



NETWORKS

ESB Networks 2013 Performance Report

Prepared by ESB Networks Ltd

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1. Executive Summary

As part of an overall investment programme worth €4 billion, ESB Networks invested €406m in 2013 on national energy infrastructure. Our investment activities focused on renewing and extending the distribution and transmission systems to provide Ireland with an improved electricity network.

The ESB Networks strategy “Sustainable Networks Strategy Towards 2020” defines the vision for ESB Networks of becoming a world class sustainable networks business. In 2013, ESB Networks continued to work towards achieving this objective while adapting to changing business needs.

The delivery of numerous innovative R&D projects continued with the completion of key phases of collaborative research projects.

Our customer service satisfaction surveys undertaken in 2013 returned an average satisfaction figure of 82.43%¹.

Following the resolution of the dispatch/constraints issue in early 2013 there was a significant take up on acceptances of Gate 3 connection offers such that by September 2013 the number of applicants accepting their offers stood at 109. These numbers translate into 1,738 MW of acceptances. By the end of 2013 there were only six Gate 3 offers remaining to be accepted, amounting to a total capacity 119 MW. Two offers have lapsed, comprising 16 MW in total.

Approximately 54% of Gate 3 developers have opted to build their shallow connections contestably.

¹ Based on a PR3 target of 74.0%

2. Introduction

ESB Networks complies with the requirements contained in the Distribution System Operator (DSO) Licence and the Transmission System Owner (TAO) Licence. Condition 13 of the DSO Licence requires the DSO to report annually on its performance and Condition 11 of the TAO Licence requires the TAO to report annually on its performance. This report has been prepared by ESB Networks on behalf of the DSO and TAO for the year ending December 2013 in order to fulfil these licence obligations.

The criteria reported upon in this report have been approved by the CER (Commission for Energy Regulation) in accordance with Condition 13 of the DSO Licence and Condition 11 of the TAO Licence. A copy of each of these licences and the approved performance criteria can be found at the following link:

http://www.esb.ie/esbnetworks/en/download_documents/reports_codes.jsp

Performance is reported under the following headings:

- Customer Service
- Cost Performance
- Capital Programme
- Supply Quality & Reliability
- Safety
- Sustainability
- Service Level Agreements Performance
- Compliance with licence requirements

2.1 Publication of Report on ESB Networks Website

In compliance with conditions 13 & 17 of the DSO Licence and Condition 11 of the TAO Licence, this performance report will be published on the ESB Networks website at the following link:

http://www.esb.ie/esbnetworks/en/download_documents/reports_codes.jsp

3. Customer Service

Key indicators of customer service performance include service delivery by the Customer Contact Centre and the treatment of complaints by ESB Networks staff. The percentage of calls answered within 20 seconds and the percentage of calls dropped are key performance criteria used to measure the quality of service provided to customers. Table 1 summarises the call answering performance of the contact centre. Graphs 1 and 2 show the trends in call handling response since 2008. These service levels exceed the target figures, reflecting strong call agent performance and the benefits achieved by the investments in Intelligent Voice Recognition (IVR) technology during this period.

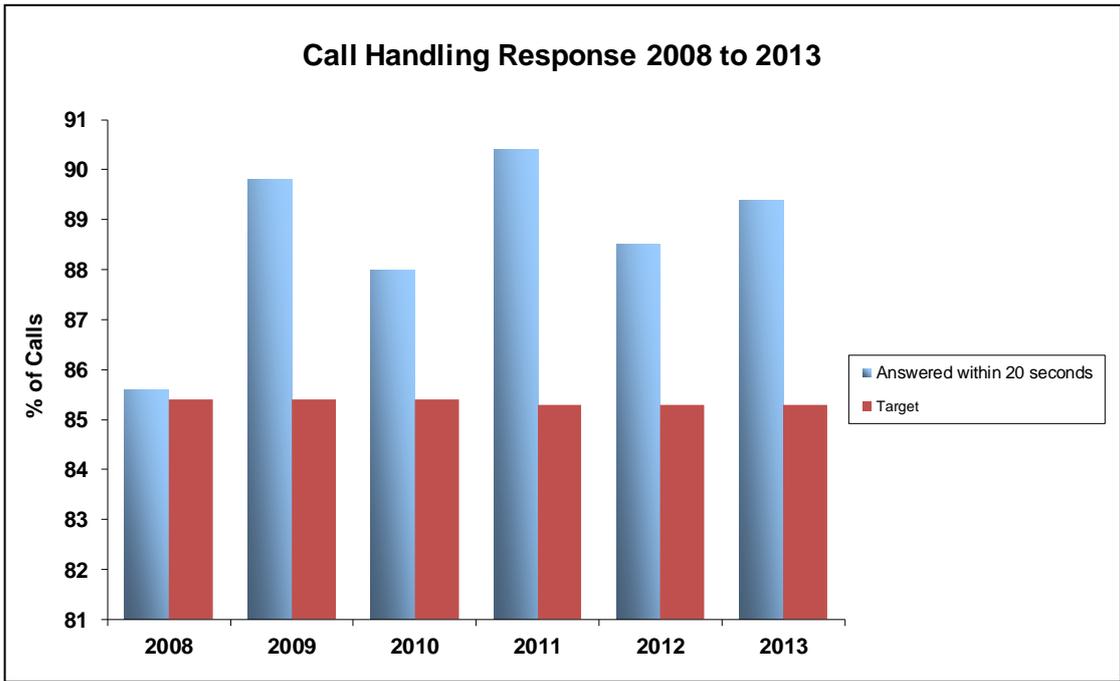
Table 1 – Customer Service Key Indicators

| Description of Criteria | 2012 | 2013 | Target |
|---|---------|---------|--------|
| Call Handling Response² | | | |
| Percentage of calls answered within 20 seconds | 89 % | 89.4 % | 80 % |
| Percentage of calls dropped ³ | 3.4 % | 3.7 % | 5 % |
| Networks customer calls to the call centre ⁴ | 568,163 | 625,515 | |

