



**DISTRIBUTION PERFORMANCE REPORT**  
**2003**

*Prepared by:*  
Distribution System Operator  
ESB Networks.  
Document No: DOC-210103-AEE

## 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 2003.

## Criteria

The report covers the performance of the Distribution Business for the year ending December 2003 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 2003

### 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**

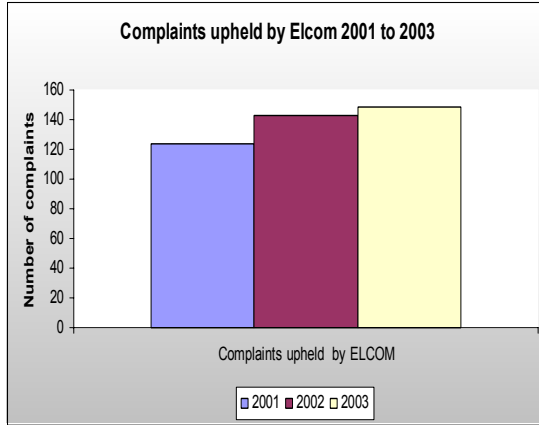
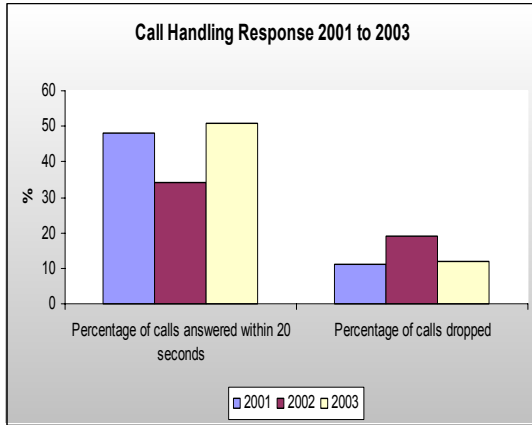
No.	Description of criteria	Value
<b>1.1</b>	<b>Call Handling Response<sup>1</sup></b>	
1.1.1	Percentage of calls answered within 20 seconds	51%
1.1.2	Percentage of calls dropped <sup>2</sup>	12%
<b>1.2.1</b>	<b>Complaints upheld by ELCOM<sup>3</sup></b>	149

Following a number of call centre improvements, the percentage of calls answered within 20 seconds was significantly increased in 2003 over the level achieved in 2002. In addition, the percentage of calls dropped reduced by 7% in the same period.

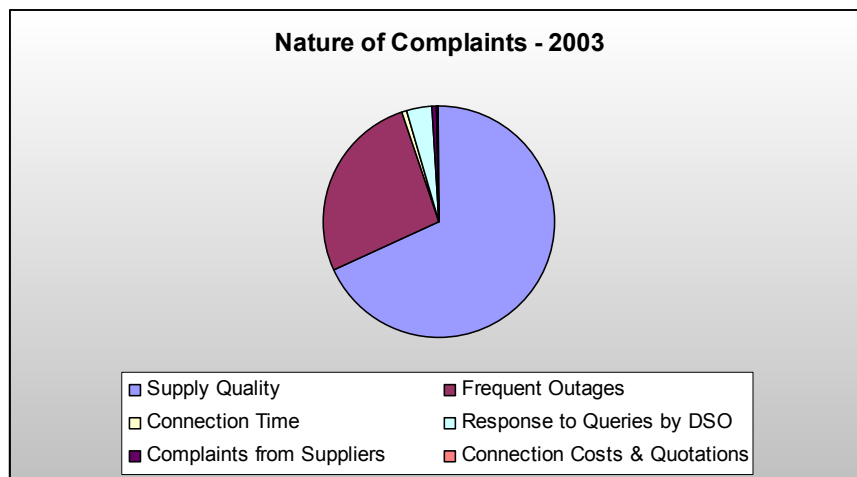
<sup>1</sup> Note both sets of figures are inclusive of storms, which has the effect of reducing the percentage.

<sup>2</sup> Where the customer has hung up without waiting for a response.

