



Independent Assessment of Chorus' Financial Position

12 December 2013



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The results of our work, including the assumptions and qualifications made in preparing the Independent Assessment of Chorus' Financial Position dated 12 December 2013, are set out in the enclosed Report ("Report"). You should read the Report in its entirety including the appendices, applicable Terms of Reference and any limitations. A reference to the Report includes any part of the Report. No further work has been undertaken by EY since the date of the Report to update it.

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This report does not contain all the information which might ordinarily be expected to be included in a report of this nature because some of the background and supporting information is subject to a confidentiality agreement and cannot be disclosed. Recipients of this report should read the contents herein with this in mind.

Executive summary

The Ministry of Business, Innovation and Employment (“MBIE”) commissioned EY to undertake an assessment of Chorus Limited’s (“Chorus”) financial position and the expected financial impact on the business resulting from the recent Commerce Commission (“Commission”) final Unbundled Bitstream Access (“UBA”) pricing decision. This Report sets out our findings in accordance with the Terms of Reference (“ToR”)

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The impact of the Commission’s final UBA pricing decision on Chorus’ annualised EBITDA is estimated to be \$142m based upon September 2013 broadband connections

A significant proportion of Chorus’ revenue is comprised of copper products that are subject to price regulation. The Commission made a final decision on 5 November 2013 to reduce the monthly UBA price by \$10.54 (a 49% reduction) with effect from 1 December 2014. This price reduction affects 1.1m copper broadband connections as at 30 September 2013.

The Commission’s price determination has a material impact on Chorus’ forecast revenue and EBITDA from FY15 to FY20. Our calculation of the impact of the Commission’s final pricing decision on EBITDA is consistent with the estimated \$142m annualised impact on EBITDA announced by Chorus on 5 November 2013.

We note that the impact of the proposed UBA price reduction on revenue and EBITDA could be affected by the outcome from Chorus’ Final Pricing Principle (“FPP”) application on UBA pricing, the High Court appeal and the Telecommunications review being undertaken by the Government.

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The final UBA pricing decision results in an estimated \$1bn funding gap prior to Chorus taking any mitigating actions

The Commission’s final decision impacts EBITDA and cash flow over the period from FY15 to FY20, resulting in a reduced net interest bearing debt capacity as well as lower cash flow to fund the Ultra Fast Broadband (“UFB”) and Rural Broadband Initiative (“RBI”) commitments.

As a result of the UBA price reduction Chorus announced an estimated \$1bn¹ funding gap to the market on 5 November 2013 reflecting the cash flow required to maintain a net interest bearing debt to EBITDA target ratio of 3.5 times over the period FY15 to FY20. The estimated funding gap is based on Chorus’ current business plans including the commitments to deliver the UFB, RBI and to meet the current Telecommunications Service Obligations (“TSO”).

The estimated \$1bn funding gap, as set out in Chorus’ market release on 5 November 2013, is prior to Chorus taking any mitigating actions to reduce operating or capital costs or to amend its dividend policy.

Our calculation of the impact of the Commission’s pricing decision on the funding requirement out to FY20 is consistent with the \$1bn funding gap announced by Chorus assuming no mitigating actions are taken by Chorus.

1 The Chorus market announcement was \$1bn. The funding gap per the financial information provided by Chorus is \$1.07bn and this is the number we have used as the basis for our analysis.

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We are of the view the estimated funding gap could be reduced from \$1bn to between \$200m and \$250m by implementing a number of cash flow savings initiatives

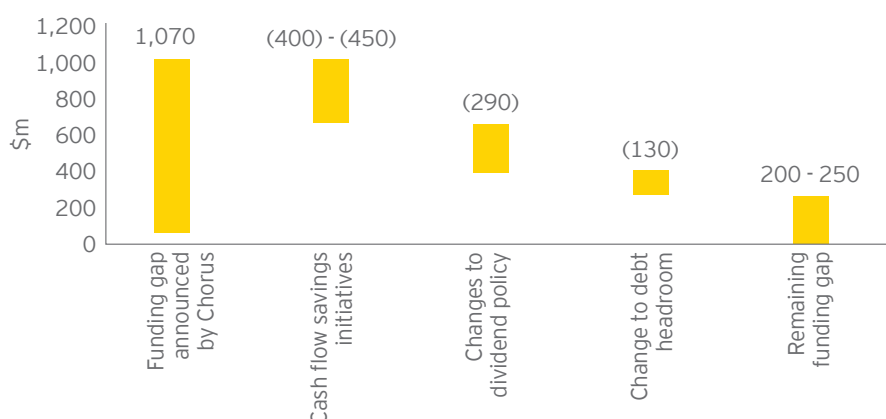
We have analysed a number of scenarios and cash flow savings initiatives and have assessed the potential impact on Chorus' financial forecasts. We are of the view the estimated \$1bn funding gap identified by Chorus could be reduced to between \$200m and \$250m if certain initiatives were successfully implemented.

The initiatives are wide ranging and include:

- ▶ Revenue uplift, operating and capital expenditure savings;
- ▶ Changes to the dividend policy; and
- ▶ Increasing the target net interest bearing debt to EBITDA ratio.

EY notes that, notwithstanding the successful implementation of all these initiatives it is likely that a funding gap (estimated to be \$200m to \$250m by FY20) will remain.

Chorus' funding gap and impact of cash flow saving initiatives



Source: EY analysis

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We estimate \$400m to \$450m of the funding gap could be reduced by implementing a number of revenue uplift, operating and capital expenditure saving initiatives

We have analysed a number of possible revenue, operating expenditure and capital expenditure initiatives that Chorus management has prepared as well as considering external benchmarks and our own experience of cash flow improvement programs. Although they are preliminary in nature, in our view these cash flow saving initiatives could reduce the funding gap by \$400m to \$450m by FY20.

These initiatives could result in a significant change in the business operating model and include revenue increases, operating cost savings and capital expenditure savings. We understand the initiatives are not likely to affect the contractual requirements of the fibre UFB and RBI rollout.

An element of execution risk, through a probability weighting, has been applied to the initiatives to estimate the funding gap reduction of \$400m to \$450m. We anticipate many of these initiatives will commence from 1 July 2015 to allow for further substantiation of the initiatives, board approvals, key stakeholder management and the development of detailed implementation plans.

Chorus has historically shown an ability to implement cost saving initiatives on a business as usual basis. Given the scale of change required from the cash flow saving initiatives considered and the fact that Chorus has only operated separately from Telecom Corporation of New Zealand Limited ("TNZ") for approximately two years, the ability to implement and achieve revenue increases, cost and capital expenditure savings from these initiatives will clearly be challenging.

