



Comments on Regulatory Incentives Process and Issues Paper

21 October 2013

1 Introduction and Summary

The Commerce Commission has released a process and issues paper on Incentives for Suppliers to Control Expenditure during a Regulatory Period (“the process and issues paper”). The process outlined involves changing the input methodologies (“IMs”) that apply to suppliers regulated under the Default Price-quality Path (DPP). Overall, we consider that introducing an IRIS is a positive step, and will provide regulated suppliers with more stable incentives across the regulatory period. However, we encourage the Commission to develop other areas of the regulatory framework in parallel with any changes to the IMs—particularly in the area of service quality.

Many of our views on incentives are contained in our report on regulatory incentives under the Default-price Quality Path (DPP) dated April 2012.¹ That report summarises the international evidence on the impacts of regulatory incentives to improve efficiency and service quality. Our research found that regulatory settings do change the way regulated suppliers behave, and that effective regulators overseas have adjusted regulatory settings to achieve three important outcomes:

- **Balanced incentives** that encourage efficient cost reductions that do not simply come at the cost of maintaining service quality
- **Stable incentives** that encourage regulated suppliers to make efficiency gains when they are available, not according to regulatory decision-making timeframes
- **Targeted incentives** that specifically focus the attention of regulated suppliers on particular outcomes that are important to consumers and/or the regulator.

Regulators also need to ensure that the level of incentives is sufficiently strong, so that regulated suppliers are motivated to innovate and improve efficiency and service quality.

An IRIS will help achieve stable incentives by smoothing out the incentive effects that otherwise exist under a five year price path. This will better align business decisions with the underlying drivers for efficiency, rather than an arbitrary five-year regulatory period. By providing more stable incentives to regulated suppliers throughout the regulatory period, an IRIS will help better achieve the Commission’s statutory objective of promoting the long-term interests of consumers.

¹ See www.comcom.govt.nz/dmsdocument/415

The process and issues paper does not describe how the Commission will ensure that the right balance is struck between cost and quality (balanced incentives), or how specific outcomes will be delivered (targeted incentives). We consider that the process of amending the DPP IMs to incorporate an IRIS should more explicitly address the impacts on supplier incentives to improve quality. Other incentive mechanisms should also be explored as the Commission continues to develop price-quality regulation in New Zealand.

The views expressed in this report are Castalia's, and not necessarily those of Vector.

2 The Role of Regulatory Incentives

Regulatory incentives help to create an environment where regulated suppliers are rewarded for performance that is in the long-term interest of consumers, and punished for behaviour that detracts from consumers' interests. The role of the regulator is to set up rules that are consistent with achieving those desirable outcomes. The management of regulated suppliers is then responsible for the business decisions taken within those rules.

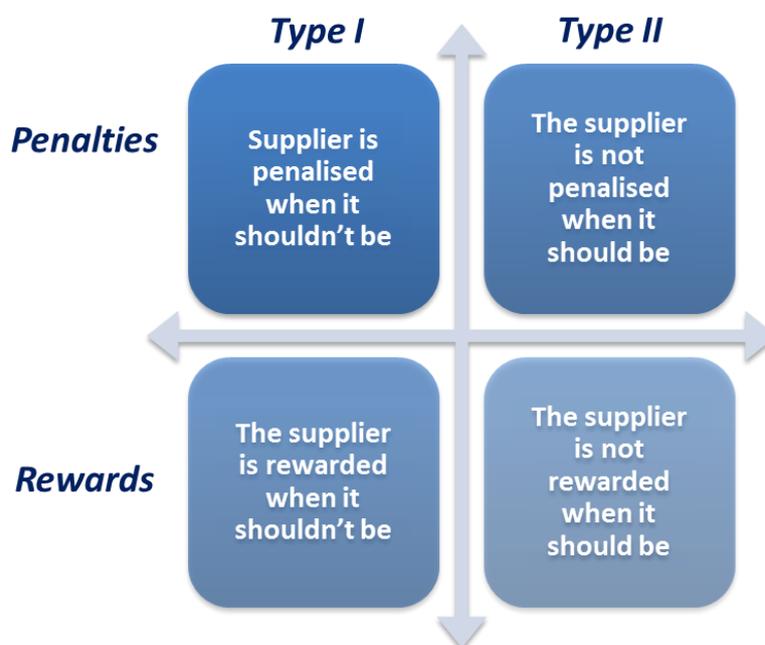
While regulated suppliers should all be able to understand the regulatory incentives that apply, the Commission should not be concerned that different regulated suppliers adopt different responses to new incentive measures. Management decisions will be influenced by a range of commercial and practical considerations that are not relevant to the regulatory framework.