<sup>3</sup> Complaints not resolved between ESB and the complainant are referred to ELCOM, the complaints arbitrator. This figure is detailed in the 2003 ELCOM Annual Report



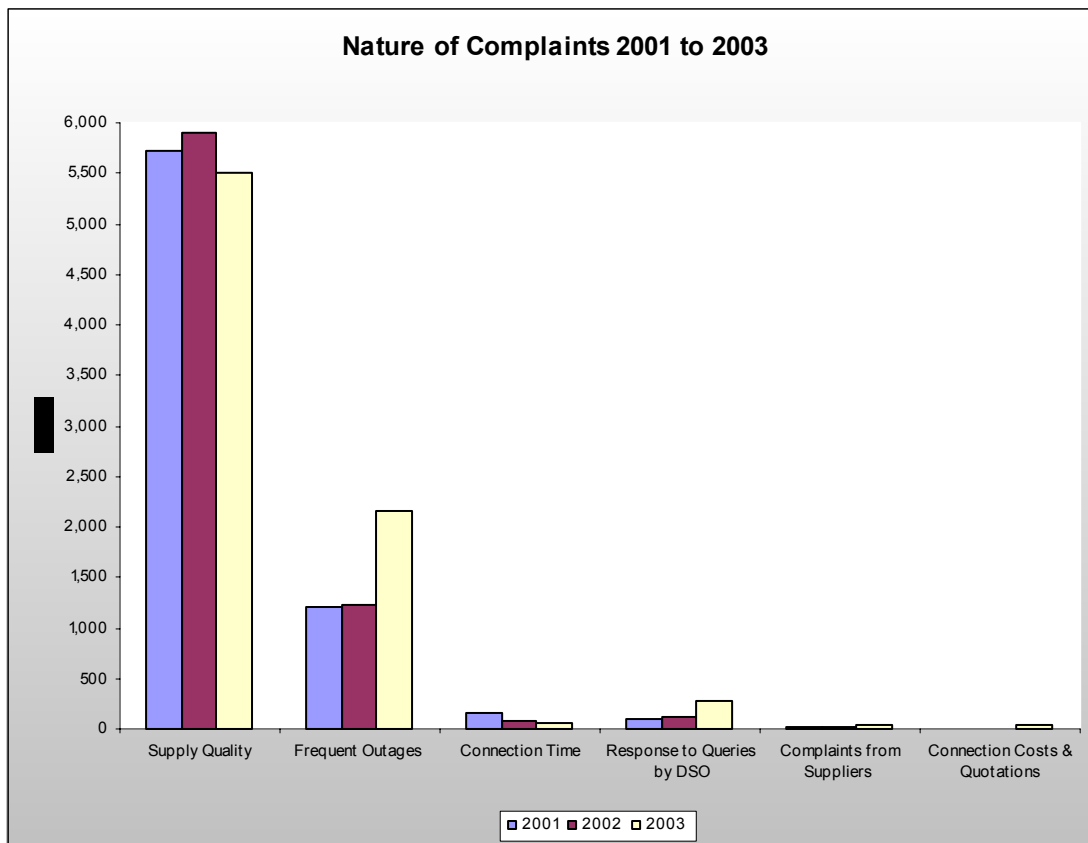
		<b>Number</b>
<b>1.3</b>	<b>Nature of complaints received:</b>	
1.3.1	Relating to supply quality	5,512
1.3.2	For frequent outages	2,161
1.3.3	On the time to connect customers	51
1.3.4	On other distribution services such as fault repairs, response to queries by DSO	287
	From Suppliers	45 <sup>4</sup>
1.3.5	On connection costs and budget quotations	30
1.3.6	No. Customers disconnected	8,436 <sup>5</sup>
1.4	No. Customers de-energised	5,580 <sup>5</sup>
1.5	No. of Networks customer calls to the call centre	827,697 <sup>6</sup>
1.6		



<sup>4</sup> All of these complaints have been resolved

<sup>5</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>6</sup> The number of Networks calls as a proportion of the total calls offered to the call centre is estimated to be 30% of all calls following a survey of one week duration. The reduced number of storm days was also a contributory factor in the reduction of Network related calls.



The number of complaints on supply quality have reduced since 2001. However, there was a significant increase in the number of complaints received for frequent outages primarily due to the increased network activity required for the MV Overhead Line Refurbishment Programme. It is envisaged that these will reduce significantly on completion of the MV Overhead Line Refurbishment Programme after 2005.

Although there has been an unprecedented increase in the number of new connections, with 77,000 recorded for 2003, the number of complaints in relation to the time taken to connect customers has decreased by approximately 66% in the period 2001 to 2003.

