



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

**Decision on 2009 Distribution System Operator Allowed Revenue, Distribution Use of System Tariffs and Distribution Loss Adjustment Factors**

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### **Abstract:**

This Paper outlines the Commission's decision on:

- Distribution System Operator (DSO) allowed revenue for the 2009 calendar year;
- Distribution Use of System (DUoS) tariffs for the nine month period from 1 January 2009 to 30 September 2009; and,
- Distribution Loss Adjustment Factors (DLAFs) for the nine month period from 1 January 2009 to 30 September 2009.

### **Target Audience:**

This decision paper is for the attention of members of the public, the energy industry, customers and all interested parties.

## Related Documents:

- [CER/05/138](#) Decision Paper on Distribution System Operator Revenues 2006-2010
- [CER/06/107](#) Quality of Service Incentive Mechanisms during the 2006-2010 price control period for ESB PES & ESB DSO
- [CER/06/197](#) Direction on 2007 Distribution System Operator Allowed Revenue
- [AIP/SEM/07/93](#) PES Retail Tariff Period Alignment in both Regulatory Jurisdictions
- [CER/07/186](#) Determination of 2008 Distribution Allowed Revenues and Use of System Tariffs for ESB Networks
- [CER/07/188](#) Schedule of Distribution Use of System Charges from 1 November 2007 to 30 September 2008
- [CER/08/095](#) Consultation Paper on 2009 DSO Revenue, DUoS Tariffs and DLAFS
- [CER/08/095a](#) Proposed DUoS Tariffs for 1 October 2008 to 30 September 2009
- [CER/08/136](#) Decision on Electricity Retail Tariff Inputs for 2008/2009

## Executive Summary

This paper outlines the Commission's decision on:

- Distribution System Operator (DSO) allowed revenue for the 2009 calendar year;
- Distribution Use of System (DUoS) tariffs for the nine month period from 1 January 2009 to 30 September 2009; and,
- Distribution Loss Adjustment Factors (DLAFs) for the nine month period from 1 January 2009 to 30 September 2009.

In summary:

- The Commission approves DSO revenue of €737.0m for the 2009 calendar year. This is an increase of 5.5% relative to the 2008 calendar year.
- The DSO's schedule of DUoS tariffs for the period 1 January 2009 to 30 September 2009 is published alongside this paper. There is an increase of 5.2% relative to the DUoS tariffs that are currently in place.
- The DSO's schedule of DLAFs for the period 1 January 2009 to 30 September 2009 is published alongside this paper.

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## 1.0 Introduction

### 1.1 *The Commission for Energy Regulation*

The Commission for Energy Regulation ('the Commission') is the independent body responsible for overseeing the regulation of Ireland's electricity and gas sector's. The Commission was initially established and granted regulatory powers over the electricity market under the Electricity Regulation Act, 1999. The enactment of the Gas (Interim) (Regulation) Act, 2002 expanded the Commission's jurisdiction to include regulation of the natural gas market, while the Energy (Miscellaneous Provisions) Act 2006 granted the Commission additional powers in relation to gas and electricity safety. The Electricity Regulation Amendment (SEM) Act 2007 outlined the Commission's functions in relation to the Single Electricity Market (SEM) for the island of Ireland. This market is regulated by the Commission and the Northern Ireland Authority for Utility Regulation (NIAUR). The Commission is working to ensure that consumers benefit from regulation and the introduction of competition in the energy sector.

### 1.2 *Purpose of this paper*

The purpose of this paper is to provide information on the Commission's decision regarding:

- the level of Distribution System Operator (DSO) revenue for the 2009 calendar year; and,
- the Distribution Use of System (DUoS) tariffs and Distribution Loss Adjustment Factors (DLAFs) to apply from 1 January 2009 to 30 September 2009.