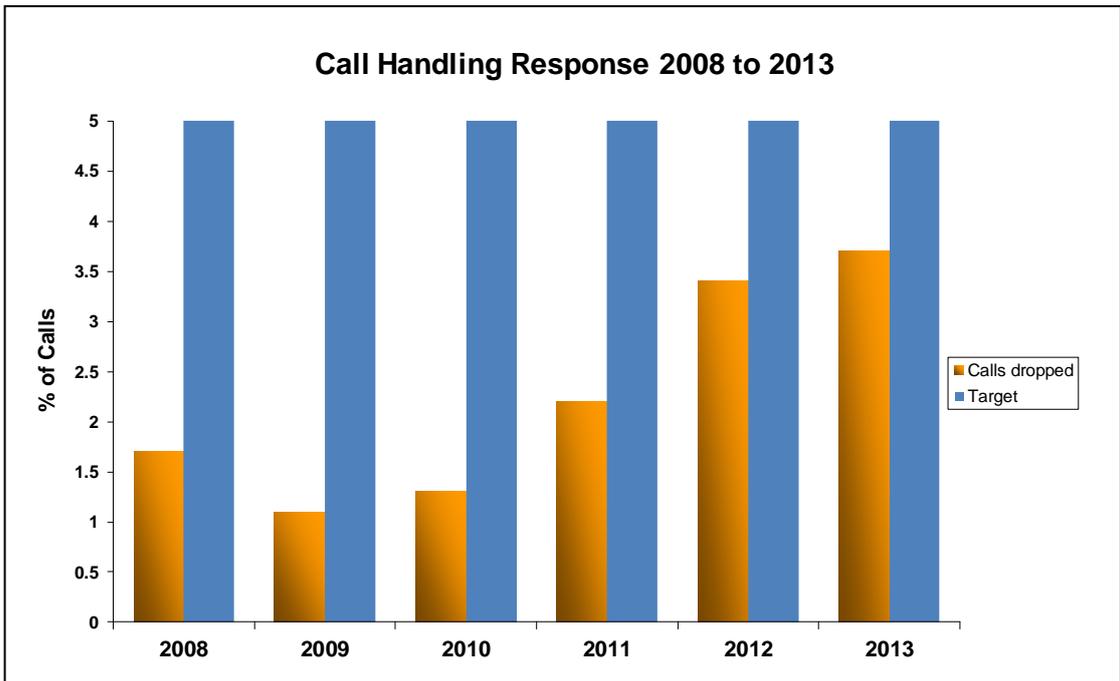
² Note both sets of figures are inclusive of storms, which has the effect of reducing the percentage of calls handled and increasing the percentage of calls dropped.

³ Where the customer has terminated the call without waiting for a response.

⁴ The exact number of calls relating to ESB Networks issues are identified.



Graph 1



Graph 2

3.1 Customer Service

The Distribution System Customer Service Code, Complaints Handling Procedure and Disconnection Code of Practice have been submitted to and approved by the CER. These procedures are published by ESB Networks on our website as follows:

- Distribution System Customer Service Code
http://www.esb.ie/esbnetworks/en/about-us/customer_charter/customer_charter.jsp
- Complaints Handling Procedure
<http://www.esb.ie/esbnetworks/en/about-us/complaints.jsp>
- Disconnection Code of Practice
<http://www.esb.ie/esbnetworks/en/commercial-downloads/Denergisation-Code-of-Practice.pdf>

3.2 Customer Service Code

ESB Networks strives to provide services to a high level of quality and in a timely fashion to meet customer requirements and is committed to making service excellence a priority in all customer dealings, in particular in the areas of telephone response, restoration of supply outages and meeting the 12 service performance guarantees in our *Customer Charter*. The volume of Customer Charter payments in 2013 was 1,063. This is a reduction of 359 on the volume of payments in 2012.

Our commitment to protect the interests of vulnerable customers, in particular those on life support equipment, is on-going and these customers have the facility to avail of priority telephone access to ESB Networks provided they register with their suppliers.

3.3 Complaints Handling Procedure

ESB Networks employs a simple and effective complaints handling procedure to support quick and efficient resolution of problems.

The complaints procedure encourages initial complaints to be submitted via three channels:

- a) A dedicated phone line in our Customer Contact Centre
- b) By email to a dedicated email address
- c) In writing through the local ESB Networks office

Staff in our Customer Contact Centre, and local management, are empowered to resolve complaints promptly and our target is to respond to 92% of all complaints received through these channels within 5 working days. The ESB Networks complaints facilitator produces a monthly management report to monitor both the volume of complaints received and our response performance in relation to these complaints.

Table 2 gives a breakdown of the complaints received during 2013.

Table 2 – Number of Complaints⁵ Received

| Description of Criteria | 2012 | 2013 |
|---|---------------|---------------|
| Complaints received | Number | Number |
| Concerning low voltage | 54 | 43 |
| For frequent outages | 812 | 923 |
| Time to connect customers | 11 | 19 |
| Operation delays and overruns | 31 | 53 |
| From suppliers | 0 | 0 |
| On connection costs and budget quotations | 31 | 40 |
| On meter reading and estimated reads | 481 | 330 |
| Others | 733 | 767 |
| Total complaints received | 2,153 | 2,175 |

Table 3 – Number of Terminations and De-energisations

| Description of Criteria | 2012 | 2013 |
|---|--------|--------|
| Connection points terminated⁶ | 12,928 | 15,896 |
| Connection points de-energised⁷ | 17,575 | 12,493 |

⁵ Please note, complaints specifically relate to queries which cannot be resolved in the area in which they have arisen, but instead have to be referred to another party – either within ESB Networks, or an outside party

⁶ This includes connection points in vacant premises that have been terminated following previous de-energisation and de-registration, it also includes MPRN's associated with housing scheme quotations that have not progressed

⁷ De-energisation for non-payment ONLY

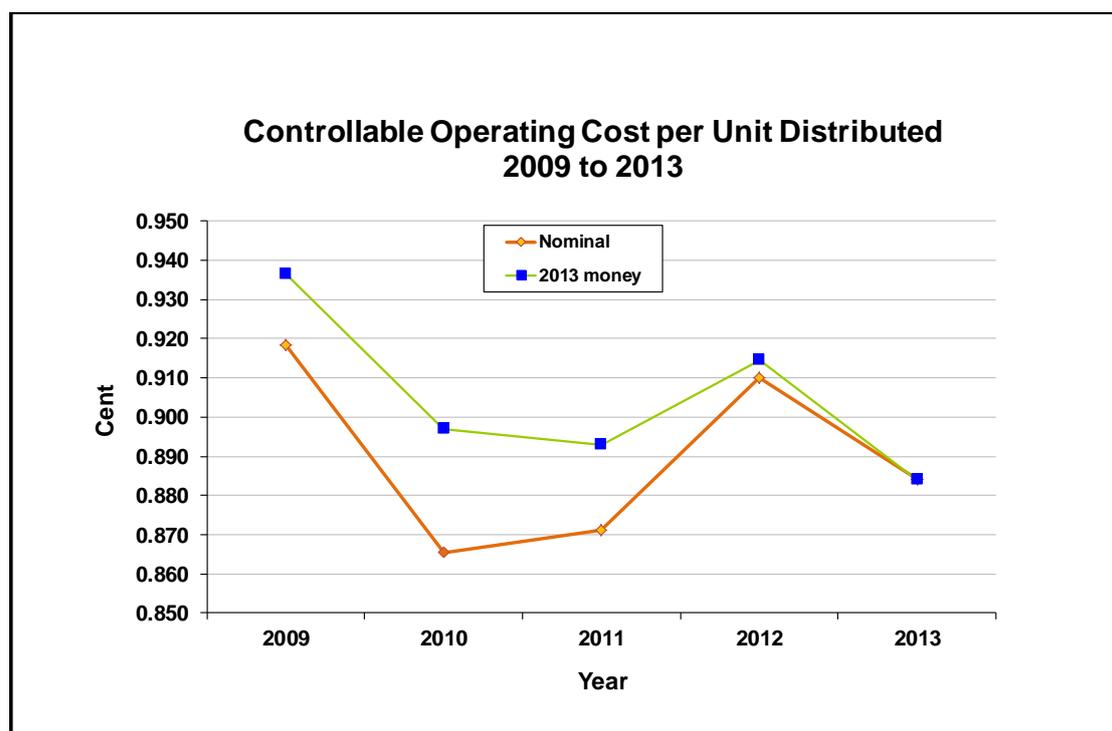
4. Cost Performance

The CER have set targets for operating expenditure and the DSO will aim to achieve these and where possible improve on them. Table 4 summarises the DSO's performance in 2013 in relation to two key cost criteria.