The increased number of complaints from Suppliers to MRSO was primarily in relation to meter reading accuracy for the NQH<sup>7</sup> customers. The significant increase in the numbers of NQH<sup>7</sup> customers in the independent market in the period 2001 to 2003 (approx 13,000 in 2001 to 30,000 in 2003) is the primary reason for the relatively small increase in these complaints. It is envisaged that the introduction of the upgraded interim MRSO IT system in November 2003, will help improve the validation of meter readings. In addition, the reduced meter reading frequency, as agreed with CER, has resulted in a number of complaints from customers and suppliers.

<sup>7</sup> Non-Quarter Hour customers

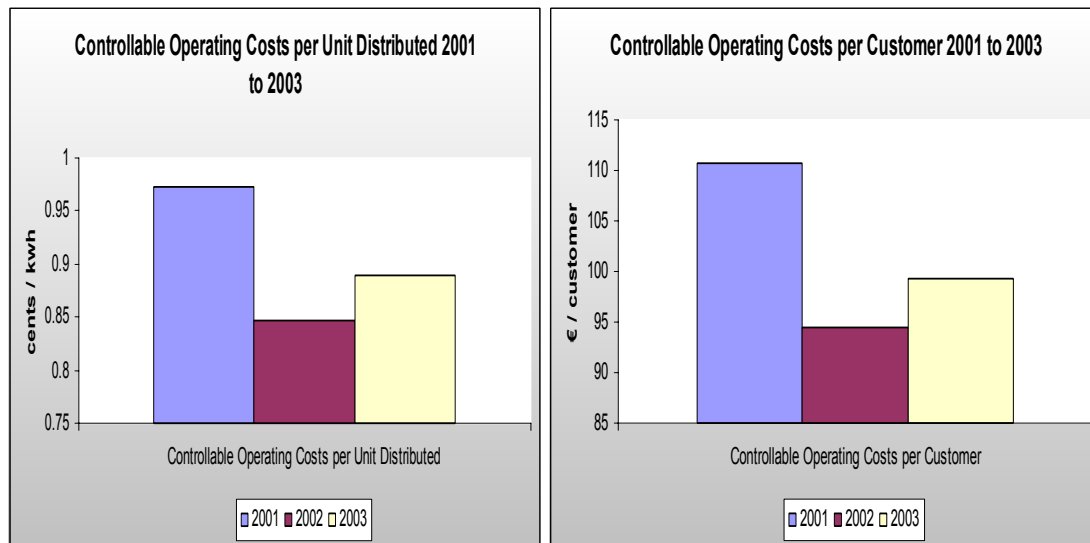
## 2.0 Cost Performance

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	0.89c/kWh
2.1.2	Controllable Operating Cost per customer	99.2€/customer

Controllable operating costs per customer and per unit distributed have increased by approximately 4% on 2002, due to an increase in operating costs of 8%, offset by increases in customer numbers and GWh distributed of 4% and 3.6% respectively. The increase in controllable operating costs is due to increased levels of maintenance work in 2003 over 2002. Overall, the level of controllable operating costs has reduced in the 2001 to 2003 period.



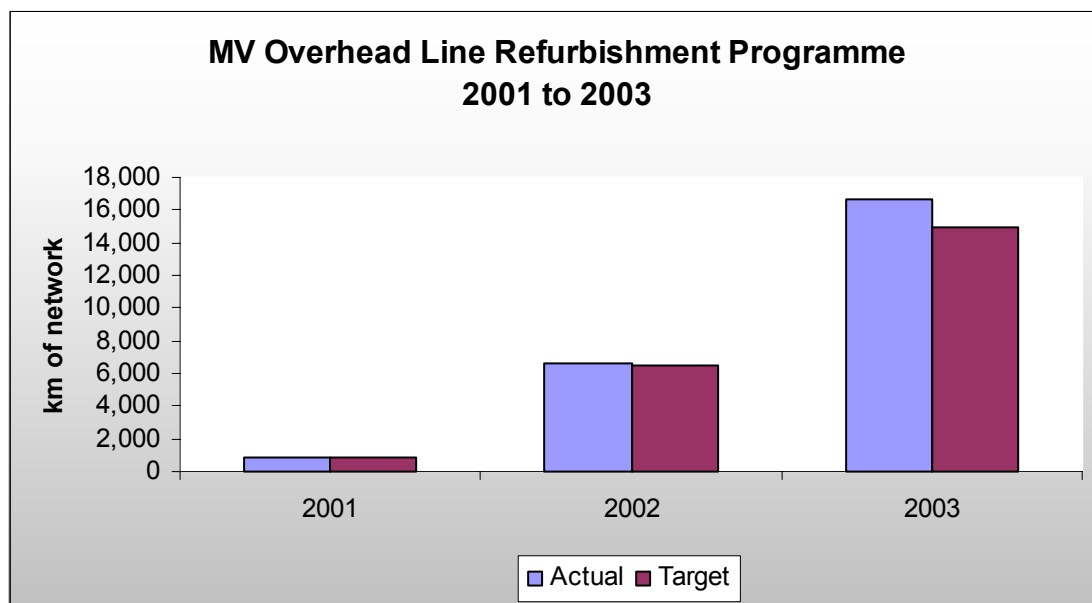
### 3.0 Achievement of capital programme