### 1.3 *Structure of this paper*

This paper is structured in the following manner:

- **Section 1** provides an introduction to and outlines the purpose of this decision paper.
- **Section 2** provides background information. It outlines how the decisions made as part of the 2006-2010 revenue control (CER/05/138) were implemented to set the DSO revenue for the 2006, 2007 and 2008 calendar years. It also outlines how DUoS tariffs were set to recover that revenue. Finally, Section 2 also outlines how this decision paper relates to the consultation/proposed decision paper that was published on 20 June 2008 regarding 2009 DSO revenue, DUoS tariffs and DLAFs.
- Section 3 provides detail on the level of DSO revenue that has been approved for the 2009 calendar year.

- Section 4 provides detail on the DUoS tariffs that have been approved for implementation from 1 January 2009 to 30 September 2009.
- Section 5 provides detail on the DLAFs that have been approved for implementation from 1 January 2009 to 30 September 2009.
- Section 6 provides a conclusion.

Four documents are published alongside this paper. These are:

- ESB Networks' schedule of DUoS tariffs, which have been approved for implementation from 1 January 2009 to 30 September 2009; and,
- ESB Networks' schedule of DLAFs, which have been approved for implementation from 1 January 2009 to 30 September 2009.
- Two responses to the consultation paper (published 20 June 2008).

## 2.0 Background Information

### 2.1 DSO revenue control for the period 2006 to 2010

In September 2005, the Commission published a decision paper detailing the level of DSO revenue for the period 2006 to 2010 (CER/05/138). The allowed revenue set for each calendar year of the period is shown in the below table in 2004 terms.

(2004 monies, €m)	2006	2007	2008	2009	2010
DSO Allowed Revenue	535.0	567.4	588.7	601.8	615.4

**Table 1:** DSO Allowed Revenues 2006-2010

### 2.2 Determination of DSO revenue for each calendar year

That decision paper also detailed how the allowed revenues would be updated each year. Accordingly, the DSO revenues for 2006, 2007 and 2008 were updated, consulted upon and set by the Commission at €561.5m<sup>1</sup>, €634.9m<sup>1</sup> and €698.8m<sup>2</sup> respectively.

The Commission is now issuing a decision on the DSO revenue to apply for the 2009 calendar year.

### 2.3 Determination of DUoS tariffs for each tariff period

For 2006 (and previous years), DUoS tariffs were set on a calendar year basis using estimated Gigawatt hour (GWh) figures and the allowed DSO revenue for that calendar year.

In 2007, DUoS tariffs were set for an 11 month tariff period from 1 November 2007 to 30 September 2008. The reasons behind the decision to change the tariff period to a non-calendar-year term are documented in the Commission's decision document AIP/SEM/07/93<sup>3</sup>.

In 2008, the Commission initially intended to set DUoS tariffs for a 12 month period from 1 October 2008 to 30 September 2009, and on 20 June 2008 published a consultation paper to that effect (CER/08/095). However, on 25 July 2008 the Commission decided DUoS charges would not be adjusted until 1 January 2009<sup>4</sup>.

Therefore the Commission is now issuing a decision on the DUoS charges (and DLAFs) to apply from 1 January 2009 to 30 September 2009. This decision paper also takes the responses to the consultation paper (published 20 June) into account.

<sup>1</sup> CER/06/197, [www.cer.ie](http://www.cer.ie)

<sup>2</sup> CER/07/186, [www.cer.ie](http://www.cer.ie)

<sup>3</sup> AIP/SEM/07/93, [www.allislandproject.org](http://www.allislandproject.org)

<sup>4</sup> The reasons behind that decision are documented in the decision paper CER/08/136



## ***2.4 Comments received on consultation paper***

### **2.4.1 Background**

On 20 June 2008, the Commission published a consultation/proposed decision paper that detailed the Commission's proposals on the level of DSO allowed revenue for the 2009 calendar year, the level of DUoS tariffs to apply from 1 October 2008 to 30 September 2009, and the level of DLAFs to apply from 1 October 2008 to 30 September 2009. Comments were invited by 18 July 2008.

However, on 25 July 2008 the Commission decided that DUoS tariffs and DLAFs would not be adjusted until 1 January 2009<sup>5</sup>. It was also decided that responses received in relation to the 20 June consultation paper would be addressed when setting the DUoS tariff and DLAFs to apply from 1 January 2009.