Despite there being the potential to close \$400m to \$450m of the estimated funding gap through various initiatives, there are some potential risks or implications associated with these cash flow savings initiatives. The significance and likelihood of these risks materialising have not been assessed in detail given the timeframe to complete our work, and may need to be explored further (refer to Appendix 5.1 for further detail).

We have only considered actions that Chorus management can take to reduce the funding gap. Actions that may be available to Chorus requiring engagement and agreement with other parties, such as Crown Fibre Holdings ("CFH"), the Commission or the Government have not been considered by EY as part of this assessment.

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We believe a further \$290m of the estimated funding gap could be reduced by revising Chorus' dividend policy

We believe Chorus could consider implementing a two year dividend holiday until the current \$675m loan facility is refinanced in November 2015. This could be followed by a reinstatement of the dividend from FY16 to FY20 at a rate equal to 50% of the FY13 dividend paid, being 12.75 cents per share.

Based on the assumption that the FY13 dividend policy (25.5 cents per share) would be continued from FY14 to FY20, the impact of this change in dividend policy could reduce the funding gap by \$290m over the period to FY20. We note that any interest savings from a lower debt requirement during this period would be incremental to this amount.

We have not considered the potential effect the dividend holiday may have on any initiatives to raise further capital (such as a capital raising) or on the Chorus share price.

.....

Increasing the target net interest bearing debt to EBITDA ratio from 3.5 times to 3.75 times could reduce the funding gap by circa \$130m

Increasing the target net interest bearing debt to EBITDA ratio from 3.5 times to 3.75 times could reduce the estimated funding gap by circa \$130m. This is on the basis of aligning the target ratio with current debt covenants. We note that this calculation excludes any potential increase in borrowing costs that may result due to the higher leverage under the terms of Chorus' banking facilities. In addition, an increase in the net interest bearing debt to EBITDA ratio could result in increased risk to Chorus of a ratings downgrade and may affect Chorus' ability to access capital markets.

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Notwithstanding the implementation of any cash flow savings initiatives identified there is the potential for a banking covenant breach

Based on Chorus management scenarios, there is a peak in net annual cash outflows in FY15 and FY16 based on the need for capital expenditure to build the UFB and RBI coupled with costs relating to the planned separation of activities, functions and systems from TNZ.

Taking into account the impact of the Commission's decision on the forecast EBITDA between FY15 and FY20, and assuming the cash flow savings initiatives outlined in this Report are successfully implemented, we believe the risk of Chorus not meeting its banking financial covenants remains.

Both S&P and Moody's credit rating agencies have Chorus on a negative credit watch. The potential for a ratings downgrade to Baa3/BBB- (from Baa2/BBB, for Moody's and S&P respectively) exists. If a ratings downgrade eventuated, the impact could see an increase in interest costs which we consider would not materially increase the estimated funding gap.

An investment grade rating, is required to enable Chorus to pay a dividend without CFH's consent and for access to sufficient debt volume to satisfy refinancing requirements. Any EBITDA scenario that includes net interest bearing debt levels above the covenant test of 3.75 times EBITDA could potentially lead to Chorus renegotiating its syndicated debt facilities.

.....

Chorus may need to consider additional options to bridge the funding gap and mitigate the risk to its financial covenants

As outlined above, after the implementation of various initiatives an estimated funding gap at the end of FY20 of \$200m to \$250m and the potential for a banking covenant breach may still exist.

Accordingly, Chorus would need to consider other funding options which may include (but are not limited to):

- ▶ Further revenue, operating cost and capital expenditure initiatives in addition to those identified;
- ▶ Further reduction in dividends;
- ▶ A capital raising; and / or
- ▶ Renegotiating contractual arrangements with CFH.



Appendices

Appendix 1 – Letter to the Minister



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Hon Amy Adams
Minister for Communications and Information Technology
Parliament Buildings
Wellington 6160
New Zealand

12 December 2013

CC Brad Ward
Programme Manager, Telecommunications Review
Ministry of Business, Innovation and Employment
Level 8, 33 Bowen Street
PO Box 5488, Wellington 6011
New Zealand

Consultancy Services in Relation to Chorus Limited

Dear Hon Ms Adams

In accordance with the Services Agreement for Consultancy Services in relation to Chorus Limited ("Chorus") dated 2 December 2013 we are pleased to present our report summarising the results of the financial analysis of Chorus and expected financial impact on the business post the Commerce Commission's ("Commission") final pricing decision.

This report has been prepared on your instructions solely for the purpose of presenting the results of the financial analysis of Chorus and expected financial impact on the business following the Commerce Commission final pricing decision, and should not be relied upon for any other purpose. Any use third parties may choose to make of our report is entirely at their own risk and we shall have no responsibility in relation to any such use.

With respect to the forecast financial information relative to Chorus referenced throughout this report, there will usually be differences between estimated and actual results, because events and circumstances frequently do not occur as expected, and those differences may be material. We take no responsibility for the achievement of projected results or initiatives.

We wish to place on record our appreciation for the assistance we have received from all parties.

Yours sincerely

Bryan Zekulich
Partner,
Ernst & Young

Wayne Boulton
Partner,
Ernst & Young

A member firm of Ernst & Young Global Limited

Appendix 2 – Context

MBIE announced an independent assessment of the financial position of Chorus on 7 November 2013, with specific guidance in the ToR provided on 15 November 2013

The ToR is detailed in Appendix 3 of this Report. A timeline of key announcements is set out in Appendix 10 of this Report. Selected events and announcements are summarised below:

- ▶ Chorus was demerged from Telecom Corporation of New Zealand on 30 November 2011 through a scheme of arrangement. Chorus presented its first annual financial statements for the 7 month period ended 30 June 2012 and subsequently for the year ended 30 June 2013. In May 2011 CFH contracted Chorus to build the UFB Network in 24 of the 33 areas across New Zealand with completion due by FY20. The UFB program relating to Chorus' areas aims to pass 830,900 premises and has an estimated revised build cost of \$1.7bn to \$1.9bn.
- ▶ The Crown (via CFH) is providing \$929m of funding to Chorus to build the UFB (through a mix of Debt and Equity securities), with Chorus providing the balance of the funding required.
- ▶ On 5 November 2013, a Commission determination announced that the final benchmarked UBA price would be \$10.92, effective 1 December 2014. This represents a 49% reduction from the current \$21.46 monthly charge. This means that the \$44.98 per month Chorus currently charges RSPs for a copper line and copper broadband service would reduce to \$34.44. The Commission's price determination effectively sets a monthly copper broadband price that will be lower than the monthly fibre broadband price of \$37.50 per month from 1 December 2014.
- ▶ The reduction in price for copper broadband services will have a direct impact on Chorus' revenue from 1 December 2014 given copper broadband accounts for approximately 1.1m connections.
- ▶ On 5 November 2013 Chorus advised the market that the proposed new UBA price would have an estimated \$142m annualised EBITDA impact, based on the connection numbers as at 30 September 2013. In addition, Chorus also highlighted the decision would lead to an estimated \$1bn funding shortfall through to FY20 and that the company may therefore not be able to finance the UFB roll out.