Regulatory incentives should minimise the risk of false negatives

Incentive-based regulation sets prices based on forward-looking price paths. This process invariably raises a challenge for regulators: how can the regulator be confident that future cost reductions (or increases) will be driven by efficiency (or inefficiency), rather than by other drivers (such as altering service quality, cyclical volatility in costs, or just pure luck)? The reality, particularly given the low cost characteristics of the DPP, is that the regulator will not have the information needed to disentangle true efficiency gains from other cost drivers. An IRIS has the effect of increasing this challenge by imposing the benefit or cost of actual performance on regulated suppliers for a longer period of time.

The regulatory framework can either minimise type I errors (false positives) or minimise type II errors (false negatives). Figure 2.1 shows how a decision theory approach applies to the particular decisions made on regulatory incentives.

Figure 2.1: An Error Minimisation Framework for Regulatory Incentives



Incentive errors arise because regulators do not, and cannot, have perfect information. Even if the regulator dedicates substantial resources to trying to gain better information, gaps will remain. This means errors are inevitable. However, it does not mean that type I

and type II errors have the same impacts—in fact, incentive based regulation should have an explicit tolerance for type I errors (and avoidance of type II errors). This is because type I errors maintains positive incentives on regulated suppliers to improve performance. A regulatory regime with type I errors tends to motivate regulated suppliers to improve performance because their returns are connected to their performance. In contrast, a regulatory regime with type II errors tends to entrench a rate of return culture within regulated businesses—which are neither rewarded nor penalised for their actions. In our view, a tolerance for type I errors in setting incentives is therefore a practical way for the Commission to achieve its statutory objective of serving the long-run interests of consumers.

This decision theory approach to regulation strongly supports the introduction of an IRIS, along with other incentives to reward good supplier performance and punish poor supplier performance. By applying this framework, the regulator can focus less on understanding the specific reasons why particular cost reductions have been achieved, and more on creating the conditions for regulated suppliers to make efficiency gain when they are available.

Are there practical problems with creating positive regulatory incentives?

Under incentive-based regulation the regulator accepts that regulated suppliers can increase their profits by reducing costs over the regulatory period. Incentive-based regulation makes use of the firm's information advantage over the regulator and its profit motive. Under incentive-based regulation the regulator therefore controls less behaviour and instead rewards outcomes.

The role of explicit regulatory incentive mechanisms like an IRIS is to encourage the management of regulated businesses to make decisions that are in the long term interests of consumers. However, in reality no approach of setting a forward-looking price path will be incentive-free. Even without explicit incentives, the price path will reward regulated suppliers for certain acts or omissions. The key question for the regulator is what characteristics the price path should have.

The objective of regulation is therefore to set up the framework and the rules of the game. The management of regulated suppliers then have the job of working within those rules in a way that best meets their shareholders' preferences. It is up to each regulated supplier how it wants to respond to the incentives put in place through regulation—in reality, these management decisions will be influenced by a range of practical considerations. For example, some regulated suppliers will chose to invest time into fully understanding the regulatory regime and how they can make it work best for them. Others may choose to focus their resources in other areas, given how their shareholders decide that management time is best used.