Consequently those comments have been taken into account in this decision paper.

### **2.4.2 Summary of comments received**

Two responses were received in relation to the 20 June 2008 consultation paper. Both have been published alongside this paper.

In summary, both respondents requested that a greater level of detail be provided and consequently the Commission has provided an increased level of detail within this decision paper.

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<sup>5</sup> The reasons behind that decision are documented in the decision paper CER/08/136.

## 3.0 DSO revenue for 2009 calendar year

### 3.1 Introduction

As detailed in Section 2.1, in September 2005 the Commission published a decision paper detailing the level of DSO allowed revenue for the period 2006 to 2010 (CER/05/138). That decision paper also detailed how the allowed revenue would be updated each year.

The DSO revenue for the 2009 calendar year has been updated according to the above decision paper and consequently the Commission has decided that DSO revenue for the 2009 calendar year will be set at €737.0m. This is based on a revenue submission provided by the DSO and the calculations behind this figure are explained below.

### 3.2 Determination of DSO revenue for 2009 calendar year

#### 3.2.1 The revenue control formula

The revenue control formula, which is used to keep the DSO's revenue in line with allowed costs, is set out in detail in Section 9 of CER/05/138. Very simply, the revenue control formula takes the 'base' allowed revenue (in 2004 monies, as detailed in Table 1), inflates that revenue into nominal figures, and adjusts it for specific revenue parameters. The following formula is used:

$$R_t = \prod_{2005}^t [(1 + CPI_j - X)/100] * B_0 + \prod_{2005}^t [(1 + CPI_j)/100 * [INCENT_t + PCust_t * (FCust_t - Cust_t)] + \Delta P_t + \Delta U_t + K_{t-1} + K_{t-2}$$

**Equation 1: Price control formula from CER/05/138**

The terms within this equation are defined fully within CER/05/138. For the 2009 calendar year:

- $R_t$ , the maximum level of revenue allowed in 2009, is €737.0m;
- When inflating from 2004 to 2009 values, the relevant figures are increased by 18.17%;
- $X$ , the efficiency factor, is set at zero;
- $B_0$ , the level of allowed revenue for the 2009 calendar year in real 2004 prices as detailed in the CER/05/138, is €602m;
- $INCENT_t$ , the value of incentive payments for 2009, is zero;
- $PCust_t$ , the revenue earned or foregone by the DSO for each additional connection above or below forecasted levels, is €0.000094m;
- $FCust_t$ , the current forecast for 2009 connections, is 310,415
- $Cust_t$ , the number of connections assumed for 2009 in the determination of  $B_0$ , is 262,556;
- $\Delta P_t$ , the change in 2009 pass-through costs from those assumed in the determination of  $B_0$  (for 2009), is €11.62m;

- $\Delta U_t$ , the change in 2009 uncertain costs from those assumed in the determination of  $B_0$  (for 2009), is -€1.6m;
- $K_{t-1}$ , the correction factor for 2008, is -€5.24m;
- $K_{t-2}$ , the correction factor for 2007, is €15.69m;

### 3.2.2 Explanation of k factors and adjustments to 2009 revenue

The above shows that  $B_0$  for 2009 was adjusted for inflation to give a figure of €711.2m. This figure was then adjusted upwards by a total of €25.8m, to yield the total value of €737.0m for DSO revenue for the 2009 calendar year. Table 2 shows that of this €25.8m:

- €15.36m related directly to 2009 and is included within Equation 1 under the terms 'PCust<sub>t</sub>/FCust<sub>t</sub>/Cust<sub>t</sub>',  $\Delta P_t$  and  $\Delta U_t$ ;
- -€5.24m related to the  $k_{-1}$  factor for 2008; and,
- €15.69m related to the  $k_{-2}$  factor for 2007.