Appendix 3 – Terms of Reference

Terms of Reference

MBIE commissioned EY to undertake an independent assessment of Chorus' financial position. This followed Chorus' response to the Commission's decision on 5 November 2013, outlining its implied \$1bn funding shortfall by FY20 and \$142 million estimated annualised EBITDA impact resulting from the Commission's decision on wholesale prices for copper-based broadband services.

The scope of work we undertook was guided by the ToR released by the Minister for Communications and Information Technology on 15 November 2013. Specifically this is to:

- ▶ Assess the impact of the final Commission decision on prices for the Unbundled Copper Local Loop ("UCLL") and UBA services on key Chorus financial indicators, including EBITDA, net operating cash flow, debt ratios, borrowing limits and borrowing costs now and over the build period for the UFB and RBI networks and to the end of the term of the CFH securities.
- ▶ Then identify the financial capability of Chorus against its TSO, Standard Terms Determination ("STD"), RBI and UFB contractual obligations, taking account of any actions that Chorus could take to increase financial flexibility including adjustments to:
 - ▶ Operational costs;
 - ▶ Capital cost structures;
 - ▶ Debt facilities; and
 - ▶ The contribution that a change in dividend policy could make.

Communication with Chorus management

The work has involved formal and ad hoc communication with the senior management team of Chorus and its advisers, including the Chief Financial Officer, the Chief Executive Officer and Chorus' Chairman.

Information requests and queries were submitted through a dataroom with access restricted to EY team members. Answers provided verbally by Chorus were also provided through the dataroom process.

A large proportion of our work was based on the Chorus financial and operating model (the "Model") relating to the seven year forecast period from FY14 to FY20.

Confidentiality

Our work was undertaken subject to a Confidentiality Agreement (the "CA") with Chorus. Under the terms of the CA, Chorus agreed to provide us with non-public, market sensitive and commercially sensitive information:

- ▶ Relating to the estimates, forecasts, opinions, projections and other financial related information, without limitation;
- ▶ In its possession or under its control; and
- ▶ Relevant to the preparation of our Report, on the basis set out in the ToR.

Certain statements made or financial information provided by Chorus and included in this report have been checked by Chorus management for factual accuracy and management have agreed that it can be released.

Timing

We commenced the independent assessment on 18 November 2013. Our Report is dated 12 December 2013. We have not undertaken any update or subsequent assessments in relation to Chorus under the ToR post the date of this Report. Given the short timeframe it is possible that our investigation may not have revealed all matters which would have been identified by a longer investigation and the reliance that can be placed on our Report may be limited in this regard.

Appendix 4 – Approach and process

Approach and process undertaken to analyse Chorus' forecasts

As outlined in the ToR for this independent assessment of Chorus' financial position we undertook the following work:

- ▶ Review of Chorus' financial and operational model to test mathematical accuracy and logic;
- ▶ Identified the key assumptions impacted by the Commission's determination and ensured they were flowed through the Chorus financial and operational model appropriately;
- ▶ Identified relationships/variables which should be considered as part of the financial outcomes;
- ▶ Identified other potential cost reductions/performance improvement initiatives available to Chorus and, where possible, included key assumptions/sensitivities in the operational and financial model;

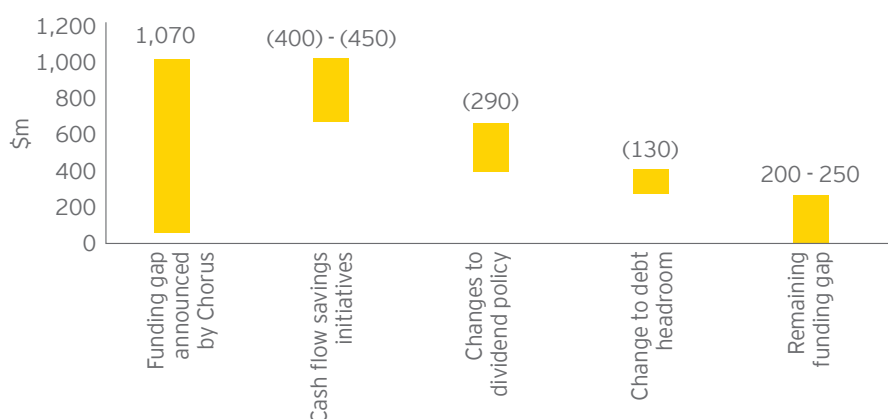
- ▶ Assessed the sources and uses of the funding of the Ultrafast broadband (UFB) contract per the plan and identified any material impact on the funding sources post the ruling;
- ▶ Assessed the impact on EBITDA and Free Cash flow available before debt based upon the above and established revised debt capacity/credit profile of the business. Reference was made to the existing/proposed debt facilities and the impact on future debt capacity was understood. An assessment was undertaken both absent potential cost outs and assuming cost outs/performance improvements were made.

We note the financial and operational models and data we have assessed is forward looking and therefore market sensitive. Accordingly we have not provided any numbers or assumptions on the forecast financial performance or financial position of Chorus. In addition, due to the advisory nature of our work we have expressed no view or conclusion on the achievability or reasonableness of the forecast financial information.

Appendix 5 – Our view on cash flow savings

Summary of Chorus' funding gap and potential cash flow saving initiatives to reduce the funding gap

Chorus' funding gap and impact of cash flow saving initiatives



Source: EY analysis

5.1 Operational cash flow savings initiatives

Overview

- The scope of our work included understanding the options that Chorus Management could take to address the expected funding gap. We have not considered or taken into account any actions or options that could be taken by other parties (e.g. CFH, the Commission, the Government, or other parties) that could assist with closing the estimated funding gap.
- We have analysed a number of possible revenue, operating expenditure and capital expenditure initiatives that Chorus management has prepared, as well as considering external benchmarks and our own experience of cash flow improvement programs. Although the cash flow saving initiatives are preliminary in nature, in our view these initiatives could reduce the funding gap by \$400m to \$450m by FY20.

The estimate may be revised when detailed execution plans are prepared for the key initiatives. Given the preliminary nature of the estimate, we have analysed the overall targets and logic of the process to identify the initiatives and the related savings.

