nominal WACC for the Pre-Implementation Period would be affected by the

Commission's forecast of expected inflation using the Draft Fibre IM forecasting method and a discount rate that would be more equivalent to the inflation adjusted returns allowed for other regulated sectors. We have not made any other changes to the Commission's model except to compute expected inflation as per the Draft Fibre IMs and the actual inflation for the period. We forecast expected inflation using five year ahead inflation estimate derived from the Draft Fibre IM inflation forecasting method using the inputs contemporaneous with the five-year RFR from 31 December 2012.

Figure 2: Commission's nominal discount rate adjusted by IM inflation forecasting method

	June 2012	*June 2013*	*June 2014*	*June 2015*	*June 2016*	*June 2017*	*June 2018*	*June 2019*	*June 2020*
Nominal (Post tax WACC)	7.6%	7.6%	7.6%	7.6%	5.4%	5.4%	5.2%	4.5%	4.5%
Real Discount Rate + Actual inflation (5 year ahead)	6.71%	6.77%	6.70%	6.99%	5.08%	4.83%	4.49%	3.65%	3.70%

36. Figure 2 highlights the consistent differences between the nominal ex-ante inflation expectations of the nominal post-tax WACC (using the Draft Fibre IM inflation forecasting method) relative to the lower actual inflation over the entire Pre-Implementation Period. Whilst differences in actual inflation from the forecast are not unusual, the decade long impact on the financial return highlights the pre-disposition for the Draft Fibre IM Inflation forecasting method to over-forecast expected inflation.

37. The continuous asymmetric mismatch between inflation expectations and actual inflation provides significant uncertainty and reduces confidence that the forecast is in fact a reasonable expectation of the expected inflation embodied in the nominal WACC.

The long-term benefit of end-users is better served by more accurate inflation forecasting of expected inflation

38. Vector considers the continuous asymmetric mismatch in expected inflation and actual inflation from the Draft Fibre IM inflation forecasting method does not serve the long-term benefit of end-users. This is because the interest cost compensation provided for in the Commission's nominal WACC is provided for

in nominal terms – with no adjustment for actual inflation. Therefore, the impact of the lower nominal return from actual inflation being less than the Commission's expected inflation forecast is fully borne by shareholders through a lower nominal return and lower real-real return on equity (RROE). This was in fact the impact for Part 4 suppliers regulated services where lower nominal returns from lower actual inflation than expected inflation contributed to a lower RROE.

39. Vector considers the status quo is not in the long-term benefit of telecommunications end-users. The persistent asymmetric delta between expected inflation from the application of the Draft Fibre IM inflation forecasting method and actual inflation reduces the capability of Chorus and LFCs to continue to make the necessary investments into their networks given the lack of confidence in the projected nominal revenues.