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 MV Overhead Line Refurbishment 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	% 2003 Capital Investment Programme achieved (i.e. percentage of allowed capital spent)	119%
<b>3.2</b>	<b>MV Overhead Line Refurbishment Programme</b>	
3.2.1	Target coverage for 2003	15,000Km
3.2.2	Actual kms renewed	16,617Km
3.2.3	% of target achieved	111%

The figures above reflect the ramp up of contractors which have facilitated delivery of increased levels of work. In particular the acceleration of the MV Overhead Line Refurbishment Programme and the increased level of new connections are significant contributors to increased capital investment.

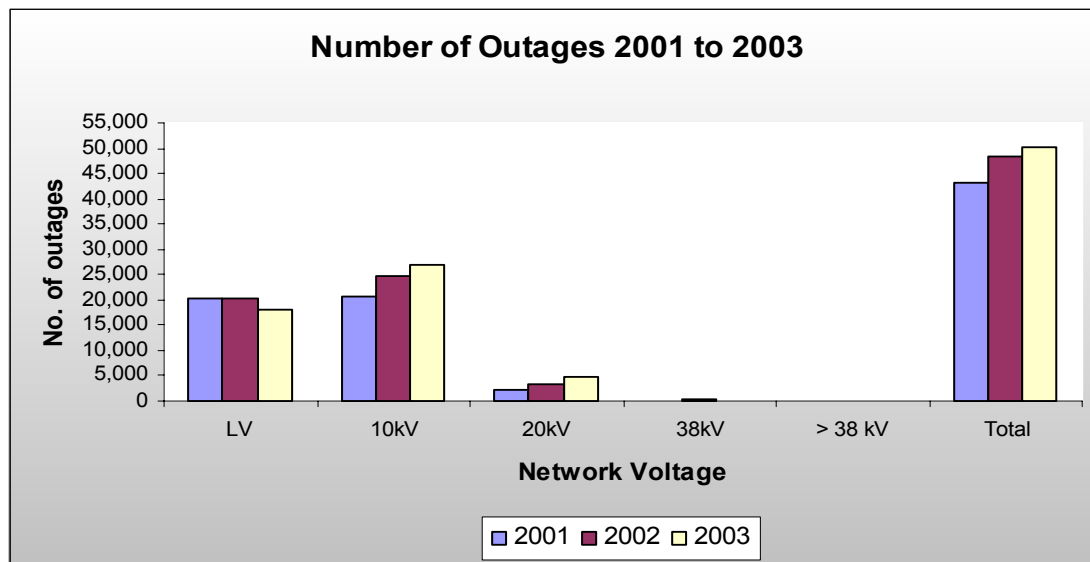


## 4.0 Supply Quality

Supply quality is an important aspect of distribution system performance. Tables 4, 5 and 6 detail DSO's performance for 2003 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 these measures, days for which the reported customer minutes lost are more than two standard deviations from the mean are excluded.<sup>8</sup> In addition, DSO is implementing a major MV Refurbishment Programme on its rural networks and this is reflected in the increased number of outages for 10kV and 20kV between 2001 and 2003 as shown in the following graph.