The initiatives are wide ranging and include:

- Opportunities to increase revenues;
- Operating cost savings; and
- Capital expenditure savings or deferral.
- An element of execution risk, through a probability weighting, has been applied to the initiatives to estimate the funding gap reduction. We anticipate many of these initiatives to commence from 1 July 2015 to allow for further substantiation of the initiatives, board approvals, key stakeholder management and the development of detailed implementation plans.

- Chorus management are embarking on a cultural change from a monopoly telecommunications provider to a standalone listed company. In some respects the Commission decision has accelerated this change and management are working through the preliminary initiatives, revising and reviewing the planning to better define and execute on these initiatives.
- Under the TSO and other contractual agreements, Chorus is obliged to deliver certain programs, such as the Fibre UFB and RBI elements. We understand that any potential reduction in capital expenditure proposed in the above initiatives will not affect the contractual requirements of the Fibre UFB and RBI rollout.
- The cash flow saving initiatives exclude potential operational and cash flow improvements in relation to the NIPA with CFH. As per the media

Appendix 5 – Our view on cash flow savings (continued)

statement by the Honourable Amy Adams (Minister of Communications and Information Technology) dated 5 December 2013 “the Government supports CFH entering into discussions with Chorus to help manage this issue”. We have not considered the impact of any agreement between Chorus and CFH and the resulting impact any such agreement might have on the Chorus future cash flow.

- ▶ Deferring or ceasing some capital expenditure may in some cases result in an increase in operational expenditure.

There are some risks or implications that may need to be considered

- ▶ Despite there being the potential to close \$400m to \$450m of the funding gap through various initiatives, there are some associated risks or implications, the significance and scale of which have not been assessed within this Report and will need to be explored further. Potential risks and implications include:
 - ▶ The ability of Chorus to seek agreement with some of the key stakeholders could delay, reduce or eliminate some of the cash flow savings initiatives.
 - ▶ Any new connections to the Chorus network will either be contracted (UFB or RBI) or require a full up front recovery of the costs incurred to connect.
- ▶ Service levels to RSPs could be lower than they are today, and accordingly end consumers will receive lower service levels. This could result in an increase in consumer complaints and negative publicity.
- ▶ Network fault rates could increase as Chorus implement a reactive rather than proactive maintenance strategy resulting in reduced network performance and increased consumer complaints.
- ▶ The lead time to remedy network faults may increase leading to a higher number of consumer complaints.
- ▶ The number of businesses or consumers who cannot connect to the network may increase, as Chorus agree to new connections only on a full cost recovery basis or where and when the UFB or RBI is scheduled to be rolled out may also result in increased consumer complaints.
- ▶ Businesses or consumers could face congestion on the network.
- ▶ The separation from TNZ covering activities and IT systems may be delayed or investment in those systems deferred leading to increased opex and/or provisioning lead times.
- ▶ The cost and capital savings may result in some redundancies.
- ▶ There could be negative brand damage for Chorus as consumers receive a service level that could be lower than that provided today.

Appendix 5 – Our view on cash flow savings (continued)

5.2 Dividend policy

Our estimation of the \$290m cash flow savings from a reduction in dividends assumes the estimated \$1 billion funding gap includes a continuation of the FY13 dividend policy (25.5 cents per share) between FY14 to FY20. The estimated dividend reductions are based on the following assumptions:

- ▶ Chorus implements a dividend holiday in the second half of FY14, FY15 and the first half of FY16;

- ▶ Between FY16 and FY20 Chorus reinstate the dividend at 50% of the FY13 dividend, or 12.75cps;
- ▶ The dividend reinvestment plan uptake rate remains at 30% which is consistent with the uptake rate of the FY13 interim dividend; and
- ▶ This estimate excludes any interest savings from a lower debt requirement.
- ▶ We have not considered the impact of any potential capital raising as it was outside the ToR.

We have used the following external research to help form a view on the dividend reduction:

- ▶ Various brokers have recently released their research reports on Chorus. All the broker reports expect a reduction in dividend pay-out to varying degrees, with some also considering the possibility of a capital raising.

Selected broker reports

Dividend: \$/share	Date	FY13	FY14	FY15	FY16	% chg	Comments
Credit Suisse	04-Dec-13	0.26	-	-	-	(100.0%)	May need to raise circa \$250m to reduce gearing in FY15.
Deutsche Bank	01-Dec-13	0.26	-	-	-	(100.0%)	Either suspend dividend or raise \$300m with modest dividend.
J. P. Morgan	29-Nov-13	0.26	0.26	0.10	0.05	(47.1%)	Need to raise \$200m to reduce gearing.
CIMB	21-Nov-13	0.26	0.15	0.15	0.15	(41.2%)	Dividend reduction or suspension. Unlikely to be able to raise \$400m equity.

Source: Credit Suisse (4 December 2013); Deutsche Bank Markets Research (1 December 2013); J. P. Morgan (29 November 2013); CIMB (21 November, 2013)

Note: FY13 Actual. FY14-16 Estimates. Percentage change represents the movement in dividend from FY13 to the average across FY14-16.

Appendix 5 – Our view on cash flow savings (continued)

Further, a number of telecommunications companies have issued dividend reductions guidance over the past twelve to eighteen months. The companies are vertically integrated compared with Chorus which has been structurally separated from TNZ. The companies (not a complete list) include:

- ▶ France Telecom: 41% reduction in dividend from 2011 levels with the second reduction announced in October 2012. The reduction was to reduce the pay out in order to control debt and maintain its credit rating.
- ▶ Portugal Telecom: 69% reduction in dividend from EUR 32.5cps in 2012 to EUR 10cps for 2013 and 2014, announced in August 2013. The company plans to focus on debt reduction in light of current market conditions.
- ▶ Telecom Italia: Halved total dividends to be paid out from 2013 to 2015 to EUR 450m p.a., down from EUR 900m paid out in FY12, announced in February 2013. The reduction was in conjunction with debt-raising to fund network development in Italy and Brazil.
- ▶ TPSA: France Telecom's Polish arm TPSA cut its 2012 dividend to PLN 0.5 per share from PLN 1.5 per share in prior years. TPSA, which announced the cut in February 2013, cited tough competition and a wider market slowdown.

- ▶ Telefonica: The Spanish telecommunications company announced in July 2012 that it would cut its 2012 dividend payment, resuming payment in 2013 at half the level it had previously announced for 2012. The highly leveraged company reduced its dividend to protect its investment-grade rating in difficult market conditions.

We consider a dividend holiday may be appropriate given the \$675m loan facility refinancing required in November 2015, the Commission's final decision on UBA pricing and the contractual commitments to rollout UFB and RBI.

We have not considered the potential impact the dividend holiday may have on any capital raising that might be considered by Chorus nor the impact on the Chorus share price.