Table 4 – Cost Performance

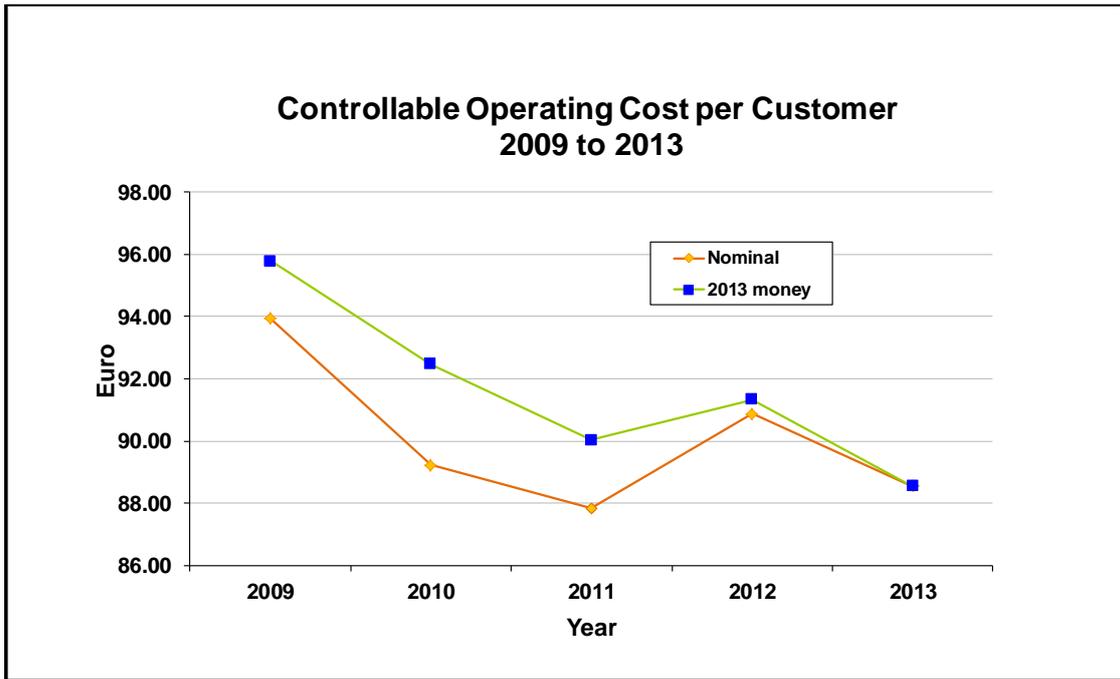
| Description of criteria | 2012 | 2013 |
|--|-------------------|-------------------|
| Controllable Costs | | |
| Controllable Operating Cost per Unit Distributed | 0.91c / kWh | 0.88c / kWh |
| Controllable Operating Cost per Customer | €90.88 / Customer | €88.50 / Customer |

The aim is to keep these controllable costs as low as possible whilst maintaining the operational integrity and efficiency of the networks. Graphs 3 and 4 below show the real and nominal values of Controllable Operating Costs, per Unit Distributed, and per Customer.



Graph 3

As can be seen from Graph 3, the Controllable Operating Cost per Unit Distributed decreased in both real terms and nominal terms in 2013 when compared to 2012.



Graph 4

Graph 4 shows that in 2013 the Controllable Operating Cost per Customer also decreased in both nominal and real terms.

Transmission OPEX

Transmission operating costs totalled €46.35m against an allowance of €43.05m in 2013.

5. Achievement of Capital Programme

ESB Networks has agreed an extensive capital program with the CER for completion over the 5 year PR3 period 2011-2015. Our investment activities in 2013 focused on renewing and extending the distribution and transmission systems to provide Ireland with an improved electricity network. The major programs of work undertaken over the past year include:

- The continuation of both the urban & rural low voltage refurbishment programs.
- The continuation of the nine-year refurbishment program for the medium voltage (MV) networks.
- MV substation replacement – this program focused on those subs which contained obsolete components during 2013.
- Continued extensive load reinforcement program to reinforce existing networks and improve the capacity of the distribution system.
- Continued conversion of the 10kV network to 20kV operation.
- Extensive uprating and refurbishment of transmission lines with 250km of 110kV lines uprated/refurbished and 120km of 220kV line uprated/refurbished.
- Significant progress on the construction of a number of new Gas Insulated Switchgear (GIS) stations. At Great Island a new 220kV GIS station was energised and all feeders were transferred over to a new 110kV GIS station at Marina. Civil works were also completed and GIS switchgear installation is underway at five new 220kV GIS stations in the South-West of Ireland. In addition, progress was made on the new GIS stations at Carrickmines (220kV), Finglas (110kV) and Ardnacrusha (110kV).
- Significant progress on construction of a new 110kV circuit between Binbane and Letterkenny.
- Connection of new 110kV customer at Cloghran 110kV station. Connection of new generation at Mount Lucas, Athea, Reamore and Great Island.
- Large volume of refurbishment and uprating works completed in existing stations including busbar uprates, bay uprates and asset replacement.

In 2013, a total of 237 MW of generation was connected to the distribution system. Wind generation accounted for 231 MW of this total. The total generation connected to the distribution system at the end of 2013 was 1,435 MW, of which the total wind accounted for was 1,166 MW.

In addition to the above, the table below reports on ESB Networks' delivery of the transmission capital program.

