

# CHORUS

## Explanation of external audit or reviews undertaken

Chorus engaged Analysys Mason (AM) to build the MAR model and input models that have live links in the model and documentation forming part of this Response. In building the models, AM rely on data provided by Chorus and seek input from internal SMEs and Chorus' external advisors.

To the extent Chorus undertakes external audit or review of the models described in A2.1 and A2.2 of the Commerce Commission's Notice dated 29 April 2021 a description of those processes and a summary of the outcomes from them is set out below. None of these pieces of work forms the definition of being an audit or to an audit standard.

| External | Description  |
|----------|--|
| PwC      | <p>PwC performed an independent verification of the price-quality path MAR model for the first regulatory period, for the regulated FFLAS of Chorus, subject to price-quality (PQ) regulation.</p> <p>The purpose of the verification was to assess and report on whether the MAR model has been compiled consistent with the Input Methodologies (IMs). This included assessment of any discretion or judgement applied in developing the IM logic in the MAR model.</p> <p>Focus areas for PwC were: cost allocation, asset valuation, taxation, cost of capital and benefit of Crown financing.</p> <p>A summary of PwC findings is shared in the Appendix.</p> |
| Deloitte | <p>Deloitte reviewed the MAR model for:</p> <ol style="list-style-type: none"><li>1. Model Integrity – for mathematical integrity of the formulae; and</li><li>2. Model documentation – for checking consistency of Model logic with Model documentation.</li></ol> <p>Test procedures were carried out on the MAR model and also linkage to the IAV model where there are logical dependencies between the IAV and MAR models.</p> <p>A summary of Deloitte findings is shared in the Appendix.</p>   |

## Appendix – Summary of outcomes (PwC)

Matters raised: 18

Matters resolved through adjustment to the model or further discussion: 13

Matters outstanding and included in final report: 5

PwC have provided the following findings:

1. Two instances where the IMs contain errors or inconsistencies that make technical compliance challenging.
2. One instance where the MAR Model uses an approach that achieves the outcome required by the IMs, by using an alternative approach.
3. Two instances where modelling constraints or assumptions mean an alternative approach to applying the IMs has been adopted.

Additionally, PwC noted an instance where the MAR model uses an alternative asset life method to clause clause 2.2.10(1)(d)(i) but that the alternative method was in accordance with clause 2.2.10(1)(d)(ii) and hence compliant.

## Appendix – Summary of outcomes (Deloitte)

Matters raised: 67

Matters resolved through adjustment to the model or further discussion: 67

Matters outstanding and included in final report: 0

Summary of matters unresolved:

- All matters raised during the Deloitte review were resolved. These were largely simple fixes mainly relating to consistency between model logic and documentation but also relating to consistency across formulae, formulaic errors and consistency between models.