- ▶ Increasing the target net interest bearing debt to EBITDA ratio from 3.5 times to 3.75 times could reduce the funding gap by circa \$130m. This is on the basis of aligning the target ratio with current debt covenants. We note that this calculation excludes any potential increase in borrowing costs that may result due to the higher leverage under the terms of Chorus' banking facilities. In addition, an increase in the net interest bearing debt to EBITDA ratio could result in increased risk to Chorus of a ratings downgrade and may affect Chorus' ability to access capital markets. We have assumed Chorus maintains an Investment Grade rating.

5.3 Change in debt headroom target

- ▶ Chorus is required to maintain an investment grade credit rating to pay a dividend without CFH's consent.
- ▶ Chorus has therefore applied a 3.5 times net interest bearing debt to EBITDA target ratio to manage the debt headroom. This multiple is based on the target disclosed in the demerger Scheme Booklet.
- ▶ Chorus' net interest bearing debt to EBITDA banking covenant is 3.75 times EBITDA.

Appendix 6 – Debt

6.1 Existing debt facilities

Chorus debt at 30 June 2013

Currency: \$m	Limit	Drawn	Available	Maturity
Syndicated bank facility	675	675	-	Nov '15
Syndicated bank facility	675	520	155	Nov '17
EMTN (GBP)	509	509	-	Apr '20
Total	1,859	1,704	155	

Source: Chorus Annual Report 2013

Note: We have excluded the syndicated loan fee of \$7m and the \$168m impact of hedge rates used. These are outlined in Note 3 of the FY13 Annual Report.

- The bank facilities feature financial covenants including a net senior interest bearing debt to EBITDA ratio of 3.75 times. As at 30 June 2013, Chorus had a net interest bearing debt to EBITDA ratio of 2.9.
- In addition to the debt facilities outlined in the adjacent table, the Crown has committed to funding Chorus with \$929m as the network is built, split 50% debt (senior and subordinated) and 50% equity. The debt is unsecured and non-interest bearing, with repayments to be made in tranches from 2025 to 2036.

6.2 Potential impact on existing debt facilities

Potential interest impact from a credit rating downgrade

Investment grade rating	Potential basis point increase from a credit rating downgrade	Potential additional total interest expense p.a.
Baa2/BBB	No change	No change
Baa3/BBB-	15-25bps	\$3m-\$5m

Source: EY Analysis

- Chorus' current credit rating is Baa2/BBB. Since the Commission's announcement of the reduction in UBA pricing both Standard & Poor's and Moody's have placed Chorus on review for possible downgrade.
- Based on industry benchmarks, a ratings downgrade could have an impact on the annual interest expense.

Appendix 6 – Debt (continued)

6.3 Access to debt markets based upon an investment grade rating

Typical debt markets for New Zealand borrowers

Debt market	Required rating	Accessibility	Volume
Bank debt	>BBB-	Open at investment grade level	High
USPP	>BBB-	Open at investment grade level, however can be expensive due to swap back from US\$ into NZ\$	High
NZ bonds	>BBB-	Open at investment grade level	Medium
Aus bonds	>BBB-	Open at investment grade level	Medium

Source: EY Analysis

- The adjacent table depicts certain debt markets available to a borrower such as Chorus.

Comparable company syndicated debt raising since 2010

Borrower	Rating at issue	Amount	Date
ATCO Gas Australia	BBB	A\$450m	Nov '13
United Energy Distribution	BBB	A\$400m	Apr '13
DBNGP	BBB- (BBB LT)	A\$170m	Dec '12
Powerco	BBB	NZ\$100m	Apr '12
Genesis Power	BBB+	NZ\$525m	Apr '12
Energy Partnership Gas	BBB- (BBB LT)	A\$420m	Nov '11
Vector	BBB+	NZ\$175m	Jul '10

Source: LoanConnector

- The adjacent table summarises the major syndicated debt raisings in New Zealand and Australia by comparable companies since 2010:
- There were no sub-investment grade transactions with most issues at BBB and BBB+, underlying the requirement for an investment grade rating;
- The largest issue was \$525m by Genesis Power; and
- Investors were predominantly New Zealand and Australian banks, with some minor participation from Asian banks in the project/infrastructure assets.

Appendix 7 – Comparison with other infrastructure businesses

7.1 Background

- ▶ The following section is a comparison of the financial and operational performance of Chorus to other organisations sharing similar industry characteristics. We considered the following industry groups:
 - ▶ New Zealand and Australian infrastructure businesses;
 - ▶ Other New Zealand fibre broadband companies and the NBN Co of Australia; and
 - ▶ Global telecommunications companies.

7.2 New Zealand and Australian infrastructure businesses

- ▶ New Zealand and Australian infrastructure businesses (such as airports, ports, gas and electricity distributors) share a number of common features with the market in which Chorus operates. They may be subject to regulation (including regulated pricing), face limited competition, have large asset bases, high cash flows, high capital expenditure and large maintenance programs.

- ▶ The infrastructure businesses that we selected for comparison are set out below:

Selected New Zealand and Australian infrastructure businesses

Country	Company	Industry	Nature of business
New Zealand	Vector	Gas and electricity distribution	A multi-network infrastructure company serving New Zealand across the electricity, gas and telecommunications sectors
New Zealand	Transpower	Electricity distribution	State-owned enterprise that plans, builds, maintains and operates New Zealand's national electricity grid
New Zealand	Powerco	Gas and electricity distribution	A leading New Zealand electricity and gas infrastructure company
New Zealand	Auckland Airport	Aviation	New Zealand's major aviation transport hub
New Zealand	Port of Tauranga	Maritime	Operators of the primary port in New Zealand
Australia	SP AusNet	Gas and electricity transmission and distribution	An electricity transmission and electricity/gas distribution network based in Victoria, Australia
Australia	APA Group	Gas distribution	A major gas transportation and storage business with interests in energy infrastructure across mainland Australia
Australia	AusGrid	Electricity distribution	An electricity distribution network operator in New South Wales, Australia
Australia	DUET Group	Electricity and gas distribution	Large gas and electricity distribution conglomerate operating across Australia
Australia	Envestra	Gas transmission and distribution	An energy company operating natural gas transmission and distribution networks throughout Australia

Source: EY Analysis

- ▶ We have analysed key financial information and metrics for the above listed infrastructure businesses, and have averaged the key financial metrics across the two geographical sample sets.

