



**DISTRIBUTION PERFORMANCE REPORT**  
**2002**

***Prepared by:***  
**Distribution System Operator**  
**ESB Networks.**

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## Introduction

Condition 13 of the DSO licence requires the DSO to report annually on the performance of the Distribution Business. The criteria to be reported upon have been approved by the Commission for Energy Regulation in accordance with Condition 13 of the DSO licence. This report has been prepared by DSO for the year ending December 2002.

## Criteria

The report covers the performance of the Distribution Business for the year ending December 2002 under the following headings:

- 1.0 Customer Service
- 2.0 Cost Performance
- 3.0 Achievement of capital programme
- 4.0 Supply Quality
- 5.0 Safety
- 6.0 Compliance with licence requirements
- 7.0 Improvements in 2002

### 1.0 Customer Service

Critical indicators of customer service performance include service delivery by the customer contact centres (located in Dublin and Cork) and the treatment of complaints by DSO staff. Table 1 (below) summarises the performance of some of the key indicators of customer service.

**TABLE 1**

No.	Description of criteria	Value
<b>1.1</b>	<b>Call Handling Response</b>	
1.1.1	Percentage of calls answered within 20 seconds <sup>1</sup> (including storm days)	34%
1.1.2	Percentage of calls dropped <sup>1</sup> (i.e. where the customer has hung up without waiting for a response)	19%
<b>1.2</b>	<b>Complaints not adequately dealt with</b>	
1.2.1	Complaints upheld by ELCOM <sup>2</sup>	143

<sup>1</sup> This figure is inclusive of storms, which has the effect of reducing the percentage.

<sup>2</sup> Complaints not adequately dealt with by ESB are referred to ELCOM, the complaints arbitrator. This figure is based on ESB Networks complaints as detailed in the 2002 ELCOM Annual Report

Call Handling - A disimprovement in call handling response occurred from the 2001 values. However, this was anticipated as the focus in 2002 was on quality of calls with a view to reducing the number of repeat callers and customer complaints. In addition, approximately 315,000 extra calls were received in 2002 and there was an 8% increase in the number of calls answered by agents. There was also a greater number of storm days in 2002 compared to 2001.

<b>1.3</b>	<b>Additional items</b>	
1.3.1	No. complaints received for quality	5901
1.3.2	No. complaints received for frequent outages	1235
1.3.3	No. complaints on the time to connect customers	76
1.3.4	No. complaints on other distribution services such as fault repairs, response to queries by DSO	122
1.3.5	No. complaints from Suppliers	20 <sup>3</sup>
1.3.6	No. complaints on connection costs and budget quotations	9
1.3.7	No. Customers disconnected	9838 <sup>4</sup>
1.3.8	No. Customers de-energised	6664 <sup>4</sup>
1.3.9	No. of Networks customer calls to the call centre	947,488 <sup>5</sup>

Customer complaints – The number of complaints in relation to the time taken to connect customers has decreased significantly. This is primarily due to a concerted effort being made to reduce the backlog in relation to this work through the use of after hours schemes. There has been an increase in the number of complaints in relation to other distribution services, this is primarily due to the significant increase in the level of network renewal. However, it should be noted that the increase is small given the volume of work.

No. complaints from Suppliers - In 2002 the majority of supplier complaints to MRSO related to meter reading accuracy. In addition, there were a small number of complaints relating to delays surrounding the change of supplier process. These complaints should reduce with the current upgrade of the interim MRSO IT systems being undertaken.

<sup>3</sup> All of these complaints have been resolved

<sup>4</sup> De-energisation is an action, which prevents the flow of electricity to the premises. Disconnection is performed where the flow of electricity is permanently prevented and the meter is removed.

<sup>5</sup> The number of Networks calls as a proportion of the total calls to the call centre is determined from a number of surveys carried out on particular days adjusted and extrapolated over the year. Approximately 35% of all calls relate to ESB Networks. This percentage was used to calculate the annual numbers of Networks calls.

