# Transmission and Distribution System Performance Report

# 2013

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## Introduction

Gaslink was established under European Union (EU) Gas Directive 2003/55/EC and in accordance with Statutory Instruments (SIs) No. 760/2005 and 377/2007. The unbundling requirements of this legislation place the Transmission and Distribution System Operator functions with Gaslink which is legally separate from the remainder of Ervia (change of name from Bord Gáis Éireann (BGÉ) to Ervia on 20th June 2014).

In accordance with the SIs, BGÉ and Gaslink entered into an Operating Agreement (OA) in 2008 that sets out the terms on which each party would fulfil their respective functions regarding the BGÉ Transportation System.

Gaslink executes most of its functions through Bord Gáis Networks (BGN) as described in the OA. The OA sets out the processes and support functions that are provided under contract by BGÉ (acting through its networks division BGN) to Gaslink.

The Transmission System Operator (TSO) and Distribution System Operator (DSO) licences granted to Gaslink by the Commission for Energy Regulation (CER) are published on the CER website[1]. Condition 17 of the TSO licence and Condition 19 of the DSO licence require Gaslink to report against a range of criteria in relation to the overall standards of performance of the Transmission and Distribution Systems. The performance standards have been determined by the CER based on performance criteria that Gaslink submitted for approval by the CER[2]. These performance criteria may be amended by the CER from time to time by notice to Gaslink.

[1] http://www.cer.ie/en/gas-distribution-network-licences.aspx
http://www.cer.ie/en/gas-transmission-network-licences.aspx

[2] The Gaslink Performance Criteria was approved by the Commission in August 2009 and can be found at the following link: http://www.cer.ie/en/gas-transmission-network-decision-documents.aspx?article=d6040781-9b0c-4039-b6f0-89ad00dbab6d

# 1.0 Transmission System

## 1.1 Transmission System Data

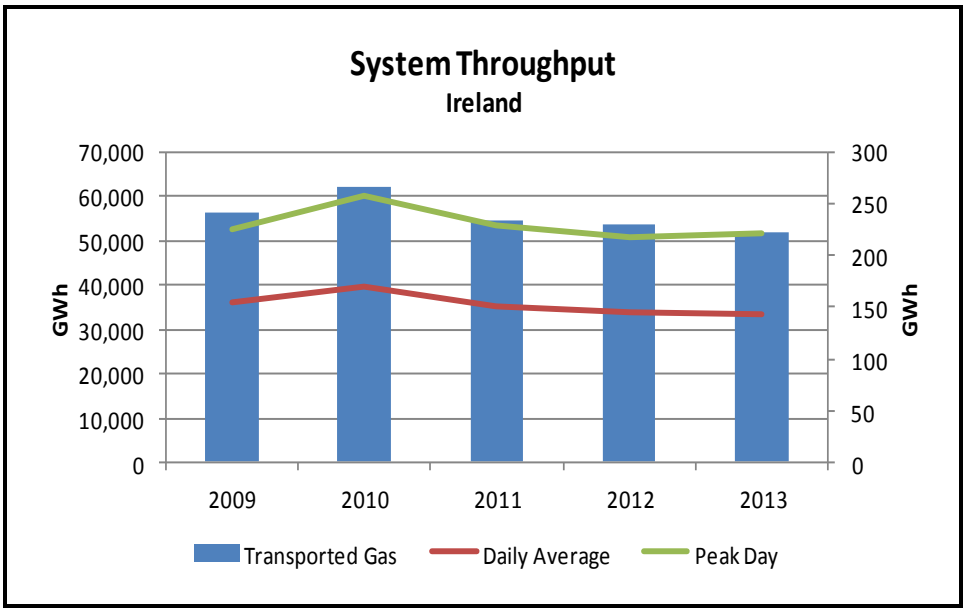
### *1.1.1 Throughput*

Throughput is the total amount of gas transported through the Transportation System in Ireland each year. The total gas transported in Calendar year 2013 includes 50GWh of fuel gas transported for Northern Ireland (NI) which was consumed at Beattock Compressor Station. Gas transported for the Republic of Ireland (RoI) Power-Gen sector continued to show the decrease seen for 2012 against 2011, the 3% decline for 2013 against 2012 was significantly less than that for 2012 against 2011 which showed a decline of 7%. Fuel usage of 715GWh for 2013 (which was down on the 852GWh for fuel usage for 2012) broadly reflected the reduced Total Gas transported for 2013. A Summary of the gas throughput for 2013 is highlighted in Table 1.1.1 and Figure 1.1.1.

Table 1.1.1

| Year | Total Gas Transported (GWh) | Daily Average Transported (GWh) | Peak Day Transported (GWh) |
|---|---|---|---|
| **2009** | 56,426 | 155 | 225 |
| **2010** | 62,316 | 171 | 258 |
| **2011** | 54,762 | 150 | 230 |
| **2012** | 53,541 | 146 | 217 |
| **2013** | 51,922 | 144 | 221 |

Figure 1.1.1



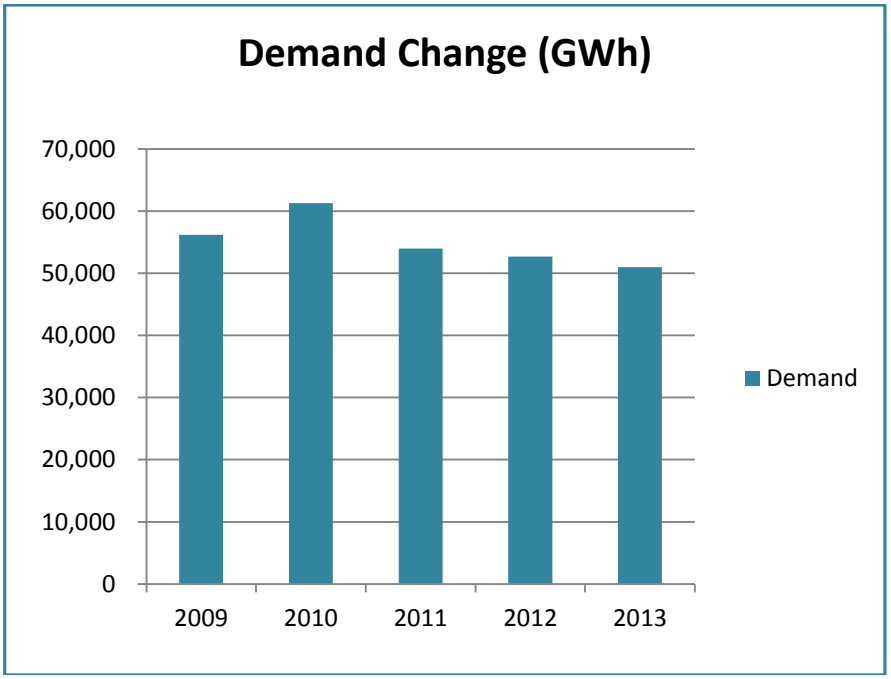
### *1.1.2 Demand Change*

Demand is the total amount of gas physically off-taken from the Gas Network in RoI each year. Table 1.1.2 and Figure 1.1.2 reflect the decreased demand for gas in 2013, down 3.3% from the previous year.

Table 1.1.2

| Year | Demand (GWh) | Change (GWh) | Change (%) |
|---|---|---|---|
| **2009** | 56,199 | -2,254 | 3.80% |
| **2010** | 61,300 | 5,101 | 9.08% |
| **2011** | 54,007 | -7,293 | -11.90% |
| **2012** | 52,721 | -1,286 | -2.38% |
| **2013** | 50,981 | -1,740 | -3.30% |

Figure 1.1.2




### *1.1.3 System Efficiency*

#### *(a) Delivery*

Table 1.1.3 reflects the amount of Gas delivered to Shippers as a percentage of the actual nomination amount. The target is to be within Key Performance Indicator (KPI) limits of 99% of the time. Low hourly flows at Inch can lead to difficulties meeting this KPI. Low hourly flows are a result of shipper / producer requirements. At Inch, providing entry gas at low

flow requires recycling of the flow for the safe and economical running of the compressors. This can lead to difficulties meeting the 99% KPI for nominated versus delivery in the case of Inch entry point.

Table 1.1.3 (a)

| KPI | Nominated vs. Delivered Target | Actual Performance | | | | |
|---|---|---|---|---|---|---|
| | | 2009 | 2010 | 2011 | 2012 | 2013 |
| **Moffat Delivery ±3%** | 99% | 100% | 100% | 100% | 99.7% | 100% |
| **Inch Delivery ±5%** | 99% | 97% | 96% | 96% | 96.7% | 100% |

### *(b) Shrinkage*

"Shrinkage Gas" means Own Use Gas and/or Natural Gas required to replace "Unaccounted for Gas" (UAG). Table 1.1.3(b) shows Shrinkage Gas attributed to the RoI system as a percentage of throughputs which stood at 1.2% in 2013.

Table 1.1.3 (b)

| KPI | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|
| **Shrinkage as a % of Throughput** | 1.41% | 1.31% | 1.8% | 1.2% |

### *(c) Transmission Meter Read Verification*

Transmission Meter Read Verification gives an indication of the number of transmission connected gas points that require meter reading adjustments as a result of failed meter reading validation[3]. Table 1.1.3(c) below notes that 1.1% of all site-metering validation-checks carried out in 2013 resulted in adjustments (i.e. approximately 21 site-metering adjustments that were performed out of 1992 meter-reading validation checks in 2013).

[3] *Adjustments typically arise as a result of:*
*(i) A communications failure – e.g. a site telemetry failure resulting in advances in the site meter not properly communicated to GTMS via SCADA.*
*(ii) An issue with the meter correction equipment on site.*

Table 1.1.3 (c)

| No. Of Adjustments | | | | | | |
|---|---|---|---|---|---|---|
| **KPI** | **Target** | **2009 Actual** | **2010 Actual** | **2011 Actual** | **2012 Actual** | **2013 Actual** |
| **Metering Data Validation** | <2% of sites | 1.3% | 1.3% | 0.9% | 0.9% | 1.1% |

### *1.1.4 Unaccounted for Gas*

"Unaccounted for Gas" (UAG)[4] means Natural Gas which is lost or otherwise unaccounted for from the Transportation System or any localised part thereof. Table 1.1.4 relates to UAG as a percentage of the overall system throughput. UAG can be quite volatile in terms of change month-on-month and year-on-year. It is dependent on a number of factors:

- Operations & Maintenance – Venting of gas, purging of pipelines, meters, gas chromatographs, gas leakage;
- Gas Accounting – If a meter is causing issues resulting in over or under accounting it will require a retroactive adjustment to the meter for the amount incorrectly applied or not.

