



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 website¹. 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 CER². These performance criteria may be amended by the CER from time to time by notice to Gaslink.

¹<u>http://www.cer.ie/en/gas-distribution-network-licences.aspx</u>

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: <u>http://www.cer.ie/en/gas-transmission-network-decision-documents.aspx?article=d6040781-9b0c-4039-b6f0-89ad00dbab6d</u>

1.0 Transmission System

1.1 Transmission System Data

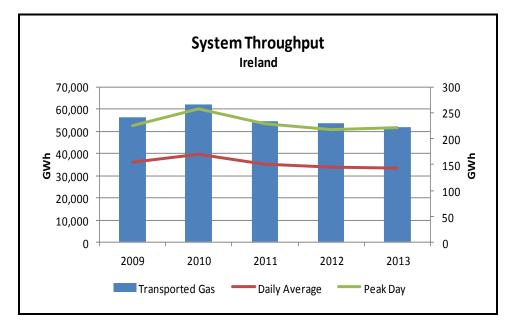
1.1.1 Throughput

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





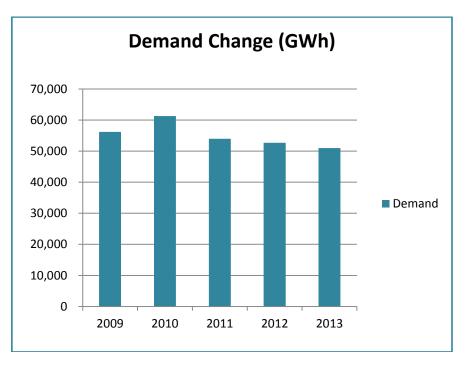
1.1.2 Demand Change

Demand is the total amount of gas physically off-taken from the Gas Network in Rol 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.

Ta	ble	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%





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.

<u>Table 1.1.3 (a)</u>

KPI	Actual Performance					
	Delivered Target	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)

КРІ	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 validation³. 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.

<u>Table 1.1.3 (c)</u>

	No. Of Adjustments						
КРІ	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.

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

Tab	le 1	.1.4

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	123	42	261	106	91 Injection
Utilised					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.

<u>Table 1.1.7 (a)</u>

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:

<u>Table 1.1.7 (b)</u>

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

<u> Table 1.1.9(a)</u>

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

<u> Table 1.1.10 (a)</u>

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.

<u>Table 1.1.10 (b)</u>

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 Rol 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.

<u>Table 1.2</u>

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

<u>Table 1.3.1</u>

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/	Commissioned
unreliable system components identified by	commissioned
Operations staff. Multi location projects.	
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	Commissioned	
Replacement	commissioned	
Beattock Unit A Valve Replacement	Commissioned	
Brighouse Station Outlet Valve Replacement	Design Stage	
Brighouse Bay and Beattock Pipework	Decign Stage	
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

	1451	Compliance				Notes:
	KPI	Monitor	2011	2012	2013	
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)
18	Third Party Damage	Development enquiries requiring action	869	875	990	
	Third Party Damage Prevention	Category A - Pipeline Damage or Leak	0	1	0	
	Detected Encroachment Events	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				Notes:
	KPI	Monitor	2011	2012	2013	
						$50 \text{mg}/m^3$ from 24th April to 30th April 2013. Maximum level recorded was $60 \text{mg}/m^3$
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
			Installation of a
1	Waterways	1	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/m³ from 24th April to 30th April 2013. The maximum level recorded was 60mg/m³. 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 manmade) 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 Charter⁹ 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 Networ	ks Customer Chart	er Service St	andards - Perfo	ormance 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%	20	£1,000
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%	5	£000
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.

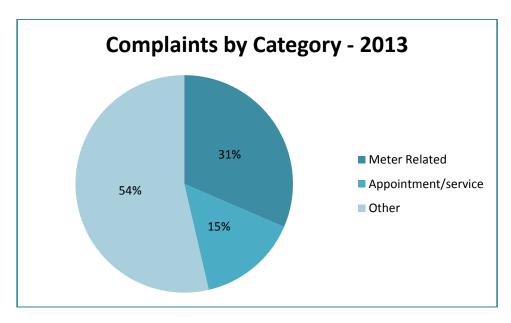
Gas Supply - Disruption to customer's gas supply in the form of bad pressure or a delay in restoration.

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.





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.

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				

Tab	le	2.	1.	.2	.4

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 Reinstatement¹⁰

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

¹⁰Once 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.