## 2.0 Cost Performance

Cost performance is a critical area in evaluating performance of the distribution business. The Commission for Energy Regulation has set very stretching targets for operating expenditure and the DSO will aim to achieve these and where possible improve on them. Table 2 (below) summarises DSO performance in relation to two key criteria in relation to these costs:

**TABLE 2**

No.	Description of criteria	Value
<b>2.1</b>	<b>Controllable Costs</b>	
2.1.1	Controllable Operating Cost per unit distributed	0.86c/kWh
2.1.2	Controllable Operating Cost per customer	95.56€/customer

The improvement in the controllable cost measures, from 0.972c/kWh and €110.79/customer in 2001, is due to a reduction in net cash operating costs and in non-network depreciation together with the increase in customer numbers and kWh distributed.

## 3.0 Achievement of capital programme

The DSO has agreed an extensive capital programme with the Commission for Energy Regulation for completion over the period 2001-2005. An important part of this capital programme is the Network Renewal Programme. Some key indicators of DSO's performance in relation to its overall capital programme and in particular the Network Renewal Programme are summarised in table 3.

**TABLE 3**

No.	Description of criteria	Value
<b>3.1</b>	<b>Total Capital Investment Programme</b>	
3.1.1	% 2002 Capital Investment Programme achieved (i.e. percentage of allowed capital spent)	116%
<b>3.2</b>	<b>Network Renewal Programme</b>	
3.2.1	Target coverage for 2002	6,500Km
3.2.2	Actual kms renewed	6,610Km
3.2.3	% of target achieved	101.7%

The figures above reflect the ramp up of contractors and after hours schemes which have facilitated delivery of more work than planned and in particular the acceleration of the networks refurbishment and an increased level of new connections.

## 4.0 Supply Quality

Supply quality is an important aspect of distribution system performance. Tables 4, 5, 6 and 7 detail DSO's performance for 2002 in relation to the key indicators of supply quality. In addition, the Commission for Energy Regulation has included an incentive/penalty in relation to customer minutes lost (CML) in the 2001-2005 price determination for the distribution business. As the effects of severe weather can cause wide variations in fault performance, days for which the reported customer minutes lost are more than two standard deviations from the mean are excluded from the fault figures. Also ESB is implementing a major renewal programme on its rural MV networks. Planned disruptions associated with this work are not counted as the intent is to measure ongoing performance and the renewal programme is once off.<sup>6</sup>

**TABLE 4**

No.	Description of criterion				Value	
<b>4.1</b>	<b>Number of Outages (adjusted for storm days and Network renewal work)</b>					
	<b>Voltage</b>	<b>Urban customers</b>		<b>Rural customers</b>		<b>Total</b>
		<b>Fault</b>	<b>Planned</b>	<b>Fault</b>	<b>Planned</b>	
	<b>LV</b>	4093	35	14843	1055	20129
	<b>10kV</b>	910	495	10020	9,873	24609
	<b>20kV</b>	95	21	1436	1,542	3260
	<b>38kV</b>	10	0	50	0	239
	<b>&gt; 38 kV</b>	3	0	15	0	18
	<b>Total</b>	<b>5133</b>	<b>551</b>	<b>26521</b>	<b>16050</b>	<b>48255</b>

**TABLE 5**

No.	Description of criteria			Value
<b>4.2</b>	<b>Customer Minutes Lost (adjusted for storm days)</b>			
		<i>Fault</i>	<i>Planned</i>	<i>Total</i>
	Urban Customers	134	32	166
	Rural Customers	202	375	577
	<b>Weighted average<sup>7</sup></b>	<b>183</b>	<b>280</b>	<b>463</b>
	Associated with Network Renewal		65	
	<b>Post adjustment for Network Renewal</b>	<b>183</b>	<b>215</b>	<b>398</b>

<sup>6</sup> 61,570 customer hours represents the average of two standard deviations from the mean of the daily fault data for the 3 years 1999, 2000 and 2001. Fault data for days for which the reported customer hours lost due to faults is greater than 61,570 are excluded. The fault statistics are then annualised to 365 days. For example if 12 days are excluded because CML exceeded 61,570, the remaining data is annualised by applying the factor 365/(365-12)=1.034.