	2007	2008	2009	Total
<b>Higher (lower) customer numbers</b>	0.38	(3.17)	5.34	2.56
Higher (lower) non-repayable line diversion costs	3.75	(3.62)	(1.60)	(1.47)
<b>Total Uncertain Costs</b>	3.75	(3.62)	(1.60)	(1.47)
Actual CPI higher than forecast	1.90	8.02	0	9.92
Actual revenue lower(higher) than forecast	(0.54)	0	0	(0.54)
<b>CPI/MWh adjustments</b>	1.36	8.02	0	9.38
Customer minutes lost	9.42	0	0	9.42
Customer interruptions	0.27	0	0	0.27
Customer satisfaction rating	1.59	0	0	1.59
<b>Total incentives</b>	11.28	0	0	11.28
Pension deficit	0	0	7.5	7.5
Property refund	(5.85)	(4.07)	0	(9.92)
Smart metering, market enhancements & All-Island-Market project costs	(0.47)	(0.12)	3.91	3.32
RMDS – industry co-ordination & design	(0.09)	(0.12)	0	(0.20)
All-Island market operational costs	0.05	0.20	0.21	0.46
Corrections for errors	5.73	1.51	0	7.24
Insurance, rates, ESI levy, vulnerable customers project	(1.76)	(3.62)	0	(5.38)
<b>Total Pass-through costs</b>	(2.39)	(6.23)	11.62	3.00
Total (pre-interest)	14.38	(4.99)	15.36	24.75
<b>Total adjustments</b>	<b>15.69</b>	<b>(5.24)</b>	<b>15.36</b>	<b>25.81</b>

**Table 2: k factors and adjustments to revenue for 2009**

### Higher (lower) customer numbers

The calculation of this figure for 2009 is demonstrated within Section 3.2.1.

### Uncertain Costs

This figure is the change in uncertain costs from those assumed in the revenue determination. The -€1.6m included in Table 2 for 2009 corresponds to the  $\Delta U_t$  value in Equation 1.

### CPI/MWh adjustments

These figures provide adjustments for the difference between forecast inflation and MWh figures, and revised forecasts/actual values.

### Incentives

An incentive value of €11.28m is included in the above table. This includes values for Customer Minutes Lost (CML) and Customer Interruptions (CI) that were calculated using the values in Table 3 below and incentive values applying to deviations from target levels, as detailed in CER/05/138.

	Forecast	Actual	Difference
Customer minutes lost	230.11	134.38	-35.73
Customer interruptions	178.27	176.36	-1.31

**Table 3:** Forecast and actual figures for CML and CI

The incentive figure of €11.28m also includes a value for the customer satisfaction rating. In 2007, the DSO achieved a satisfaction rating of 85% versus a target of 81%. This resulted in an incentive figure which would have exceeded the cap placed on this item<sup>6</sup>; therefore the figure was set at the cap, that is, 0.25% gain of allowed revenues or €1.59m. This is consistent with the decision paper on Quality of Service Mechanisms (CER/06/107) which was published by the Commission on 2 June 2006.

### Pass-through costs

This figure is the change in pass-through costs from those assumed in the revenue determination. The €11.62m included in Table 2 for 2009 corresponds to the  $\Delta P_t$  in Equation 1. These figures and the detail behind them have been reviewed by the Commission and the Commission is satisfied that they should be included within the DSO revenue for the 2009 calendar year.

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<sup>6</sup> 4% multiplied by a PSATRAT of €0.650m; see CER/06/107 for more details.

### 3.2.3 The inflation rate

The Commission's decision paper CER/05/138 provides the following revenue control formula:

$$R_t = \prod_{2005}^t [(1 + CPI_j - X)/100] * B_0 + \prod_{2005}^t [(1 + CPI_j)/100 * [INCENT_t + PCust_t * (FCust_t - Cust)_t]] + \Delta P_t + \Delta U_t + K_{t-1} + K_{t-2}$$

and goes on to define the CPI value within the formula as:

*'CPI the annual average percentage change in the Irish (all-items) Harmonised Index of Consumer Prices (HICP) for the 12-month period October to September in the year j.....published by Eurostat in Eurostatistics for short-term economic analysis'*

However, to date HICP has not been implemented as the indexation value; the Consumer Price Index has instead been used.