UAG in simple terms is entry – exit; if the total gas off-taken from the system exceeds the gas brought into the system then it results in a negative UAG which means we have "found" gas i.e. "surplus" gas. This UAG is in fact taken from BGN's system stock required for the operation of the pipeline network. Other reasons for "surplus" gas is the rectification of under-accounting issues that is then manually applied at the end of each month. This would also affect the cleansed exit total for each shipper.

Table 1.1.4

| UAG | Target (%) | Throughput (%) | Energy (GWh) |
|---|---|---|---|
| **2009** | ±1 | +0.059 | +33.5 |
| **2010** | ±1 | +0.028 | +17.6 |
| **2011** | ±1 | -0.153 | -83.8 |
| **2012** | ±1 | +0.020 | +12.4 |
| **2013** | ±1 | +0.123 | +82.3 |

[4] *Volume as a percentage of total gas.*

### *1.1.5 Carbon Usage / Emissions*

This is a measurement of the tonnes of Carbon Emissions produced at each of the compressor stations based on fuel gas consumption which is highlighted in Table 1.1.5.

Table 1.1.5

| Compression site | 2010 (tonnes) | 2011 (tonnes) | 2012 (tonnes) | 2013 (tonnes) |
|---|---|---|---|---|
| **Midleton** | 4,932 | 8,528 | 9,707 | 8,116 |
| **Beattock** | 47,318 | 41,002 | 44,012 | 43,186 |
| **Brighouse** | 71,440 | 62,619 | 58,896 | 57,302 |

### *1.1.6 Usage of Inventory Product and Storage*

Table 1.1.6 below outlines the amount of gas kept in storage during each calendar year.

Table 1.1.6

| | 2009 (GWh) | 2010 (GWh) | 2011 (GWh) | 2012 (GWh) | 2013 (GWh) |
|---|---|---|---|---|---|
| **I/C Inventory Space[5] Utilised** | 123 | 42 | 261 | 106 | 91 Injection<br>91 Withdrawal |
| **Inch Export to Storage[6]** | 1069 | 1468 | 1576 | 1670 | 2122 |

### *1.1.7 Capacity Bookings*

Exit Capacity is the total amount of capacity booked by shippers on the transmission system. As of 31/12/13, 207.3GWh was the total exit capacity booked (Power, Daily Metered (DM), Industrial & Commercial (I&C), Non-Daily Metered (NDM) and Shrinkage).

[5] "I/C Inventory Space" relates to the IC2 interconnector with GB.
[6] "Inch" relates to gas that is stored in the depleted Kinsale Gas field.

Table 1.1.7 (a)

| Exit Capacity bookings (kWh) | 31/12/2013 |
|---|---|
| Power | 86,443,593 |
| DM IC | 17,236,525 |
| NDM | 98,419,126 |
| Shrinkage | 5,226,501 |
| **Total** | **207,325,745** |
| **Distribution Supply Point Capacity (kWh)** | |
| DM IC | 17,524,067.64 |
| RES | 70,036,711.23 |
| NDM IC | 28,309,425.91 |
| **Total** | **115,870,204.8** |

The Moffat and Inch Entry Capacity bookings on 31/12/2013 are as follows:

Table 1.1.7 (b)

| Capacity bookings (GWh) | 31/12/2010 | 31/12/2011 | 31/12/2012 | 31/12/2013 |
|---|---|---|---|---|
| Inch | 35.89 | 34.494 | 34.3 | 37.65 |
| Moffat | 214.28 | 197 | 199.5 | 173.9 |
| **Total** | **250.17** | **231.5** | **233.8** | **211.55** |

### *1.1.8 Total number of Transmission Connections*

The total number of transmission Connections (by category) at year end plus % change from previous year is highlighted in Table 1.1.8.

Table 1.1.8

| Category | 31st December 2012 | 31st December 2013 | % change |
|---|---|---|---|
| Transmission LDM | 31 | 32 | 3.2% |
| Transmission DM | 19 | 17 | -10.5% |

### *1.1.9 Total length of Transmission Pipeline*

**Table 1.1.9(a)**

| Transmission Pipeline length (Km) | | | |
|---|---|---|---|
| Onshore Pipeline (km) | 2,055 | Decommissioned (km) | 25 |
| Offshore Pipeline (km) | 412 | Decommissioned | 0 |
| **Total Length of Pipeline (km)** | **2,467** | **Decommissioned** | **25** |

### *1.1.10 Performance Standards*

#### *(a) BGN Transmission Service Standards – Performance 2013*

Table 1.1.10 (a)

| Customer Commitments | Performance Target | Actual Performance |
|---|---|---|
| **Maintenance Days**[7] | | |
| Unscheduled Maintenance / Interruptions | 0 | 0 |
| Interruptions due to maintenance | 5 | 0 |
| **Safety & Quality** | | |
| Reportable Safety Incidents | 0 | 0 |
| **Communications & Instrumentation** | 99.8% | 99.98% |
| GTMS System Availability | | ( equates to approx. 6 hours downtime in the year) |

#### *(b) System Balancing*

A Balancing Action means a Balancing Gas Buy or Sell in respect of a Day as required to match the amount of gas entering and leaving the system.

Table 1.1.10 (b)

| KPI | Target | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|
| **System Balancing Actions** | 48 (12 per Qtr.) | 20 | 37 | 39 | 20 | 22 |
| **Shipper Imbalance as % of total flow*** | N/A | 0.25% | 0.24% | 0.14% | 0.4% | 0.22% |

* This relates to overall system throughput, i.e. section 1.1.1 that is RoI 2013 Total Gas Transported of 51,922GWh.

[7] *See Code of Operations Part G Section 5.1.3(b)*

## 1.2 GPRO

The GPRO (Gas Point Registration Office) is a register of Gas Points that are operated and maintained by BGN on behalf of Gaslink. Table 1.2 sets out the number of Large Daily Metered (LDM), DM, and NDM registered Gas Points in 2013 as well as requests to change shipper and provides Historical Consumption.

Table 1.2

| Category | LDM | DM | NDM I/C | NDM Domestic | Total |
|---|---|---|---|---|---|
| Gas Points Registered @ 31 Dec 2013 | 45 SPRNs (76 Streams)[8] | 217 SPRNs (222 Streams) | 26,200 | 640,441 | 666,903 |
| Total Gas Points Registered during 2013 | 1 | 3 | 611 | 6,392 | 7,007 |
| Gas Points Deregistered during 2013 | N/A | N/A | 23 | 153 | 176 |
| Tariff Exempt NDM Supply Points @ 31 Dec 2013 | N/A | N/A | 1,518 | 6,113 | 7,631 |
| Total Tariff Exempt NDM Supply Points during 2013 | N/A | N/A | 496 | 3,565 | 4,061 |
| Change of Shippers Jan-Dec 2013 | 6 | 82 | 4,698 | 112,216 | 117,002 |
| Historical Consumption Requests Jan –Dec 2013 | 7 | 114 | 2,361 | 0 | 2,482 |

## 1.3 Achievement of Capital Programme

Table 1.3.1

| Reinforcement | Comment |
|---|---|
| AGI Capacity Upgrades (5 number) | Commissioned |
| AGI Capacity Upgrades (1 number) | Under Construction |
| AGI Capacity Upgrades (2 number) | Design Stage |
| Cluden to Brighouse Bay Pipeline | Design Stage |

[8] SPRN – Supply Point Registration Number for DM or LDM site

Table 1.3.2

| Refurbishment | Comment |
|---|---|
| Operations Upgrades - Works identified or refurbishment or replacement of obsolete/ unreliable system components identified by Operations staff. Multi location projects. | Commissioned |
| Operation Upgrades 2013 (2 number) | Design Stage |
| Ballough Bypass | Design Stage |
| National Pipeline Marker Upgrade Phase 2 | Under Construction |
| Waterford Replacement Pipeline | Commissioned |
| East Wall to Coolock Pipeline | Commissioned |
| Limerick Optimisation | Design Stage |
| Ballymun Pipeline Interchange Diversion | Design Stage |
| AGI Boiler Replacement (4 number) | Commissioned |
| AGI Boiler Replacement (8 number) | Design Stage |
| AGI Site Instrumentation (8 number) | Commissioned |

Table 1.3.3

| Third Party | Comment |
|---|---|
| A8 Larne Diversion | Commissioned |
| Twynholm Metering Upgrade | Design Stage |

Table 1.3.4

| Interconnectors | Comment |
|---|---|
| Brighouse Bay and Beattock Exhaust Stack Replacement | Commissioned |
| Beattock Unit A Valve Replacement | Commissioned |
| Brighouse Station Outlet Valve Replacement | Design Stage |
| Brighouse Bay and Beattock Pipework Modifications | Design Stage |
| Beattock Turbine Ancillary Equipment Upgrade | Design Stage |

Table 1.3.5

| New Supply | Comment |
|---|---|
| Newtownfane to Haynestown (Mullagharlin) | Design Stage |
| Compressed Natural Gas (CNG) Facility, Cork | Commissioned |
| Great Island Power Station | Commissioned |
| Gas to Glanbia Waterford | Design Stage |

## 1.4 Transmission Gas Safety

### *1.4.1 High Level Safety Statistics*

#### *1.4.1.1 Introduction*

This section of the report is an extract from reports submitted to the CER under the natural gas safety regulatory framework (the 'Framework'). All information has been provided to the best ability of BGN at the time of submittal to the CER. The report includes KPI measures and statistics that have been under continuous monitoring during 2013. The purpose of the KPI's are to identify opportunities for improvement and to ensure the Network continues to be managed in a safe manner.