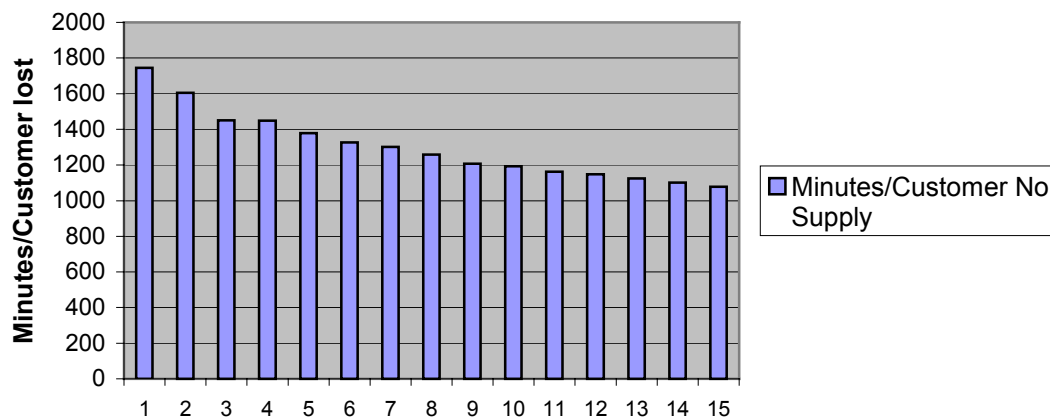
<sup>7</sup> Calculated by the number of customers involved in the outage multiplied by the duration of the outage for all outages during the year divided by the total number of customers connected.

**TABLE 6**

No.	Description of criteria	Value
<b>4.3</b>	<b>Additional items</b>	
4.3.1	Percentage of faults exceeding 4 hours restoration time	22%
4.3.2	Verified voltage complaints	2842

The number of faults exceeding 4 hours restoration time has increased on 2001 mainly due to the higher number of storm days in 2002 and the severity of the storm in October 2002.

**15 Worst Feeders 2002**



**Figure 1**

Figure 1 shows the worst 15 MV feeders in terms of fault customer minutes lost per connected customer. Nine of the feeders on the list are 10 kV feeders that have yet to be refurbished under the rural network renewal programme. The length of the feeder and coastal exposure are elements which impact on the performance of a feeder. The construction of a number of new stations will enable a number of the feeders to be split and thus improve their performance. The installation of automatic and remote control equipment will also improve performance.

Table 8 shows the number of storm days and details of the weather on those days. There were twelve days in 2002 compared to three in 2001.

TABLE 8

No.	Description of criteria	Value
4.4	<b>Storms and exceptional events</b>	
4.4.1	Number of storm days	12
4.4.2	<b>Description of storm days</b> <b>26<sup>th</sup> January 2002</b> Extensive thunderstorm activity across Munster, Connacht and parts of Leinster overnight and early morning. Also, windy in the west and south-west with gusts of over 60mph. 23,000 customers affected.  <b>28<sup>th</sup> January 2002</b> Very windy in the extreme North (gusting over 95mph). Gusts of over 60mph. in other parts of the country. Also, a few scattered thunderstorms. 21,000 customers affected.  <b>1<sup>st</sup> February 2002</b> Windy with gusts of over 60mph in many areas, 88mph in the Northwest. Also isolated thunderstorms in west and north-west. 24,000 customers affected.  <b>2<sup>nd</sup> February 2002</b> Extensive thunderstorm activity over the Western half of the country. Also, gusts of over 60mph. 21,000 customers affected.  <b>20<sup>th</sup> February 2002</b> Gusts of 60 to 70mph in places. Also, very isolated thunderstorms (midlands and north-east). 15,000 customers affected.  <b>26<sup>th</sup> February 2002</b> Windy in places (gusts of over 70mph in south-east). Also a few scattered thunderstorms. 13,000 customers affected.  <b>9<sup>th</sup> March 2002</b> Windy over Munster and Leinster with gusts of over 60mph Locally heavy sleet/snow. Isolated thunderstorms, chiefly over Western half. 17,000 customers affected.  <b>10<sup>th</sup> March 2002</b> Windy with gusts of over 60mph in many areas (greater than 85mph in the northwest). Also, scattered thunderstorms, chiefly in the north-west, west and east. 12,000 customers affected.  <b>17<sup>th</sup> May 2002</b> Widespread thunderstorm activity. 18,000 customers affected.	

**2nd June 2002**

Extensive thunderstorm activity across Munster and Leinster. 34,000 customers affected.

**27<sup>th</sup> October 2002**

Windy with gusts of over 80mph in many areas (locally greater than 100mph). 39,000 customers affected.