Table 5 – Progress of Capital Programmes

| Description of Criteria | Value | Progress Comment |
|---|---|--|
| <p>Total Planned Capital Investment Programme⁸</p> <p>Distribution Capital Investment Programme achieved to date (%) (i.e. percentage of allowed capital spent)</p> <p>Transmission Capital Investment Programme achieved to date (%)</p> | <p>25.7%</p> <p>40%</p> | <p>Distribution CapEx completed in 2013 was 7.1%, the allowed target was 20.6%</p> <p>Transmission CapEx completed in 2013 was 17%, the allowed target was 21%</p> |
| <p>LV Rural Refurbishment Programme</p> <p>LV Groups completed (no.)</p> | <p>1,482</p> | <p>61% of target</p> |
| <p>LV Urban Refurbishment Programme</p> <p>Spans completed (no.)</p> | <p>2,749</p> | <p>49% of target</p> |
| <p>HV Cable Replacement Programme</p> <p>38kV pre-1945 paper insulated cable (km)</p> | <p>1.25</p> | |
| <p>Capacity added during 2013</p> <p>Increase in 110kV/38kV capacity</p> <p>Increase in 110kV/MV capacity</p> <p>Increase in 38kV/MV capacity</p> | <p>1.5 MVA</p> <p>0 MVA</p> <p>61 MVA</p> | |

⁸ Based on HICP (Harmonised Indices of Consumer Prices)

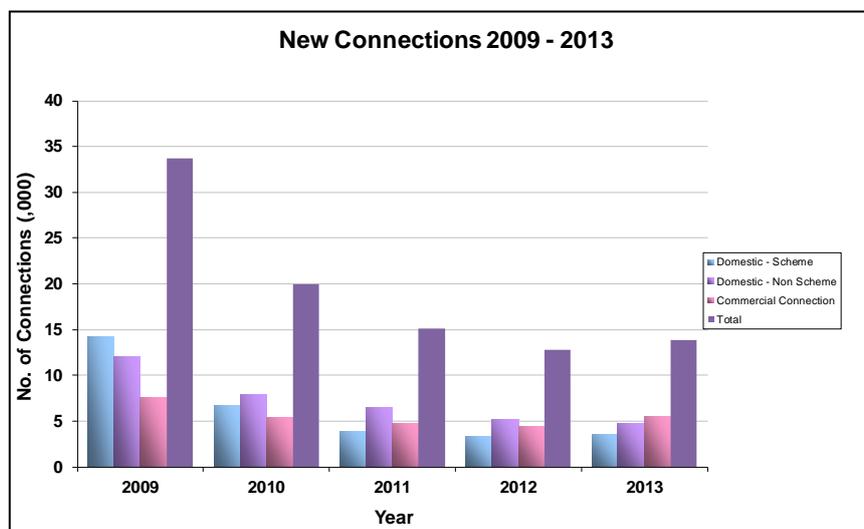
| Description of Criteria | Value | Progress Comment |
|--|-------|--|
| Transmission New Build | | |
| 220kV Stations | 1 | Great Island Station |
| 110kV Stations | 1 | Marina Station |
| 400kV/220kV Transformers | 1 | Woodland Station |
| Reactive Capacitors | 3 | Thurles Station Mullingar Station (2) |
| Busbar Uprates | | |
| Half busbar uprates | 3 | |
| Full busbar uprates | 4 | |
| 110kV Line Uprates | 149km | Extensive uprating and refurbishment of transmission lines uprated/refurbished |
| 220kV Line Uprates | 61km | Extensive uprating and refurbishment of transmission lines uprated/refurbished |
| 38kV Overhead Line Refurbishment | 196km | 41% of target |
| 110kV Overhead Line Refurbishment | 101km | Extensive uprating and refurbishment of transmission lines uprated/refurbished |
| 220kV Overhead Line Refurbishment | 59km | Extensive uprating and refurbishment of transmission lines uprated/refurbished |

| Description of Criteria | Value | Progress Comment |
|---|-------|------------------|
| MV Substations Asset Replacement in 2013 | | |
| 1. Oil-filled Switchgear Subs (No.) | 5 | |
| 2. Cast Resin Kiosks (RGB12 & Magnefix) | 63 | |
| 3. Open Cubicle Switchgear | 56 | |
| 20kV Conversion (km) | 2,579 | 64% of target |

| Description of Criteria | Value | Progress Comment |
|--|-------|---|
| Embedded Wind Generation Connected to the Distribution System in 2013 | | |
| Wind Farms Connected | 14 | The Total Capacity of all Wind Farms that are Connected to the Distribution System is 1,166 MW. |
| Total MW Connected | 231 | |

New Connections

In 2013, a total of 13,828 new connections to the Distribution System were completed by ESB Networks. This equates to an overall increase of 8% in the volume of new connections when compared with the total of 12,800 in 2012. This reflects a slight upturn in the economy.



Graph 5

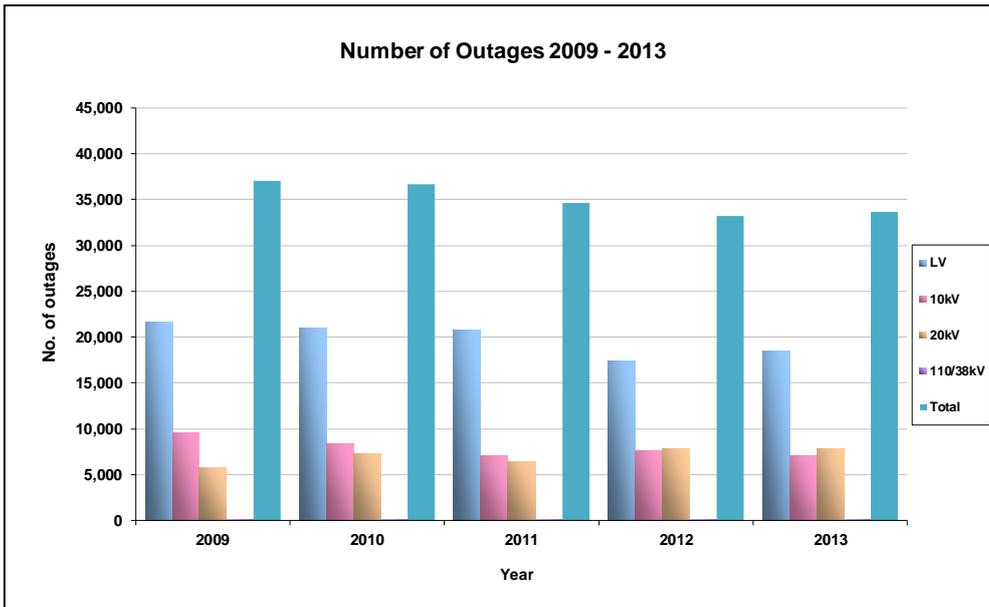
6. Supply Quality and Reliability

Supply reliability is an essential aspect of distribution system performance. The number of interruptions of supply is given in Table 6. Graph 6 shows the trend over the past 5 years.

Table 6 – Number of Outages⁹ by Connection Voltage

| Description of criteria | | | Value |
|--|---------------|--------------|---------------|
| Voltage | Unplanned | Planned | Total |
| LV | 17,605 | 933 | 18,538 |
| 10kV | 4,408 | 2,687 | 7,095 |
| 20kV | 5,951 | 1,965 | 7,916 |
| 110kV/38kV | 115 | 1 | 116 |
| Unknown | 3 | 5 | 8 |
| Total (excl. Storm Days and MRPs) | 28,082 | 5,591 | 33,673 |

⁹ Short interruptions lasting less than three minutes are not included. In some fault situations, there can be a number of temporary supply restorations followed by an interruption before supply is permanently restored. One interruption per customer affected is recorded in these situations. The figures do not include customer outages which resulted from problems on the Transmission System, e.g. operation of under-frequency relays.