#### *1.4.1.2 New Initiatives*

New Initiatives in 2013 include:

- Continued roll out of new programme for upgrading marking of Transmission pipelines with over 900km of pipeline now completed (approx. 65% of total programme).
- Waterford City and Santry to Eastwall pipeline replacement projects completed.
- Improved moisture detection equipment installed at Inch Entry Point.
- Above Ground Installation (AGI) enhanced corrosion protection project initiated with pilot project completed.
- New landowner's handbook developed and issued out to improve safety awareness.

### *1.4.2 Key Performance Indicators*

#### *1.4.2.1 High Level Transmission Safety KPI's*

The reference number (ref: 1 – 4) denotes KPI grouping under the Six Key Safety Regulatory Objectives.

Table 1.4.2.1 - High Level Transmission Safety KPI's

| | KPI | Compliance Monitor | 2011 | 2012 | 2013 | Notes: |
|---|---|---|---|---|---|---|
| 1A | Public Reported Escapes (Reported Leaks) | Total Reported Escapes | 4 | 9 | 13 | All leaks were minor in nature and were repaired by BGN technicians by standard reactive maintenance (e.g. tightening of flange) |
| 1B | Third Party Damage | Development enquiries requiring action | 869 | 875 | 990 | |
| | Third Party Damage Prevention Detected Encroachment Events | Category A - Pipeline Damage or Leak | 0 | 1 | 0 | |
| | | Category B - Serious Potential for Damage | 20 | 19 | 29 | |
| | | Category C - Limited Potential for Damage | 25 | 22 | 16 | |
| | | Total detected encroachment | 45 | 42 | 45 | |
| 1C | Transmission Pipelines | Line breaks (major leakage) | 0 | 0 | 0 | |
| | | Line damaged (sustainable level of leakage) | 0 | 1 | 0 | |
| | | Line damaged (no leakage) | 0 | 1 | 0 | |
| 2A | Pressure Control | Occasions where pressure drops below minimum design pressure | 0 | 0 | 0 | |
| | | Occasions where pressure is greater than 1.1 x Maximum Operating Pressure | 0 | 0 | 0 | |
| 2B | Gas Outages | Number of Unplanned Outages | 0 | 0 | 0 | |
| 3A | Gas Quality | Number of non-compliant events (constituent parts outside criteria) | 0 | 0 | 1 | Water content at Inch Entry Point intermittently increased beyond |

| | KPI | Compliance Monitor | 2011 | 2012 | 2013 | Notes: |
|---|---|---|---|---|---|---|
| | | | | | | 50mg/$m^3$ from 24th April to 30th April 2013. Maximum level recorded was 60mg/$m^3$ |
| 3B | Gas Quality | % Availability of the gas measurement equipment | 100% | 100% | 100% | |
| 4A | Gas Supply Emergencies | Local Gas Supply Emergencies 1,000 - 9,999 customers affected | 0 | 0 | 0 | |
| | | NGEM Emergencies > 10,000 customers affected | 0 | 0 | 0 | |
| 4B | Gas Emergency Exercises | Emergency Exercises planned per annum | 2 | 2 | 2 | |
| | | Emergency Exercises undertaken | 4 | 5 | 3 | |
| 5A | Incidents | Gas Related Incidents | 0 | 0 | 0 | |

#### *1.4.2.2 Analysis of 2013 Transmission Safety KPI's*

Commentary on the high level KPI's is presented under the six key Regulatory Objectives, which support the overall Strategic Objective of the Framework. This is consistent with one of the fundamental principles of the Framework: that gas safety risks must be mitigated to a level that is deemed to be as low as reasonably practical (ALARP).

##### *(a) Minimising the Risk of Loss of Containment*

The high level KPI's, over the period, demonstrate consistent performance in this area. Of particular note are:

1A. Public Reported Escapes

There were 13 Public Reported Escapes (PREs) related to leaks on the BGN transmission network. 12 PREs originated from within Above Ground Installations (none related to pipelines) and one originated from a downstream customer installation. While this is an increase on the 9 PREs reported in 2012, all of the leaks were minor in nature and were repaired by BGN technicians using standard reactive maintenance methods (e.g. tightening of flange). The majority of the leaks were as a result of relief valve passes and flange weeps.

1B. Third Party Damage

Third Party Development works enquiries which potentially impacted on the Transmission network and required action from BGN increased from 875 in 2012 to 990 in 2013 (13% increase). BGN maintained the high level of promotion of the 'Dial before You Dig' phone line and email service. This increase in activity may be indicative of a general increase in construction activity. However, it is too early to determine if this is a real and sustained increase.

The total detected encroachments in 2013 were 45 which was a 7.1% increase on the 42 detected in 2012. Total detected encroachments have remained at a broadly consistent level since 2011.

Since 2011 BGN has classified Transmission pipeline encroachments in line with the United Kingdom Onshore Pipeline-operators Association (UKOPA) model – i.e. Category A, Category B and Category C. Category A is the most severe and would include actual damage to a transmission pipeline, wrap or sleeve. There was no Category A encroachments in 2013. In 2012 there was one Category A encroachment.

Categories B and C relate to a level of potential damage and are differentiated by the actual activity and method carried out in the vicinity of the pipeline. Category B encroachments are deemed to have serious potential for damage while Category C have limited potential for damage. Although the total number of detected encroachments has remained broadly consistent since 2011 the split between Category B and Category C encroachments has changed in 2013. BGN are monitoring this trend closely and a further break down of the encroachment types is provided below.

Category A – Pipeline Damage or Leak includes damage to wrap or sleeve

| Number of Encroachments By Third Party | Third Party Type | | Number of Encroachments By Activity | Activity Type |
|---|---|---|---|---|
| 0 | 0 | | 0 | 0 |

Category B – Serious Potential for Damage

| Number of Encroachments By Third Party | Third Party Type | | Number of Encroachments By Activity | Activity Type |
|---|---|---|---|---|
| 15 | Contractor | | 4 | Drainage installation |
| 8 | Landowner | | 7 | Excavation for services |
| 4 | Local Authority | | 1 | Building Works |
| 1 | Unknown | | 2 | Excavation for survey |
| 1 | Developer | | 5 | Excavation for repair |
| | | | 1 | Fencing |
| | | | 4 | Installation of a Pole/Structure |
| | | | 1 | Deepening Ditches |
| | | | 2 | Pipe laying |
| | | | 2 | Earth Moving |

Category C – Limited Potential for Damage

| Number of Encroachments By Third Party | Third Party Type | | Number of Encroachments By Activity | Activity Type |
|---|---|---|---|---|
| 3 | Landowner | | 2 | Excavation for service |
| 8 | Contractor | | 2 | Deepening Ditches |
| 2 | Local Authority | | 1 | Borehole Drilling |
| 1 | Waterways | | 1 | Installation of a Pole/Structure |
| 2 | Unknown | | 1 | Building works |
| | | | 2 | Excavation for repair |
| | | | 1 | Excavation for survey |
| | | | 2 | Pipe laying |
| | | | 1 | Roadwork's |
| | | | 2 | Other |
| | | | 1 | Waterways Repairs |

1C. Transmission Pipelines

Line breaks remained at zero in 2011, 2012 and again in 2013.

### *(b) Maintaining Safe System Operating Pressure*

All KPI's have demonstrated a very high performance. All MOP reviews were completed to schedule. There were no overpressure events and no unplanned customer outages. All scheduled AGI maintenance was completed.

### (c) *Minimising the Risk of Injecting Gas of Non-Conforming Quality*

There was one gas quality non-compliant result in 2013. Water content at the Inch Entry Point intermittently increased beyond the limit of 50mg/$m^3$ from 24th April to 30th April 2013. The maximum level recorded was 60mg/$m^3$. Both BGN and the offshore operator were aware of the excursion and closely monitored and controlled the event. There was no public safety or network integrity impact as a result of this excursion.

### *(d) Providing an Efficient and Coordinated Response to Gas Emergencies*

There were no reportable Transmission gas supply emergencies in 2013.

### (e) *Minimising the Safety Risks Associated with the Utilisation of Gas*

In 2013, there were no reportable safety incidents relating to the transmission network or customer installations directly connected to the transmission network.

## *1.4.3 Natural Gas Safety Regulatory Framework*

Gaslink and BGN fully comply with the Natural Gas Safety Regulatory Framework. The Gaslink Transmission System Operator Safety Case outlines in detail how this is achieved.

Gaslink's safety case was originally submitted to the CER and approved in June 2009. Within the safety case framework a quarterly KPI report is submitted to the CER for review. A number of updates to the Safety Case have been made since 2009 and have been accepted by the CER. The Safety Case describes the arrangements that are in place for:

- The safe control and operation of the transmission system.

- The management of the life cycle of the assets including design, construction, commissioning, maintenance and repair, reinforcement and renewal and decommissioning and abandonment.
- Ensuring that staff meet the required standards of qualification and competence.
- Emergency preparedness.
- Ensuring that gas transported in the network meets required standards for gas composition and quality.
- Hazard assessment and mitigation of the risks to a level that is as low as is reasonably practicable associated with the transportation of gas.
- Compliance with relevant standards and codes of practice.
- Cooperation with third parties.

Under the Natural Gas Safety Regulatory Framework, Gaslink is required to conduct a full review of its safety case every three years to ensure that the safety case remains a 'living document' and fully reflects the current safety operating measures and practices. Gaslink commissioned an independent body to support this 'Triennial' review and to provide external assurance. The review was initiated in 2012 and completed in 2013 with a detailed report issued to the CER. There were a number of recommendations and a programme was agreed with the CER to implement/address the recommendations. A revised Safety Case (with supporting submissions) was issued to the CER in November 2013. The revised safety case addressed many of the recommendations made in the Triennial review and also incorporated changes related to the BGN Organisation Structure, Standby Rota and Leak Survey. Further updates are planned for 2014 to reflect continued planned improvements within the Networks business.

