

# DISTRIBUTION PERFORMANCE REPORT 2004

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 2004.

#### Criteria

The report covers the performance of the Distribution Business for the year ending December 2004 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 2004

#### 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
1.1	Call Handling Response <sup>1</sup>	
1.1.1	Percentage of calls answered within 20 seconds	57%
1.1.2	Percentage of calls dropped <sup>2</sup>	15%
1.2.1	Complaints upheld by ELCOM <sup>3</sup>	97

Despite a significant increase in the number of ESB networks calls to the Call Centre (up 43%), the number of calls answered. within 20 seconds has continued to improve. There has also been a small increase in the number of calls dropped. Trends in these figures for the past four years are shown in the graphs overleaf.

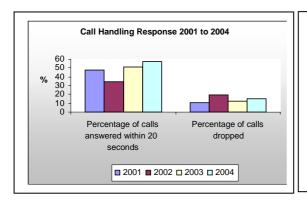
<sup>&</sup>lt;sup>3</sup> Complaints not resolved between ESB Networks and the complainant are referred to ELCOM, the complaints arbitrator. This figure is detailed in the 2004 ELCOM Annual Report

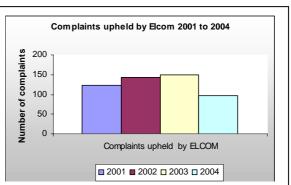


<sup>&</sup>lt;sup>1</sup> Note both sets of figures are inclusive of storms, which has the effect of reducing the percentage.

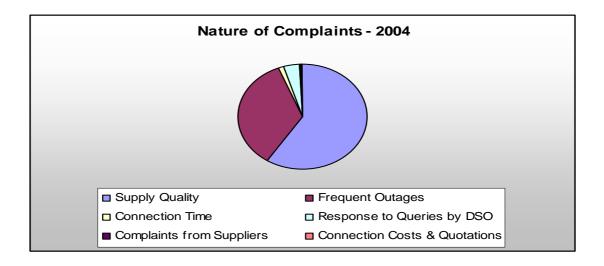
 $<sup>^{2}% \</sup>left( 1-1\right) =0$  Where the customer has hung up without waiting for a response.

## **Distribution System Performance Report**





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95 <sup>6</sup>
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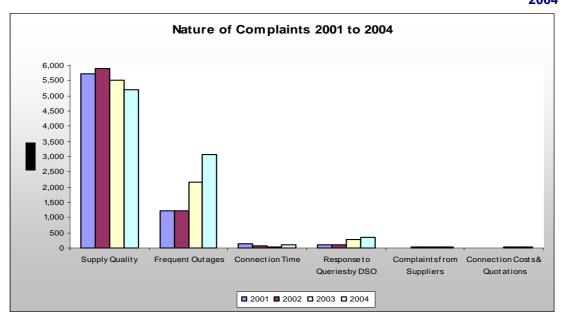
<sup>&</sup>lt;sup>4</sup> All of these complaints have been resolved

where the flow of electricity is permanently prevented and the meter is removed.

<sup>6</sup> The number of ESB 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.



<sup>&</sup>lt;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.



The number of complaints on supply quality has continued to reduce 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 and also the high volume of work associated with new connections.<sup>7</sup> It is envisaged that these will reduce significantly on completion of the MV Overhead Line Refurbishment Programme.

Although there has been an increase in complaints in relation to time taken to connect new customers compared to 2003, the overall trend (compared with 2001) is still a reduction. The number of complaints in relation to the time taken to connect customers has decreased by approximately 66% in the period 2001 to 2004. This is with a backdrop of an unprecedented increase in the number of new connections, with 90,600 recorded for 2004.

There has been a significant reduction in the number of complaints from Suppliers to MRSO. This was expected following the introduction of the upgraded interim MRSO IT system in November 2003, which has helped improve the validation of meter readings.