**1<sup>st</sup> December 2002**

Windy with gusts of over 60mph in places (greater than 85mph in north-west). 28,000 customers affected.

## 5.0 Safety

Public safety is a very important factor for the Distribution Business. With the sharp increase in construction activity over the last few years the number of notifiable dangerous occurrences to the Health and Safety Authority has increased. The increased number of designated storms days of 12 in 2002 (from 3 in 2001) is another factor for this increase from 2001. Table 9 reports on the number of such incidents broken down by third party and non-third party.

**TABLE 9**

No.	Description of criteria	Value
<b>5.1</b>	<b>No. of safety incidents</b>	
5.1.1	3 <sup>rd</sup> Party Faults	531
5.1.2	Non-3 <sup>rd</sup> Party Faults	650

The number of 3<sup>rd</sup> party faults has decreased on 2001 figures mainly due to the decrease in economic activity and customer awareness campaigns. The increase in Non-3<sup>rd</sup> Party faults is mainly due to the higher number of storm days in 2002 compared to 2001.

## 6.0 Compliance with licence requirements

A key factor for the DSO, as the entity appointed to carry out the functions set out in the DSO licence, is to comply with all aspects of the licence. In order to monitor this a compliance log is maintained in which reported breaches of compliance are noted and reports on the subsequent investigations are filed. Table 10 reports on the number of compliance issues logged for 2002.



**TABLE 10**

No.	Description of criteria	Value
6.1	No. compliance issues (all of these issues have been resolved)	2

## **7.0 Improvements in 2002**

ESB Networks is committed to providing a quality network service to all of its customers. During 2002 various processes were introduced to improve this service.

### **CUSTOMER SERVICE**

- The Networks Customer Charter was launched in July 2002.
- A new job tracking system has been developed. This system facilitates the management and tracking of progress of new customer connections and will provide essential information to allow the call centres to handle customer queries effectively.
- A number of codes of practice were published during the year. These include documents relating to the connection process, explanations of charges for connection, de-energisation procedures and complaints handling.
- Ongoing customer contact surveys to gauge customer opinion of ESB Networks were undertaken. These surveys have indicated that customer perception of ESB Networks is continuing to improve.
- MRSO provided increased flexibility to Suppliers in the change of supplier process in relation to the VIPP agreements. The use of customer reads in the change of supplier process was introduced for non-domestic customers.

### **REGULATORY ISSUES**

- The first set of regulatory accounts were completed and provided to CER.
- A compliance code of conduct was developed and briefed to staff.

### **PERFORMANCE IMPROVEMENT**

- Further progress was made in relation to the installation of the supervisory and data acquisition system (SCADA). SCADA provides powerful centralised facilities for remote monitoring and operation of substations. Its benefits include

significantly improved operating performance, supply reliability, safety and customer service. SCADA is the foundation for distribution automation generally.

- It provides automated control down to distribution station level and provides the basis for extending automation out on the MV distribution networks.

### **MARKET OPENING**

- The Market was opened further to customers with an annual consumption between 1 and 4 GWh. Profile meters (approx 1,200) were installed to facilitate this market opening. Profile meters for MV Customers was progressed. Following the approval by CER, ESB commenced work on the Standard Load Profile Project. This involves the installation of multi-function meters in approx 1,800 sites across different customer classes to facilitate the development of standard load profiles for the Irish market.
- A contract was placed for new MRSO Systems with CGEY and progressed to blueprint completion.
- A Market Opening Implementation Project has been put in place together with an implementation plan for full market opening in February 2005. Accelerated market opening to 0.1GWh has been agreed with the Department of the Marine and Natural Resources and CER for February 2004.

### **BUSINESS SEPARATION**

- The separation of ESB Networks from other businesses of ESB is required by licence conditions governing the new competitive market. Considerable progress on business separation has already been made, and a number of initiatives implemented. ESB developed Principles of Business Separation which will ensure that licence conditions are met while holding the costs of separation to reasonable levels and minimising the impact on customer service. A Business Separation Status Report incorporating these Principles was approved by CER in July 2002.
- In October 2002 a comprehensive and confidential report was submitted to the CER setting out a range of proposals and options in relation to separation of ESB Networks from other ESB businesses and a range of initiatives were agreed.