#### *1.4.3.1 Update on National Gas Emergency Manager Activities*

Pursuant to SI 697 Section 19B of 2007, the CER appointed Gaslink as the National Gas Emergency Manager and approved the Natural Gas Emergency Plan submitted by Gaslink to the CER in November 2008. Revision 3 of the NGEP was updated in late 2013 and approved by the CER in January 2014.

### *1.4.3.2 Compliance with Transmission System Standards*

#### *(a) Transmission System Standards*

Safety is an inherent consideration in all design standards. BGN and Gaslink processes and procedures ensure that the Transmission system is designed in a safe manner and to the highest standard.

This commitment is reflected in Gaslink's "Transmission System Standards" document (as approved by the CER). The Transmission System Standards covers without limitation, the engineering of pipelines and associated equipment and the technical standards to be adopted for the design, construction, operation and maintenance, including standards relating to the physical durability of the transmission system (including its ability to withstand internal and external pressures, shocks and damage, whether natural or man-made) and standards relating to the odourisation of natural gas.

#### *(b) General Statement of Compliance*

Gaslink are compliant with the standards set out in the Transmission System Standards document.

#### *(c) Compliance with Licence Conditions*

Both Gaslink and BGN have system operator and system owner licences respectively. Both organisations maintain a log in which reported compliance breaches are noted, investigated and reported. There were no material breaches of the Transmission Asset Owner Licence Conditions or the Transmission Operator Licences during 2013.

### *1.4.3.3 Other Improvements/Initiatives during the Year*

#### *(a) Code Modifications*

The following Code Modification Proposals were addressed during 2013:

Table 1.4.3.3

| Total Number of New Proposals in 2013 | Total Number of Outstanding Proposals in 2013 (from 2012) | Total Number of Proposals Approved in 2013 | Total Number of Proposals Approved & Implemented in 2013 | Total Number of Proposals Rejected in 2013 | Total Number of Proposals 'on hold' at end of 2013 |
|---|---|---|---|---|---|
| 5 | 3 | 5 | 4 | 1 | 2 |

The following Code Modifications were approved and implemented during 2013:

- A053b 'Receipt Date for Letters of Credit'
- A054 'Incomplete Combustion Factor and Soot Index Monitoring'
- A057 'Retirement of Part J – *Transition* of the Code of Operations''
- A058 'Congestion Management Procedures'

# 2.0 Distribution System

## 2.1 Customer Service

As service provider to Gaslink, BGN connects all natural gas customers to the network and is responsible for carrying out related work at customer premises. The services provided include: safety and emergency response, pipeline service laying and modification, and meter installations/alterations. Every effort is made to provide services in a prompt, efficient, safe manner and to a high standard. BGN continuously seeks to improve the levels of service that it provides. The BGN Customer Charter[9] provides assurances to customers regarding the standards to which these services are provided. In certain circumstances, BGN will provide compensation for failing to meet these standards, where the customer makes a claim.

Table 2.1.1

| Bord Gáis Networks Customer Charter Service Standards - Performance 2013 | | | | | | |
|---|---|---|---|---|---|---|
| **Section** | **Customer Commitments** | **Total Occurance** | **% Achieved** | **PPL Standard** | **No. Of Claims** | **Compensation Paid** |
| **2.1.2.1** | **Call Handling** | | | | | |
| | Calls Answered <20 secs | 303,973 | 94.61% | 80% | | |
| | Calls Abandoned | 2,636 | 0.79% | 7% | | |
| | Mystery Shopper Calls | 1001 | 93% | n/a | | |
| | Call Follow-up Surveys | 1007 | 95% | n/a | | |
| **2.1.2.2** | **Quotation Issuing** | | | | | |
| | Quotations Issued <7 w/days | 3,313 | 100.00% | 100% | | |
| **2.1.2.3** | **Complaint Resolution** | | | | | |
| | 10 w/days | 1,709 | 99.30% | 85% | | |
| | 30 w/days | 293 | 99.40% | 85% | | |
| **2.1.2.4** | **Payment Guarantee** | | | | | |
| | Compensations/Refunds Paid | 39 | 100.00% | 100% | | |
| **2.1.3.1** | **Appointment Granting** | | | | | |
| | < 5 w/days | 67,655 | 99.99% | 100% | | |
| | < 20 w/days | 3,428 | 99.88% | 100% | | |
| **2.1.3.2** | **Appointment Kept** | | | | | |
| | Metering as promised | 71,700 | 99.30% | 100% | 20 | €1,000 |
| | Services as promised | 3,273 | 99.20% | 100% | | |
| **2.1.3.3/4** | **Reinstatement** | | | | | |
| | Temporary <1 w/day | 5,102 | 97.80% | 100% | 5 | €600 |
| | Permanent <20 w/day | 8,536 | 94.32% | 100% | | |
| **2.1.4.2** | **Supply Restoration** | | | | | |
| | Gas on <24 hr | 15,101 | 99.93% | 100% | 9 | €1,345 |
| **2.1.4.1** | **Emergency Reponse** | | | | | |
| | Attend Site <1 hr | 19,268 | 99.90% | 97% | | |

[9] http://www.bordgaisnetworks.ie/en-IE/About-Us/Our-business/Customer-charter--codes-of-conduct/Customer-Charter-HTML-version/

### *2.1.1 Customer Service – Performance on Charter Commitments*

BGN's performance across a range of customer service perspectives is measured relative to BGN Customer Charter standards and Planned Performance Levels (PPL's) agreed with the CER and published in March 2007. An updated version of the BGN Customer Charter document was published in 2012 but the commitments remained as originally agreed.

### *2.1.2 Administrative Standards*

#### *2.1.2.1 Call Handling*

There were a total of 334,000 calls received in 2013. 304,000 of these calls were answered, and 94.6% of calls answered were done so within 20 seconds, representing 308,000 calls. This was well within the standard of 80% minimum answering within 20 seconds. Approximately 20 – 30% of the live inbound call volume is Supplier related and should not be coming through to BGN.

A total of 29,742 calls were abandoned which was 8.9% of calls offered. Only 2,636 representing 0.79% were abandoned after the welcome message (after 10 seconds). This performance was well within the standard of 7% abandoned. The welcome message is provided in the first 20 seconds so the timing of the call answered starts when the customer connects to BGN and not after they listen to the message and pick an option. Of the total number of 304,000 calls answered, 94.6% were answered within 20 seconds.

#### *2.1.2.2 Quotation Issuing*

2013 quotation performance remained highly compliant at 100% issued within seven working days. The average turnaround was one day for domestic quotes and 1.5 days for I&C quotes. Overall there were no quotations issued outside the standard.

#### *2.1.2.3 Complaint Resolution*

Complaints registered to BGN from customers in 2013 were down 2.5% on the volume registered in 2012 with a total of 2,016 created. Resolution compliance still remained high at 99.4% compared to the Planned Performance Level at 85% minimum. 2,014 complaints were closed-out during 2013, with 12 complaints resolved beyond the target date. The nature and

relative frequency of complaint types registered is highlighted in Table 2.1.2 and Figure 2.1.2.

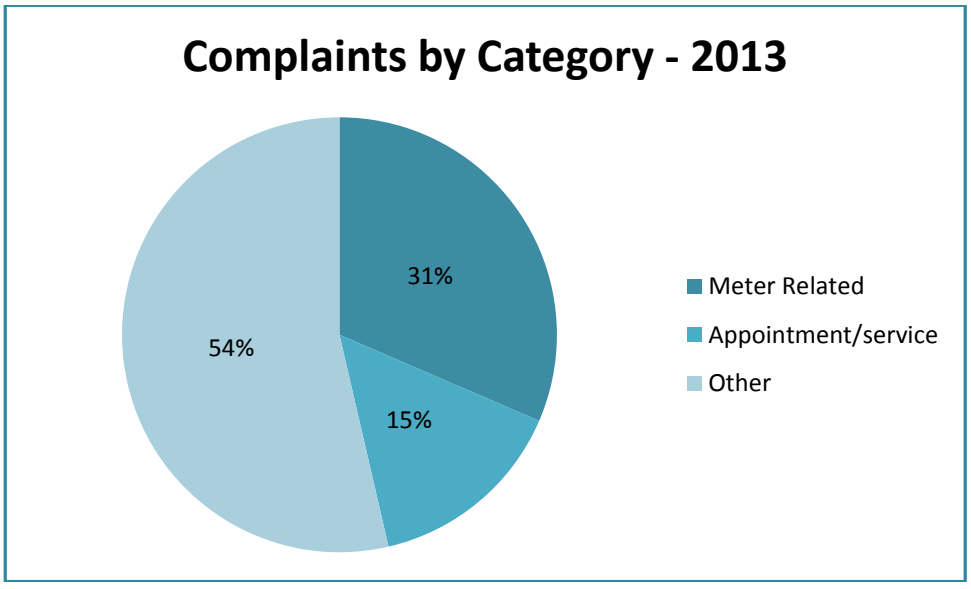
Table 2.1.2.3

| Complaint Type | Number Of Complaints | % of Overall |
|---|---|---|
| Meter Related | 634 | 31% |
| Appointment/service | 300 | 15% |
| Site Management | 365 | 18% |
| Damage to Property | 148 | 7% |
| Reinstatement | 102 | 5% |
| Technical | 90 | 4% |
| Gas Supply | 44 | 2% |
| Service Quality | 39 | 2% |
| Charging | 81 | 4% |
| Connections | 108 | 5% |
| Gasworks | 24 | 1% |
| Misc (System) | 64 | 3% |
| Notice of Works | 15 | 1% |
| **Grand Total** | **2014** | **100%** |

***

**Site Management** – Inconvenience to the customer caused by a site currently being in or left in poor condition such as blocked access.
**Gas Supply** - Disruption to customer's gas supply in the form of bad pressure or a delay in restoration.
**Gasworks –** Customer dissatisfied with quality and finish of pipework after BGN works.
**Misc (system**) – Lack of information due to the system not being updated in a timely fashion.
**Safety/Technical** – Dissatisfied with a technical matter or an issue related to safety following BGN works or response.