**TABLE 4**

No.	Description of criterion	Value			
<b>4.1</b>	<b>Number of Outages</b>				
	<b>Voltage</b>	<b>Urban customers</b>		<b>Rural customers</b>	
		<b>Fault<sup>9</sup></b>	<b>Planned<sup>10</sup></b>	<b>Fault<sup>8</sup></b>	<b>Planned<sup>9</sup></b>
	<b>LV</b>	3,380	40	13,478	1,065
	<b>10kV</b>	702	467	8,110	17,785
	<b>20kV</b>	88	25	1,691	3,100
	<b>38kV</b>	15	0	80	2
	<b>&gt; 38 kV</b>	2	0	5	0
	<b>Total</b>	<b>4,187</b>	<b>532</b>	<b>23,364</b>	<b>21,952</b>



<sup>8</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.

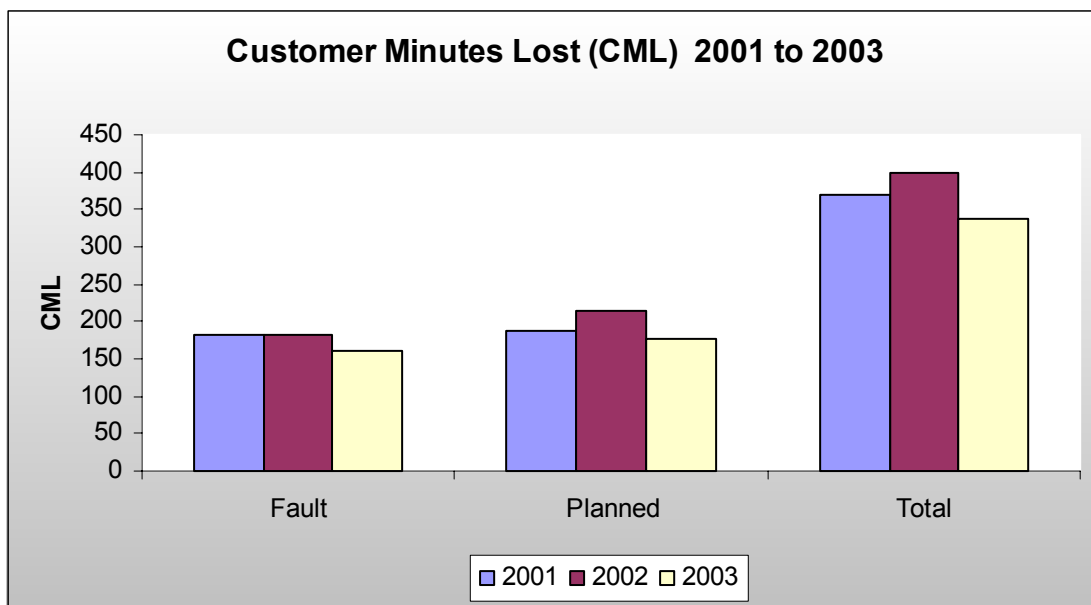
<sup>9</sup> Adjusted for storm days

<sup>10</sup> Includes MV Overhead Line Refurbishment Work Programme

TABLE 5

No.	Description of criteria	Value		
<b>4.2</b>	<b>Customer Minutes Lost</b>			
		<b>Fault<sup>8</sup></b>	<b>Planned</b>	<b>Total</b>
	Urban Customers	77	37	114
	Rural Customers	193	548	741
	<b>Weighted average<sup>11</sup></b>	<b>162</b>	<b>410</b>	<b>572</b>
	Associated with MV Refurbishment		234	
	<b>Post adjustment for MV Refurbishment</b>	<b>162</b>	<b>177</b>	<b>338</b>

Having adjusted for the MV Refurbishment Programme, the following graph shows that the CML weighted average for 2003 is less than that for both 2001 and 2002.



<sup>11</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	19%
4.3.2	Verified voltage complaints	2,879

The number of faults exceeding 4 hours restoration time has decreased on 2002. The introduction of a daily validation of the fault reports has resulted in the improved accuracy of these reports. In addition, the reduced number of storm days from 12 to 3 and their severity has also contributed favorably to this percentage. The number of verified voltage complaints recorded in 2003 is broadly in line with previous years.