Appendix 7 – Comparison with other infrastructure businesses (continued)

Comparison of New Zealand infrastructure businesses

Currency: NZ\$m	Chorus	Vector	Transpower	PowerCo	Auckland Airport	Port of Tauranga	Average
Period end	Jun-13	Jun-13	Jun-13	Mar-13	Jun-13	Jun-13	
Key financial information							
Revenue	1,057	1,279	918	401	448	244	658
Total operating expenses	(394)	(649)	(295)	(177)	(118)	(121)	(272)
EBITDA	663	630	623	224	331	123	386
Net debt at year end*	1,908	2,364	3,022	1,077	1,072	189	1,545
Average equity	576	2,203	1,460	476	2,486	764	1,478
Dividends paid	(95)	(148)	(295)	(52)	(157)	(63)	(143)
Key financial metrics							
EBITDA Margin	62.7%	49.3%	67.8%	55.8%	73.8%	50.4%	59.4%
Operating cost to income ratio	37.3%	50.7%	32.2%	44.2%	26.2%	49.6%	40.6%
Net interest bearing debt to EBITDA	2.9	3.8	4.8	4.8	3.2	1.5	3.6
Return on equity	29.7%	9.4%	18.1%	13.0%	7.2%	14.7%	12.5%
Debt/equity	2.9	1.1	1.9	2.3	0.4	0.2	1.2
Dividend yield	10.7%	5.6%	-	-	4.0%	3.3%	4.3%
Capex/revenue	64.4%	22.2%	78.6%	26.1%	12.3%	27.9%	33.4%

Source: Annual Reports

Comparison of Australian infrastructure businesses

Currency: NZ\$m	Chorus	SP AusNet	APA Group	Ausgrid	DUET	Envestra	Average
Period end	Jun-13	Mar-13	Jun-13	Jun-13	Jun-13	Jun-13	
Key financial information							
Revenue	1,057	1,935	1,502	3,949	1,550	599	1,907
Total operating expenses	(394)	(784)	(594)	(1,440)	(672)	(174)	(733)
EBITDA	663	1,151	908	2,509	878	425	1,174
Net debt at year end*	1,908	5,588	4,996	9,940	6,220	2,382	5,825
Average equity	576	3,753	2,435	3,588	6,143	843	3,352
Dividends paid	(95)	(298)	(319)	(546)	(213)	(111)	(297)
Key financial metrics							
EBITDA Margin	62.7%	59.5%	60.5%	63.5%	56.6%	71.0%	62.2%
Operating cost to income ratio	37.3%	40.5%	39.5%	36.5%	43.4%	29.0%	37.8%
Net interest bearing debt to EBITDA	2.9	4.9	5.5	4.0	7.1	5.6	5.4
Return on equity	29.7%	8.8%	8.7%	23.2%	0.4%	15.1%	11.2%
Debt/equity	2.9	1.5	1.7	2.7	1.0	2.9	1.9
Dividend yield	10.7%	6.9%	5.9%	-	8.2%	5.9%	6.7%
Capex/revenue	64.4%	51.5%	31.2%	38.2%	25.9%	42.8%	37.9%

Source: Annual Reports. Note: Australian dollars converted to NZ Dollars using rate as at June 2013 (rate obtained from oanda.com)

* Chorus' net debt at year end consists of debt, finance leases, EMTN hedging less cash.

18 Independent Assessment of Chorus' Financial Position

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Appendix 7 – Comparison with other infrastructure businesses (continued)

Observations

- ▶ Chorus' FY13 EBITDA margin was 62.7% which is broadly in line with its peers (59.4% average for New Zealand peers and 62.2% average for Australian peers). The operating cost to income ratio of Chorus is also similar to that of its peers.
- ▶ Chorus' net interest bearing debt to EBITDA ratio was 2.9 at June 2013. This is significantly lower than comparable peers whose net interest bearing debt to EBITDA ratios range from 3.2 to 7.1 (excluding Port of Tauranga that has a relatively low net debt level).
- ▶ In FY13 Chorus' return on equity was 29.7%, which is significantly higher than other infrastructure businesses which have average returns of 12.5% (New Zealand peers) and 11.2% (Australian peers).
- ▶ Chorus' debt/equity ratio was 2.9 when considering average debt and average equity balances for FY13. This is higher than the average ratios for New Zealand peers (1.2) and Australian peers (1.9).
- ▶ Chorus' FY13 dividend yield (based on its share price at 30 June 2013) was 10.7%. This compares with a 4.3% average dividend yield for New Zealand peers and 6.7% average dividend yield for Australian peers.
- ▶ The capex/revenue ratio for Chorus is 64.4%. This is nearly double the ratio of its New Zealand peers (33.4%) and higher than its Australian peers (37.9%).

7.3 Local Fibre Companies ("LFCs") and NBN Co

- ▶ We have considered the publically available financial information for the three New Zealand Local Fibre Companies (Enable, Ultrafast Fibre, Northpower) responsible for rolling out the UFB and providing fibre network services in New Zealand.
- ▶ The LFCs differ fundamentally from the current Chorus business model as they have no copper infrastructure or copper revenues. Additionally, given they are significantly smaller operations, we have not compared the financial performance of the companies.

- ▶ In relation to Cost Per Premises Passed ("CPPP"), only Chorus and Australia's NBN Co, the Government-owned entity responsible for rolling out the fibre network in Australia, publically report CPPP data. Chorus has a lower CPPP than NBN Co, that reported a CPPP of NZ\$3,856 per premise for its first set of release sites.

7.4 Global telecommunication companies

- ▶ We have not compared Chorus against other telecommunications companies based on the structural separation of the retail, wholesale and access components of the market and the uniqueness of the New Zealand model globally. International telecommunication markets appear to differ due to the vertical integration of RSPs and network asset ownership.

Comparison of LFCs and NBN Co (Australia)

Company	Period	Candidate areas	Premises Passed	Customer connections	Current CPPP (NZ\$)
Chorus	Jun-13	24	153,000	8,000	2,935
Enable	Jun-13	2	31,000	1,454	N/A
Ultrafast Fibre	Jun-13	6	48,000	1,322	N/A
Northpower	Jun-13	1	15,262	855	N/A
NBN Co	Mar-13	Australia	96,060	18,800	3,856

Sources: Chorus / Enable / Ultrafast Fibre / Northpower – Annual Reports

NBN Co – Premises passed / customer connections: "NBN Co Media Release: NBN Co March quarter rollout update, 15 May 2013"

Cost Per Premises Passed based on First Release Sites Actual: "Report to Parliamentary Joint Committee on the National Broadband Network – Financial and Rollout Data, 19 April 2013"

Appendix 8 – Historical financial information

Income statement

Selected income statement financial information and ratios

\$m	7mFY12	FY13
EBITDA	399	663
Net earnings/(loss) for the period	102	171
Selected ratios		
EBITDA margin	65.1%	62.7%
EBIT margin	34.3%	32.5%
NPAT margin	16.6%	16.2%
Return on average equity	33.2%	29.7%