Figure 2.1.2.3



#### *2.1.2.4 Payment Guarantee*

This section relates to additional payments made if the original payment was not within 10 working days. Charter compensations for 2013 totalled 38 approved/paid (of 47 claimed, 1 rejected) for an aggregate pay-out of €3,450. Of the 38 compensation payments made 20 related to broken appointments, 9 to supply restoration delays and 5 to reinstatements. As all payments were made inside the 10 day criteria, there were no compensation payments made in relation to this standard.

Table 2.1.2.4

| Compensation Claims | | |
|---|---|---|
| | 2013 | 2012 |
| Paid | 38 | 47 |
| Rejected | 0 | 1 |
| > 10 Working Days | 0 | 0 |
| | | |
| **Payment Catergory** | | |
| | 2013 | 2012 |
| Supply Restoration | 9 | 11 |
| Broken Appointment | 20 | 34 |
| Appointment Granting | 4 | 0 |
| Reinstatements | 5 | 2 |
| | 3 | |
| Total | 38 | 47 |

### *2.1.3 Service Delivery Standards*

#### *2.1.3.1 Appointment Granting*

Appointment requests in 2013 were significantly lower than 2012 (meter appointment requests totalled 67,661, down 28%, and service appointment requests totalled 3,432, up 4.5%). Compliance with service standards was 99.88% for 2013 while for metering compliance was 99.99%. Throughout the year, four service appointments were granted outside the twenty day standard while there were six meter appointments granted outside criteria in 2013.

#### *2.1.3.2 Appointments Kept*

In total, there were 21% less appointments in 2013 versus 2012. 2013 performance achieved 99.3% compared to 98.6% in 2012. In 2013, 538 of 72,238 metering appointments were not

delivered as promised, and 28 of 3,301 service lay appointments were not delivered as booked.

#### *2.1.3.3 Temporary Reinstatement[10]*

Performance in 2013 was slightly down on 2012 at 97.8% of over 5102 temporary reinstatements conducted within the 24hr standard. Temporary Reinstatement may be completed outside criteria due to weather conditions such as heavy rain which may cause the cutting to be flooded or the contractor may have access problems (e.g. gates, cars in the way, etc.).

#### *2.1.3.4 Permanent Reinstatement*

94.4% of almost 8,536 permanent reinstatement activities during 2013 were performed within the 20 working day planned performance level. Delays in permanent reinstatement can occur for a number of reasons. There may be a delay in obtaining a licence for the work or some permanent reinstatement could be grouped in order to maximise the use of certain materials (e.g. asphalt). Currently, surface categories are being grouped to improve efficiencies and increase performance levels.

### *2.1.4 Gas Supply Standards*

#### *2.1.4.1 Emergency Response*

BGN has a statutory responsibility to respond to smells of gas reported by members of the public, across the network. These PREs occurred 19,507 times per annum and have a one hour response criteria. Only 19 of 19,507 responses in 2013 were outside the 1 hour maximum standard for 99.9% compliant performance. The average response time across all responses was 27 minutes. 4,806 of these escapes were internal, 2,797 external and 11,909 were no traces.

#### *2.1.4.2 Interruption Notification and Supply Restoration*

The target set out in BGN's Customer Charter approved by the CER is to restore gas supply by midnight of the following day in the event of an unplanned interruption. Of the 15,112

[10]Once a gas service has been installed in an excavation reinstatement of the ground takes three stages: 1. Back filling, 2. Temporary reinstatement (within 24 hours) 3. Permanent reinstatement (within 20 working days). Once the excavation is back filled, it is temporarily reinstated with tarmac to make safe. The purpose of temporarily reinstating the ground is to allow time for the backfill in the excavation to settle so there is a lower chance of the reinstatement sinking in the future. Permanent reinstatement is then carried out in the original material of the site e.g. concrete, cobble lock, etc, (within 20 working days).

loss of gas supply incidents (i.e. unplanned interruptions), only 11 were restored outside the 24 hour criteria, making the YTD performance 99.9% for 2013. These loss of gas supply incidents are refered to as “no gas” responses.The vast majority or 63% of loss of gas supply incidents related to prepaid meters. The percentage of loss of gas supply for prepayment meters has always been historically higher than credit meters because of the required customer interaction and additional technology associated with the meter. Now as the population of these meter types grows the increase in loss of gas supply incidents is to be expected. The high percentage of loss of gas supply associated with prepayment meters are as a result of a number of different reasons including tamper faults, card errors, downstream problems on single appliance situations i.e. boiler resets, boiler issues, battery issues, letting credit run out, causing the boiler to lock out and meter faults.

## 2.2 Distribution System Data

### *2.2.1 Annual total, Annual Daily Average and Peak Day Flows*

Table 2.2.1, outlines Distribution (Dx), DM, and NDM natural gas flows for both I&C and Residential (RES) market sectors.

Table 2.2.1

| Dx* DM I/C | | 2011 | 2012 | 2013 | % Change |
|---|---|---|---|---|---|
| Annual Total | MWh | 2,997,560 | 3,312,979 | 3,407,738 | 3% |
| Annual Daily Average | MWh | 8,212 | 9,052 | 8,412 | -7% |
| Peak Day Flow | MWh | 12,149 | 12,668 | 12,541 | -1% |
| **Dx NDM I&C** | | | | | |
| Annual Total | MWh | 3,716,728 | 3,990,528 | 4,030,462 | 1% |
| Annual Daily Average | MWh | 10,183 | 10,903 | 11,025 | 1% |
| Peak Day Flow | MWh | | | | |
| **Dx NDM RES** | | | | | |
| Annual Total | MWh | 7,341,417 | 7,744,001 | 7,817,915 | 1% |
| Annual Daily Average | MWh | 20,113 | 21,158 | 21,438 | 1% |
| Peak Day Flow | MWh | | | | |
| **Dx NDM Total** | | | | | |
| Annual Total | MWh | 11,058,146 | 11,734,529 | 11,848,376 | 1% |
| Annual Daily Average | MWh | 30,296 | 32,062 | 32,464 | 1% |
| Peak Day Flow | MWh | 74,481 | 71,705 | 75,507 | 5% |
| **Dx Total** | | | | | |
| Annual Total | MWh | 14,055,705 | 15,047,508 | 15,256,114 | 1% |
| Annual Daily Average | MWh | 38,509 | 41,113 | 40,875 | -1% |
| Peak Day Flow | MWh | 85,525 | 84,373 | 87,913 | 4% |

### *2.2.2 Shrinkage*

Shrinkage Gas means Own Use Gas and/or Natural Gas required to replace Unaccounted for Gas. Shrinkage as a % of total distribution throughput in 2013 = 1.31% (compared to 0.94% in 2012).

#### *2.2.2.1 Total number of Distribution Connections*

Table 2.2.2.1

| Connections | 2011 | 2012 | 2013 | % Change from 2012 |
|---|---|---|---|---|
| Dx DM I/C | 203 | 207 | 203 | -1.93% |
| Dx NDM I/C | 23,684 | 23,967 | 24,054 | 0.36% |
| Dx NDM RES | 622,573 | 626,791 | 630,921 | 0.66% |
| Dx Total | 646,460 | 650,965 | 655,178 | 0.65% |

## 2.3 Total Length of Pipe in Distribution System

The distribution network operates in two tiers; a medium pressure and a low pressure. The lower pressure network is predominantly polyethylene distribution pipelines.

Table 2.3.1

| Distribution System Length | | | |
|---|---|---|---|
| | 2011 | 2012 | 2013 |
| **Total Length (km)** | 11,030 | 11,131 | 11,218 |

Distribution Network Lengths - Systems Lengths at end 2013.

## 2.4 Achievement of Capital Programme

### *2.4.1 Cast Iron Mains Replacement Progress*

From 2004 to 2009, a total of 1,233km of old metallic mains have now been replaced, 95% of which were in the Greater Dublin Area and 5% in Cork. The programme included the renewal of approximately 49,000 old metallic services and the transfer of 34,000 existing PE services. In addition, approximately 65,000 internal inspections were conducted during the course of the programme to ensure that it was safe to reintroduce gas.

Subsequent to the "Cast Iron Replacement Project", a desktop study was completed in June 2012 to determine the scope for the residual Site works which is scheduled for completion in June 2014.

Table 2.4.1

| High Volume Programmes | Comment |
|---|---|
| G4 Domestic Meter Replacement | • Construction ongoing<br>• 50% Complete<br>• On target to change 28,000 meters in 2015<br>• Programme to run to end of PC3 in 2017 |
| I/C Meter Replacement PC2 | • Construction ongoing<br>• 75% complete<br>• Finish date Q1 2015 |
| I/C Meter Replacement Programme | • Design & construction ongoing<br>• 5% Complete<br>• Finish Date Q4 2016 |
| PE in Porches | • Design and Construction Ongoing<br>• 25% complete<br>• To run until the end of PC3 |
| Kerotest | • Construction finalising snag list in Q2 2014<br>• Post construction risk review to take place in Q2 2014 |
| DX bridge crossings | • Design and Construction ongoing<br>• Almost 10% complete |
| Dublin Metallic Mains | • Final 35 locations with very small volumes of metallic main currently being resolved by the contractor.<br>• Remaining sites have inherent unique locational difficulties, which are leading to delays driven by the respective landowners<br>(middle of dual carriage way, listed/protected buildings etc.) |

## 2.5 New Connections during Year (by category)

Table 2.5.1

| Meters | 2011 | 2012 | 2013 |
|---|---|---|---|
| One off residential | 5,983 | 4,441 | 4,631 |
| New Housing | 1,097[11] | 1,288 | 1,933 |
| I&C | 926 | 719 | 857 |

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[11] New housing connection records do not currently differentiate between houses and apartments

## 2.6 Update on New Towns Receiving Gas

BGN has carried out numerous feasibility studies on various towns to assess the economic viability of connecting the selected towns to the Distribution Network. These studies are carried out in line with a BGN Connection Policy [12] approved by the CER in April 2006 and revised in 2011.

The following is a brief update on the status of New Towns Projects.

### *2.6.1 Completed New Towns Projects*

Macroom: Town Network were completed at the end of 2012 and connections commenced in 2013.

Tuam: Feedermain and Town Network completed during 2013.