Graph 6

The impact of outages on customers across the entire distribution system is measured by two parameters; average number of interruptions per customer connected in the year (CI) and the average number of minutes without supply per customer connected in the year (CML). The CER has set targets for Customer Interruptions (CI) and Customer Minutes Lost (CML) for the period 2011-2015. As the effects of severe weather can cause wide variations in these measures and are outside ESB Networks control, there is an adjustment for storms days.

Table 7 – Customer Minutes Lost (CML) and Customer Interruptions (CI)

| Description of criteria | Value | | | | | |
|---|-----------------------|------------------|----------------|----------------|---------------|---------------|
| | Customer Minutes Lost | | | | | |
| | Unplanned Target | Unplanned Actual | Planned Target | Planned Actual | Total Target | Total Actual |
| Total (including Major Renewal Programmes) | 76.4 | 86.72 | 55.7 | 42.13 | 132.10 | 128.85 |
| Major Renewal Programmes | | | | 14.92 | | 14.92 |
| Total (excluding Major Renewal Programmes) | | 86.72 | | 27.21 | | 113.93 |
| Customer Interruptions | | | | | | |
| | Unplanned Target | Unplanned Actual | Planned Target | Planned Actual | Total Target | Total Actual |
| Total (including Major Renewal Programmes) | 1.133 | 1.1420 | 0.226 | 0.1661 | 1.3590 | 1.3080 |
| Major Renewal Programmes | | | | 0.0554 | | 0.0554 |
| Total (excluding Major Renewal Programmes) | | 1.1420 | | 0.1107 | | 1.2526 |

Table 7 shows CML and CI for 2013 broken down between unplanned and planned. Major Renewal Programmes are programmes such as the LV overhead network refurbishment programme where planned outages are required to carry out the work. The planned CI and CML arising from these programmes in a given year depends on the nature and volumes of renewal works carried out in that year. While the CI and CML incurred on these programmes is reckonable in the incentive / penalty scheme, it is useful to show the performance excluding CI and CML as that reflects the underlying trend in continuity performance.

Table 8 shows the number of storm days in 2013 and details of the weather on those days.

Table 8 – Storm Days

| Description of criteria |
|--|
| Storms and exceptional events Number of storm days: 10 |
| Description of storm days |
| 27th December 2013 Rain and wind with gusts exceeding 63 knots or 117 kmh. There were 192,053 customers affected with the South-West being the worst affected area |
| 26th December 2013 Rain and wind with gusts exceeding 69 knots or 128 kmh. There were 46,338 customers affected with the South-West & West being the worst affected area(s) |
| 24th December 2013 Rain and wind with gusts exceeding 64 knots or 119 kmh. There were 43024 customers affected with the West being the worst affected area |
| 23rd December 2013 Rain and wind with gusts exceeding 60 knots or 112 kmh. There were 38,867 customers affected with the South & South-West being the worst affected area(s) |
| 21st December 2013 Rain and wind with gusts exceeding 53 knots or 98 kmh. There were 82,159 customers affected with the South-West being the worst affected area |
| 18th December 2013 Rain and wind with gusts exceeding 78 knots or 145 kmh. There were 66,797 customers affected with the West & North-West being the worst affected area(s) |

| | |
|--|---------|
| 10th July 2013 | |
| The distribution network was subjected to lightning strikes. There were 30,929 customers affected with the south west being the worst affected area | |
| 17th April 2013 | |
| Rain and wind with gusts exceeding 69 knots or 129 kmh. There were 51,241 customers affected with the South-West & South-East being the worst affected area(s) | |
| 31st January 2013 | |
| The distribution network was subjected to lightning strikes. There were 42,045 customers affected with the South, South-West & West being the worst affected area(s) | |
| 30th January 2013 | |
| The distribution network was subjected to lightning strikes. Rain and wind with gusts exceeding 69 knots or 129 kmh. There were 54,583 customers affected with the South being the worst affected area | |
| Total number of customers affected by storm days in 2013: | 648,036 |

Table 9 – Faults Exceeding 4 Hours Duration and Voltage Quality Problems

| Description of criteria | 2012 | 2013 |
|--|-------|-------|
| Additional items | | |
| Percentage of faults exceeding 4 hours restoration time | 26.8% | 26% |
| Customer reports of problems relating to Voltage Quality | 1,770 | 1,564 |
| Verified problems relating to Voltage Quality | 539 | 437 |

The percentage of faults exceeding 4 hours restoration time was 26% in 2013.

The number of customers that reported problems relating to voltage quality was 1,564. These requests are not categorised as service complaints but are essentially requests for a technical investigation of possible voltage problems.

The number of verified problems relating to supply quality was 437. These are situations where the voltage at the customer’s location was verified to be outside the standard levels.

Operations

During 2013, SCADA (Supervisory Control and Data Acquisition) installation was completed in three 220kV stations along with a further twelve 110kV stations, fourteen 38kV stations and 11 Wind Farms across the country. Also, 173 DA devices were built on the SCADA system in 2013. This number incorporates Nulec Recloser's, Soules, Voltage Regulators, IFTs and 38kV LBFMs.

There were 60 operational incidents while operating the MV and 38kV network.

Continuing progress was made on the prototype testing of alternative methods of treating the neutral on the 20kV system. The Arc Suppressed System which has been installed in Baltinglass, Gurranebane, Birr, Saggart – Dublin and Creagh – Ballinasloe. These units will be made operational during 2014.

Planning is underway to complete the remaining PR3 MV Arc Suppression Coil Schemes in Baltinglass, Kilmacthomas, Kilcullen and Ballinderry.

7. Safety

Fatalities and Serious Injuries

There was one electrical fatality due to contact with ESB Networks infrastructure during 2013. There was one fatality from contact with electricity on the customers' side of the meter during 2013. The total number of electrical fatalities for the 10 year period from 2004 to 2013 is 27 (15 of these were on the networks side of the meter and 12 were on the customers side). The 10 year rolling total for electrical fatalities on the networks side of the meter from 2004 to 2013 was the same for the period 2003 to 2012. There was a reduction in the number of fatalities on the customer side of the meter over these periods.

Public Safety Programme 2013

Throughout 2013 we continued to meet our obligations and responsibilities for public safety by implementing ESB Networks' *Public Safety Plan* (2013-2015) with initiatives aimed at the "at-risk" groups, including construction, farming, leisure and children. Public safety Programmes for children included both school visits and promotion of the child-appropriate public safety content on the ESB internet site. Public safety information was also provided through the National Contact Centre, with safety booklets and other content mailed in response to specific requests.

Information Advertising/Promotion 2013

- Advertising in the National and technical press promoting awareness of the dangers from contact with ESB Networks electricity infrastructure.
- TV advertising in the national agricultural livestock marts aimed at the farming community.
- Broadcasting of full range of public safety radio advertisements on local and national radio stations.
- Participation at the National Ploughing Championships in September, in conjunction with the Health and Safety Authority.

Network Refurbishment Programme

Delivery of the network refurbishment Programmes continued to have a significant and beneficial impact on public safety.