Source: Chorus annual report and EY analysis

Balance sheet

Selected balance sheet ratios

\$m	Jun-12	Jun-13
Debt/Equity	3.1	2.9
Net interest bearing debt to EBITDA	2.6	2.9
Dividend payout ratio	55%	58%
Return on average equity	33.2%	29.7%
Return on average assets (leverage adjusted)	8.8%	7.9%

Source: Chorus annual report and EY analysis

Cash flow

Selected historic cash flow ratios

\$m	7mFY12	FY13
Capex/Revenue	42%	64%
Capex/Dividends	135%	213%

Source: Chorus annual report and EY analysis

Appendix 9 – Regulatory environment

As at the date of this Report, there were a number of regulatory processes and actions underway which are outside the terms of the ToR

The outcome of these processes and actions may fundamentally change the analysis and the size of the funding gap contained in this Report. Process and actions include (but are not limited to) the following:

UCLL and SLU pricing FPP application

- ▶ The Commission issued its decision on 3 December 2012 resulting in a 3.8% drop in the final average UCLL price. After the final decision, Chorus applied to the Commission to review the UCLL price, using a FPP which is based on a Total Service Long Run Incremental Cost ("TSLRIC") model.
- ▶ A TSLRIC model is essentially a bottom up costing model that produces the expected costs that would be incurred by an efficient operator providing the regulated service in the form described in the applicable standard terms determination. TSLRIC costs may be different from actual costs as these costs are representative of an efficient operator.
- ▶ On 6 December 2013 the Commission released a consultation document relating to the FPP for UCLL which seeks submissions of process and issues in relation to using the TSLRIC methodology. The Commission is expecting to complete the FPP process in December 2015.

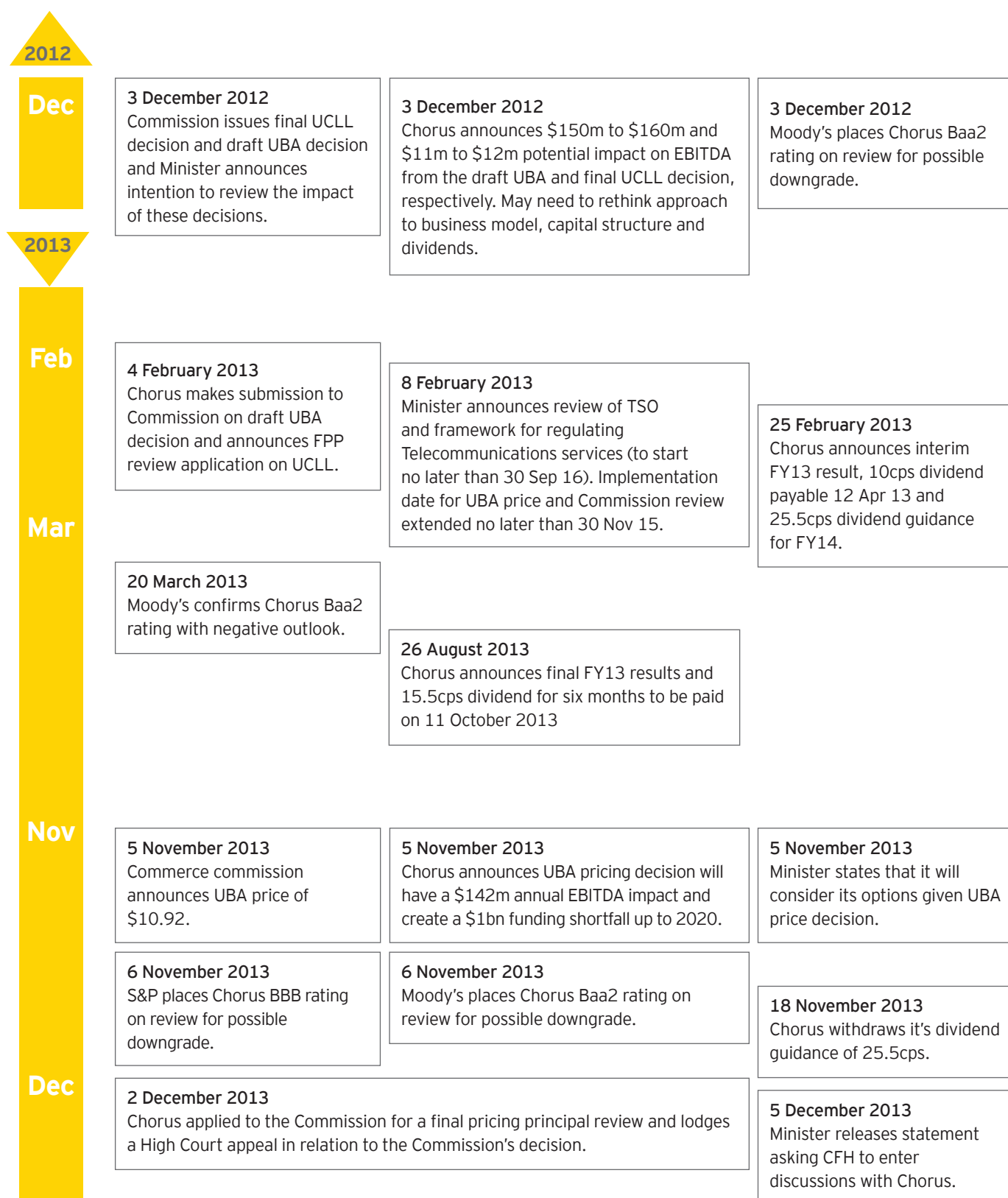
UBA pricing FPP application and High Court appeal

- ▶ The Commission issued its final decision on 5 November 2013 resulting in a 49% drop in the final average UBA price. After the final decision, Chorus applied to the Commission to review the UBA price, using a FPP which is based on a TSLRIC model.
- ▶ We understand the FPP process may take two years to complete.
- ▶ Chorus has also appealed to the High Court to determine whether the Commission has applied the law correctly in its final decision, in particular in relation to the specific factors set out in section 18 and section 18(2A) of the Telecommunications Act.

Regulatory Framework Review and TSO Review

- ▶ In February 2013, the Government announced a review of the TSO and also announced a review of the wider regulatory framework.
- ▶ On 9 July 2013, the Government issued a discussion document on the TSO, as part of a scheduled review, proposing a number of potential future options for the TSO, and inviting views on any additional options. Recommendations are expected to be provided to the Government by the end of December 2013.
- ▶ A draft regulatory framework discussion document was released in August 2013. The document stated the review was commenced earlier than anticipated to ensure that regulatory settings are, and remain, fit for purpose in a period of transition from a legacy copper network to a new fibre network. The review is the first step of a full review of the Telecommunications Act 2001. The regulatory framework review was not required to commence until September 2016.