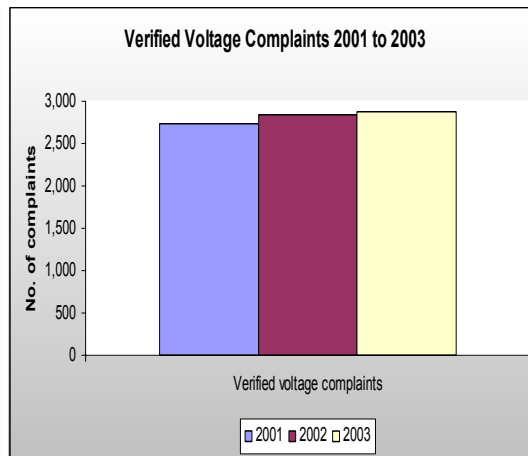
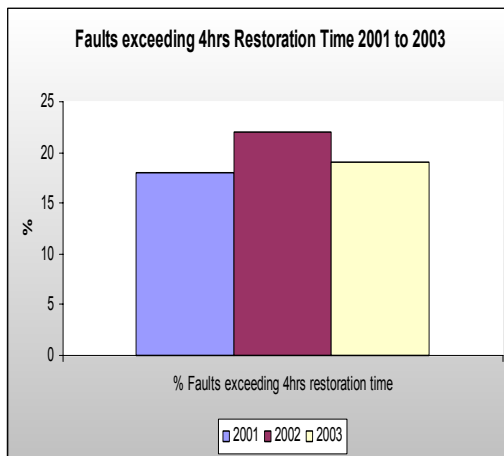


Table 7 shows the number of storm days and details of the weather on those days. There were three days in 2003 compared to twelve in 2002.

TABLE 7

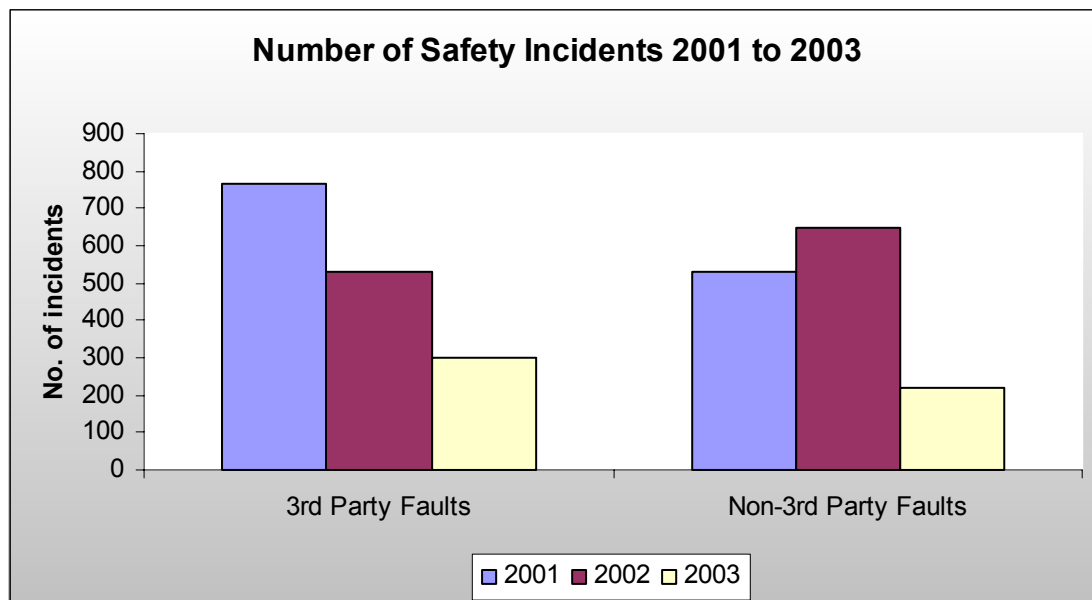
No.	Description of criteria	Value
4.4	<b>Storms and exceptional events</b>	
4.4.1	Number of storm days	<b>3</b>
4.4.2	<b>Description of storm days</b> <u>17<sup>th</sup> Jan 2003</u> Isolated thunderstorms near the West & Northwest coast during morning & afternoon. Windy across much of the country with gusts of up to 60 knots. 22,117 customers affected.  <u>5<sup>th</sup> August 2003</u> Scattered thunderstorms in parts of the midlands and South Connacht in the afternoon and in South Leinster overnight. Widespread severe thunderstorm activity over North Leinster, North Connacht and Ulster during rest of day. 49,475 customers affected.  <u>22<sup>nd</sup> October 2003</u> Scattered thunderstorms across parts of Leinster throughout the day with falls of hail. 21,285 customers affected.	