Delivery of the “Advanced Driver Training” Programme, which is a risk-based response to the potential risk associated with driving for work, continued during 2013.

Involvement with the HSA

ESB Networks continued their support of the KEEP SAFE Programme for 5th and 6th Class primary school children in association with the Health and Safety Authority and other national bodies, coordinated by Junior Achievement Ireland.

Dangerous Occurrences

Table 10 reports on the number of dangerous occurrences associated with the networks infrastructure during 2013. These figures are broken down as third party damages¹⁰ and non-third party notifiable fault incidents¹¹.

Table 10 – Dangerous Occurrences

| Description of criteria | 2012 | 2013 |
|--|------|------|
| Number of safety incidents | | |
| 3 rd Party plant damages (excluding underground cable dig-ins) | 854 | 1214 |
| 3 rd Party plant damages caused by underground cable dig-ins | 816 | 980 |
| Non 3 rd party – MV and 38kV notifiable fault incidents (e.g. line drops) | 121 | 245 |
| Non 3 rd party – LV notifiable fault incidents | 844 | 1410 |

¹⁰ Third party damages are incidents where third parties cause damage to the networks infrastructure. These are broken down into incidents that involve damage to underground electricity cables termed ‘Dig-Ins’ and incidents that cause damage to other plant such as overhead lines, mini-pillars and substations.

¹¹ Non-third party notifiable fault incidents are principally incidents on the overhead lines networks where an overhead line conductor / wire falls e.g. in stormy conditions or due to corrosion or other plant item failure.

Theft and Break-Ins to Substations

The issue of metal theft including unauthorised break-ins to ESB Networks' substations poses a significant safety risk to the individuals involved. This mirrors the overall national trend of increased metal theft over the last number of years. In addition to the public safety risks associated with this activity there are also significant additional negative impacts and costs arising from increased security measures, damage to equipment, environmental damage and clean-up costs due to oil spillages, disruption to work programmes etc. ESB Networks continues to monitor closely the level of security incidents to assess the level of risk pertaining to various substation sites. This also assists in deciding on required mitigation measures for same, such as mobile monitoring systems etc.

8. Sustainability

ESB Networks Strategy and Responding to Change

As set out in the strategy document “Sustainable Networks Strategy Towards 2020”, the vision for ESB Networks is to become a world class sustainable networks business. This will be achieved by the delivery of infrastructure and services that support national economic growth and sustainability targets and business and value growth underpinned by excellence in safety, service, asset management and people development.

In 2013, ESB Networks continued its effort to deliver the sustainable network of the future and some of the highlights are as follows:

R&D Projects

In 2013, there was significant progress made in integrating Networks R&D with the work of other stakeholders while also embedding the lessons learnt into ESB Networks planning and policies. Priorities in 2013 included network-monitoring technologies, facilitation of demand response, telecommunications integration, and collaboration internally and with EirGrid to deliver harmonised and progressive development.

In collaboration with ESB Telecoms Services, efforts were dedicated to integrating new network monitoring and control functionalities with high-speed wireless telecommunications and optical switching. In response to domestic and international interest, 2013 also saw the commencement of a new project to deliver a distribution monitoring and management system for the safe and secure facilitation of market led demand response.

The European Energy Efficiency Directive sets out obligations, which ESB Networks as a system operator must meet, in relation to facilitating demand response in a secure and transparent manner. In 2013, efforts were dedicated to developing a technical framework to achieve this with due regard to customer privacy and networks security issues raised. ESB Networks’ is striving to develop a framework for responsible, economic and fair management of these issues insofar as they pertain to ESB Networks obligations as the DSO.

To safeguard the needs of its customers, ESB Networks’ broader R&D programme interacts with industry and the system as a whole. As such, consultation has been ongoing with a wide range of stakeholders, resulting in collaborative projects being undertaken, including an impact analysis of high efficiency distribution technologies on transmission system performance indices.

Carbon Reduction

During 2013 there was steady progress on delivering on our internal carbon reduction targets. While building kWhs were up 3.2% on 2012, factoring in the cold weather during early 2013 (degree days up c. 5%), adjusted kWhs were in effect up just 0.8%. Fuel consumption was down 3.9% on 2012 due to ongoing “Green Fleet” initiatives such as vehicle rationalisation and improved utilisation, use of biofuel, and advances in the operation of our Fleet Management System (FMS) in ESB Networks fleet. At the end of 2013, a 34% reduction in our carbon footprint had been achieved against the 2006 baseline. This is further 4% reduction achieved compared to 2012.

Environment

ESB Networks is committed to operating to the highest environmental standards as part of its ‘2020 Sustainable Networks Strategy’. During 2013 ESB Networks successfully retained its external accreditation to the International Standard for EMS (Environment Management Systems) to ISO14001:2004.

Renewable Generation

By the end of September 2013, there were 109 acceptances of Gate 3 connection offers that total 1,738 MW. There are a small number of acceptances still outstanding pending resolutions of connection method for their respective installations. Two offers have lapsed comprising 16 MW. At the end of 2013, 8 of the Gate 3 applicants, totalling 71 MW, connected to the distribution system.

In Gate 3, 64 developers have opted to build their connection on a contestable basis. This represents 54% of all Gate 3 applicants.

Offers Issued Update

Modifications

In addition to completing the Gate 3 offer program, there were 27 modified offers issued during 2013. These consisted of Gate 2, Gate 3 and Non-GPA type offers.

Non-GPA

Also, furthermore to above, under the 2009 CER direction CER/09/099, 21 offers were issued to generators outside the Group Processing Approach during 2013.

This brought the total amount of offers issued during 2013 to 48.

Energised and Connected Projects

In 2013, a total of 237 MW of generation was connected to the distribution system. Wind equated to 231 MW of this figure. This brings the total generation connected to the distribution system to 1,435 MW by the end of 2013, where 1,166 MW accounted for wind.

9. Service Level Agreements

There are three market roles that ESB Networks performs that are central to supporting a fully open market; these roles are the Meter Registration System Operator (MRSO), Data Collector and Meter Operator. These functions involve daily processes to support the market. The processes are detailed in a suite of documents referred to as the Market Process Documents (MPDs).

Service Level Agreements (SLA) set out the target service levels that ESB Networks will operate to in providing market roles to all market participants. The format of the SLA's, in general terms, outline the time frames within which suppliers can expect the required transactions to have been completed in response to the supplier message. These market messages and related SLA's are based on the agreed processes approved by CER. They set out performance standards which ESB Networks must strive to achieve and report on, as laid down in condition 13 of the DSO Licence. As provided in that condition, the standards and/or targets of performance may be determined by the CER from time to time.

SLA Report

The Service Level Agreement (SLA) Report in the following tables contain the complete set of results for 2013. The report provides a description of each SLA and the measure against which its level of performance is reported. It is inevitable that a small number of exceptional transactions will require special manual handling for a number of reasons. To accommodate such cases the performance targets are set below 100%, in most cases it is 95%. The target timeline for those transactions that do exceed the SLA timeline is set at twice the SLA timeline.