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%	

Table 2.2.1

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.

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

<u>Table 2.4.1</u>

2.5 New Connections during Year (by category)

<u>Table 2.5.1</u>

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Meters	2011	2012	2013
One off residential	5,983	4,441	4,631
New Housing	1,09711	1,288	1,933
1&C	926	719	857

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<u>http://www.bordgaisnetworks.ie/Global/Documents/Connections%20Policy%20(Revision2,%20February-2011).pdf</u>

- 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. 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 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. Ali G restaurant LPG related incident 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 (1800 20 50 50)	33206	29504	30672	

Ref	Subject	High Level KPI				Notes:
			2011	2012	2013	
6B	Third Party Damage	Total enquiries to 1800 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 (1800 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.

<u>4C Public Reported Escapes - % attended within one hour</u>

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, selfevacuated 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 (1800 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 (1800 89 89 89) 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 <u>BGN</u> website¹³ 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 <u>http://www.bordgaisnetworks.ie/en-IE/About-Us/Our-business/Customer-charter--codes-of-conduct/</u>

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.

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

Table 2.7.6.3

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 regime¹⁴ 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 *						
-Special Read Requests. **	90% ← 5 w/days. 100% ← 10 w/days.	86.35% ← 5 w/days. 95.98% ← 10 w/days.				
-All Other Requests. ***	90% ← 10 w/days. 100% ← 20 w/days.	98.39% ← 10 w/days. 99.18% ← 20 w/days				
Appointment Grant for Requests						
-Special Read Requests	100% ← 5 working days.	100% ← 5 working days.				
-All Other Requests	100%← 5 working days.	100% \leftarrow 5 working days.				
Supplie	r Requested Work Access Star	ndards				
Meter Related Activity Domestic & Commercial	Standard	Performance				
Isolation/ Disconnection						
Attended As Appointment Access % Achieved	100% 60%	100% 42%				
All Other Activities						
Attended As Appointment Access % Achieved.	100% 100%	100% 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

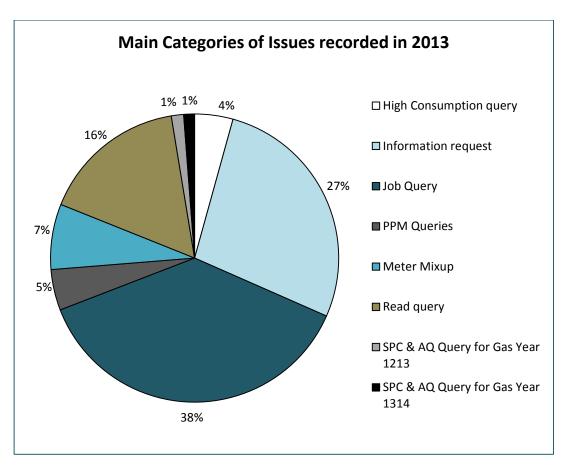
to why they are there. The Code of Disconnection states that BGN must inform the customer when they arrive on site as to what their intention is. A "Pay Before Lock" system is in place which allows the BGN representative to offer the customer the facility to ring the shipper/supplier before the lock 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.





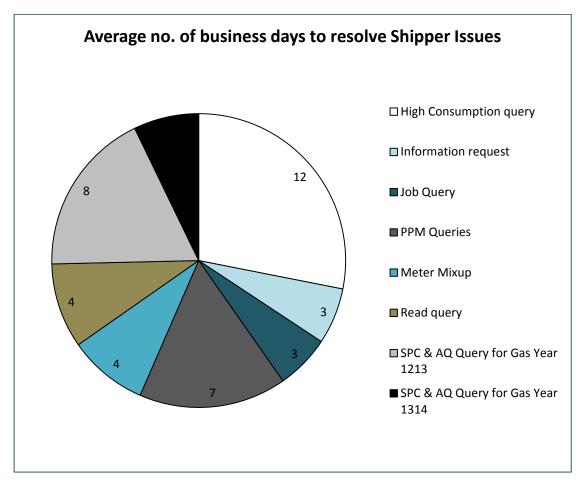
There are a wide variety of issues escalated to the Shipper Services Key Account Management function, in addition to the day to day operational issues.

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.





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% 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	80% within accuracy of 1,250	94%				
Reconciliation (FAR) –	kWh					
Domestic Reconciliation						
Forecasting, Allocation and	80% within accuracy of 4,500	74%***				
Reconciliation (FAR) – IC	kWh					
Reconciliation						

*** 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.