

# Annual Price Adjustments – Are they a necessary feature of Incentive Regulation?

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Some concerns have been raised with respect to the need for annual adjustments under the new methodology and a preference has been expressed for adjustments to take place every other year. The RIC will examine this issue in this paper.

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# 1. Introduction

As part of its second price control review for the electricity distribution and transmission sector, the Regulated Industries Commission (RIC) plans to release a series of papers detailing key aspects of the regulatory framework. One of these aspects is whether or not there should be annual price adjustments as part of the overall price formula.

The RIC Act, Chapter 54:73, sections 6 and 67 as well as Part 5, provides that the type of regulation utilized by the RIC be some form of incentive regulation. Specifically, the Act mandates the RIC:

- to establish the principles and methodologies for determining rates; and
- to determine the rates and charges for services every five years.

The Act therefore provides clear support for incentive regulation. While there is a range of possible approaches to incentive regulation, perhaps the two most common forms are price caps and revenue caps. In its simplest form, a price cap allows the service provider to increase its rates annually by an amount equal to an inflation measure, less an amount equal to an annual rate of productivity. This basic formula can also be applied in the case of a revenue cap, where the service provider will be able to adjust its starting or base revenue by an amount equal to an inflation measure less an assumed rate of productivity.

In its Determination, the RIC capped T&TEC's revenue such that it had to comply in each year of the Review Period with the following formula:

$$ARR_t \leq (1 + RPI) (1 - X_t) \times ARR_{t-1} + U$$

Where:

Year $t$	$X_t$
2007	4.4
2008	4.4
2009	4.4
2010	4.4

**ARR = Annual Revenue Received from Services.**

**ARR<sub>2006</sub> = \$1,901.03 million.**

**RPI means the Retail Price Index as determined by the CSO.**

**U = Unused charge. T&TEC will be permitted to carry over any unused change in charges from one year to the following years.**

**The RPI will be calculated using the following formula:**

$$\frac{RPI\ June_{t-1} + RPI\ Sept_{t-1} + RPI\ Dec_{t-1} + RPI\ Mar_{t-1}}{RPI\ June_{t-2} + RPI\ Sept_{t-2} + RPI\ Dec_{t-2} + RPI\ Mar_{t-2}}$$

Where:

- Year  $t$  is the year for which tariffs are being set
- Year  $t-1$  is the previous year
- Year  $t-2$  is two years previous.

**The overall side constraint is set at  $(RPI + X) = 7.4\%$ .**

## Purpose of Document

Some concerns have been raised with respect to the need for annual adjustments under the new methodology and a preference has been expressed for adjustments to take place every other year. The RIC will examine this issue in this paper.

## Responding to this Document

All persons wishing to comment on this document are invited to submit their comments by Responses should be sent by post, fax or e-mail to:

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## 2. Should Annual Price Adjustments be abolished?

It is generally accepted that incentive regulation seeks to mimic the discipline of a competitive market. In a competitive market the presence of competitors leads firms to seek efficiency gains which are passed to customers in the form of lower prices in an effort to gain increased market share. Prices are therefore flexible and can change frequently. Hence, theoretically, if the regulated sector were achieving the same productivity gains as other competitive sectors in the economy (as well as the same level of input price inflation) the discipline of competitive forces could be replicated by limiting the growth rate of regulated prices to the economy-wide rate of inflation. These assumptions of course do not hold in every instance and hence the X-factor, in practice, is set by a variety of methods<sup>1</sup>.

An important feature of incentive regulation is that once the pricing principle/formula is established, the regulator does not adjust the pricing principle/formula within the regulatory control period, to reflect any changes between the actual and forecast revenue requirements. Service providers have to manage any differences between forecast costs, determined by the regulator, and actual costs during the regulatory control period. To the extent that costs differ, the service provider retains the benefits or bears the loss. This is one of the central tenets of incentive-based regulation and it provides service providers with an incentive to efficiently control their costs.

The above underlies the fact that in seeking to replicate a competitive market, the methodology favours more frequent rather than less frequent price movements. Indeed, annual price adjustments hold two important advantages. The first being, in instances where upward price adjustments are needed these can be phased in gradually and thereby allow customers to make

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<sup>1</sup> The X-factor or productivity adjustment as it is sometimes known in price cap plans is a theoretical concept. It is designed to allow the regulated firms to confront a competitive like price constraint by incorporating objective, industry-wide productivity improvements into a regulatory price formula. There are two common approaches used by regulators for determining the value of the X-factor. The first approach relies heavily on total factor productivity analysis and is sometimes referred to as the historical productivity method or approach (or alternatively as the index-based method) and it is primarily used in the United States (US) and is discussed extensively in the academic literature. The second approach, which is common in the United Kingdom (UK) and Australia, is the building blocks approach. Under this approach X-factor emerges from a process where the regulator makes adjustments to separate cost components (such as operating expenditure, often referred to as opex and capital expenditure often referred to as capex).

small incremental adjustments to their budgets rather than having to cope with larger though less frequent adjustments. Indeed, the aim to achieve full cost reflectivity with a one off increase can lead to price shocks for customers, even leading to significant increases for some customer classes. This is why some customers may prefer a 5% increase each year rather than a 30% increase every five years. Similarly, for some a 5% increase each year may be much more desirable than a 10% every other year. Rate increases are not popular. However, most rate payers seem to understand and accept small increases much better than large increases, even though the small increases are more frequent. The second advantage rests with the service provider. Annual adjustments can stabilize a service provider's financial footing by allowing it to better cope with increases in input prices. It improves cash flows and the service provider is less likely to face financial hardships as a result.

On the other hand service providers may argue that biennial price increases make it easier to align price adjustments to quality of service improvements which may take a longer time to achieve. However, from a regulatory standpoint quality of service improvements and the time-frame for implementing same are invariably taken into account when price controls are being reviewed.

The RIC notes that while regulators in other jurisdictions have made adjustments to the length of the regulatory period, to date, none have deviated from annual price adjustments. The RIC also understands that even though the first price control is almost at a close, the overall methodology, inclusive of annual price adjustments, is still new. Moreover, in a sector in which a general price review had been long outstanding prior to the RIC's review for the 2006-2011 price control period, the idea of annual price adjustments is still novel.

The RIC would also like to highlight that given the fact that the service provider had not implemented annual adjustments for all classes as and when due, leading in some cases to two adjustments being implemented simultaneously. This may have actually impacted negatively on certain customer classes. In fact, this has led some customers to believe that they were being

subjected to a large one-off increase<sup>2</sup>. The RIC understands that the service provider may have had good intentions for delaying some of these adjustments but believes that customers would have coped much better with smaller annual adjustments.

**The RIC therefore welcomes views on the need for annual price adjustments.**

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<sup>2</sup> Domestic Customers in fact did not face their first price adjustment (inclusive of the initial increase for 2006-2007) until May 1, 2008 when the adjustment for both 2006-2007 and 2007-2008 were effected. Rates for 2008-2009, came into effect on August 1, 2008. Moreover, because the first increase also coincided with T&TEC's change out to new meters, which enhanced the accuracy of meter readings, thus leading some customers to believe that the increase in rates was greater than it actually was.