The actual performance is measured as the percentage of transactions that were completed within the agreed SLA timeline and the percentage completed within twice the SLA timeline during 2013. The target for the number of transactions to be completed within the SLA timeline for all SLA's with the exception of 14A and 14B (these SLA's relate to NQH Meter Reading) is set at 95%. The target levels for 14A and 14B are stated in the comments column of Table 13. The comments column is used to provide an explanation of the reason why the actual performance has not reached the set performance target within the SLA timeline.

Performance against SLA's

There are a total of 44 SLA's in place. The performance of each SLA is shown in Table 11, 12, 13, 14, 15 and 16 below.

Table 11 – Change of Supplier

| Market Processes | | Standard Approval Timelines (SLA) | Actual Performance | | Comments |
|---------------------------------|-----|---|---------------------|-----------------------|--|
| Description | No. | | Within SLA Timeline | Within Twice Timeline | |
| Change of Supplier (NQH) | 1A | Validate within 5 days | 100% | 100% | |
| | 1B | Using customer read – Complete within 3 days | 99.62% | 99.88% | There was a system error which resulted in workflow stall or move-in move-out failure. |
| | 1B | Using special read – Complete within 10 days | 100% | 100% | |
| | 1B | Using scheduled read – Complete within 3 days | 96.14% | 97.05% | There was a system error which resulted in workflow stall or move-in move-out failure. |
| Change of Supplier (QH) | 2A | Validate within 5 days | 99.78% | 99.83% | There was a system error which resulted in workflow stall or move-in move-out failure. |
| | 2B | Complete within 3 days | 99.87% | 99.96% | As per 2A above. |
| Change of Supplier Cancellation | 3A | Validate cancellation within 5 days | 99.96% | 99.97% | There was a system error which resulted in workflow stall or move-in move-out failure. |
| | 3B | Complete cancellation within 5 days | 99.93% | 99.95% | As per 3A above. |

Table 12 – New Connections and Connection Agreements

| Market Processes | | Standard Approval Timelines (SLA) | Actual Performance | | Comments |
|--|-----------|--|---------------------|-----------------------|--|
| Description | No. | | Within SLA Timeline | Within Twice Timeline | |
| New Connection and registration with supplier (NQH) | 5A | Prepare Quote – Within 7 working days where no site visit required. Within 15 working days where site visit required | 98.98% | 100% | Calculations for this SLA were based on records for quotations issued within customer charter guidelines. |
| | 5B | Complete connection – Within 10 working days of receipt of ETCL certificate. | 99.37% | 100% | As per 5A above. |
| | 5C | Data Processing – Issue details to Supplier within 10 Days | 98.90% | 99.60% | There are small numbers of orders outstanding due to incorrect MCC, COS changes, conflicting devices and some unreturned paper service orders. |
| New Connection and registration with supplier (QH) | 6A | Prepare Quote – Within 7 working days where no site visit required. Within 15 working days where site visit required | 98.98% | 100% | Calculations for this SLA were based on records for quotations issued within customer charter guidelines. |
| | 6B | Complete Connection – Within 10 working days of receipt of ETCL certificate. | 99.37% | 100% | As per 6A above |
| | 6C | Data Processing – Issue details to Supplier within 10 Days | 98.90% | 99.60% | There are small numbers of orders outstanding due to incorrect MCC, COS changes, conflicting devices and some unreturned paper service orders. |
| Change to meter point characteristics | 8A | Prepare quote – Within 7 working days where no site visit required. Within 15 working days where site visit required | 98.98% | 100% | Calculations for this SLA were based on records for quotations issued within customer charter guidelines. |
| | 8B | Complete change – Within 10 working days of receipt of ETCL certificate. | 99.37% | 100% | As per 8A above. |
| | 8C | Process Change – Issue details to Supplier within 10 Days | 98.90% | 99.60% | There are small numbers of orders outstanding due to incorrect MCC, COS changes, conflicting devices and some unreturned paper service orders. |

Table 13 – Meter Works

| Market Processes | | Standard Approval timelines (SLA) | Actual Performance | | Comments |
|---|------------|--|---------------------|-----------------------|--|
| Description | No. | | Within SLA timeline | Within twice timeline | |
| De-energisation of Meter Point | 9A | De-energise within 5 days | 91.67% | 96.01% | |
| | 9B | Issue Meter details to Supplier within 10 Days | 97.47% | 99.66% | There are small numbers of orders outstanding due to incorrect MCC, COS changes, conflicting devices and some unreturned paper service orders. |
| Re-energisation of Meter Point | 10A | Re-energise within 5 days | 98.16% | 99.26% | |
| | 10B | Issue Meter details to Supplier within 10 Days | 99.00% | 99.91% | There are small numbers of orders outstanding due to incorrect MCC, COS changes, conflicting devices and some unreturned paper service orders. |
| Change of Meter Configuration | 11A | Reconfigure within 5 days after the receipt and validation of Supplier request | 88.06% | 95.31% | |
| | 11B | Process data within 10 days | 99.33% | 99.82% | |
| Meter Problems and Reports of damage | 12A | Repair or replace faulty meter within 5 days | 74.42% | 85.38% | The majority of calls are generated by meter readers and are not strictly customer service requests. |
| | 12B | When a faulty meter is Repaired or Replaced – Process Meter Data within 5 days | 98.15% | 98.97% | There are small numbers of orders outstanding due to incorrect MCC, COS changes, conflicting devices and some unreturned paper service orders. |

Table 14 – Meter Data

| Market Processes | | Standard Approval timelines (SLA) | Actual Performance | | Comments |
|---------------------------------|------------|---|---------------------|-----------------------|---|
| Description | No. | | Within SLA timeline | Within twice timeline | |
| NQH Meter Reading | 14A | Scheduled Read – Distribution of Reads to Suppliers within 7 workdays | 99.81% | 99.92 | |
| | 14A | 2 Scheduled reading visits per annum | 100% | N/A | Within SLA timeline target is 100% |
| | 14A | 4 Scheduled reading visits per annum | 98.90% | N/A | Within SLA timeline target is 97%. |
| | 14A | Actual reads for scheduled meter reading visits | 84.96% | N/A | Within SLA timeline target is 80% |
| | 14A | Actual reads for scheduled MD meter reads | 97.43% | N/A | |
| | 14A | One actual read per annum | 98.12% | N/A | Within SLA timeline target is 98.00% |
| | 14B | No Consecutive Block Estimations | 99.20% | N/A | Within SLA timeline target is 98.40%. |
| | 14B | No Consecutive MD Block Estimations | 100% | N/A | Within SLA timeline target is 100% |
| | 14C | Out of Cycle Customer Read – Readings processed within 3 workdays | 97.82% | 99.42% | |
| QH Data Collection | 15A | D+4 QH data-Send to SEM-O / Suppliers in 1 workday | 100% | 100% | |
| | 15B | QH Actual Data | On D+4 | | Within 10 days |
| | | Send to suppliers within 4 and 10 days** | 99.1% | 99.4% | **SEM Timeline |
| Request for Special Read | 18A | Site visit by 7 days | 79% | N/A | Outside target due to insufficient contact details supplied with request. |
| | 18B | Issue of Meter details within 3 Days | 77% | N/A | As per 18A above. |