<sup>&</sup>lt;sup>7</sup> It is worth noting that the number of complaints versus the number of interactions for the MV Overhead Line Refurbishment Programme and new connections is very low.



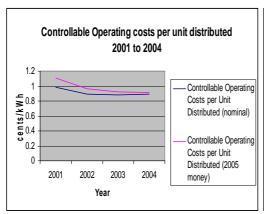
#### 2.0 **Cost Performance**

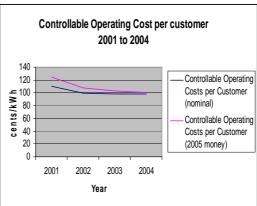
Cost performance is a critical area in evaluating performance of the distribution business. The Commission for Energy Regulation has set very stretching targets for operating expenditure and the DSO will aim to achieve these and where possible improve on them. Table 2 (below) summarises DSO performance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

TABLE 2

No.	Description of criteria	Value
2.1	Controllable Costs	
2.1.1	Controllable Operating Cost per unit distributed	0.89c/kWh
2.1.2	Controllable Operating Cost per customer	98.60€/customer

Controllable operating costs per customer have increased marginally vis a vis 2003, due to an increase in operating costs of 4.6%, offset by increases in customer numbers of 4.5%. As can be seen from the graphs below over the period 2001-2004 there has been a real reduction of approx. 17% in operating costs per kWh and approx 19% decrease in operating costs per customer.



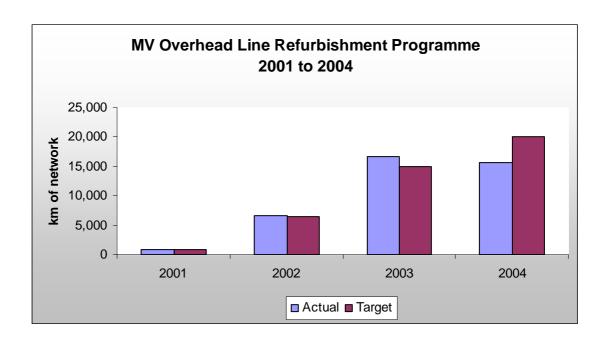


## 3.0 Achievement of capital programme

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 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
3.1	Total Capital Investment Programme	
3.1.1	% 2004 Capital Investment Programme achieved (i.e. percentage of allowed capital spent)	111%
3.2	MV Overhead Line Refurbishment Programme	
		<sup>8</sup> 16,000Km
3.2.1	Target coverage for 2004	10,000111
3.2.2	Actual kms renewed	15,598Km
3.2.3	% of target achieved	97%



<sup>&</sup>lt;sup>8</sup> Revised target to reflect change from five year programme to six years to ensure best return from contractor management and highest quality work achieved.



#### 4.0 **Supply Quality**

Supply quality is an important aspect of distribution system performance. Tables 4, 5 and 6 detail DSO's performance for 2004 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.9 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 2004 as shown in the following graph. 10

TABLE 4

No.	Description of criterion					Value	
4.1	Number	Number of Outages					
		Urban customers <sup>11</sup> Rural customers					
	Voltage	Fault <sup>12</sup>	Planned <sup>13</sup>	Fault <sup>11</sup>	Planned <sup>12</sup>	Total	
	LV	2,834	50	11,757	1,033	15,674	
	10kV	686	1,066	8,713	17,613	28,078	
	20kV	98	50	2,236	2,822	5,206	
	38kV	61		154		215	
	> 38 kV						
	Total	3,679	1,166	22,860	21,468	49,173	

<sup>13</sup> Includes MV Overhead Line Refurbishment Work Programme



<sup>861,570</sup> 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>10</sup> Increase in the number of planned outages outweighs any reduction in fault outages

For continuity monitoring purposes, ESB defines the cities of Dublin, Cork, Limerick, Galway and Waterford as urban areas. Other areas including provincial towns are classified as rural for continuity purposes. adjusted for storm days