Cootehill: Feedermain and Town Network were completed during Summer 2013.

### *2.6.2 Approved New Towns Projects*

Wexford – Approved by CER in December 2012 subject to contracting main energy users, discussions are ongoing and currently estimate commencing construction in Q3, 2014.

Nenagh –Approved by the CER in May 2013 subject to main anchor load connecting, discussions are ongoing and currently estimate commencing construction in Q3, 2014.

### *2.6.3 Potential additional New Towns*

Listowel – A further review of options to bring gas to Kerry Foods in this town commenced in 2013.

### *2.6.4 Reinforcement Performance Review*

All of the planned reinforcements for 2013 were completed on by year end per the list below:

1. Castledawson Avenue
2. Woodview Cottages
3. Springhill Avenue

[12] http://www.bordgaisnetworks.ie/Global/Documents/Connections%20Policy%20(Revision2,%20February-2011).pdf

4. Thornhill Road Reinforcement
5. Lucan Rd/Glenaulin Park
6. Mercer Street Lower
7. Wierview Drive
8. Shielmartin Park
9. Charlemont Reinforcement
10. Brighton Road Reinforcement
11. Park Drive
12. Gilford Road
13. Grange Road
14. Botanic Avenue
15. Brookvale road

Design work has concluded on the following projects which are scheduled for construction in 2014:

1. Dublin Industrial Estate DRI Reinforcement
2. Harpurs Lane DRi Reinforcement
3. Ulverton Road
4. Killiney Hill Road
5. O' Curry Street Limerick
6. Mercer Street lower
7. Donamede VEC

## 2.7 Distribution Gas Safety

### *2.7.1 Introduction*

All information has been provided to the best ability of BGN at the time of submittal to the CER. The report includes KPI measures and statistics that have been under continuous monitoring and improvement during the reported period of 2013. Safety performance is a key priority for both Gaslink and BGN.

### *2.7.2 New Initiatives*

During 2013, BGN:

- Made significant progress on a number of safety improvement driven capital projects such as the Bridge Crossing review, Kerotest valve replacement, PE in porches remediation project (see table 2.4.1);
- Continued to provide network mapping data exchange agreements to utilities, contractors and local authorities incorporating Geographical Information System (GIS) data;
- Issued correspondence, guidance and calendar to homeowners/landowners advising them of actions to be taken before carrying out any civil works; and
- Continued support and involvement with 'Carbon Monoxide (CO) Awareness Week'.

### *2.7.3 Key Performance Indicators*

#### *2.7.3.1 High Level Distribution Safety KPI's*

The reference number (ref: 1 - 6) denotes KPI grouping under the Six Key Safety Regulatory Objectives for High Level Distribution Safety KPI's as highlighted in Table 2.7.3 as follows:

Table 2.7.3

| Ref | Subject | High Level KPI | | | | Notes: |
|---|---|---|---|---|---|---|
| | | | 2011 | 2012 | 2013 | |
| 1A | Public Reported Escapes | Number of External Leaks Detected | 3091 | 2605 | 2797 | |
| | | Number of Internal Leaks Detected | 4693 | 4660 | 4806 | |
| 1C | Third Party Damage | No. of Main Damages | 89 | 48 | 59 | |
| | | No. of Service Damages | 482 | 404 | 408 | |
| 1D | Gas in Buildings | Number of 'Gas in Buildings' events (i.e. all gas ingress from external infrastructure) | 2 | 2 | 1 | Gas leak on Grafton Street following Third Party Damage. Non-gas user, self-evacuated. |
| | Evacuations | No. of BGN initiated evacuations | 2 | 0 | 1 | Sunnybank Apartment Complex 16 people evacuated leak on boiler in one of the apartments. |
| 2B | Gas Outages | > 15 Customer affected | 1 | 1 | 1 | Third Party Damage to gas main in Sallins, Co Kildare. Required isolation of 21 properties. |
| | | > 100 Customer affected | 0 | 1 | 1 | Third Party Damage to 180mm gas main in Leixlip, Co Kildare. Required isolation of 119 properties. |
| | | > 250 Customer affected | 0 | 0 | 0 | |
| 4A | Gas Supply Emergencies | Local Gas Supply Emergencies 1,000 – 9,999 customers affected | 0 | 0 | 0 | |
| | | NGEM Emergencies - >10,000 customers affected | 0 | 0 | 0 | |
| 4B | Public Reported Escapes | % attended within one hour | 99.86 | 99.90 | 99.90 | Regulatory requirement of 97% outperformed to 99.90% level. |

| Ref | Subject | High Level KPI | | | | Notes: |
|---|---|---|---|---|---|---|
| | | | 2011 | 2012 | 2013 | |
| 5A | Incidents (Occurring on Gas Network) | Reportable under Gas Legislation | 0 | 1 | 1 | Third Party Damage to gas main in Sallins, Co. Kildare. Fire and damage to machinery. |
| | Incidents (Occurring on Gas Network) | Reportable under CER Guidelines | 3 | 1 | 2 | Gas main damaged by third party on Old Dublin Road, Leixlip, Co. Kildare.<br><br>Gas leak on Grafton Street following Third Party Damage. Non-gas user, self-evacuated. |
| 5B | Incidents (Occurring on Customer installations) | Reportable under Gas Legislation | 1 | 0 | 2 | Barrett's Terrace Cork, 1 person hospitalised suffering from burns<br><br>34 Elmpark Avenue, Ranelagh, Dublin 6. CO from customer installation. |
| | Incidents (Occurring on Customer installations) | Reportable under CER Guidelines | 0 | 1 | 3 | Sunnybank Apartment Complex 16 people evacuated leak on boiler in one of the apartments.<br><br>Ali G restaurant LPG related incident<br><br>Crowne Plaza Hotel, Dundalk. CO from customer installation. |
| 5C | Non Gas related incidents | Number of Non Gas related incidents attended by BGN | 2 | 1 | 0 | |
| 6A | Emergency Reports | Total no. of calls received via the 24-hour emergency telephone number (1850 20 50 50) | 33206 | 29504 | 30672 | |

| Ref | Subject | High Level KPI | | | | Notes: |
|---|---|---|---|---|---|---|
| | | | 2011 | 2012 | 2013 | |
| 6B | Third Party Damage | Total enquiries to 1850 427 747 (inward communication) | 1511 | 3442 | 3437 | |
| | | Total enquiries to distributionDBYD @bge.ie/post/fax /calls (inward communication) | 4876 | 4533 | 4631 | |
| | | Total inward enquiries | Total 6,387 | Total 7975 | Total 8068 | |
| 6C | Carbon Monoxide Helpline | No. of CO-related calls received via the 'Carbon Monoxide Helpline (1850 79 79 79) | 2298 | 1845 | 1792 | |

#### *2.7.3.2 Summary of 2013 Distribution Safety KPI's:*

Commentary on the high level KPI's is presented under the six key Regulatory Objectives, which support the overall Strategic Objective of the Framework. This is consistent with one of the fundamental principles of the Framework.

#### *(a) Minimising the Risk of Loss of Containment*

The KPI's of particular note are:

1A Public Reported Escapes

The number of internal escapes in 2013 was 4806 which is up 146 (3%) from 2012 (4,660) and up 113 (2%) from 2011 (4,693).

The number of external escapes in 2013 was 2797 up 192 (7%) from 2012 (2,605) and down 394 (9.5%) on 2011 (3,091).

1C Third Party Damage

The number of mains hits in 2013 was 59 which was up 11 (23%) from 2012 (48) and down 30 (34%) from 2011 (89).

The number of service hits in 2013 was 408 which was up 4 (1%) from 2012 (404) and down 74 (15%) from 2011 (482).

1D Gas in Buildings

There was one gas in building event in 2013 which was a decrease in comparison to 2012. Gas entered the cellar of River Island Clothes Shop on Grafton Street from a damaged 63mm coupler via an adjacent, damaged electricity supply duct. The coupler appears to have been damaged by a 3rd party during the recent refurbishment work on the street.

### *(b) Maintaining Safe System Operating Pressure*

The KPI's of particular note are:

2B Gas Outages

There were two unplanned outages in 2013. This is equal to the number which occurred in 2012 and up one event on 2011 figures. Both outages were as a result of 3rd party damage to a BGN gas main. The incidents were as follows;

- August 2013. Third Party Damage to gas main in Sallins. Co Kildare in August. Required isolation of 21 properties.

- September 2013: Third Party Damage to 180mm gas main on Old Dublin Road Leixlip, Co Kildare in September. Required isolation of 119 properties.

### *(c) Minimising the Risk of Injecting Gas of Non-Conforming Quality*

There were no non-compliant gas quality events reported.

### *(d) Providing an Efficient and Coordinated Response to Gas Emergencies*

The KPI's demonstrate consistent high performance over the period reported. Of particular note is:

4B Gas Supply Emergencies

There were no gas supply emergencies in 2013 which is consistent with previous years.

4C Public Reported Escapes - % attended within one hour

In 2013 BGN responded to 99.9% of all PREs within 1 hour. This is consistent with the very high performance levels achieved in 2012 and is an improvement on the levels achieved in 2011.

### *(e) Minimising the Safety Risks Associated with the Utilisation of Gas*

The KPI's of particular note are:

5A Incidents Occurring on the Distribution Gas Network

*Reportable Under Gas Legislation:*

In 2013 there was one incident reported under legislation which occurred on the Distribution Gas Network. The details are as follows:

- Third Party Damage to gas main 19th August 2013 Sherlockstown Road, Sallins, Co. Kildare. Fire and damage to machinery.

*Reportable Under Guidelines:*

In 2013 there were two incidents reported under CER guidelines which occurred on the Distribution Gas Network. The details are as follows:

- Gas leak on Grafton Street following Third Party Damage. Non-gas user, self-evacuated store.

5B Incidents Occurring Downstream of the Distribution Gas Network (Customer Installations)

*Reportable Under Gas Legislation:*

In 2013 there were two incidents reported under legislation which occurred downstream of the Distribution Gas Network. The details are as follows:

- Barrett's Terrace Cork, 1 person hospitalised suffering from burns.
- 34 Elmpark Avenue, Ranelagh, Dublin 6. CO from customer installation.