This suggests the only practical considerations relevant to incentive-based regulation are those that would impact on the ability of any regulated supplier to respond (not those suppliers that choose not to respond).

3 Service Quality Incentives

We understand that this process is focused on amending the IMs. However, supplier incentives like an IRIS will inevitably interact with other components of the regulatory regime. As a result, it would be logical for the Commission to consider service quality incentives at the same time as an IRIS and other efficiency incentive mechanisms, and to make decisions on how service quality incentives can be improved.

In this section we explain why service quality incentives are important and what they should look like in the context of regulation in New Zealand. We also address two issues that we have with the current service quality incentives:

- The current service quality incentive regime is narrowly focused, only considering reliability
- There is an interaction between timing incentives (under IRIS) and service quality that needs to better be understood.

In our view, incorporating service quality targets explicitly into the price-quality path (for example, through an “S-factor”) would broaden out the service quality measures.

3.1 Why Service Quality Incentives are Important

Service quality incentives play a crucial role in incentive-based regulation to ensure regulated suppliers do not cut costs by sacrificing service quality. While suppliers have a range of reasons to maintain service quality (including their own service commitments), the regulatory regime should balance suppliers’ incentives to reduce costs with incentives to maintain service quality at the level demanded by consumers.

It is challenging for regulation to align each regulated supplier’s incentives with their customers’ interests, particularly under the DPP. It will generally not be in consumers’ interests to have service quality degraded to reduce costs, but nor is it desirable to simply ‘lock in’ existing levels of service quality regardless of what customers want or where regulated suppliers sit relative to comparable businesses.

Why is regulation needed to incentivise service quality?

There are two particular features of regulated markets that make it difficult to replicate the service quality outcomes found in competitive markets:

- **The lack of customer pressure to improve service.** In the absence of regulatory incentives to maintain or improve service quality, regulated suppliers may be able to increase their returns by degrading service quality. In competitive markets, the opposite outcome is typically observed—suppliers generally increase their returns by improving service quality because high-quality producers are able to attract demand and increase market share. In some cases, businesses are able to increase market share by lowering service quality—but only if customers are willing to accept lower levels of service quality in return for lower prices (such as in the budget airline industry). In either situation, suppliers need to have good information on what level of service customers are prepared to pay to support.
- **The incentive to transfer quality risks back to customers.** Service quality impacts are not always immediately observable. For example, it may be possible to operate networks with less redundancy if consumers are willing to share quality risks (in other words, if the cost of system redundancy is not worth the reduction in risk). Regulated suppliers have no incentive to carry

their share of risk: they will generally be better off increasing redundancy and passing costs on to consumers.

Good regulatory systems overcome these challenges through penalties and rewards that maintain the incentives on quality service throughout the regulatory period. These mechanisms mean regulated suppliers are able to increase their returns by improving service quality.

What should quality incentives look like in New Zealand?

The objectives of Part 4 are explicitly linked to meeting customers' expectations of service quality. In New Zealand we would expect service quality indicators to reflect:

- An expectation that customers will receive better value for money over time – meaning quality will not be degraded just to reduce costs
- The willingness of customers to pay more to improve service quality, or to accept lower quality services for lower prices
- An expectation that service quality will be relatively consistent throughout the regulatory period.

These reflect the fact that incentive regulation should provide incentives for true efficiency gains, not simple cost minimisation.

3.2 Improvements to Current Service Quality Indicators

The DPP currently has narrow service targets based on reliability. In fact, there are a large number of different service quality indicators that consumers are likely to care about. The narrow targets may therefore create an incentive to degrade service quality in areas that are not monitored. This section highlights how the current regulation works and what we see as flaws in the current quality incentives regime.

The current services targets are narrow

We discuss the quality standards for EDBs below, to illustrate that the indicators used to measure service quality are narrow. The same concern also applies to the regulation of gas pipelines.