Table 15 – Miscellaneous MRSO Processes

| Market Processes | | Standard Approval timelines (SLA) | Actual Performance | | Comments |
|------------------|-----|--|---------------------|-----------------------|--|
| Description | No. | | Within SLA timeline | Within twice timeline | |
| Data Aggregation | 16 | Issue of aggregated data to SEM-O/TSO/Suppliers and Generators within 5 workdays | 100% | N/A | |
| Change of SSAC | 20 | Complete process in 3 workdays | 100% | 100% | |
| De-registration | 21 | Auto Completion within 5 workdays | 99.98% | 99.99% | There was a system error which resulted in workflow stall or move-in move-out failure. |
| | | Manual Completion within 10 workdays | 100% | 100% | |

Table 16 – Change of Customer

| Market Processes | | Standard Approval timelines (SLA) | Actual Performance | | Comments |
|-------------------------|-----|-----------------------------------|---------------------|-----------------------|----------|
| Description | No. | | Within SLA timeline | Within twice timeline | |
| Change Customer Details | 24 | Complete within 5 days | 100% | 100% | |
| Change of Legal Entity | 25 | Complete within 5 days | 99.68% | 100% | |

10. Compliance with licence requirements

Annual Compliance Report

The Compliance Officer for ESB Networks submits a report on compliance to the CER each year and the Compliance Report was submitted to CER in March 2013.

Records and Reporting

The following tables serve to illustrate the sections of this report that meet the reporting requirements contained in the DSO and TAO Licences.

Table 17 – DSO Licence Compliance Matrix

| Clause in DSO Licence | | Requirement | Performance Report Reference |
|-------------------------------|--|---|------------------------------|
| Title | No. | | Section |
| Relevant Assets | 5.1 | Submit a register of all relevant assets to CER annually | 10 |
| Performance of DSO's Business | 13.4 | Report annually on performance | Entire report |
| | 13.5 | Publication of criteria | 2 |
| Records and Reporting | 17.1 | Maintain a record of its general operation under Conditions 7, 8, 9, 13, 14 and 15: | |
| | | 7. Theft of Electricity | 10 |
| | | 8. Meter Point Registration Service | 10 |
| | | 9. Provision of Metering and Data Services | 10 |
| | | 13. Performance Reporting | Entire Report |
| | | 14. Access to Land or Premises | 10 |
| | | 15. Customer Service Code and Complaints Handling Procedure | 3.2 3.3 |
| | 17.3 | Report annually on performance | Entire report |
| 17.4 | Publication of report | 2.1 | |
| 17.5 | Presented in a standard form to be approved by the CER | Entire Report | |

Table 18 – TAO Licence Compliance Matrix

| Clause in TAO Licence | | Requirement | Performance Report Reference |
|-------------------------------|-----|--------------------------------|------------------------------|
| Title | No. | | Section |
| Performance of TAO's Business | 11 | Report annually on performance | Entire report |

Market Services

Condition 17 of the DSO Licence states that the Licensee shall keep a record of its general operation of the arrangements mentioned in Conditions 7, 8, 9, 13, 14 and 15 and, if the CER so directs in writing, of its operation of any particular cases specified, or of classes specified, by the CER. Condition 7, 8 and 9 relate to Market Services and the records of their general operation that are kept by ESB Networks are as follows:

Condition 7: Detection and Prevention of Theft of Electricity

In compliance with licence Condition 7 records were kept in respect of incidents where theft of electricity was suspected or where there was interference with metering equipment and that these incidents were reported to the supplier.

Condition 8: Meter Point Registration Service

In compliance with licence Condition 8 records were kept in respect of the Meter Point Registration Service i.e. of MPRN, identity of the supplier, meter class, premises address and other information required for change of supplier.

Condition 9: Provision of Metering and Data Services

Salient business and transaction data were maintained on the services provided under Condition 9 of DSO Licence Provision of Metering and Data Services. These services include, provision of metering equipment, installation, commissioning, testing, repair and maintenance of metering equipment and data collection.

Access to Land and/or Premises

Pursuant to Condition 14 of the DSO Licence and as required in Condition 17, the following are the general principles and procedures that ESB Networks will follow in respect of any person acting on its behalf who requires access to land and/or premises for the purposes set out in this licence:

- All such employees or representatives acting on behalf of ESB Networks will possess the skills necessary to perform the duties for which access is required and will be appropriate persons to visit and enter the land and/or premises;
- Both employees and representatives of ESB Networks will be in possession of identity cards that clearly identify them as such. These identifications will be available to the persons occupying the land and/or premises. All vehicles arriving on these sites will either carry the full ESB Networks livery or be clearly identified as working on behalf of ESB Networks;
- ESB Networks will ensure that any person visiting land and/or premises on its behalf will be able to inform final customers connected to the Electricity System, on request, of a contact point for help and advice they may require in relation to the distribution of electricity.

Records are maintained of individual training, levels of approval to carry out work and the issue of ID cards. The contact number of the customer contact centre is available via briefing material to all team members and is printed on ESB Networks vehicles.

Register of Assets

Table 19 – Register of Distribution System Assets at the end of 2013

| Asset | Units | Volume |
|--------------------------------------|-------|---------|
| 220kV | | |
| 220kV Substations | Sub | 3 |
| 220/110kV Transformer Capacity (MVA) | MVA | 2,250 |
| 110kV | | |
| 110kV Overhead Lines | km | 439 |
| 110kV Underground Cable | km | 184 |
| 110/38kV Substations | Sub | 82 |
| 110kV/MV Substations | Sub | 28 |
| 110/38kV Transformer Capacity | MVA | 6,292 |
| 110kV/MV Transformer Capacity | MVA | 1,345 |
| 38kV | | |
| 38kV Overhead Lines | km | 5,731 |
| 38kV Underground Cable | km | 951 |
| 38kV Substations | Sub | 432 |
| 38kV Transformer Capacity | MVA | 5,112 |
| MV | | |
| 20kV 3-ph Overhead Lines | km | 14,700 |
| 20kV 1-ph Overhead Lines | km | 29,500 |
| 10kV 3-ph Overhead Lines | km | 12,800 |
| 10kV 1-ph Overhead Lines | km | 25,800 |
| 20kV Underground Cable | km | 600 |
| 10kV Underground Cable | km | 8,849 |
| 3-ph Pole mounted Transformers | Trafo | 19,941 |
| 1-ph Pole mounted Transformers | Trafo | 213,784 |
| MV Ground Mounted Substations | Sub | 19,787 |
| LV | | |
| LV 3-ph Overhead Lines | km | 4,208 |
| LV 1-ph Overhead Lines | km | 54,300 |
| LV Underground Cable | km | 12,256 |
| LV Mini-Pillars | MP | 167,983 |