*Reportable Under Guidelines:*

In 2013 there were three incidents reported under CER guidelines which occurred downstream of the Distribution Gas Network. The details are as follows:

- Ali G restaurant in Ennis. LPG related incident.
- Sunnybank Apartment Complex. 16 people evacuated following leak on boiler in one of the apartments.
- Crowne Plaza Hotel, Dundalk. CO from customer installation.

5C Non Gas related incidents

There were no non gas related incidents attended to in 2013.

### *(f) Promoting Public Awareness of Gas Safety*

The KPI's of particular note are:

6A Emergency Calls Received

The total number of calls received via the 24-hour emergency telephone number (1850 20 50 50) in 2013 was 30,672 which was a slight increase on 2012 figures. It should be noted that 45% of the calls made to the emergency line were related to gas escapes with 55% of the calls non-emergency related. The percentage of non-emergency calls received on the number decreased in 2013 (55% in comparison to 60% in 2012) which was positive and show better awareness/compliance from the public.

6B Carbon Monoxide Reports

BGN are maintaining advertising campaign to ensure continuing awareness. Other initiatives included Carbon Monoxide awareness week in September 2013 and a Carbon Monoxide Alarms promotion with members of the RGI's. The number of CO-related calls received via the 'Carbon Monoxide Helpline (1850 79 79 79) were marginally down (3% decrease) on 2012 levels.

6D Dial-Before-You-Dig Enquiries

Number of incoming enquiries received for "Dial-Before-You-Dig" has increased further from 7,975 in 2012 to 8068 this year. This continues the upward trend and is likely to be due to the continued media and public awareness campaigns combined with a slight increase in general construction activity.

### *2.7.4 Natural Gas Safety Regulatory Framework*

Gaslink and BGN fully comply with the Natural Gas Safety Regulatory Framework. The Gaslink Distribution System Operator Safety Case outlines in detail how this is achieved.

Gaslink's safety case was originally submitted to the CER and approved in June 2009. Within the safety case framework a quarterly KPI report is submitted to CER for review. A number of updates to the Safety Case have been made since 2009 and accepted by the CER. The Safety Case describes the arrangements that are in place for:

- The safe control and operation of the distribution system.
- The management of the life cycle of the assets including design, construction, commissioning, maintenance and repair, reinforcement and renewal and decommissioning and abandonment.
- Ensuring that staff meets the required standards of qualification and competence.
- Emergency preparedness.
- Ensuring that gas transported in the network meets required standards for gas composition and quality.
- Hazard assessment and mitigation of the risks to a level that is a low as reasonably practical associated with the transportation of gas.
- Compliance with relevant standards and codes of practice.
- Cooperation with third parties.

### *2.7.5 Compliance with Distribution System Standards*

Safety is an inherent consideration in all design standards. BGN and Gaslink processes and procedures ensure the Distribution system is designed in a safe manner and to the highest standard.

This commitment is reflected in Gaslink's "Distribution System Standards" document (as approved by the CER). The Distribution System Standards covers without limitation, the engineering of pipelines and associated equipment and the technical standards to be adopted for the design, construction, operation and maintenance, including standards relating to the physical durability of the distribution system.

Gaslink are compliant with the standards set out in the Distribution System Standards document.

### *2.7.6 Compliance with Codes of Practice*

#### *2.7.6.1 Codes of Practice*

Every effort is made by BGN and Gaslink to provide services in a prompt, efficient and safe manner and to a high standard. This commitment is reflected in BGN's Customer Charter and four Codes of Practice.

The BGN Customer Charter benchmarks the performance standards that BGN strives to achieve and provides assurance to customers of BGN's commitment to these standards. The four Codes of Practice outline the procedures and processes BGN adheres to in each of the relevant areas.

The BGN Customer Charter and Codes of Practice can be found on the BGN website[13] and are as follows:

- Customer Charter
- Vulnerable Customer guide
- Complaints Handling Code of Practice
- Disconnection Code of Practice

In accordance with the Transmission & Distribution System Owner / Operator Licences, (Compliance Officer Condition), the Compliance Officer produces an annual report as to its compliance during the relevant year. Compliance training was rolled out to all Networks Employees.

#### *2.7.6.2 General Statement of Compliance*

Gaslink and BGN provide services in a prompt, efficient and safe manner and to a high standard, in accordance with the arrangements set out in the BGN Customer Charter and in line with the principles set out in the Codes of Practice.

[13] http://www.bordgaisnetworks.ie/en-IE/About-Us/Our-business/Customer-charter--codes-of-conduct/

General levels of performance compliance (performance relative to published Planned Performance Levels or Service Standards) for 2013 are as outlined in Section 2.1 of this report.

Non-compliances of a procedural nature relating to the conduct of activities covered by the charter & codes listed are added as they arise, to the Regulatory & Compliance general register of non-compliances, maintained by Bord Gáis Networks.

### *2.7.6.3 Vulnerable Customer Guide*

A vulnerable customer is a person who is particularly vulnerable to disconnection during winter months for reasons of advanced age or physical, sensory, intellectual or mental health. (S.I. No. 463 2011)

BGN has implemented a Special Services Register (for customers who are listed as vulnerable). As of the 31st of December 2013, there were 7,518 vulnerable customers registered on the Special Services Register.

Table 2.7.6.3

| Number of vulnerable customers 31st December 2013 | | |
|---|---|---|
| **Type** | **Description** | **Total Customers** |
| 1 | Visually Impaired | 170 |
| 2 | Mobility Impaired | 437 |
| 3 | Hearing Impaired | 276 |
| 4 | Elderly | 6,635 |
| | **Total Types** | **7,518** |

### *2.7.6.4 Complaints Handling Code of Practice*

BGN has implemented a Complaints Handling Procedure. A report on the complaints received and compensation paid as a result of the introduction of this Code are outlined in section 2.1.2.3.

### *2.7.6.5 Disconnection Code of Practice*

The disconnection of gas supply at an End User's premises may be required under a range of circumstances. Because of the inconvenience caused to end users by disconnection a set of

practices is set down and followed to ensure that the reason for disconnection is validated, appropriately communicated to the End User and carried out in the correct manner.

Table 2.7.5.5

| Disconnection of gas supply | 2010 Actual | 2011 Actual | 2012 Actual | 2013 Actual |
|---|---|---|---|---|
| Total number of Lock Requests Dispatched | 9,214 | 9,538 | 15,570 | 13,199 |
| Total number of Locks failed | 4,295 | 5,323 | 7,988 | 7,703 |
| Total number of Successful Locks | 4,912 | 4,215 | 6,851 | 5,496 |

### *2.7.7 Compliance with Licence Conditions*

Both Gaslink and BGN have system operator and system owner licences respectively. Both organisations maintain a log in which reported breaches of compliance are noted, investigated and reported on. There were no material breaches of the Distribution Asset Owner Licence Conditions or the Distribution Operator Licences during 2013.

### *2.7.8 Customer Service*

***Satisfaction Monitoring***

W5, BGN's independent survey company, phone customers who have contacted the BGN call centre within one week of the customer's initial contact to ascertain the level of customer satisfaction with the service provided. Call Back monitoring for 2013 yielded overall satisfaction of 94%.

Mystery Shopper surveys are carried out by W5 staff who phone the call centre posing as customers and ask a series of questions to evaluate the quality of service provided by the agents. Mystery Shopper satisfaction achieved an overall performance of 93% in 2013.

W5 also carry out surveys to determine satisfaction levels in relation to the following: Complaints (60%), Field Operations (83 %), Public Reported Escapes response (90 %) and Meter Replacement (90 %).

***Service Information Improvements***

The Customer Care team within BGN continue to put in place initiatives to improve the overall Customer experience**.**

***Customer Information***

Customer surveys across ten different BGN activities are conducted. We asked customers about the level of effort required to interact with us. Overall we scored very favourably here.We will continue to monitor this to identify areas where effort could be reduced.

Every month all the satisfaction results and the key words identified by customers are circulated to the relevant operation managers with detailed analysis of the results provided.

In order to ensure engagement across the whole of the Networks business, the scores and key words are also published on the staff intranet and uploaded to every screensaver for the month. We have received very positive feedback about the screensaver and the customer experience section on the zone has the most views of any other information area on the zone.

### *2.7.9 Site Works Performance*

The BGN Customer Charter incorporates explicit commitments in respect of a range of customer facing services. The prices included in the Site works charging regime[14] have been determined in the context of continuing to provide these customer facing services in line with those published commitments.

[14] http://www.cer.ie/en/gas-distribution-network-current-consultations.aspx?article=bb4768ef-ab2f-403b-aecd-ae1a3d763f59

Table 2.7.9

| Bord Gáis Networks Site-works Services Standards – Performance 2013 | | |
|---|---|---|
| **Supplier Requested Work Returns** | | |
| **Meter Related Activity Domestic & Commercial** | **Standard** | **Performance** |
| Confirmation Out-turn/Read from Activity *<br>-Special Read Requests. **<br><br><br>-All Other Requests. *** | <br><br>90% ← 5 w/days.<br>100% ← 10 w/days.<br><br>90% ← 10 w/days.<br>100% ← 20 w/days. | <br><br>86.35% ← 5 w/days.<br>95.98% ← 10 w/days.<br><br>98.39% ← 10 w/days.<br>99.18% ← 20 w/days |
| Appointment Grant for Requests<br>-Special Read Requests<br><br>-All Other Requests | <br>100%← 5 working days.<br><br>100%← 5 working days. | <br>100% ← 5 working days.<br><br>100% ← 5 working days. |
| **Supplier Requested Work Access Standards** | | |
| **Meter Related Activity Domestic & Commercial** | **Standard** | **Performance** |
| **Isolation/ Disconnection**<br><br>Attended As Appointment<br>Access % Achieved<br><br>**All Other Activities**<br><br>Attended As Appointment<br>Access % Achieved. | <br><br>100%<br>60%<br><br><br>100%<br>100% | <br><br>100%<br>42%<br><br><br>100%<br>99.9% |

*Out-turn is the message sent back to the shipper (complete or no access). There were commissioning issues relating to the transition of data through new computer systems that delayed the reporting of competed activities.