The quality standards for EDBs for 2010-2015 use reliability limits based on the historic averages (2004-2009) of System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) reliability data for the period.² Although measuring reliability is a common method of measuring quality of service, we believe there are also other service quality indicators that matter to consumers.

We believe there are other measures of service quality that customers also care about such as:

- **Response times to events/issues that do not cause power outages.** A customer may ring up with a concern or query. A high quality service would involve responding quickly to customer concerns. However, there are no financial incentives for EDBs to spend money to ensure a quick response.
- **Response times for new connection requests.** Customers that want to receive a new connection or change their existing connection facilities will want their requests to be addressed as soon as possible. Again, while there may be other reasons to maintain good practice in this area, the current

² The Commerce Commission, EDB and GPB Input Methodology Reasons Paper 2010, 9.3.25

regulatory regime provides no incentives to respond quickly to connection requests.

- **Minimising disruption when carrying out maintenance/repairs.** When undertaking maintenance or repairs of lines it is inevitable that there will be disruptions to neighbouring properties, such as through road/sidewalk closures. Although EDBs are incentivised to reduce the time that power is out (due to SAIDI), there are currently no incentives to minimise other disruptions, such as road closures.

The quality path should encourage EDBs to satisfy its customers in all areas of service, not just reliability as measured by SAIDI and SAIFI. The limited definition of service quality means that EDBs are not incentivised to provide the best possible service to customers.

Broader measures of service quality could be introduced incrementally to the price-quality path. The Commission could initially introduce one more service-quality indicators, together with a small increase of the weighting of service-quality in the quality path. Over time, the measures could be expanded to incorporate more service quality indicators and increase the proportion of regulated suppliers' revenue at risk (many regulatory regimes overseas cap the impacts of service quality incentives at 5 percent of revenue).

Castalia believes the benefit of increasing additional service quality measures would be increased by the introduction of an s-factor.

Other regulators have been able to broaden out the service quality incentives

Our April 2012 report provides examples of how regulators overseas have moved to a more complete and consistent package of incentives that covers service quality. For example, in the UK Ofgem's 2008/09 Electricity Distribution Quality of Service Report outlines the different types of incentives it provides to its distribution and network operators (DNO) to encourage service quality in reliability and also other service quality areas:

- **Performance against interruptions target:** Ofgem have set targets for each DNO for the number of unplanned power cuts per 100 customers (CIs) and the number of customer minutes lost per customer (CMLs) on their networks. Performance against these targets is linked to financial rewards and penalties.
- **Quality and speed of telephone response performance:** Each DNO is assessed on customer satisfaction with the quality of its telephone response through a monthly customer survey. DNOs may be rewarded or penalised depending on their overall annual score.
- **Customer service reward scheme:** A discretionary reward of £1 million per year designed to reward the performance of those DNOs that best serve the interests of their customers across the chosen categories throughout the year.
- **Guaranteed standards of performance:** DNOs are subject to a number of guaranteed standards of performance that set out service levels that should be met. The standards cover a range of activities including supply restoration, connections and voltage quality. If the DNO fails to meet the level of service required, it must make a payment to the affected customer, subject to certain exemptions.

While we do not necessarily endorse any of the measures above as quality standards that are relevant in New Zealand under the DPP/CPP framework, they do suggest that a potentially wide range of measures is available.

3.3 Interaction between Timing Incentives and Service Quality

The Commission's issues and process paper focuses on smoothing out the timing of incentives within and across regulatory periods, without assessing how an IRIS might affect incentives for achieving service quality. In our view, the IRIS will help to smooth out incentives for service quality throughout the regulatory period and will mean that the rewards for higher quality service will not be affected by the timing of actions taken.

Having a more consistent level of incentives makes it very important to set the level right. If regulated suppliers have strong incentives to reduce costs, then an IRIS will make this incentive relevant to service quality throughout the regulatory period. This further highlights the importance of having broad service quality measures that enable the Commission to be confident that the regulatory framework facilitates the right outcomes.