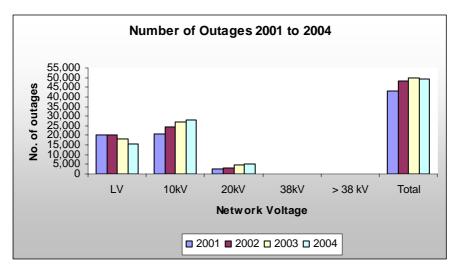
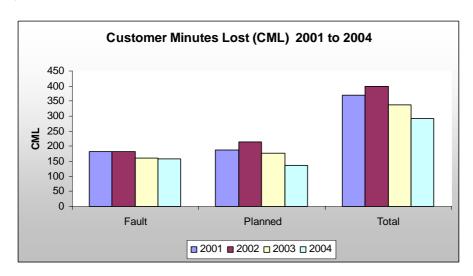


TABLE 5

No.	Description of criteria	Value		
4.2	Customer Minutes Lost			
		Fault <sup>8</sup>	Planned	Total
	Urban Customers	83	36	119
	Rural Customers	183	535	718
	Weighted average <sup>14</sup>	157	401	558
	Associated with MV Refurbishment		265	
1	Post adjustment for MV Refurbishment	157	136	293

Having adjusted for the MV Refurbishment Programme, the following graph shows that the CML weighted average for 2004 is less than that for the three previous years.



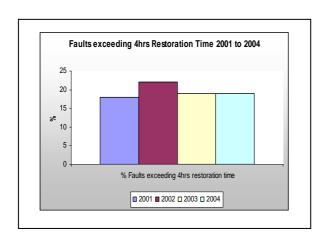
 $<sup>^{14}</sup>$  Calculated by the number of customers involved in the outage multiplied by the duration of the outage for all outages during the year divided by the total number of customers connected.



TABLE 6

No.	Description of criteria	Value	
4.3	Additional items		
4.3.1	Percentage of faults exceeding 4 hours restoration time	19%	
4.3.2	Verified voltage complaints	2,390	

The number of verified voltage complaints recorded in 2004 has decreased by almost 20% compared with previous years.



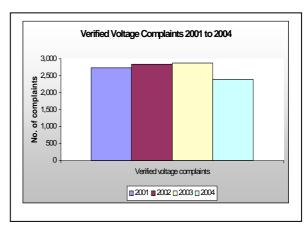


Table 7 shows the number of storm days and details of the weather on those days. There were two days in 2004 compared to three in 2003.

TABLE 7

No.	Description of criteria	Value
4.4	Storms and exceptional events	
4.4.1	Number of storm days	2
4.4.2	Description of storm days  7th February 2004  Storm mainly concentrated in Co. Donegal. Windy across much of the country with gusts of up to 69 knots. 22,117 customers affected.  20th March 2004  Violent stormy weather across all the country. Gusts of up to 63 knots. Thunder and lightening and gale winds experienced.	

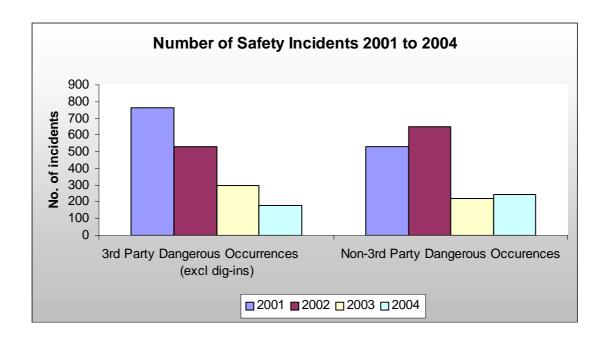


## 5.0 Safety

Public safety is a critical factor for ESB Networks. 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
5.1	No. of safety incidents	
5.1.1	3 <sup>rd</sup> Party Dangerous Occurrences (excluding dig-ins)	180
5.1.2	3 <sup>rd</sup> Party Dig-ins	961
5.1.3	Non-3 <sup>rd</sup> Party Dangerous Occurrences	243



### 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 2004



No.	Description of criteria	Value
6.1	No. compliance issues	1

The incident in question related to the ESB Networks phone number whereby if callers selected Option 9, the ESB Customer Supply number was given and the caller was directed to the phone book for contact numbers of other suppliers. This has since been rectified.