**Special reads are reads requested by customers through their shippers. Special Reads are carried out in instances of dispute with the customer regarding their bills. BGN carried out 61 of these requested jobs in 2012, an increase from 24 in the previous year. Special reads are charged to the customer.

*** Meter fits, locks, unlocks exchanges etc.

***Disconnections for Non-Payment***

The low rate of access 44.37% on shipper requesting credit locks in 2013 is primarily due to inability to access meters located inside customer's homes. When a BGN representative calls to lock the meter they may be refused access. If the meter is outside, the BGN representative can attempt to lock the meter but must always tell the customer upfront as

to why they are there. The Code of Disconnection states that BGN must inform the customer when they arrive on site as to what their intention is. A “Pay Before Lock” system is in place which allows the BGN representative to offer the customer the facility to ring the shipper/supplier before the lock takes place to agree to a payment plan. If no agreement is reached the representative locks the meter unless access is denied.

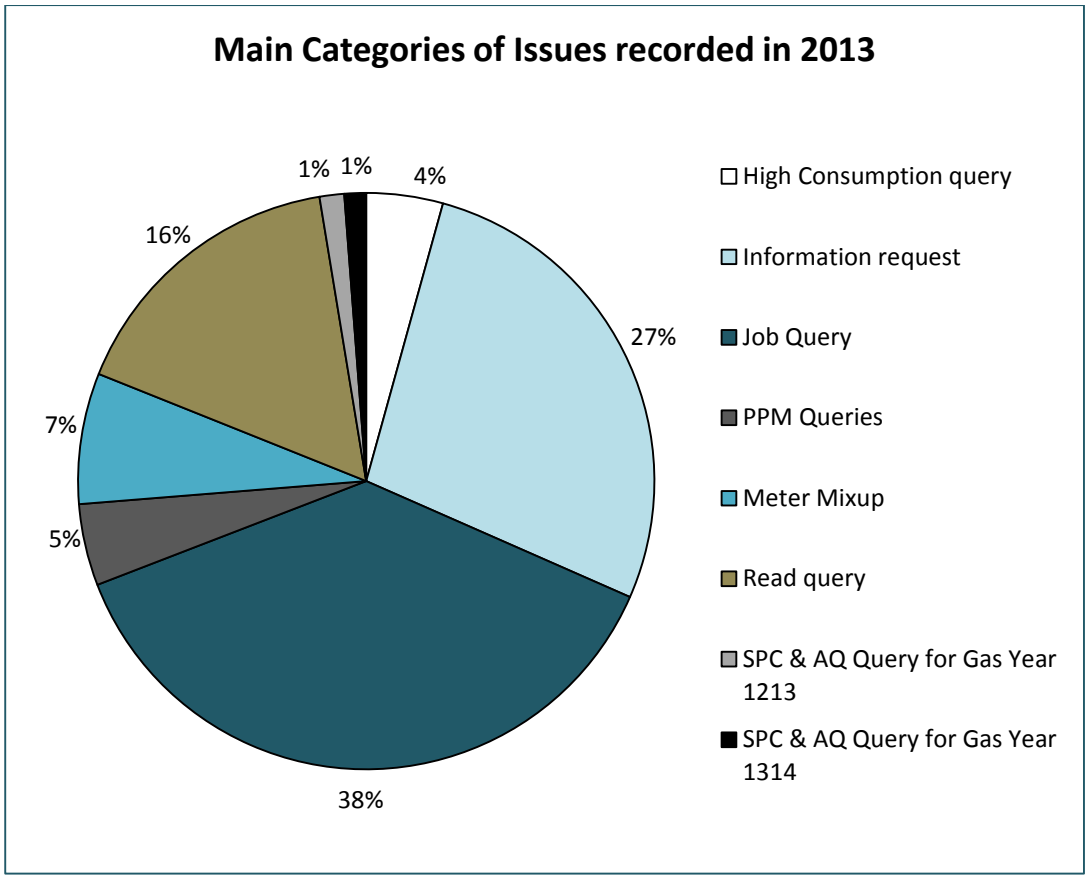
# 3.0 Other Performance Criteria

## 3.1 Shipper Issues

### *3.1.1 Breakdown of Opened Shipper Escalations by Type*

There were 3,215 issues escalated to the Shipper Services Key Account Management department in 2013. The main categories of issue recorded are shown in Figure 3.1.1.

Figure 3.1.1



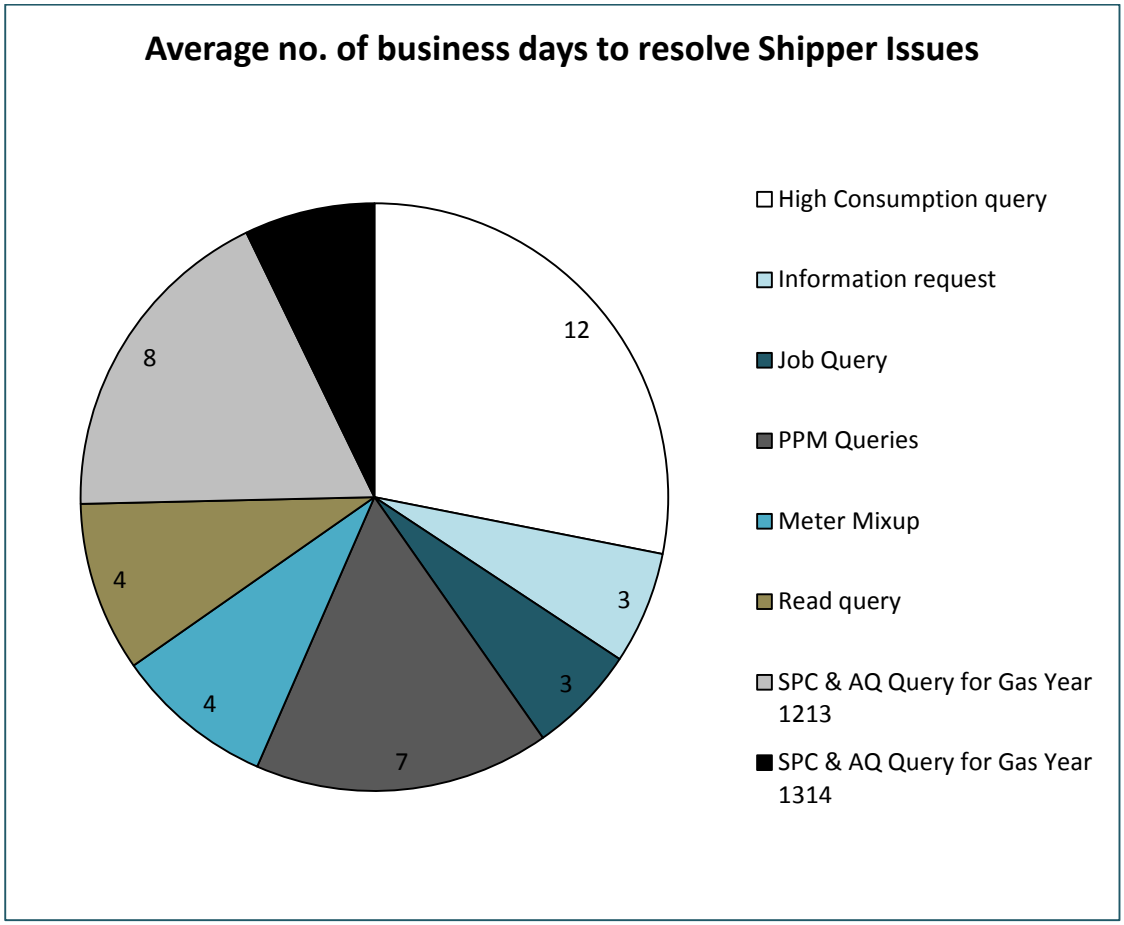

There are a wide variety of issues escalated to the Shipper Services Key Account Management function, in addition to the day to day operational issues.

BGN and Gaslink work with industry at the Gas Market Arrangements Retail Group (GMARG) and Code Mod Forum to agree process changes to reduce some of these issues. BGN and Gaslink continue to work proactively with Shippers on initiatives to identify possible issues in advance of problems occurring.

### *3.1.2 Average Number of Business Days that a Shipper Issue was Open*

The average length of time that a Shipper issue was open was four business days. The average number of business days to resolve Shippers issues per category is shown in Figure 3.1.2.

Figure 3.1.2




### *3.1.3 Shipper Issues Management*

All Shipper issues are systematically logged by the Shipper Services Key Account Management function on the Shipper Issues system. Every issue is assigned a unique issue number and Shippers where requested receive an email confirmation of their issue and status within three business days. BGN provide each Shipper with an issue update every 20 business days thereafter as long as the issue remains open on its system.

### *3.1.4 Other BGN Service Standards*

Table 3.1.3

| Customer Commitment | Performance Target | Actual Performance 2013 |
|---|---|---|
| **Shipper Operations** | | |
| Change of Shipper (NDM) | Process Change of Shipper Requests- 100% <=5 business days | 100%<br>Record number of change of shippers processed during 2013 (c. 117,000) |
| Change of Shipper (DM) | Outgoing shipper notified with >=10 business days' notice | 100% |
| Entry Capacity Booking Requests | Process <=20 days – 100% | 100% |
| Exit Capacity Booking Requests | Process <=20 days – 100% | 100% |
| **Meter Reading/ Meter Data Services** | | |
| Access Rate | 80% | 86% |
| Read Rate | Average 3.2 reads per site per calendar year | 3.42 |
| Forecasting, Allocation and Reconciliation (FAR) – Domestic Reconciliation | 80% within accuracy of 1,250 kWh | 94% |
| Forecasting, Allocation and Reconciliation (FAR) – IC Reconciliation | 80% within accuracy of 4,500 kWh | 74%*** |

*** The IC band ranges between 73,000 kWh and 5,500,000 kWh so range of reconciliation accuracy can vary significantly given the wide range of annual volumes consumed at these sites.