## 5.0 Safety

Public safety is a very important factor for the Distribution Business. Table 8 reports on the number of dangerous occurrences notifiable to the Health and Safety Authority (HSA) broken down by third party and non-third party.

**TABLE 8**

No.	Description of criteria	Value
<b>5.1</b>	<b>No. of safety incidents</b>	
5.1.1	3 <sup>rd</sup> Party Faults	298
5.1.2	Non-3 <sup>rd</sup> Party Faults	222



The reduction in the number of safety incidents is primarily as a result of an initiative to improve the accuracy of reporting of Dangerous Occurrences undertaken in 2003. The process involves re-validation of each recorded Dangerous Occurrence by designated staff in consultation with field operatives. These reports are subsequently forwarded to the HSA as required. The increased focus on 'quality' of incidents has resulted in the elimination or re-classification of many incorrectly recorded events and a consequential reduction in numbers. In addition, the reduced number of designated storm days is also a contributory factor to this reduction

## 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 9 reports on the number of compliance issues logged for 2003

**TABLE 9**

No.	Description of criteria	Value
6.1	No. compliance issues (all of these issues have been resolved)	7

This represents a slight increase on 2002. Although small in number, the increase was expected given the increased penetration of market opening over the previous three years. The issues in 2003 covered a number of areas including the meter reading responsibility of DSO rather than the supplier, outage notification, MIC changes and change of supplier issues. Each case was investigated and resolved and the appropriate measures implemented to ensure it does not re-occur.

## 7.0 Improvements in 2003

ESB Networks is committed to providing a quality network service to all of its customers. During 2003 various processes were introduced to improve this service.

### **CUSTOMER SERVICE**

A number of initiatives to improve our service to all our customers were launched in 2003. These included:

- The Network Services Bureau was set up in Athlone to handle the quotation and receipting process for domestic new connections. This is being gradually ramped up and will be fully operational by mid 2004. It is intended that the bureau will issue all quotations for non-scheme domestic new connections and receipt all cheque payments. Currently about 90% of all applications and 80% of all capital contribution payments are being received in the bureau.
- There have been significant improvements in customer service levels during 2003:
  - Quotation and construction lead times have been reduced by 50% compared to 2002, a considerable achievement given the increased volume of new business.
  - An improved outage notification postcard was introduced during 2003. This redesign included clearer text on the A5 format and on stronger paper. A centralised printing process was also introduced in November 2003.

- The meter-reading function introduced a number of initiatives including:
  - 'Long-term no access' initiative for meter readers.
  - Meter reading contracts based on rate per reading rather than rate per visit.
  - Customer contact campaign to promote customer reads.
- ESB Networks provided all customers with an MIC of 1MVA or greater a 24/7 contact number which is staffed by technical personnel. In addition, all customers with an MIC of between 500kVA and 1MVA were notified of a call centre hotline number.
- A number of initiatives involving contractors were introduced to each element of the new connection activity during 2003. These included the delivery of materials, the installation of poles unaccompanied by ESB personnel, and the installation of cables for connections to housing schemes, in addition to meter replacement programmes.
- The first ever ESB Networks customer survey was carried out during 2003, covering 7 areas of the business, and it is planned to carry out similar surveys bi-annually over the coming years.
- Having finished development, the Operations Management System (OMS) is currently been piloted in two locations (Waterford and Letterkenny) and will be expanded to other locations during 2004. The OMS will improve customer service in a number of areas including fault identification and outage notification.

## **NETWORK INFORMATION**

- Following closure of the regional records offices and centralising of records and data, the centralised network mapping function provides customers and contractors with a means of requesting details of the MV and LV network in a particular location. By faxing in a request (fax number 01-6388169) with a map indicating the location, the contractors will be issued details of the network at that location. This service caters for all queries across the country.
- The launch of an interactive system to provide MV and 38kV network maps on a national basis on [www.esb.ie](http://www.esb.ie) provides customers with information to facilitate an initial feasibility study. In addition to the maps, the capacity ratings of overhead network and 38kV Station are provided. For further details see the Infrastructure page under [www.esb.ie/esbnetworks](http://www.esb.ie/esbnetworks).