Appendix 10 – Timeline of announcements



Appendix 11 – Glossary of terms and definitions

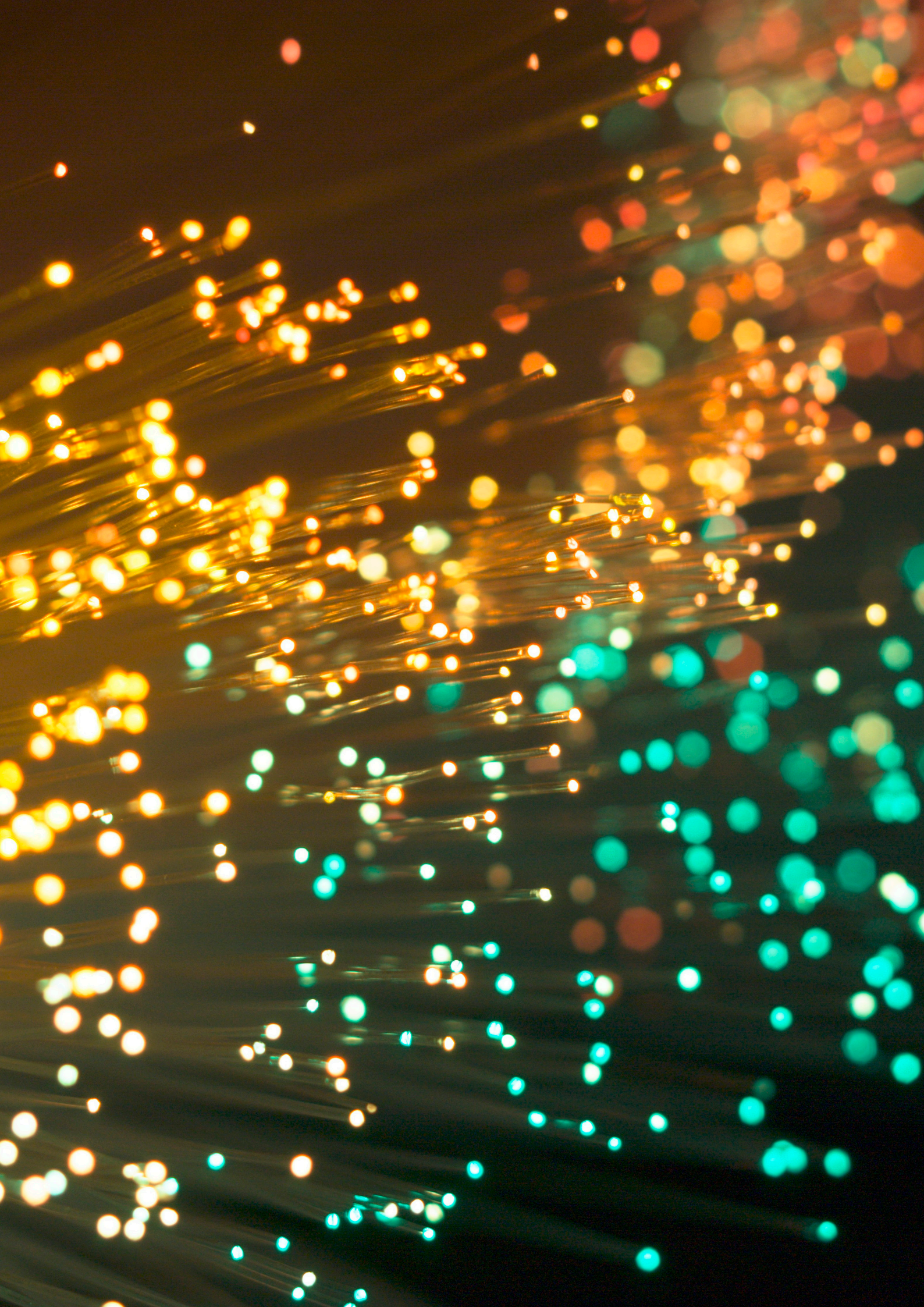
Glossary of terms

000s	Thousands
\$	New Zealand dollars
A\$	Australian dollars
ARPU	Average Revenue Per User
bn	Billion
Capex	Capital expenditure
CFH	Crown Fibre Holdings
Chorus	Chorus Limited
Commission	The Commerce Commission
CPPP	Cost Per Premises Passed
CPPC	Cost Per Premises Connected
CPS	Cents per share
EBIT	Earnings before interest and tax
EBITDA	Earnings before interest, tax, depreciation and amortisation
EMTN	Euro Medium Term Note
EY	Ernst & Young
Funding gap	The \$1.0bn funding shortfall announced by Chorus on 5 November 2013
FFI	Forecast Financial Information (including Forecast Financial Information for the period from FY14 to FY20)
FPP	Final Pricing Principle
FY	Financial Year
GBP	Great British Pounds
LFC	Local Fibre Company
m	Million
MBIE	Ministry of Business, Innovation and Employment
Minister	Minister for Communications and Information Technology
NGA	Next Generation Access
NIPA	Network Infrastructure Project Agreement
NPAT	Net Profit After Tax
NZ	New Zealand
Opex	Operational expenditure
PLN	Polish Zloty
RBI	Rural Broadband Initiative
Report	This report, an Independent Assessment of Chorus' Financial Position, dated 12 December 2013
RSP	Retail Service Provider
SLU	Sub-loop unbundling
STD	Standard Terms Determination
TNZ	Telecom Corporation of New Zealand Limited
ToR	Terms of Reference
TSLRIC	Total Service Long Run Incremental Cost
TSO	Telecommunications Service Obligations
UBA	Unbundled Bitstream Access
UCLL	Unbundled Copper Local Loop
UFB	Ultra Fast Broadband

Appendix 11 – Glossary of terms and definitions (continued)

Definition of calculations

Capex / depreciation	Net capex / depreciation
Capex / revenue	Net capex / total revenue
Debt/equity	Average debt / average equity
Dividend payout ratio	Total dividend (cash + non-cash) / NPAT
Dividend yield	Prior 12 month dividend / share price at year end
EBITDA margin	EBITDA / total revenue
EBIT margin	EBIT / total revenue
Net interest bearing debt / EBITDA	(Debt + finance lease liabilities + EMTN hedging) / EBITDA
NPAT margin	NPAT/ total revenue
Operating cost to income ratio	Operating costs / total revenue
Return on average assets (leverage adj)	$(EBIT \times (1 - \text{NZ tax rate '28\%'})) / \text{average total assets}$
Return on average equity (%)	$NPAT / ((\text{opening equity} + \text{closing equity})/2)$



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