#### 7.0 Improvements in 2004

ESB Networks is committed to providing a quality network service to all of its customers. During 2004 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 2004. These included:

- The development of standard agreements so all customers of similar classes nationally are offered the same consistent contract from ESB Networks.
- As part of the DSO's work on new market opening systems, a programme
  was established to reconcile, correct and regularise data for the different
  customer types. Domestic and small business customers were assigned a
  Maximum Import Capacity in accordance with CER approved formula, this
  exercise provided the opportunity to correct inaccurate information
  with suppliers/customers being refunded where applicable as part of this
  exercise.
- The resource of material available online at <a href="www.esb.ie/esbnetworks">www.esb.ie/esbnetworks</a> has continued to increase with most major policies now available.
- The suite of Application Forms for new and increased connections was redeveloped during the year.
- An initiative was undertaken by ESB Networks to make the General Conditions (applicable to all customers less than 100kVA) easier to understand and set out in simpler language. With inputs from the Plain English Campaign, the document was revised and re-issued.
- Having completed a successful pilot of the Operations Management System (OMS), roll-out has commenced (almost 25% of customers now covered). It is planned that by end of 2005 OMS will be rolled out to the majority of locations. The OMS improves customer service in a number of areas including fault identification and outage notification.



#### PERFORMANCE IMPROVEMENT

- Further progress was made in relation to the installation of the supervisory and data acquisition system (SCADA) resulting in 82% of stations with SCADA at the end of 2004. 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. There are now 143 Distribution Automation devices controlled by SCADA on the system, most of which are now using GSM communications.

#### **SAFETY INITIATIVES**

- Following on from the appointment of a Public Safety Manager, an overall public safety plan was produced for ESB Networks covering the period 2004 and 2005.
- Complementary local public safety implementation plans were put in place by Network Projects Managers and Customer Services Managers.
- A strategic alliance was agreed with the Health and Safety Authority with the aims of promoting best health and safety practice in the agricultural and construction sectors when working in proximity to ESB Networks electricity infrastructure and reducing the instances of injury and fatalities.

#### MARKET OPENING

ESB's corporate Market Opening IT Programme delivered the IT systems and market processes to allow full market opening for all customers by February 2005. As part of this programme a number of key milestones were achieved. These included:

- Successful cut-over of IT systems covering the following market functions:

  - Meter Operator
  - Data Collector
  - DUoS Billing and invoicing
- Successful testing and assurance processes for ESB Networks IT systems and processes for the full opening of the market
- CER Approved Service Level Agreements for DSO



These newly installed systems have resulted in significant integration and streamlining of processes and data with consequent improved turnaround times for supplier requested services.

#### **BUSINESS SEPARATION**

The separation of ESB Networks from other businesses of ESB is now almost complete in accordance with the Business Separation Implementation Plan agreed with the CER in 2003. The following are the more significant separation initiatives carried out to date:

- Separate IT systems in place for ESB Networks and ESB Customer Supply (implemented as part of the Market Opening programme).
- Logical separation of Contact Centres for ESB Networks and ESB Customer Supply, with separate telephone and email contact arrangements.
- Cessation of provision of walk-in services for ESB Networks customers in ESB shops.
- Introduction of Compliance Code of Conduct and procedures governing staff transfers between businesses.
- Separate internet presence for ESB Networks.
- Separation of premises carried out in 17 shared locations.
- Separate ESB Networks identity rolled-out on vehicles, signage, media advertising, etc