## **SAFETY INITIATIVES**

- In accordance with condition 31 of the DSO licence, a technical and safety audit was carried out by an independent auditor and the report provided to the CER.
- The appointment of a Manager with specific responsibility for all issues relating to Public Safety.

- A series of public safety initiatives were undertaken in 2003 which included:
  - MV Overhead Line Refurbishment Programme
  - An inspection of all Minipillars was completed and a routine cycle of inspections will be carried out in 2004.
  - All MV Substations were visited and a detailed condition report prepared for follow-up over the coming years.
  - MV Hazard Patrols and follow-up was completed on 33% of the MV Rural networks as part of the 3 year cycle.

#### **PERFORMANCE IMPROVEMENT**

- Further progress was made in relation to the installation of the supervisory and data acquisition system (SCADA) resulting in 77.2% of stations with SCADA at the end of 2003. 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.
- Further rollout of the Distribution Automation Project continued with the installation of a number of automatic network switches and reclosers on the network. Following the success of this development work, it is expected that the rollout of these schemes will increase in 2004.
- GSM communication from SCADA to Remote network switches was developed and tested in 2003 and it is planned to rollout this over the coming 18 months.

#### **MARKET OPENING**

- ESB set-up a corporate Market Opening IT Programme, early in 2003, to aid the Business delivery of IT systems for complete market opening in February 2005. As part of this project a number of key milestones were achieved. These included:
  - At the end of 2003, the market participants signed off on the Market Process Diagrams under-pinning the full market opening in 2005.
  - The major design phase of the Networks Market Opening IT systems was completed at the end of 2003.
- The MRSO installed an upgraded interim IT system which significantly improved the turnaround time for the Change of Supplier process due to increased automation and streamlining of the process. In addition, the provision of standardised regular reports to Suppliers regarding changes to the existing customer database, together with increased controls and audit trails provide greater accuracy in the registration and data management functions for the MRSO.
- Along with a software upgrade, the implementation of a major hardware platform upgrade for MV90 Interval Data Collection System was completed in 2003. In addition, the number of channels available for polling meters was significantly increased and a new process for meter register readings was developed to facilitate 2-monthly Non Quarter Hour max demand reads for interval metered customers.

- In preparation for the further market opening in February 2004, for all customers with an annual consumption of 100,000 units and greater, substantial progress has been made on the relevant meter installation programme. Over 90% of this group have been completed. In addition, a fast-track approach is being adopted for those remaining customers who choose to change supplier and who do not already have a profile meter installed. This ensures that there is no delay in the change of supply process.

## **BUSINESS SEPARATION**

- The separation of ESB Networks from other businesses of ESB is required by the DSO licence. During 2003 a comprehensive Business Separation Implementation Plan was agreed with the CER. This Plan set out a wide range of Business Separation initiatives which are to be implemented progressively, and which are targeted for completion in 2005.
- Many of these initiatives are already implemented. Others are in the course of implementation and are on schedule for completion by the agreed dates. The CER receives regular progress reports on implementation of the Plan.
- The following provides a sample of the more significant Business Separation initiatives completed during 2003:
  - Separate connection (ESB Networks) and supply (ESB Customer Supply) application forms put in place for domestic and business customers by end of October 2003. The Forms are available from [www.esb.ie/esbnetworks](http://www.esb.ie/esbnetworks), ESB Call Centre, ESB Retail outlets, and ESB Networks Services Design Offices.
  - Separate internet sub-site developed for ESB Networks ([www.esb.ie/esbnetworks](http://www.esb.ie/esbnetworks)).
  - New identifier developed for ESB Networks, and roll-out is in progress on vehicles, stationery, and other signage.
  - Compliance Code of Conduct rolled out to all personnel in ESB Networks and all relevant staff in other business lines.
  - Policy and procedures implemented to govern the transfer of personnel from ESB Networks to other businesses of ESB.
  - Service Level Agreements put in place for all internal services provided to, and by, ESB Networks.

## **QUALITY MANAGEMENT SYSTEM**

- In January 2003, the Asset Management and Network Systems areas were successful in gaining accreditation of their management systems in accordance with new International Quality Standard ISO 9001:2000. This system is based on the development of focussed business plans, a process approach to key business tasks and continuous monitoring and improvement of the way that business is carried out.