

# Memo

To: New Zealand Commerce Commission  
Date: 5 September 2009  
From: James Mellsop  
Subject: CBA sensitivity slides from MTAS conference

## 1. Introduction

At the 2 and 3 September MTAS conference, a NERA slide pack titled, “MTAS Conference Slides – FTM CBA Sensitivity” was tabled. As mentioned informally to the Telecommunications Commissioner, my intention was to explain this slide pack during the conference, but unfortunately the altered agenda meant that the right opportunity did not arise.

Accordingly, the purpose of this memo is to briefly describe that slide pack. There was a discussion at the conference about the uncertainty surrounding the size of the waterbed effect and FTM pass-through. The slides demonstrate the sensitivity of the Commission’s cost benefit analysis (CBA) to these two (uncertain) parameters. On the basis of the Commission’s (corrected) model, the results show that for plausible parameter values, there can be net costs of regulation, particularly on the consumer surplus standard. For example:

- If pass-through remains at a constant 75%, then there would be net costs of regulation on the consumer surplus standard if the waterbed effect is greater than about 45% (see slide 3); and
- If the waterbed is 50%, then (constant) pass-through would need to be about 80% or more for there to be net benefits of regulation on the consumer surplus standard (see slide 5).

## 2. Methodology

As outlined on slide 1 of the slide pack, there are some errors in the Commission’s CBA that need to be corrected, the most important of which is the error in the calculation of the waterbed effect. This correction was made by Covec in their adjusted version of the Commission’s model. We have adopted the Covec model, but then restored the Commission’s original assumptions, as listed on slide 1. In this sense we are testing the sensitivity of the Commission’s model and assumptions, corrected for technical errors.

### 3. CBA sensitivity

In the slide pack, we show that using the Commission's original assumptions and correcting any errors in the model, the net benefits (costs) of regulation are sensitive to the assumed FTM pass-through and waterbed effect. Specifically:

- On slide 2, we vary the waterbed effect (as shown on the horizontal axis), assuming (as the Commission does) that pass-through increases over time from 75% to 100%;
- On slide 3, we vary the waterbed effect (as shown on the horizontal axis), assuming a constant pass-through of 75%;
- On slide 4, we vary the waterbed effect (as shown on the horizontal axis), assuming a constant pass-through of 50%;
- On slide 5, we vary the pass-through (as shown on the horizontal axis), assuming (as the Commission does) a 50% waterbed effect;<sup>1</sup> and
- On slide 6, we vary the pass-through (as shown on the horizontal axis), assuming a 75% waterbed effect.<sup>2</sup>

On the basis of the Commission's (corrected) model, the results show that for plausible parameter values, there can be net costs of regulation.

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<sup>1</sup> In varying the pass-through, we have assumed a constant level of pass-through over the whole period, and varied that level.

<sup>2</sup> In varying the pass-through, we have assumed a constant level of pass-through over the whole period, and varied that level.