The Commission has considered whether it would be appropriate to switch at this stage to HICP or to continue with CPI and has decided to continue to use CPI as the indexation value for the remainder of this revenue control.

### 3.3 Comparison with revenue for 2008 calendar year

The allowed DSO revenue for the 2009 calendar year is €737.0m, a 5.5% increase over the €698.8m that was allowed for the 2008 calendar year. If revenue was recovered on a calendar year basis this would result in an increase of +4.6% in the Average Unit Price (AUP), from 2.82 c/kWh in 2008 to 2.95 c/kWh in 2009.

However, as revenue is instead recovered on a tariff period basis; it is useful to compare the AUP between tariff periods. For the tariff period from 1 November 2007 to 30 September 2008 the AUP was 2.79 c/kWh. For the tariff period from 1 January 2009 to 30 September 2009 the AUP will be 2.95 c/kWh.

## 4.0 DUoS tariffs (1 Jan 09 to 30 Sept 09)

### 4.1 Background

In the consultation paper (CER/08/095, published 20 June 2008), DUoS tariffs were proposed for the period 1 October 2008 to 30 September 2009. These were intended to recover a total of €726.8m. Of that €726.8m, €186.6m related to the 2008 calendar year<sup>7</sup> and €540.2m related to the 2009 calendar year<sup>8</sup>. These figures were based on calendar year revenue which had been scaled to reflect the percentage of total annual MWhs that related to the tariff period.

However, on 25 July 2008 the Commission decided that DUoS tariffs would not be adjusted until 1 January 2009<sup>9</sup>.

Therefore the Commission is now issuing a decision on the DUoS charges (and DLAFs) to apply from 1 January 2009 to 30 September 2009. This decision paper also takes the responses to the consultation paper (published 20 June) into account.

### 4.2 Level of DUoS tariffs

The DUoS tariffs proposed in the consultation paper (CER/08/095) were intended to recover a total of €726.8m over 12 months from 1 October 2008 to 30 September 2009. However, those DUoS tariffs were not implemented; a decision was made to keep the existing, lower, DUoS tariffs in place until 31 December 2008.

Consequently the DUoS tariffs approved in this decision paper aim to ensure that the DSO recovers the proportion of the €726.8m that relates to the tariff period from 1 January 2009 to 30 September 2009 (the proportion that relates to that period is €540.2m).

The DSO's schedule of DUoS tariffs (that is to be implemented from 1 January 2009) is published alongside this paper.

If members of the public wish to compare these DUoS tariffs with the existing DUoS tariffs (CER/07/188) and those that were published for consultation on 20 June 2008 (CER/08/095a) those documents can also be found on the Commissions' website. There is an increase of 5.2% relative to the DUoS tariffs that are currently in place.

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<sup>7</sup> Total revenue of €698.8m was approved for the 2008 calendar year, CER/07/186.

<sup>8</sup> This paper approves a total revenue of €737.0m for the 2009 calendar year.

<sup>9</sup> The reasons behind that decision are documented in the decision paper CER/08/136.

## **5.0 Distribution Loss Adjustment Factors**

The DLAFs proposed in the consultation paper (CER/08/095) were intended for implementation from 1 October 2008 to 30 September 2009. However, a decision was made to keep the existing DLAFs in place until 31 December 2008.

Consequently the Commission has now approved the DLAFs to apply from 1 January 2009 to 30 September 2009. These values are published in an ESB Networks' document alongside this decision paper. No changes have been made from the values that were published for consultation on 20 June 2008.

## 6.0 Conclusions

This paper outlines the Commission's decision on:

- Distribution System Operator (DSO) allowed revenue for the 2009 calendar year;
- Distribution Use of System (DUoS) tariffs for the nine month period from 1 January 2009 to 30 September 2009; and,
- Distribution Loss Adjustment Factors (DLAFs) for the nine month period from 1 January 2009 to 30 September 2009.

The allowed revenue for the 2009 calendar year is €737.0m. The DUoS tariffs and DLAFs to apply for the nine month period from 1 January 2009 to 30 September 2009 are published alongside this paper.